



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 667

Part II of II

667 525

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16016	--	--	--	--	--	--
SDev	19.30388	--	--	--	--	--	--
%RSD	.1205302	--	--	--	--	--	--
#1	16002	--	--	--	--	--	--
#2	16029	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQA

Operator: RJG

Run Time: 08/15/00 10:19:17

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	.00054	2.3797	.00608	.01284	.00137	114.58	.00017
SDev	.00029	.0039	.00115	.00001	.00009	.06	.00004
%RSD	53.934	.16246	18.861	.04049	6.6983	.04956	21.479
#1	.00034	2.3824	.00527	.01284	.00131	114.54	.00019
#2	.00075	2.3769	.00689	.01285	.00144	114.62	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06561	.00184	.00151	41.060	48.703	5.7131	.00164
SDev	.00016	.00004	.00020	.020	.055	.0001	.00000
%RSD	.24470	2.2891	13.514	.04911	.11248	.00090	.01729
#1	.06550	.00181	.00136	41.046	48.742	5.7131	.00164
#2	.06573	.00187	.00165	41.075	48.664	5.7131	.00164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08245	-.00167	.00189	.00070	.00090	-.00165	-.00080
SDev	.00052	.00035	.00209	.00151	.00098	.00137	.00059
%RSD	.63555	20.856	110.56	214.57	108.36	82.889	73.312
#1	.08208	-.00192	.00041	-.00036	.00021	-.00068	-.00039
#2	.08282	-.00143	.00337	.00177	.00160	-.00262	-.00121
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	-.00663	.00414	.00055	-.00086	.00251	.16155
SDev	.00099	.00104	.00036	.00082	.00060	.00001
%RSD	14.864	25.071	65.763	95.728	23.862	.00813
#1	-.00593	.00341	.00030	-.00144	.00208	.16155
#2	-.00733	.00487	.00081	-.00028	.00293	.16154
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	16065	--	--	--	--	--	--
SDev	.7775412	--	--	--	--	--	--
%RSD	.0048398	--	--	--	--	--	--
#1	16065	--	--	--	--	--	--
#2	16066	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQD

Operator: RJG

Run Time: 08/15/00 10:23:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	1.0097	.00410	.01689	.00031	101.00	.00004
SDev	.00001	.0079	.00042	.00005	.00007	.64	.00015
%RSD	2.1796	.78663	10.187	.27136	24.354	.62876	350.23
#1	.00058	1.0153	.00439	.01686	.00026	101.45	-.00006
#2	.00056	1.0041	.00380	.01692	.00036	100.55	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04742	.00221	.00185	31.921	40.379	4.5347	.00103
SDev	.00122	.00009	.00020	.091	.148	.0143	.00018
%RSD	2.5718	3.8826	11.111	.28640	.36570	.31539	17.815
#1	.04829	.00227	.00199	31.985	40.483	4.5448	.00116
#2	.04656	.00215	.00170	31.856	40.274	4.5246	.00090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06329	.00127	.00038	.00067	-.00040	.00109	.00059
SDev	.00112	.00279	.00072	.00045	.00390	.00079	.00182
%RSD	1.7768	220.71	191.80	66.266	980.34	72.488	307.37
#1	.06408	-.00071	.00089	.00036	.00236	.00165	.00188
#2	.06249	.00324	-.00013	.00099	-.00315	.00053	-.00070
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	-.00127	.00483	.00280	-.00420	.00135	.10113	
SDev	.00173	.00043	.00029	.00165	.00002	.00058	
%RSD	135.90	8.9622	10.217	39.369	1.7361	.57395	
#1	-.00249	.00514	.00260	-.00537	.00133	.10154	
#2	-.00005	.00453	.00300	-.00303	.00137	.10072	
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	15966	--	--	--	--	--	--
SDev	98.53574	--	--	--	--	--	--
%RSD	.6171724	--	--	--	--	--	--
#1	15896	--	--	--	--	--	--
#2	16035	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQE

Operator: RJG

Run Time: 08/15/00 10:27:36

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	9.8551	.00088	.05013	.00634	80.454	.00105
SDev	.00005	.0221	.00017	.00001	.00002	.169	.00001
%RSD	20.242	.22418	19.714	.01005	.32120	.20958	1.3089
#1	.00022	9.8395	.00075	.05013	.00632	80.335	.00104
#2	.00030	9.8707	.00100	.05012	.00635	80.573	.00106
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	.09375	.00511	.01078	4.6164	22.899	2.8733	-.00128
SDev	.00024	.00037	.00008	.0120	.063	.0097	.00044
%RSD	.25646	7.2268	.76379	.25997	.27462	.33899	34.430
#1	.09358	.00485	.01072	4.6079	22.855	2.8664	-.00097
#2	.09392	.00537	.01084	4.6249	22.943	2.8802	-.00159
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	.12529	.00331	.00318	.00323	-.00251	.00004	-.00081
SDev	.00056	.00234	.00007	.00073	.00003	.00209	.00140
%RSD	.45020	70.525	2.0842	22.748	1.2787	5280.3	173.08
#1	.12569	.00166	.00323	.00271	-.00253	-.00143	-.00180
#2	.12489	.00497	.00314	.00375	-.00249	.00151	.00018
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	-.00304	.00303	.00101	-.00082	.00092	.39974	
SDev	.00043	.00150	.00114	.00332	.00019	.00077	
%RSD	14.242	49.292	112.91	403.48	20.592	.19339	
#1	-.00335	.00198	.00020	-.00317	.00106	.39919	
#2	-.00273	.00409	.00182	.00153	.00079	.40029	
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	16294	--	--	--	--	--	--
SDev	28.07228	--	--	--	--	--	--
%RSD	.1722860	--	--	--	--	--	--
#1	16314	--	--	--	--	--	--
#2	16274	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQG

Operator: RJG

Run Time: 08/15/00 10:31:45

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	-.00002	.01659	-.00001	.04806	-.00043	46.798	.00012
SDev	.00033	.00009	.00074	.00003	.00024	.046	.00006
%RSD	1416.4	.51481	12975.	.06534	55.908	.09866	46.977
#1	-.00026	.01665	.00052	.04804	-.00026	46.830	.00008
#2	.00021	.01653	-.00053	.04808	-.00060	46.765	.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.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	-.00021	.00095	.00238	.03829	13.076	.04314	.00507
SDev	.00011	.00057	.00015	.01249	.005	.00003	.00024
%RSD	50.388	59.953	6.4725	32.632	.04161	.07497	4.7703
#1	-.00029	.00055	.00227	.02946	13.073	.04311	.00490
#2	-.00014	.00135	.00249	.04713	13.080	.04316	.00524
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	.00367	.00294	.00061	.00139	-.00103	.00043	-.00006
SDev	.00147	.00393	.00178	.00013	.00100	.00105	.00104
%RSD	39.984	133.61	291.89	9.0054	96.821	247.50	1742.2
#1	.00264	.00016	.00186	.00130	-.00033	.00117	.00067
#2	.00471	.00572	-.00065	.00147	-.00174	-.00032	-.00079
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00379	.00131	-.00039	-.00007	.00031	.00355	
SDev	.00189	.00147	.00035	.00282	.00040	.00000	
%RSD	49.840	112.31	90.208	3991.1	130.54	.07986	
#1	-.00512	.00235	-.00014	.00193	.00002	.00355	
#2	-.00245	.00027	-.00064	-.00207	.00059	.00354	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15945	--	--	--	--	--	--
SDev	23.86485	--	--	--	--	--	--
%RSD	.1496705	--	--	--	--	--	--
#1	15962	--	--	--	--	--	--
#2	15928	--	--	--	--	--	--

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Method: METTRA Sample Name: DHDQH

Operator: RJG

Run Time: 08/15/00 10:35:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01532	-.00034	.04289	-.00021	59.801	.00009
SDev	.00065	.00078	.00078	.00024	.00001	.034	.00008
%RSD	5212.0	5.0724	229.56	.55627	7.1133	.05761	83.770
#1	-.00045	.01587	-.00089	.04306	-.00020	59.776	.00004
#2	.00047	.01477	.00021	.04272	-.00022	59.825	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00405	.00067	.00220	1.8258	17.696	.60996	.00423
SDev	.00036	.00024	.00032	.0217	.028	.00041	.00011
%RSD	8.9942	36.219	14.501	1.1891	.15977	.06773	2.4778
#1	.00379	.00050	.00197	1.8105	17.716	.61025	.00416
#2	.00431	.00084	.00243	1.8412	17.676	.60966	.00430
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	.01201	.00199	.00097	.00131	-.00005	-.00025	-.00018
SDev	.00022	.00038	.00103	.00081	.00050	.00073	.00065
%RSD	1.8259	18.954	105.98	61.922	999.45	293.27	357.69
#1	.01217	.00172	.00024	.00073	-.00040	-.00076	-.00064
#2	.01186	.00225	.00169	.00188	.00030	.00027	.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
Avge	-.00536	.00284	.00011	.00057	.00204	.01464
SDev	.00241	.00199	.00213	.00005	.00277	.00013
%RSD	45.015	70.327	1987.6	9.2890	135.75	.90958
#1	-.00365	.00425	.00162	.00053	.00008	.01454
#2	-.00706	.00143	-.00140	.00061	.00399	.01473
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16106	--	--	--	--	--	--
SDev	56.46220	--	--	--	--	--	--
%RSD	.3505635	--	--	--	--	--	--
#1	16146	--	--	--	--	--	--
#2	16066	--	--	--	--	--	--

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Method: METTRA Sample Name: DHDQM

Operator: RJG

Run Time: 08/15/00 10:40:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.95908	.00637	.01713	.00097	100.99	.00007
SDev	.00029	.00980	.00042	.00009	.00009	.75	.00014
%RSD	146.15	1.0215	6.6358	.50011	8.9732	.73958	197.18
#1	-.00001	.96601	.00607	.01719	.00090	101.51	-.00003
#2	.00041	.95215	.00667	.01707	.00103	100.46	.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	.04762	.00146	.00146	31.802	40.252	4.5104	.00723
SDev	.00020	.00054	.00000	.206	.266	.0290	.00072
%RSD	.42633	36.850	.19817	.64813	.66016	.64253	10.016
#1	.04776	.00108	.00145	31.948	40.440	4.5309	.00672
#2	.04748	.00184	.00146	31.656	40.065	4.4899	.00775
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	.06275	.00113	.00038	.00063	.00013	.00045	.00034
SDev	.00035	.00171	.00217	.00088	.00121	.00158	.00065
%RSD	.55615	151.41	569.45	138.80	918.38	353.28	189.98
#1	.06250	-.00008	.00192	.00125	.00099	-.00067	-.00012
#2	.06299	.00235	-.00115	.00001	-.00072	.00156	.00080
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00237	.00222	.00069	-.00393	.00153	.10525	
SDev	.00297	.00334	.00124	.00486	.00000	.00086	
%RSD	125.36	150.72	179.67	123.90	.23936	.81658	
#1	-.00447	.00458	.00157	-.00737	.00153	.10586	
#2	-.00027	-.00015	-.00019	-.00049	.00152	.10464	
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	

						667	537
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16363	--	--	--	--	--	--
SDev	127.7391	--	--	--	--	--	--
%RSD	.7806714	--	--	--	--	--	--
#1	16272	--	--	--	--	--	--
#2	16453	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQQ

Operator: RJG

Run Time: 08/15/00 10:44:12

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	-.00002	.24349	.00108	.05291	-.00012	51.340	.00001
SDev	.00030	.00510	.00052	.00020	.00004	.110	.00010
%RSD	1808.5	2.0962	48.020	.38199	34.294	.21467	1117.1
#1	-.00023	.24710	.00072	.05305	-.00015	51.418	-.00006
#2	.00019	.23988	.00145	.05277	-.00009	51.263	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00118	.00110	.00269	.82275	14.407	.42650	.00535
SDev	.00022	.00042	.00059	.01105	.015	.00040	.00006
%RSD	18.291	37.630	22.018	1.3425	.10232	.09358	1.1289
#1	.00103	.00081	.00227	.81494	14.418	.42679	.00530
#2	.00134	.00140	.00311	.83056	14.397	.42622	.00539
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	.00708	.00208	.00090	.00129	-.00018	.00013	.00002
SDev	.00018	.00097	.00099	.00034	.00016	.00108	.00066
%RSD	2.6148	46.737	110.32	26.182	88.843	857.65	2828.8
#1	.00695	.00139	.00160	.00153	-.00029	.00089	.00049
#2	.00721	.00276	.00020	.00105	-.00007	-.00063	-.00045
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00258	.00278	.00099	-.00014	-.00054	.00907	
SDev	.00015	.00167	.00116	.00240	.00000	.00012	
%RSD	5.8451	60.109	117.34	1667.1	.71390	1.3140	
#1	-.00248	.00396	.00181	-.00184	-.00054	.00898	
#2	-.00269	.00160	.00017	.00155	-.00054	.00915	
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	

						667	539
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16197	--	--	--	--	--	--
SDev	24.39518	--	--	--	--	--	--
%RSD	.1506178	--	--	--	--	--	--
#1	16180	--	--	--	--	--	--
#2	16214	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 08/15/00 10:48:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0378	24.678	.51258	2.0321	2.0633	51.417	.49386
SDev	.0031	.055	.00469	.0006	.0152	.506	.00374
%RSD	.29605	.22473	.91430	.03154	.73802	.98355	.75809
#1	1.0399	24.717	.51589	2.0326	2.0741	51.775	.49651
#2	1.0356	24.639	.50927	2.0317	2.0526	51.059	.49121
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	2.0604	2.0634	1.9894	25.487	50.104	2.0374	2.0720
SDev	.0117	.0147	.0015	.210	.235	.0110	.0019
%RSD	.56873	.71137	.07648	.82412	.46937	.53947	.09055
#1	2.0687	2.0737	1.9883	25.635	50.270	2.0452	2.0707
#2	2.0521	2.0530	1.9905	25.338	49.937	2.0296	2.0733
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	2.0286	.51633	.51025	.51227	.52330	.51111	.51517
SDev	.0199	.00207	.00450	.00231	.00596	.00119	.00278
%RSD	.98275	.40130	.88150	.45094	1.1386	.23312	.53939
#1	2.0427	.51487	.51343	.51391	.52751	.51195	.51713
#2	2.0145	.51780	.50707	.51064	.51908	.51026	.51320
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	.51014	.52077	.51723	1.0382	2.0560	2.0758	
SDev	.00221	.00425	.00357	.0145	.0142	.0156	
%RSD	.43389	.81559	.69022	1.4010	.68894	.75330	
#1	.51171	.52378	.51976	1.0485	2.0660	2.0869	
#2	.50858	.51777	.51471	1.0280	2.0460	2.0648	
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	

667

541

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16446	--	--	--	--	--	--
SDev	47.51702	--	--	--	--	--	--
%RSD	.2889363	--	--	--	--	--	--
#1	16479	--	--	--	--	--	--
#2	16412	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 08/15/00 10:52:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.02593	-.00096	.00019	.00073	.02612	.00025
SDev	.00017	.00226	.00115	.00013	.00028	.00907	.00001
%RSD	1115.0	8.7177	120.23	67.199	38.329	34.737	1.8190
#1	-.00013	-.02433	-.00177	.00010	.00053	.01971	.00026
#2	.00010	-.02753	-.00014	.00028	.00093	.03254	.00025
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	-.00000	.00031	.00044	.00123	.00591	.00045	.00378
SDev	.00023	.00049	.00019	.00059	.00415	.00015	.00152
%RSD	5523.6	159.96	42.147	48.116	70.082	33.915	40.082
#1	.00016	-.00004	.00057	.00081	.00298	.00035	.00485
#2	-.00017	.00065	.00031	.00165	.00885	.00056	.00271
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	.00122	.00016	-.00060	-.00034	-.00016	.00019	.00007
SDev	.00031	.00002	.00147	.00097	.00268	.00006	.00086
%RSD	25.593	12.799	246.93	282.63	1669.2	30.073	1159.1
#1	.00100	.00014	.00044	.00034	.00174	.00015	.00068
#2	.00144	.00017	-.00164	-.00103	-.00206	.00023	-.00053
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00057	-.00098	-.00084	.00196	.00012	.00122	
SDev	.00021	.00123	.00089	.00160	.00057	.00001	
%RSD	37.666	125.96	106.19	81.356	469.65	.81306	
#1	-.00072	-.00185	-.00147	.00083	-.00028	.00122	
#2	-.00042	-.00011	-.00021	.00309	.00052	.00121	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667

543

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16481	--	--	--	--	--	--
SDev	96.02565	--	--	--	--	--	--
%RSD	.5826516	--	--	--	--	--	--
#1	16413	--	--	--	--	--	--
#2	16549	--	--	--	--	--	--

Method: METTRA Sample Name: DHDQV

Operator: RJG

Run Time: 08/15/00 10:56:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	.24462	.00059	.05293	-.00015	50.593	.00024
SDev	.00010	.00557	.00012	.00016	.00011	.075	.00002
%RSD	22.909	2.2756	20.819	.30057	74.538	.14785	9.0085
#1	.00049	.24856	.00067	.05304	-.00023	50.646	.00025
#2	.00035	.24069	.00050	.05282	-.00007	50.541	.00022
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	.00116	.00185	.00236	.67660	14.188	.40618	.00658
SDev	.00003	.00046	.00003	.00121	.019	.00040	.00089
%RSD	2.3357	24.877	1.3625	.17932	.13138	.09838	13.575
#1	.00114	.00217	.00238	.67746	14.202	.40646	.00721
#2	.00118	.00152	.00233	.67574	14.175	.40589	.00595
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	.00709	.00500	-.00170	.00053	-.00138	.00256	.00125
SDev	.00085	.00290	.00023	.00081	.00076	.00048	.00058
%RSD	11.963	57.953	13.631	152.44	55.280	18.826	46.152
#1	.00769	.00704	-.00186	.00110	-.00192	.00222	.00084
#2	.00649	.00295	-.00153	-.00004	-.00084	.00290	.00166
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	-.00123	.00080	.00012	.00214	-.00004	.00801	
SDev	.00078	.00044	.00004	.00407	.00039	.00001	
%RSD	63.375	55.646	29.860	190.05	1034.4	.10382	
#1	-.00178	.00111	.00015	-.00074	.00024	.00800	
#2	-.00068	.00048	.00010	.00501	-.00031	.00801	
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

08/15/00 11:00:44 AM

page 2

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	16168	--	--	--	--	--	--
Avge	8.096511	--	--	--	--	--	--
SDev	.0500789	--	--	--	--	--	--
%RSD							
#1	16173	--	--	--	--	--	--
#2	16162	--	--	--	--	--	--

667

545

Method: METTRA Sample Name: DHDR0

Operator: RJG

Run Time: 08/15/00 11:00:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.07573	.00010	.04780	-.00031	58.559	.00006
SDev	.00069	.00214	.00054	.00005	.00001	.033	.00012
%RSD	611.22	2.8244	549.00	.10931	3.0291	.05632	194.08
#1	-.00038	.07724	-.00028	.04784	-.00031	58.583	-.00002
#2	.00060	.07422	.00048	.04776	-.00032	58.536	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00294	.00093	.00197	2.3071	16.446	.48436	.00603
SDev	.00014	.00024	.00046	.0076	.014	.00003	.00001
%RSD	4.5974	25.615	23.330	.33126	.08300	.00610	.12222
#1	.00285	.00076	.00165	2.3017	16.455	.48434	.00603
#2	.00304	.00110	.00230	2.3125	16.436	.48438	.00602
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	.01066	.00273	-.00007	.00087	-.00146	.00071	-.00001
SDev	.00080	.00266	.00179	.00030	.00033	.00227	.00140
%RSD	7.5136	97.459	2680.5	35.255	22.584	317.47	16020.
#1	.01123	.00085	.00120	.00108	-.00169	.00232	.00098
#2	.01010	.00462	-.00133	.00065	-.00122	-.00089	-.00100
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	-.00177	.00238	.00100	.00014	.00082	.01306	
SDev	.00094	.00042	.00003	.00037	.00000	.00014	
%RSD	52.829	17.630	3.2086	262.58	.25355	1.1021	
#1	-.00244	.00268	.00098	.00041	.00081	.01316	
#2	-.00111	.00208	.00102	-.00012	.00082	.01296	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16036	--	--	--	--	--	--
SDev	11.52570	--	--	--	--	--	--
%RSD	.0718748	--	--	--	--	--	--
#1	16028	--	--	--	--	--	--
#2	16044	--	--	--	--	--	--

667

547

Method: METTRA Sample Name: DHDR5

Operator: RJG

Run Time: 08/15/00 11:04:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00031	.26713	.00152	.07197	-.00029	96.979	.00006
SDev	.00019	.00803	.00124	.00007	.00007	.292	.00017
%RSD	60.808	3.0066	81.415	.09377	22.682	.30114	312.27
#1	.00044	.27281	.00239	.07202	-.00033	97.186	.00018
#2	.00018	.26145	.00064	.07192	-.00024	96.773	-.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	.01428	.00113	.00195	1.6381	21.475	1.2419	-.00086
SDev	.00023	.00003	.00025	.0101	.036	.0006	.00008
%RSD	1.6477	2.5684	13.029	.61474	.16644	.05064	9.0166
#1	.01412	.00115	.00177	1.6310	21.500	1.2423	-.00081
#2	.01445	.00111	.00212	1.6453	21.449	1.2414	-.00092
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	.02666	.00411	-.00150	.00037	-.00116	.00001	-.00038
SDev	.00194	.00044	.00140	.00079	.00008	.00011	.00004
%RSD	7.2569	10.770	93.708	211.75	7.2464	1337.3	11.692
#1	.02803	.00442	-.00249	-.00018	-.00122	.00008	-.00035
#2	.02529	.00380	-.00050	.00093	-.00110	-.00007	-.00041
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	-.00103	.00108	.00037	-.00337	.00183	.02869	
SDev	.00129	.00004	.00046	.00154	.00020	.00007	
%RSD	125.03	3.5058	122.05	45.636	10.847	.24193	
#1	-.00195	.00105	.00005	-.00228	.00169	.02874	
#2	-.00012	.00110	.00070	-.00446	.00197	.02864	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16064	--	--	--	--	--	--
SDev	12.37437	--	--	--	--	--	--
%RSD	.0770317	--	--	--	--	--	--
#1	16055	--	--	--	--	--	--
#2	16073	--	--	--	--	--	--

667

549

Method: METTRA Sample Name: DHDR8

Operator: RJG

Run Time: 08/15/00 11:09:05

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
Avg	-.00045	1.9832	.00016	.05279	-.00037	14.883	.00007
SDev	.00001	.0024	.00115	.00027	.00001	.024	.00017
%RSD	3.2160	.11902	736.17	.51466	1.7826	.16029	249.52
#1	-.00046	1.9848	-.00066	.05298	-.00037	14.866	.00019
#2	-.00044	1.9815	.00097	.05260	-.00038	14.900	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00330	.00349	.00406	2.4332	2.9149	.10462	-.00085
SDev	.00009	.00009	.00028	.0144	.0018	.00007	.00008
%RSD	2.6679	2.5569	6.8218	.59082	.06186	.06350	9.9748
#1	.00324	.00355	.00386	2.4231	2.9136	.10457	-.00090
#2	.00336	.00343	.00425	2.4434	2.9161	.10466	-.00079
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	.00602	.00679	.00212	.00368	-.00307	.00111	-.00028
SDev	.00028	.00284	.00055	.00131	.00103	.00026	.00052
%RSD	4.6856	41.854	26.062	35.771	33.643	23.120	183.10
#1	.00582	.00478	.00173	.00275	-.00234	.00129	.00008
#2	.00621	.00879	.00251	.00460	-.00380	.00093	-.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	
Avg	-.00575	.00295	.00005	-.00247	.00394	.01258	
SDev	.00092	.00132	.00058	.00050	.00041	.00000	
%RSD	15.924	44.935	1104.4	20.063	10.421	.01870	
#1	-.00639	.00388	.00046	-.00212	.00365	.01257	
#2	-.00510	.00201	-.00036	-.00282	.00424	.01258	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15972	--	--	--	--	--	--
SDev	40.16422	--	--	--	--	--	--
%RSD	.2514711	--	--	--	--	--	--
#1	16000	--	--	--	--	--	--
#2	15943	--	--	--	--	--	--

667 551

Method: METTRA Sample Name: DHDRH

Operator: RJG

Run Time: 08/15/00 11:13:15

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	-.00005	.14140	.00079	.03375	-.00029	12.043	.00027
SDev	.00015	.00510	.00100	.00008	.00007	.086	.00004
%RSD	320.39	3.6068	127.10	.23817	22.698	.71032	13.881
#1	.00006	.14500	.00149	.03381	-.00034	12.104	.00030
#2	-.00015	.13779	.00008	.03369	-.00024	11.983	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00234	.00196	.00379	.60154	2.4378	.03916	-.00236
SDev	.00027	.00020	.00014	.00159	.0106	.00016	.00023
%RSD	11.641	9.9895	3.6263	.26475	.43304	.41445	9.5623
#1	.00253	.00210	.00369	.60041	2.4453	.03927	-.00252
#2	.00215	.00182	.00389	.60267	2.4304	.03904	-.00220
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	.00545	.00318	.00008	.00111	-.00110	.00068	.00009
SDev	.00046	.00263	.00012	.00079	.00107	.00065	.00007
%RSD	8.4572	82.521	156.92	71.292	97.074	94.818	85.408
#1	.00513	.00504	-.00001	.00167	-.00186	.00114	.00014
#2	.00578	.00133	.00016	.00055	-.00035	.00022	.00003
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	-.00141	.00286	.00144	-.00176	-.00020	.03021	
SDev	.00126	.00074	.00091	.00647	.00059	.00016	
%RSD	89.585	25.724	63.408	367.95	293.81	.54598	
#1	-.00231	.00234	.00079	.00282	.00022	.03033	
#2	-.00052	.00338	.00208	-.00634	-.00062	.03009	
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	

667 553

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16096	--	--	--	--	--	--
SDev	.6014551	--	--	--	--	--	--
%RSD	.0037366	--	--	--	--	--	--
#1	16097	--	--	--	--	--	--
#2	16096	--	--	--	--	--	--

Method: METTRA Sample Name: DH4QPB

Operator: RJG

Run Time: 08/15/00 11:17:24

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
Avg	-.00005	-.00937	.00003	-.00034	-.00013	.00955	.00012
SDev	.00059	.00603	.00050	.00004	.00019	.00222	.00015
%RSD	1122.2	64.413	1677.9	11.775	144.98	23.269	128.25
#1	.00036	-.00510	.00038	-.00037	-.00026	.01112	.00022
#2	-.00047	-.01364	-.00032	-.00031	.00000	.00798	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	.00033	.00017	-.01048	-.00682	-.00015	-.00238
SDev	.00026	.00067	.00003	.00573	.00539	.00003	.00022
%RSD	53.146	199.97	15.652	54.704	79.030	22.678	9.1376
#1	-.00031	.00081	.00015	-.01453	-.00301	-.00013	-.00253
#2	-.00068	-.00014	.00018	-.00643	-.01064	-.00017	-.00222
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	.00101	.00116	-.00020	.00025	.00021	.00082	.00062
SDev	.00052	.00408	.00270	.00044	.00283	.00021	.00081
%RSD	51.067	351.41	1363.9	173.86	1324.4	25.271	130.84
#1	.00065	.00405	-.00211	-.00006	-.00179	.00096	.00005
#2	.00138	-.00172	.00171	.00057	.00222	.00067	.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	
Avg	-.00088	-.00070	-.00076	.00253	-.00028	-.00033	
SDev	.00174	.00026	.00076	.00342	.00078	.00005	
%RSD	197.97	37.326	99.156	135.45	280.10	15.613	
#1	.00035	-.00052	-.00023	.00495	.00027	-.00037	
#2	-.00211	-.00089	-.00130	.00011	-.00083	-.00029	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16230	--	--	--	--	--	--
SDev	58.47787	--	--	--	--	--	--
%RSD	.3603006	--	--	--	--	--	--
#1	16189	--	--	--	--	--	--
#2	16272	--	--	--	--	--	--

667

555

Method: METTRA Sample Name: DH4QPC

Operator: RJG

Run Time: 08/15/00 11:21:34

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	.05078	2.0451	1.9938	2.0041	.05078	51.034	.04803
SDev	.00040	.0050	.0015	.0054	.00024	.201	.00018
%RSD	.78598	.24312	.07585	.27197	.47761	.39431	.36870
#1	.05106	2.0416	1.9949	2.0002	.05095	51.176	.04790
#2	.05049	2.0487	1.9927	2.0079	.05061	50.892	.04816
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51153	.20588	.25019	.94601	49.841	.50429	1.0329
SDev	.00104	.00029	.00042	.00437	.008	.00030	.0074
%RSD	.20405	.14208	.16954	.46194	.01533	.06013	.71255
#1	.51079	.20609	.24989	.94910	49.846	.50407	1.0277
#2	.51227	.20568	.25049	.94292	49.835	.50450	1.0381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50003	.52213	.50313	.50946	.51258	.50663	.50861
SDev	.00360	.00053	.00075	.00068	.00275	.00041	.00119
%RSD	.72082	.10132	.14969	.13318	.53623	.08083	.23367
#1	.50258	.52250	.50366	.50994	.51453	.50692	.50945
#2	.49748	.52175	.50260	.50898	.51064	.50634	.50777
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9844	2.0106	2.0018	2.1267	.50881	.52835	
SDev	.0018	.0021	.0020	.0057	.00064	.00036	
%RSD	.09162	.10670	.10172	.27038	.12580	.06852	
#1	1.9857	2.0121	2.0033	2.1308	.50926	.52860	
#2	1.9831	2.0090	2.0004	2.1226	.50835	.52809	
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	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16293	--	--	--	--	--	--
SDev	47.90648	--	--	--	--	--	--
%RSD	.2940378	--	--	--	--	--	--
#1	16326	--	--	--	--	--	--
#2	16259	--	--	--	--	--	--

667

557

Method: METTRA Sample Name: DG7DJ

Operator: RJG

Run Time: 08/15/00 11:25:43

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	-.00041	.02787	.00118	.02178	-.00029	27.729	.00003
SDev	.00014	.00329	.00034	.00007	.00011	.089	.00017
%RSD	34.372	11.790	28.857	.32742	37.845	.32165	633.93
#1	-.00031	.03020	.00094	.02183	-.00037	27.793	.00014
#2	-.00051	.02555	.00142	.02173	-.00021	27.666	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00117	.00013	.00177	.06097	17.457	.10555	.00339
SDev	.00034	.00024	.00022	.00648	.054	.00019	.00116
%RSD	28.750	177.73	12.247	10.632	.30865	.18415	34.188
#1	-.00141	-.00003	.00192	.05639	17.495	.10569	.00421
#2	-.00093	.00030	.00162	.06555	17.419	.10541	.00257
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00214	.00274	.00137	.00182	.00085	-.00016	.00017
SDev	.00065	.00119	.00189	.00086	.00046	.00073	.00034
%RSD	30.272	43.603	138.14	47.225	54.175	452.49	193.66
#1	.00168	.00358	.00003	.00121	.00052	.00036	.00041
#2	.00260	.00189	.00270	.00243	.00117	-.00068	-.00006
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	-.00192	.00482	.00258	.00200	.00615	.02034	
SDev	.00148	.00217	.00095	.00056	.00037	.00005	
%RSD	77.345	45.036	37.027	27.809	5.9844	.24848	
#1	-.00297	.00635	.00325	.00239	.00589	.02030	
#2	-.00087	.00328	.00190	.00161	.00641	.02037	
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	

667 559

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16084	--	--	--	--	--	--
SDev	64.24107	--	--	--	--	--	--
%RSD	.3993992	--	--	--	--	--	--
#1	16039	--	--	--	--	--	--
#2	16130	--	--	--	--	--	--

Method: METTRA Sample Name: DG7E2

Operator: RJG

Run Time: 08/15/00 11:29:52

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	-.00036	.32911	.00130	.02897	-.00017	32.524	.00006
SDev	.00043	.01343	.00053	.00011	.00001	.158	.00008
%RSD	122.13	4.0814	40.583	.39070	5.1409	.48608	131.76
#1	-.00066	.33861	.00093	.02905	-.00018	32.636	.00011
#2	-.00005	.31961	.00167	.02889	-.00017	32.412	.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00048	.00133	.00425	.71021	17.639	.34184	.00150
SDev	.00009	.00020	.00019	.00388	.059	.00076	.00093
%RSD	18.728	14.932	4.3873	.54587	.33629	.22189	62.428
#1	-.00055	.00119	.00412	.70747	17.681	.34238	.00216
#2	-.00042	.00147	.00439	.71295	17.597	.34131	.00084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00408	.00372	.00369	.00370	.00072	.00033	.00046
SDev	.00023	.00483	.00227	.00010	.00382	.00270	.00053
%RSD	5.7408	129.86	61.407	2.6477	529.98	808.64	115.18
#1	.00391	.00030	.00529	.00363	.00342	-.00158	.00009
#2	.00424	.00714	.00209	.00377	-.00198	.00225	.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	-.00421	.00216	.00004	-.00080	.00467	.02504	
SDev	.00080	.00104	.00043	.00061	.00003	.00003	
%RSD	19.096	48.436	1141.5	75.563	.66929	.12345	
#1	-.00478	.00290	.00034	-.00037	.00470	.02501	
#2	-.00364	.00142	-.00027	-.00123	.00465	.02506	
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	

667 561

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16180	--	--	--	--	--	--
SDev	100.5148	--	--	--	--	--	--
%RSD	.6212297	--	--	--	--	--	--
#1	16109	--	--	--	--	--	--
#2	16251	--	--	--	--	--	--

Method: METTRA Sample Name: DG7E3

Operator: RJG

Run Time: 08/15/00 11:34:01

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	-.00041	.05194	.00064	.00234	-.00014	17.224	.00004
SDev	.00009	.00305	.00025	.00005	.00003	.006	.00020
%RSD	22.204	5.8710	39.440	2.0726	22.715	.03696	488.38
#1	-.00034	.04979	.00046	.00230	-.00012	17.220	.00019
#2	-.00047	.05410	.00082	.00237	-.00016	17.229	-.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00078	.00006	.00031	.88426	4.4774	.12028	-.00074
SDev	.00007	.00014	.00019	.00121	.0081	.00016	.00002
%RSD	9.1949	235.58	59.705	.13685	.18189	.12995	2.3064
#1	-.00083	.00016	.00018	.88341	4.4717	.12017	-.00075
#2	-.00073	-.00004	.00045	.88512	4.4832	.12040	-.00073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00138	.00433	-.00049	.00112	-.00098	.00043	-.00004
SDev	.00051	.00177	.00003	.00061	.00240	.00084	.00024
%RSD	37.171	40.872	5.3061	54.271	245.94	196.75	588.26
#1	.00174	.00558	-.00047	.00155	-.00268	.00102	-.00021
#2	.00102	.00308	-.00050	.00069	.00072	-.00017	.00013
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	-.00281	.00217	.00051	-.00128	-.00052	.01512	
SDev	.00062	.00031	.00041	.00077	.00000	.00008	
%RSD	21.957	14.334	80.733	59.796	.08145	.55536	
#1	-.00238	.00239	.00080	-.00074	-.00052	.01518	
#2	-.00325	.00195	.00022	-.00182	-.00052	.01506	
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	

667**563**

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16238	--	--	--	--	--	--
SDev	79.90307	--	--	--	--	--	--
%RSD	.4920715	--	--	--	--	--	--
#1	16295	--	--	--	--	--	--
#2	16182	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 08/15/00 11:38:11

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	1.0364	24.569	.51403	2.0165	2.0817	51.837	.49615
SDev	.0005	.045	.00382	.0074	.0032	.135	.00041
%RSD	.04547	.18306	.74285	.36805	.15462	.26107	.08175
#1	1.0367	24.601	.51673	2.0217	2.0839	51.933	.49644
#2	1.0360	24.537	.51133	2.0113	2.0794	51.742	.49586
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	2.0666	2.0709	1.9788	25.595	50.391	2.0512	2.0767
SDev	.0010	.0011	.0035	.004	.100	.0026	.0127
%RSD	.04940	.05123	.17933	.01417	.19914	.12682	.61388
#1	2.0658	2.0717	1.9813	25.598	50.462	2.0531	2.0677
#2	2.0673	2.0702	1.9762	25.593	50.320	2.0494	2.0857
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	2.0320	.52581	.51090	.51587	.52708	.51097	.51633
SDev	.0114	.00369	.00101	.00190	.00099	.00060	.00007
%RSD	.55865	.70132	.19814	.36893	.18833	.11723	.01337
#1	2.0401	.52320	.51019	.51452	.52638	.51139	.51638
#2	2.0240	.52842	.51162	.51721	.52778	.51054	.51628
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	.51050	.52134	.51773	1.0406	2.0618	2.0758	
SDev	.00268	.00155	.00192	.0034	.0046	.0022	
%RSD	.52511	.29667	.37168	.32504	.22358	.10666	
#1	.50861	.52025	.51637	1.0382	2.0651	2.0774	
#2	.51240	.52244	.51909	1.0430	2.0586	2.0743	
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	

667 565

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16491	--	--	--	--	--	--
SDev	80.07984	--	--	--	--	--	--
%RSD	.4856054	--	--	--	--	--	--
#1	16547	--	--	--	--	--	--
#2	16434	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 08/15/00 11:42:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	-.00037	.00113	.00007	.00071	.00065	.00024
SDev	.00010	.00859	.00008	.00018	.00020	.00389	.00014
%RSD	76.974	2319.6	7.4215	251.00	27.508	598.50	60.492
#1	-.00006	.00571	.00119	-.00006	.00057	-.00210	.00013
#2	-.00021	-.00645	.00107	.00020	.00085	.00340	.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
Avg	-.00000	-.00016	-.00042	-.00405	.00340	.00017	.00371
SDev	.00003	.00003	.00027	.00292	.00356	.00011	.00188
%RSD	1127.9	16.613	63.875	71.963	104.78	63.367	50.507
#1	-.00003	-.00018	-.00062	-.00199	.00088	.00009	.00504
#2	.00002	-.00014	-.00023	-.00612	.00591	.00025	.00239
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	.00035	-.00058	.00069	.00026	.00112	-.00039	.00011
SDev	.00065	.00080	.00067	.00071	.00003	.00328	.00220
%RSD	182.30	136.86	97.769	269.79	2.3441	846.24	1918.0
#1	.00081	-.00002	.00116	.00077	.00110	-.00271	-.00144
#2	-.00010	-.00115	.00021	-.00024	.00114	.00193	.00167
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	.00051	.00017	.00028	.00165	-.00029	-.00010	
SDev	.00301	.00006	.00096	.00089	.00000	.00011	
%RSD	593.87	37.566	342.88	53.776	1.3825	109.88	
#1	.00264	.00012	.00096	.00102	-.00028	-.00018	
#2	-.00162	.00021	-.00040	.00228	-.00029	-.00002	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 567

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16515	--	--	--	--	--	--
SDev	89.90891	--	--	--	--	--	--
%RSD	.5444083	--	--	--	--	--	--
#1	16451	--	--	--	--	--	--
#2	16579	--	--	--	--	--	--

Method: METTRA Sample Name: DG7E4

Operator: RJG

Run Time: 08/15/00 11:46:29

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	-.00010	.02734	.00037	.02167	.00013	27.789	.00022
SDev	.00013	.00877	.00044	.00007	.00005	.004	.00002
%RSD	130.30	32.094	121.21	.34655	43.062	.01432	11.055
#1	-.00020	.03354	.00005	.02162	.00009	27.786	.00024
#2	-.00001	.02113	.00068	.02172	.00016	27.791	.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	-.00049	.00077	.00134	.05350	17.691	.10046	.00227
SDev	.00000	.00007	.00002	.00409	.000	.00003	.00028
%RSD	.55898	9.2431	1.6196	7.6541	.00168	.02816	12.540
#1	-.00049	.00082	.00133	.05640	17.691	.10044	.00207
#2	-.00048	.00072	.00136	.05061	17.690	.10048	.00247
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	.00233	.00380	-.00055	.00090	-.00001	.00090	.00060
SDev	.00045	.00143	.00027	.00030	.00124	.00068	.00087
%RSD	19.251	37.650	49.589	32.791	12767.	75.746	145.39
#1	.00201	.00279	-.00036	.00069	-.00089	.00042	-.00002
#2	.00265	.00481	-.00074	.00111	.00087	.00138	.00121
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	-.00196	.00165	.00045	-.00017	.00521	.01065	
SDev	.00206	.00054	.00033	.00079	.00272	.00005	
%RSD	105.29	32.544	73.546	466.06	52.194	.45026	
#1	-.00342	.00203	.00021	-.00073	.00714	.01069	
#2	-.00050	.00127	.00068	.00039	.00329	.01062	
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	

667 569

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16355	--	--	--	--	--	--
SDev	29.34493	--	--	--	--	--	--
%RSD	.1794259	--	--	--	--	--	--
#1	16334	--	--	--	--	--	--
#2	16376	--	--	--	--	--	--

Method: METTRA Sample Name: DG7E5

Operator: RJG

Run Time: 08/15/00 11:50:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00049	.10339	.00017	.02792	-.00033	65.235	.00011
SDev	.00006	.00377	.00110	.00016	.00005	.099	.00001
%RSD	12.185	3.6505	657.38	.57246	14.544	.15122	5.0790
#1	-.00045	.10606	-.00061	.02803	-.00037	65.304	.00011
#2	-.00054	.10072	.00094	.02781	-.00030	65.165	.00010
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	-.00061	.00028	.00060	.51791	11.136	.11227	-.00045
SDev	.00030	.00008	.00007	.00868	.007	.00011	.00053
%RSD	49.328	29.987	11.769	1.6766	.06277	.09398	118.28
#1	-.00082	.00034	.00065	.51177	11.141	.11220	-.00082
#2	-.00040	.00022	.00055	.52405	11.131	.11235	-.00007
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	.00121	.00230	.00049	.00109	.00125	-.00034	.00019
SDev	.00026	.00023	.00173	.00108	.00002	.00024	.00015
%RSD	21.731	9.9383	354.28	99.043	1.9584	69.411	80.312
#1	.00140	.00214	.00172	.00186	.00126	-.00051	.00008
#2	.00103	.00246	-.00074	.00033	.00123	-.00017	.00029
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	-.00380	.00228	.00026	-.00251	.00047	.01548	
SDev	.00014	.00126	.00088	.00211	.00040	.00014	
%RSD	3.6418	55.030	345.14	83.984	85.105	.88870	
#1	-.00390	.00139	-.00037	-.00401	.00019	.01558	
#2	-.00370	.00317	.00088	-.00102	.00075	.01539	
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	

667 571

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16093	--	--	--	--	--	--
SDev	1.307871	--	--	--	--	--	--
%RSD	.0081272	--	--	--	--	--	--
#1	16092	--	--	--	--	--	--
#2	16094	--	--	--	--	--	--

Method: METTRA Sample Name: DGG3T

Operator: RJG

Run Time: 08/15/00 11:54:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.14963	.00139	.02227	-.00040	41.094	.00002
SDev	.00039	.00882	.00024	.00005	.00000	.180	.00000
%RSD	133.11	5.8957	17.586	.23080	1.1745	.43861	19.332
#1	.00002	.15587	.00121	.02231	-.00041	41.221	.00001
#2	.00057	.14339	.00156	.02224	-.00040	40.966	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00132	.00160	.58288	6.6115	.03509	-.00051
SDev	.00022	.00034	.00009	.00322	.0111	.00008	.00044
%RSD	110.28	26.140	5.2927	.55293	.16833	.21994	86.358
#1	-.00036	.00107	.00154	.58516	6.6194	.03503	-.00081
#2	-.00004	.00156	.00166	.58060	6.6037	.03514	-.00020
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	.00312	.00423	-.00102	.00073	-.00148	-.00021	-.00063
SDev	.00045	.00220	.00085	.00130	.00143	.00204	.00089
%RSD	14.345	51.939	83.769	177.75	96.610	987.57	140.53
#1	.00280	.00268	-.00162	-.00019	-.00047	-.00165	-.00126
#2	.00343	.00578	-.00041	.00165	-.00249	.00124	-.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	-.00154	.00156	.00053	.00106	.00201	.02083	
SDev	.00048	.00134	.00105	.00241	.00215	.00016	
%RSD	30.966	85.831	200.08	226.88	106.92	.78352	
#1	-.00121	.00251	.00127	-.00064	.00049	.02072	
#2	-.00188	.00061	-.00022	.00276	.00353	.02095	
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	

667 573

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16121	--	--	--	--	--	--
SDev	61.23586	--	--	--	--	--	--
%RSD	.3798621	--	--	--	--	--	--
#1	16077	--	--	--	--	--	--
#2	16164	--	--	--	--	--	--

Method: METTRA Sample Name: DGG44

Operator: RJG

Run Time: 08/15/00 11:58:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00046	.05071	.00024	.05151	-.00049	213.17	.00045
SDev	.00002	.01147	.00133	.00009	.00000	.37	.00010
%RSD	3.5237	22.614	545.40	.18244	.44090	.17291	21.580
#1	.00047	.05882	-.00070	.05158	-.00049	213.43	.00038
#2	.00045	.04260	.00119	.05145	-.00049	212.91	.00052
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	.00402	.00152	.01069	.47305	41.910	2.1570	.00007
SDev	.00049	.00014	.00003	.00228	.070	.0009	.00016
%RSD	12.189	9.4469	.26152	.48228	.16809	.04353	228.13
#1	.00367	.00163	.01071	.47466	41.960	2.1577	.00018
#2	.00437	.00142	.01067	.47144	41.860	2.1564	-.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00564	.00590	.00094	.00259	-.00210	.00145	.00027
SDev	.00105	.00183	.00021	.00047	.00053	.00011	.00025
%RSD	18.679	30.909	22.292	18.027	25.287	7.2746	91.199
#1	.00490	.00461	.00109	.00226	-.00172	.00153	.00045
#2	.00639	.00719	.00079	.00292	-.00247	.00138	.00010
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	-.00090	.00044	-.00001	-.00359	.00116	.15380	
SDev	.00066	.00209	.00117	.00141	.00019	.00059	
%RSD	73.069	473.29	19383.	39.303	16.793	.38279	
#1	-.00137	.00192	.00082	-.00458	.00102	.15422	
#2	-.00044	-.00104	-.00084	-.00259	.00130	.15338	
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	

667 575

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15960	--	--	--	--	--	--
SDev	23.44087	--	--	--	--	--	--
%RSD	.1468719	--	--	--	--	--	--
#1	15944	--	--	--	--	--	--
#2	15977	--	--	--	--	--	--

Method: METTRA Sample Name: DGJLV

Operator: RJG

Run Time: 08/15/00 12:03:06

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	-.00016	.24620	.00170	.05421	-.00055	176.17	.00008
SDev	.00018	.00897	.00015	.00014	.00009	.52	.00025
%RSD	111.39	3.6432	8.8973	.25778	17.117	.29403	308.23

#1	-.00003	.25255	.00159	.05431	-.00062	176.53	.00025
#2	-.00029	.23986	.00181	.05411	-.00049	175.80	-.00009

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

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	.00094	.01923	1.3776	12.273	1.0925	-.00127
SDev	.00005	.00017	.00008	.0160	.037	.0014	.00008
%RSD	285.41	18.085	.42603	1.1608	.30091	.13190	6.1529

#1	.00002	.00106	.01929	1.3663	12.299	1.0936	-.00122
#2	-.00006	.00082	.01917	1.3889	12.246	1.0915	-.00133

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00320	.00254	.00035	.00108	-.00119	.00034	-.00017
SDev	.00079	.00051	.00045	.00013	.00026	.00010	.00002
%RSD	24.821	19.924	128.19	12.175	21.678	29.552	11.409

#1	.00264	.00290	.00003	.00099	-.00101	.00027	-.00016
#2	.00376	.00218	.00067	.00117	-.00137	.00041	-.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	-.00598	.00390	.00061	-.00192	-.00035	.01261
SDev	.00064	.00108	.00051	.00110	.00001	.00007
%RSD	10.741	27.773	83.535	57.195	1.6114	.52252

#1	-.00644	.00467	.00097	-.00114	-.00035	.01257
#2	-.00553	.00313	.00025	-.00269	-.00034	.01266

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

667 577

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15964	--	--	--	--	--	--
SDev	13.32869	--	--	--	--	--	--
%RSD	.0834907	--	--	--	--	--	--
#1	15955	--	--	--	--	--	--
#2	15974	--	--	--	--	--	--

Method: METTRA Sample Name: DGJLX

Operator: RJG

Run Time: 08/15/00 12:07:15

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	-.00024	.06247	.00085	.02040	-.00044	41.246	.00006
SDev	.00058	.01173	.00047	.00016	.00022	.052	.00013
%RSD	238.19	18.773	55.247	.79974	48.885	.12728	223.46
#1	.00017	.07076	.00118	.02052	-.00059	41.209	-.00003
#2	-.00065	.05418	.00052	.02029	-.00029	41.283	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00125	.00061	.04172	.39475	6.6185	.03602	-.00128
SDev	.00044	.00038	.00004	.00578	.0080	.00000	.00022
%RSD	35.184	62.164	.10067	1.4647	.12158	.01000	17.327
#1	-.00094	.00088	.04175	.39066	6.6128	.03602	-.00113
#2	-.00156	.00034	.04169	.39884	6.6242	.03603	-.00144
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	.00145	.00546	-.00094	.00119	-.00229	.00144	.00020
SDev	.00178	.00021	.00073	.00056	.00030	.00031	.00031
%RSD	122.88	3.8550	77.653	47.061	13.003	21.674	153.99
#1	.00271	.00531	-.00146	.00079	-.00250	.00122	-.00002
#2	.00019	.00561	-.00043	.00158	-.00208	.00166	.00042
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	-.00382	.00359	.00112	-.00448	.00126	.03057	
SDev	.00069	.00148	.00076	.00349	.00236	.00019	
%RSD	18.189	41.422	67.750	77.977	187.17	.63601	
#1	-.00431	.00464	.00166	-.00201	.00294	.03071	
#2	-.00332	.00254	.00058	-.00694	-.00041	.03043	
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	

667 579

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16023	--	--	--	--	--	--
SDev	23.19297	--	--	--	--	--	--
%RSD	.1447443	--	--	--	--	--	--
#1	16040	--	--	--	--	--	--
#2	16007	--	--	--	--	--	--

Method: METTRA Sample Name: DGJM2

Operator: RJG

Run Time: 08/15/00 12:11:24

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
Avg	.00016	.09009	.00159	.02135	-.00044	41.719	.00015
SDev	.00014	.01021	.00100	.00002	.00022	.162	.00008
%RSD	88.258	11.328	63.350	.08724	49.829	.38751	52.418
#1	.00025	.09731	.00088	.02136	-.00060	41.833	.00020
#2	.00006	.08287	.00230	.02134	-.00029	41.605	.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00053	.00113	.00113	.45175	6.7210	.04150	-.00172
SDev	.00020	.00015	.00022	.00895	.0175	.00013	.00009
%RSD	37.403	13.013	19.466	1.9822	.25966	.32304	5.1167
#1	-.00067	.00124	.00128	.45808	6.7334	.04159	-.00166
#2	-.00039	.00103	.00097	.44542	6.7087	.04140	-.00178
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	.00187	.00363	-.00068	.00075	-.00166	.00105	.00014
SDev	.00093	.00040	.00019	.00026	.00033	.00088	.00048
%RSD	50.035	10.948	27.295	34.019	19.563	84.380	334.06
#1	.00253	.00391	-.00055	.00094	-.00143	.00042	-.00020
#2	.00121	.00335	-.00081	.00057	-.00189	.00167	.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	-.00405	.00185	-.00012	-.00165	.00322	.00279	
SDev	.00089	.00188	.00155	.00359	.00042	.00002	
%RSD	22.001	101.34	1344.4	217.57	12.914	.61124	
#1	-.00469	.00052	-.00121	.00089	.00352	.00278	
#2	-.00342	.00318	.00098	-.00419	.00293	.00280	
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: DGJM4

Operator: RJG

Run Time: 08/15/00 12:15:33

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	-.00037	.33181	.00114	.02447	-.00018	47.115	.00004
SDev	.00008	.01149	.00048	.00013	.00012	.137	.00003
%RSD	20.074	3.4619	42.198	.54846	67.537	.29177	85.039
#1	-.00043	.33994	.00080	.02456	-.00026	47.212	.00001
#2	-.00032	.32369	.00148	.02438	-.00009	47.017	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.00108	.00214	.93574	8.9993	.30748	.00420
SDev	.00024	.00009	.00019	.00464	.0276	.00045	.00079
%RSD	176.74	8.4269	8.9622	.49550	.30703	.14608	18.840
#1	.00030	.00114	.00227	.93902	9.0188	.30779	.00476
#2	-.00003	.00102	.00200	.93246	8.9797	.30716	.00364
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	.00258	.00534	.00041	.00205	-.00022	.00090	.00053
SDev	.00011	.00291	.00177	.00021	.00169	.00003	.00058
%RSD	4.3890	54.536	433.04	10.334	766.19	3.6327	110.70
#1	.00250	.00328	.00166	.00220	.00097	.00092	.00094
#2	.00266	.00740	-.00084	.00190	-.00142	.00088	.00011
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00206	.00104	.00001	-.00494	.00115	.01249	
SDev	.00295	.00265	.00078	.00138	.00040	.00014	
%RSD	143.68	254.14	8177.5	28.023	34.748	1.1533	
#1	-.00415	.00291	.00056	-.00396	.00143	.01239	
#2	.00003	-.00083	-.00054	-.00591	.00087	.01259	
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

08/15/00 12:15:30 PM

page 2

667 581

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16092	--	--	--	--	--	--
SDev	82.62515	--	--	--	--	--	--
%RSD	.5134620	--	--	--	--	--	--
#1	16033	--	--	--	--	--	--
#2	16150	--	--	--	--	--	--

667 583

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16263	--	--	--	--	--	--
SDev	91.32243	--	--	--	--	--	--
%RSD	.5615185	--	--	--	--	--	--
#1	16199	--	--	--	--	--	--
#2	16328	--	--	--	--	--	--

Method: METTRA Sample Name: DGJM4P5

Operator: RJG

Run Time: 08/15/00 12:19:43

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	-.00023	.08148	.00011	.00450	.00040	9.1606	.00002
SDev	.00007	.00347	.00069	.00001	.00009	.0286	.00003
%RSD	32.044	4.2598	637.62	.32120	21.720	.31176	151.37
#1	-.00018	.08394	.00059	.00449	.00034	9.1808	-.00000
#2	-.00028	.07903	-.00038	.00451	.00047	9.1404	.00004
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	.00000	-.00062	.17758	1.7098	.05993	-.00082
SDev	.00045	.00001	.00053	.00218	.0019	.00020	.00014
%RSD	152.47	385.26	85.732	1.2285	.11269	.33683	17.075
#1	-.00061	.00001	-.00100	.17604	1.7112	.05979	-.00092
#2	.00002	-.00001	-.00025	.17912	1.7085	.06007	-.00072
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00062	.00010	.00027	.00076	-.00144	-.00071
SDev	.00038	.00055	.00012	.00027	.00100	.00081	.00020
%RSD	30.429	88.634	125.31	97.531	132.85	56.285	28.975
#1	.00098	.00101	.00019	.00046	.00147	-.00201	-.00085
#2	.00152	.00023	.00001	.00008	.00005	-.00086	-.00056
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00177	.00228	.00211	.00043	-.00023	.00161	
SDev	.00066	.00109	.00051	.00316	.00038	.00013	
%RSD	37.187	47.864	24.150	734.74	167.67	7.8860	
#1	.00223	.00151	.00175	.00266	-.00050	.00152	
#2	.00130	.00305	.00247	-.00180	.00004	.00170	

667 585

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16612	--	--	--	--	--	--
SDev	27.36586	--	--	--	--	--	--
%RSD	.1647360	--	--	--	--	--	--
#1	16593	--	--	--	--	--	--
#2	16631	--	--	--	--	--	--

Method: METTRA Sample Name: DGJM4S

Operator: RJG

Run Time: 08/15/00 12:23:52

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	.05136	2.6580	1.9942	2.0280	.05061	97.411	.04763
SDev	.00028	.0260	.0099	.0145	.00050	1.101	.00049
%RSD	.55455	.97838	.49692	.71560	.98805	1.1302	1.0189
#1	.05116	2.6764	2.0012	2.0382	.05096	98.190	.04797
#2	.05156	2.6396	1.9872	2.0177	.05025	96.633	.04728
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	.50942	.20637	.25652	1.9298	59.686	.80615	1.0458
SDev	.00423	.00132	.00189	.0345	.506	.00616	.0006
%RSD	.83060	.63766	.73610	1.7865	.84778	.76374	.05920
#1	.51241	.20730	.25786	1.9542	60.044	.81051	1.0463
#2	.50643	.20544	.25519	1.9055	59.328	.80180	1.0454
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	.50274	.52995	.50641	.51425	.52879	.51421	.51907
SDev	.00540	.00212	.00526	.00422	.00589	.00009	.00190
%RSD	1.0749	.40070	1.0390	.81994	1.1145	.01747	.36653
#1	.50656	.53145	.51013	.51723	.53296	.51415	.52041
#2	.49892	.52845	.50269	.51126	.52462	.51427	.51772
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	1.9695	2.0179	2.0017	2.1291	.51156	.53526	
SDev	.0102	.0132	.0122	.0230	.00441	.00503	
%RSD	.51769	.65216	.60811	1.0797	.86113	.94027	
#1	1.9767	2.0272	2.0103	2.1453	.51467	.53882	
#2	1.9622	2.0085	1.9931	2.1128	.50844	.53170	
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	

667 587

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15980	--	--	--	--	--	--
SDev	106.2780	--	--	--	--	--	--
%RSD	.6650522	--	--	--	--	--	--
#1	15905	--	--	--	--	--	--
#2	16056	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 08/15/00 12:28:02

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	1.0370	24.551	.51286	2.0170	2.0997	52.114	.49558
SDev	.0016	.013	.00003	.0058	.0044	.121	.00103
%RSD	.15295	.05255	.00665	.28621	.20745	.23246	.20835
#1	1.0358	24.560	.51284	2.0210	2.1028	52.199	.49485
#2	1.0381	24.541	.51288	2.0129	2.0966	52.028	.49631
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	2.0647	2.0715	1.9821	25.645	50.705	2.0559	2.0776
SDev	.0031	.0023	.0025	.024	.030	.0004	.0127
%RSD	.15040	.11027	.12659	.09411	.06004	.01925	.60920
#1	2.0625	2.0699	1.9838	25.628	50.726	2.0556	2.0686
#2	2.0669	2.0732	1.9803	25.662	50.683	2.0561	2.0865
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	2.0295	.52705	.51366	.51812	.53409	.51614	.52212
SDev	.0128	.00515	.00087	.00229	.00309	.00446	.00401
%RSD	.63052	.97628	.16882	.44234	.57927	.86480	.76753
#1	2.0385	.52341	.51304	.51650	.53190	.51298	.51928
#2	2.0204	.53069	.51427	.51974	.53628	.51930	.52495
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	.51233	.52451	.52045	1.0456	2.0721	2.0735	
SDev	.00777	.00264	.00434	.0040	.0057	.0007	
%RSD	1.5155	.50289	.83484	.38435	.27562	.03229	
#1	.50684	.52264	.51738	1.0484	2.0761	2.0739	
#2	.51782	.52637	.52353	1.0427	2.0681	2.0730	
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	

667 589

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16449	--	--	--	--	--	--
SDev	54.05776	--	--	--	--	--	--
%RSD	.3286431	--	--	--	--	--	--
#1	16487	--	--	--	--	--	--
#2	16411	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 08/15/00 12:32:11

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	-.00015	.04222	.00069	.00028	.00090	.00224	.00027
SDev	.00037	.00547	.00091	.00007	.00003	.00281	.00008
%RSD	247.00	12.956	131.65	26.722	3.0249	125.54	29.528
#1	-.00041	.04608	.00134	.00023	.00088	.00025	.00021
#2	.00011	.03835	.00005	.00033	.00091	.00423	.00033
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	-.00035	-.00002	-.00153	-.00774	.00632	.00026	.00384
SDev	.00016	.00022	.00030	.00046	.00588	.00010	.00137
%RSD	44.891	892.52	19.436	5.8824	93.081	36.356	35.600
#1	-.00046	-.00018	-.00174	-.00806	.00216	.00020	.00481
#2	-.00024	.00013	-.00132	-.00742	.01048	.00033	.00288
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	.00124	.00171	-.00082	.00002	-.00114	.00154	.00065
SDev	.00063	.00224	.00078	.00023	.00018	.00013	.00015
%RSD	50.901	131.48	95.285	1042.0	15.694	8.3126	22.358
#1	.00169	.00012	-.00027	-.00014	-.00127	.00145	.00055
#2	.00080	.00329	-.00137	.00018	-.00101	.00163	.00075
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00121	-.00189	-.00086	.00355	-.00002	-.00009	
SDev	.00010	.00046	.00034	.00244	.00038	.00008	
%RSD	8.0586	24.515	39.879	68.671	1519.3	96.614	
#1	.00128	-.00156	-.00061	.00528	.00024	-.00014	
#2	.00114	-.00222	-.00110	.00183	-.00029	-.00003	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 591

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16663	--	--	--	--	--	--
SDev	25.45585	--	--	--	--	--	--
%RSD	.1527714	--	--	--	--	--	--
#1	16681	--	--	--	--	--	--
#2	16645	--	--	--	--	--	--

Method: METTRA Sample Name: DGJM4D

Operator: RJG

Run Time: 08/15/00 12:36:21

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	.05295	2.7516	2.0558	2.1005	.05326	101.99	.04909
SDev	.00046	.0047	.0038	.0011	.00010	.14	.00013
%RSD	.87529	.17205	.18684	.05163	.18102	.13262	.27012
#1	.05262	2.7482	2.0585	2.1013	.05333	102.09	.04900
#2	.05328	2.7549	2.0531	2.0997	.05319	101.90	.04918
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	.52722	.21394	.26501	1.9837	62.023	.84221	1.0681
SDev	.00095	.00001	.00037	.0085	.035	.00135	.0049
%RSD	.18039	.00306	.13936	.42638	.05721	.15976	.46262
#1	.52654	.21394	.26475	1.9777	61.998	.84126	1.0646
#2	.52789	.21395	.26527	1.9897	62.048	.84316	1.0716
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	.52050	.54709	.51780	.52755	.53376	.52042	.52487
SDev	.00346	.00110	.00327	.00255	.00383	.00215	.00271
%RSD	.66418	.20045	.63235	.48320	.71750	.41354	.51648
#1	.52295	.54632	.51549	.52575	.53105	.51890	.52295
#2	.51806	.54787	.52012	.52936	.53647	.52195	.52678
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.0123	2.0773	2.0556	2.2073	.53110	.54919	
SDev	.0079	.0013	.0018	.0003	.00076	.00008	
%RSD	.39060	.06140	.08595	.01131	.14219	.01483	
#1	2.0067	2.0782	2.0544	2.2075	.53163	.54925	
#2	2.0178	2.0764	2.0569	2.2071	.53056	.54913	
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	

667 593

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16159	--	--	--	--	--	--
SDev	6.717515	--	--	--	--	--	--
%RSD	.0415710	--	--	--	--	--	--
#1	16164	--	--	--	--	--	--
#2	16154	--	--	--	--	--	--

Method: METRKA Sample Name: DGJM6

Operator: RJG

Run Time: 08/15/00 12:40:30

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
Avg	-.00025	.11788	.00177	.02109	-.00020	41.918	.00011
SDev	.00030	.01052	.00003	.00008	.00001	.085	.00013
%RSD	120.64	8.9218	1.8658	.38326	6.4458	.20180	119.63
#1	-.00046	.12532	.00175	.02115	-.00021	41.978	.00002
#2	-.00004	.11045	.00179	.02103	-.00019	41.858	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.00061	.00142	.41024	6.7828	.04196	.00157
SDev	.00017	.00002	.00033	.01495	.0083	.00001	.00128
%RSD	21.255	2.5381	23.188	3.6443	.12266	.01647	81.782
#1	-.00090	.00062	.00119	.42081	6.7887	.04197	.00248
#2	-.00066	.00060	.00166	.39966	6.7769	.04196	.00066
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	.00228	.00104	.00167	.00146	.00067	.00058	.00061
SDev	.00007	.00147	.00147	.00049	.00245	.00028	.00100
%RSD	3.0390	141.27	87.926	33.650	365.89	48.313	165.12
#1	.00233	.00000	.00271	.00181	.00241	.00077	.00132
#2	.00223	.00208	.00063	.00111	-.00106	.00038	-.00010
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	-.00491	.00294	.00032	.00371	.00015	.00765	
SDev	.00027	.00132	.00097	.00150	.00078	.00015	
%RSD	5.4463	45.038	300.71	40.292	524.73	1.8892	
#1	-.00472	.00387	.00101	.00265	-.00040	.00775	
#2	-.00510	.00200	-.00036	.00477	.00070	.00755	
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	

667 595

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16109	--	--	--	--	--	--
SDev	21.21320	--	--	--	--	--	--
%RSD	.1316891	--	--	--	--	--	--
#1	16094	--	--	--	--	--	--
#2	16124	--	--	--	--	--	--

Method: METTRA Sample Name: DGLQQ

Operator: RJG

Run Time: 08/15/00 12:44:40

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	6.8009	.00088	.06237	-.00008	48.470	-.00009
SDev	.00013	.0747	.00026	.00080	.00029	.881	.00007
%RSD	48.129	1.0979	29.792	1.2793	367.92	1.8181	73.219
#1	-.00017	6.8537	.00070	.06294	-.00029	49.094	-.00014
#2	-.00035	6.7481	.00107	.06181	.00013	47.847	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00265	.00878	.00586	7.1720	15.116	.17661	-.00019
SDev	.00046	.00035	.00041	.0869	.220	.00238	.00025
%RSD	17.274	3.9634	6.9855	1.2111	1.4561	1.3486	132.33
#1	.00297	.00902	.00615	7.2334	15.272	.17829	-.00036
#2	.00232	.00853	.00557	7.1105	14.961	.17492	-.00001
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	.01043	.00296	.00313	.00307	.00042	-.00075	-.00036
SDev	.00055	.00023	.00081	.00061	.00271	.00142	.00004
%RSD	5.2214	7.7503	25.730	19.966	638.99	188.12	12.139
#1	.01081	.00312	.00370	.00350	.00234	-.00176	-.00039
#2	.01004	.00279	.00256	.00264	-.00149	.00025	-.00033
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	-.00212	.00315	.00139	-.00299	.01348	.02900	
SDev	.00080	.00083	.00082	.00284	.00039	.00048	
%RSD	37.817	26.419	58.985	95.069	2.8829	1.6626	
#1	-.00269	.00256	.00081	-.00499	.01376	.02934	
#2	-.00155	.00373	.00197	-.00098	.01321	.02866	
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	

667 597

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16111	--	--	--	--	--	--
SDev	221.0420	--	--	--	--	--	--
%RSD	1.371986	--	--	--	--	--	--
#1	15955	--	--	--	--	--	--
#2	16267	--	--	--	--	--	--

Method: METTRA Sample Name: DGLR0

Operator: RJG

Run Time: 08/15/00 12:48:49

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	-.00010	28.187	.01027	.18241	.00150	47.210	-.00002
SDev	.00048	.020	.00076	.00094	.00003	.156	.00006
%RSD	473.49	.07120	7.3676	.51728	1.9033	.32985	330.92

#1	-.00045	28.201	.01080	.18308	.00152	47.320	-.00006
#2	.00024	28.173	.00973	.18174	.00148	47.100	.00002

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

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02364	.03962	.03963	38.289	16.621	1.2108	.00301
SDev	.00079	.00042	.00004	.049	.047	.0001	.00052
%RSD	3.3276	1.0680	.10306	.12842	.28484	.00473	17.271

#1	.02309	.03932	.03961	38.255	16.654	1.2108	.00264
#2	.02420	.03992	.03966	38.324	16.587	1.2109	.00338

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	.04947	.01098	.01619	.01445	.00044	.00101	.00082
SDev	.00048	.00096	.00005	.00029	.00159	.00319	.00265
%RSD	.97579	8.7657	.27635	2.0108	359.40	316.25	323.99

#1	.04981	.01030	.01622	.01425	-.00068	-.00125	-.00106
#2	.04913	.01166	.01615	.01466	.00156	.00326	.00270

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	-.00289	.00547	.00269	-.00039	.05128	.12556
SDev	.00015	.00129	.00081	.00122	.00023	.00024
%RSD	5.1134	23.577	30.190	311.99	.45685	.19129

#1	-.00300	.00639	.00326	-.00126	.05112	.12573
#2	-.00279	.00456	.00211	.00047	.05145	.12539

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

667 599

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16458	--	--	--	--	--	--
SDev	10.57069	--	--	--	--	--	--
%RSD	.0642268	--	--	--	--	--	--
#1	16466	--	--	--	--	--	--
#2	16451	--	--	--	--	--	--

Method: METTRA Sample Name: DGNRC

Operator: RJG

Run Time: 08/15/00 12:52:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00007	.64518	.00138	.61274	-0.00069	225.70	.00033
SDev	.00069	.00953	.00030	.00146	.00038	2.43	.00029
%RSD	1010.1	1.4771	21.442	.23878	54.722	1.0787	87.658
#1	.00042	.65192	.00159	.61377	-0.00096	227.43	.00053
#2	-.00056	.63844	.00117	.61170	-.00042	223.98	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	.00697	.00657	12.684	37.752	1.2249	.00106
SDev	.00072	.00038	.00022	.031	.245	.0058	.00004
%RSD	55.140	5.5178	3.3671	.24269	.65020	.47214	3.9806
#1	.00181	.00724	.00672	12.706	37.926	1.2290	.00109
#2	.00080	.00669	.00641	12.662	37.579	1.2209	.00103
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	.00407	.07144	.06813	.06923	.00348	.00252	.00284
SDev	.00111	.00308	.00153	.00001	.00481	.00051	.00126
%RSD	27.129	4.3114	2.2467	.00683	138.24	20.375	44.345
#1	.00485	.07362	.06704	.06923	.00008	.00288	.00195
#2	.00329	.06926	.06921	.06923	.00688	.00216	.00373
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	-.00434	.00340	.00082	-.00252	.00360	.04369	
SDev	.00224	.00050	.00108	.00150	.00001	.00047	
%RSD	51.583	14.628	131.11	59.633	.29846	1.0659	
#1	-.00276	.00375	.00158	-.00359	.00361	.04402	
#2	-.00592	.00305	.00006	-.00146	.00359	.04336	
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	

667 601

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15879	--	--	--	--	--	--
SDev	126.9961	--	--	--	--	--	--
%RSD	.7997512	--	--	--	--	--	--
#1	15790	--	--	--	--	--	--
#2	15969	--	--	--	--	--	--

Method: METTRA Sample Name: DGNRF

Operator: RJG

Run Time: 08/15/00 12:57:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	7.0576	.01828	.42499	.00024	231.13	.00020
SDev	.00060	.0242	.00035	.00013	.00020	.14	.00007
%RSD	103.67	.34264	1.9218	.03006	83.988	.05942	34.728
#1	-.00100	7.0405	.01803	.42490	.00039	231.03	-.00024
#2	-.00015	7.0747	.01853	.42508	.00010	231.22	-.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	.00267	.00737	.00730	17.385	31.581	1.4707	.00117
SDev	.00005	.00056	.00015	.060	.055	.0039	.00017
%RSD	1.7709	7.6104	2.0656	.34475	.17360	.26524	14.691
#1	.00271	.00697	.00719	17.343	31.543	1.4679	.00105
#2	.00264	.00776	.00741	17.428	31.620	1.4735	.00129
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	.01055	.00378	.00304	.00329	.00310	.00117	.00181
SDev	.00009	.00397	.00065	.00089	.00320	.00185	.00017
%RSD	.81284	105.11	21.339	27.086	103.31	158.36	9.1835
#1	.01061	.00097	.00350	.00266	.00537	-.00014	.00169
#2	.01049	.00659	.00258	.00391	.00084	.00248	.00193
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	-.00136	.00160	.00062	-.00097	.01574	.03847	
SDev	.00056	.00329	.00201	.00245	.00241	.00021	
%RSD	41.160	205.15	325.18	253.39	15.292	.55853	
#1	-.00175	.00393	.00204	.00076	.01404	.03832	
#2	-.00096	-.00072	-.00080	-.00270	.01744	.03862	
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	

667 603

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16203	--	--	--	--	--	--
SDev	66.43282	--	--	--	--	--	--
%RSD	.4100127	--	--	--	--	--	--
#1	16250	--	--	--	--	--	--
#2	16156	--	--	--	--	--	--

Method: METTRA Sample Name: DGR3H

Operator: RJG

Run Time: 08/15/00 13:01:17

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	-.00009	1.7999	.00094	.03253	.00002	41.017	.00001
SDev	.00113	.0076	.00172	.00007	.00021	.082	.00018
%RSD	1226.8	.42007	183.48	.22617	1213.4	.19949	3450.8
#1	-.00089	1.8052	-.00028	.03258	.00016	40.959	-.00012
#2	.00071	1.7945	.00215	.03247	-.00013	41.075	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.00246	.00900	2.0668	12.676	.06387	-.00149
SDev	.00046	.00052	.00058	.0079	.012	.00013	.00061
%RSD	58.023	20.966	6.4942	.38136	.09436	.20948	41.034
#1	.00046	.00210	.00858	2.0612	12.667	.06378	-.00192
#2	.00111	.00283	.00941	2.0724	12.684	.06397	-.00106
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	.00459	.00369	.00123	.00205	.00023	.00143	.00103
SDev	.00016	.00050	.00042	.00011	.00096	.00049	.00001
%RSD	3.5904	13.513	33.751	5.4613	416.17	34.318	.82377
#1	.00447	.00334	.00153	.00213	.00091	.00109	.00103
#2	.00471	.00404	.00094	.00197	-.00045	.00178	.00104
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	-.00343	.00046	-.00083	-.00119	.00401	.01380	
SDev	.00125	.00155	.00062	.00291	.00042	.00023	
%RSD	36.354	334.66	74.057	243.92	10.444	1.6710	
#1	-.00431	.00156	-.00040	.00086	.00371	.01363	
#2	-.00254	-.00063	-.00127	-.00325	.00430	.01396	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

		1	2	3	4	5	6	7
IntStd								
Mode	Counts		NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--	--
Avge	16319	--	--	--	--	--	--	--
SDev	111.6172	--	--	--	--	--	--	--
%RSD	.6839867	--	--	--	--	--	--	--
#1	16398	--	--	--	--	--	--	--
#2	16240	--	--	--	--	--	--	--

667 605

Method: METTRA Sample Name: DGR3L

Operator: RJG

Run Time: 08/15/00 13:05:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00027	2.6110	.00106	.03723	.00001	41.474	-.00006
SDev	.00027	.0064	.00195	.00002	.00006	.122	.00014
%RSD	99.167	.24559	183.91	.04530	795.16	.29360	217.58

#1	-.00046	2.6155	.00244	.03724	-.00003	41.560	.00003
#2	-.00008	2.6065	-.00032	.03721	.00005	41.388	-.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	.00090	.00342	.00716	2.9513	12.975	.08549	-.00154
SDev	.00003	.00033	.00015	.0097	.024	.00004	.00067
%RSD	2.9861	9.5950	2.0293	.32953	.18232	.04982	43.178

#1	.00092	.00319	.00726	2.9582	12.991	.08552	-.00201
#2	.00088	.00366	.00706	2.9444	12.958	.08546	-.00107

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	.00579	.00647	.00040	.00242	-.00062	.00035	.00003
SDev	.00053	.00242	.00178	.00038	.00170	.00048	.00025
%RSD	9.0988	37.443	450.94	15.767	274.20	137.64	972.25

#1	.00617	.00476	.00166	.00269	.00058	.00001	.00020
#2	.00542	.00819	-.00086	.00215	-.00182	.00069	-.00015

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	-.00402	.00275	.00049	.00032	.00570	.01858
SDev	.00186	.00028	.00043	.00051	.00001	.00020
%RSD	46.246	10.285	87.102	157.14	.16175	1.1049

#1	-.00534	.00295	.00019	-.00004	.00570	.01873
#2	-.00271	.00255	.00080	.00068	.00569	.01844

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

667 607

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16292	--	--	--	--	--	--
SDev	17.25368	--	--	--	--	--	--
%RSD	.1059051	--	--	--	--	--	--
#1	16279	--	--	--	--	--	--
#2	16304	--	--	--	--	--	--

Method: METTRA Sample Name: DGTKV

Operator: RJG

Run Time: 08/15/00 13:09:36

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	-.00016	.61332	.01961	.00544	-.00001	23.306	-.00001
SDev	.00053	.00312	.00147	.00009	.00016	.156	.00020
%RSD	322.26	.50845	7.5024	1.5654	1120.1	.67108	3145.4
#1	.00021	.61552	.01857	.00550	-.00013	23.417	-.00015
#2	-.00054	.61111	.02065	.00538	.00010	23.196	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00355	.00489	.03514	.86881	8.8369	.08073	.00134
SDev	.00012	.00060	.00029	.00123	.0462	.00029	.00020
%RSD	3.2681	12.153	.83194	.14108	.52291	.36470	14.911
#1	.00363	.00531	.03534	.86968	8.8696	.08094	.00119
#2	.00347	.00447	.03493	.86794	8.8043	.08052	.00148
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	.01496	.00545	.00187	.00306	.00048	.00113	.00092
SDev	.00025	.00416	.00165	.00029	.00261	.00215	.00057
%RSD	1.6843	76.447	88.350	9.3494	541.83	190.44	61.940
#1	.01514	.00839	.00070	.00326	-.00137	.00266	.00132
#2	.01478	.00250	.00303	.00286	.00233	-.00039	.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	.00367	.00232	.00277	.00182	.00450	.02876	
SDev	.00042	.00125	.00069	.00252	.00290	.00024	
%RSD	11.561	53.993	25.070	138.44	64.370	.84569	
#1	.00397	.00144	.00228	.00004	.00655	.02893	
#2	.00337	.00321	.00326	.00360	.00245	.02859	
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	

667 609

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16481	--	--	--	--	--	--
SDev	62.93250	--	--	--	--	--	--
%RSD	.3818523	--	--	--	--	--	--
#1	16436	--	--	--	--	--	--
#2	16525	--	--	--	--	--	--

Method: METTRA Sample Name: DH1RV

Operator: RJG

Run Time: 08/15/00 13:13:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	1.6022	.00189	.08927	-.00054	375.50	.00004
SDev	.00008	.0040	.00061	.00024	.00011	.35	.00005
%RSD	137.51	.24895	32.433	.27272	20.084	.09264	123.34
#1	-.00012	1.6050	.00232	.08944	-.00061	375.75	.00000
#2	-.00000	1.5994	.00145	.08910	-.00046	375.26	.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00546	.00365	.00432	1.8996	263.17	1.4719	.01907
SDev	.00041	.00008	.00031	.0097	.33	.0002	.00043
%RSD	7.4862	2.2134	7.2265	.51069	.12575	.01268	2.2528
#1	.00517	.00359	.00410	1.8927	263.40	1.4720	.01876
#2	.00575	.00370	.00454	1.9064	262.93	1.4718	.01937
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	.01125	.00280	-.00022	.00078	.00164	.00098	.00120
SDev	.00052	.00122	.00088	.00099	.00032	.00155	.00114
%RSD	4.6267	43.576	392.99	126.47	19.534	157.48	94.791
#1	.01088	.00367	.00040	.00149	.00187	.00208	.00201
#2	.01161	.00194	-.00084	.00008	.00141	-.00011	.00040
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00013	.00274	.00187	.00067	.00688	.01279	
SDev	.00045	.00023	.00000	.00242	.00039	.00009	
%RSD	347.07	8.4478	.22200	361.33	5.7187	.71150	
#1	.00045	.00257	.00187	-.00104	.00660	.01273	
#2	-.00019	.00290	.00187	.00238	.00716	.01286	
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	

667 611

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15880	--	--	--	--	--	--
SDev	19.02076	--	--	--	--	--	--
%RSD	.1197796	--	--	--	--	--	--
#1	15866	--	--	--	--	--	--
#2	15893	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-5

Operator: RJG

Run Time: 08/15/00 13:17:55

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	1.0325	24.449	.51365	2.0113	2.1118	52.275	.49556
SDev	.0022	.046	.00142	.0078	.0109	.232	.00233
%RSD	.21666	.18687	.27716	.38923	.51472	.44457	.46967
#1	1.0340	24.481	.51466	2.0169	2.1195	52.440	.49721
#2	1.0309	24.416	.51265	2.0058	2.1041	52.111	.49391
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	2.0574	2.0680	1.9784	25.623	50.760	2.0533	2.0685
SDev	.0040	.0028	.0047	.052	.150	.0040	.0057
%RSD	.19333	.13601	.23776	.20352	.29539	.19243	.27384
#1	2.0603	2.0700	1.9817	25.660	50.866	2.0561	2.0645
#2	2.0546	2.0660	1.9751	25.586	50.654	2.0505	2.0725
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	2.0352	.52453	.51385	.51741	.53749	.51582	.52304
SDev	.0151	.00371	.00133	.00035	.00106	.00059	.00075
%RSD	.74104	.70718	.25956	.06679	.19812	.11449	.14310
#1	2.0458	.52191	.51480	.51716	.53824	.51624	.52357
#2	2.0245	.52715	.51291	.51765	.53673	.51540	.52251
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	.50739	.52458	.51885	1.0492	2.0741	2.0675	
SDev	.00273	.00207	.00047	.0020	.0146	.0091	
%RSD	.53801	.39525	.09134	.18893	.70377	.44105	
#1	.50932	.52311	.51852	1.0506	2.0844	2.0740	
#2	.50546	.52604	.51919	1.0477	2.0638	2.0611	
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	

667 613

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16560	--	--	--	--	--	--
SDev	9.652284	--	--	--	--	--	--
%RSD	.0582882	--	--	--	--	--	--
#1	16553	--	--	--	--	--	--
#2	16566	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5

Operator: RJG

Run Time: 08/15/00 13:22:05

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
Avg	.00010	.09899	-.00071	.00027	.00088	.01496	.00036
SDev	.00045	.00148	.00004	.00026	.00017	.01654	.00007
%RSD	443.95	1.4969	5.1622	96.425	19.989	110.53	20.985
#1	-.00022	.10004	-.00069	.00009	.00075	.00327	.00030
#2	.00042	.09794	-.00074	.00045	.00100	.02665	.00041
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	.00053	.00017	-.00286	.00411	.01818	.00039	.00355
SDev	.00029	.00046	.00052	.00947	.01086	.00027	.00155
%RSD	55.380	274.68	18.222	230.69	59.745	68.647	43.559
#1	.00032	-.00016	-.00322	-.00259	.01050	.00020	.00465
#2	.00073	.00049	-.00249	.01080	.02586	.00058	.00246
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	.00098	.00127	.00100	.00109	.00236	-.00020	.00065
SDev	.00000	.00018	.00167	.00105	.00147	.00001	.00049
%RSD	.34201	14.375	167.48	96.848	62.540	4.1390	74.287
#1	.00098	.00140	-.00018	.00034	.00340	-.00020	.00100
#2	.00098	.00114	.00218	.00183	.00131	-.00019	.00031
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	-.00091	-.00064	-.00073	.00506	.00065	-.00007	
SDev	.00337	.00014	.00121	.00222	.00019	.00021	
%RSD	369.42	21.412	165.95	43.814	29.058	314.44	
#1	.00147	-.00054	.00013	.00663	.00052	-.00022	
#2	-.00329	-.00074	-.00159	.00349	.00079	.00008	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 615

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16628	--	--	--	--	--	--
SDev	40.79951	--	--	--	--	--	--
%RSD	.2453626	--	--	--	--	--	--
#1	16599	--	--	--	--	--	--
#2	16657	--	--	--	--	--	--

Method: METTRA Sample Name: DHRK1B

Operator: RJG

Run Time: 08/15/00 13:26:14

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	.00023	.12486	-.00043	.00010	-.00045	.25763	.00019
SDev	.00004	.00979	.00123	.00009	.00024	.00151	.00007
%RSD	16.769	7.8410	285.13	82.762	53.930	.58471	36.417
#1	.00020	.13178	.00044	.00016	-.00062	.25870	.00014
#2	.00025	.11794	-.00130	.00004	-.00028	.25657	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00088	.00307	-.00184	.01339	.00674	.00020	.00121
SDev	.00006	.00002	.00003	.00266	.00220	.00000	.00117
%RSD	6.7419	.65576	1.8780	19.845	32.689	.59237	96.868
#1	-.00092	.00308	-.00181	.01526	.00829	.00020	.00204
#2	-.00084	.00305	-.00186	.01151	.00518	.00020	.00038
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	.00319	.00616	-.00099	.00139	.00056	.00228	.00171
SDev	.00028	.00172	.00065	.00014	.00046	.00012	.00007
%RSD	8.7059	27.851	65.599	9.8951	81.685	5.1877	4.3803
#1	.00338	.00495	-.00053	.00129	.00089	.00219	.00176
#2	.00299	.00737	-.00145	.00149	.00024	.00236	.00165
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	-.00844	.00573	.00101	-.00562	.00018	.01291	
SDev	.00108	.00253	.00204	.00167	.00061	.00026	
%RSD	12.783	44.098	202.39	29.735	337.01	2.0346	
#1	-.00921	.00394	-.00044	-.00680	.00061	.01272	
#2	-.00768	.00752	.00246	-.00444	-.00025	.01309	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 617

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15605	--	--	--	--	--	--
SDev	24.32475	--	--	--	--	--	--
%RSD	.1558809	--	--	--	--	--	--
#1	15588	--	--	--	--	--	--
#2	15622	--	--	--	--	--	--

Method: METTRA Sample Name: DHRK1C

Operator: RJG

Run Time: 08/15/00 13:30:24

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
Avg	.04969	2.0018	2.0538	2.0327	.05570	L.23775	.05240
SDev	.00020	.0220	.0119	.0132	.00021	.00219	.00017
%RSD	.39651	1.0981	.58091	.64807	.38358	.92078	.31814
#1	.04983	2.0174	2.0623	2.0420	.05585	L.23930	.05252
#2	.04956	1.9863	2.0454	2.0234	.05555	L.23621	.05228
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	.54382	.21924	.25198	1.0757	L.01686	.53129	L-.00029
SDev	.00318	.00119	.00105	.0011	.00085	.00230	.00003
%RSD	.58404	.54414	.41577	.10013	5.0396	.43371	8.5918
#1	.54607	.22008	.25272	1.0750	L.01626	.53292	L-.00028
#2	.54158	.21840	.25124	1.0765	L.01746	.52966	L-.00031
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	.53281	.53701	.51911	.52507	-.00053	.00139	L.00075
SDev	.00781	.00487	.00189	.00288	.00001	.00077	.00051
%RSD	1.4666	.90757	.36413	.54922	1.0901	55.620	68.486
#1	.53833	.54046	.52044	.52711	-.00053	.00193	L.00111
#2	.52728	.53357	.51777	.52303	-.00053	.00084	L.00039
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	1.9476	2.0222	1.9974	2.0993	.53512	.56077	
SDev	.0106	.0128	.0121	.0028	.00303	.00352	
%RSD	.54192	.63520	.60491	.13448	.56685	.62852	
#1	1.9550	2.0313	2.0059	2.1013	.53727	.56327	
#2	1.9401	2.0131	1.9888	2.0973	.53298	.55828	
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	

667 619

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15690	--	--	--	--	--	--
SDev	100.6923	--	--	--	--	--	--
%RSD	.6417548	--	--	--	--	--	--
#1	15619	--	--	--	--	--	--
#2	15761	--	--	--	--	--	--

Method: METTRA Sample Name: DHQXN

Operator: RJG

Run Time: 08/15/00 13:34:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	79.875	.08427	1.3583	.00735	117.69	.00143
SDev	.00008	.221	.00090	.0018	.00001	.11	.00005
%RSD	6.2635	.27622	1.0655	.12949	.06523	.09641	3.1894
#1	.00126	79.719	.08364	1.3596	.00735	117.61	.00140
#2	.00116	80.031	.08491	1.3571	.00736	117.77	.00146
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	.07220	.12712	.20639	158.73	20.218	8.0100	.00345
SDev	.00025	.00036	.00014	.60	.043	.0247	.00112
%RSD	.34402	.28471	.06882	.37647	.21111	.30775	32.269
#1	.07203	.12687	.20649	158.31	20.188	7.9926	.00267
#2	.07238	.12738	.20629	159.16	20.248	8.0275	.00424
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	.15382	.26972	.26116	.26401	.00906	.00615	.00712
SDev	.00107	.00240	.00323	.00295	.00212	.00044	.00100
%RSD	.69359	.88849	1.2347	1.1169	23.436	7.2213	14.094
#1	.15307	.26803	.25888	.26192	.01056	.00646	.00783
#2	.15457	.27142	.26344	.26609	.00756	.00583	.00641
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	-.00646	.00607	.00190	.00706	.20200	.59577	
SDev	.00055	.00150	.00118	.00043	.00242	.00162	
%RSD	8.4969	24.717	62.401	6.1388	1.1965	.27199	
#1	-.00607	.00713	.00273	.00736	.20371	.59462	
#2	-.00685	.00501	.00106	.00675	.20029	.59691	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

667 621

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17848	--	--	--	--	--	--
SDev	68.44849	--	--	--	--	--	--
%RSD	.3835079	--	--	--	--	--	--
#1	17896	--	--	--	--	--	--
#2	17800	--	--	--	--	--	--

Method: METTRA Sample Name: DHQXNP5

Operator: RJG

Run Time: 08/15/00 13:38:43

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	.00040	16.232	.01839	.28731	.00224	25.249	.00035
SDev	.00018	.014	.00044	.00076	.00014	.190	.00003
%RSD	45.939	.08617	2.3943	.26320	6.2642	.75177	8.9604
#1	.00053	16.242	.01870	.28784	.00214	25.383	.00033
#2	.00027	16.222	.01808	.28677	.00234	25.114	.00037
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01530	.02731	.03823	33.715	4.2248	1.6744	-.00102
SDev	.00016	.00040	.00028	.052	.0238	.0047	.00001
%RSD	1.0671	1.4560	.73572	.15340	.56419	.28345	.77540
#1	.01542	.02759	.03843	33.751	4.2417	1.6778	-.00101
#2	.01519	.02703	.03803	33.678	4.2080	1.6711	-.00102
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03425	.06073	.05632	.05779	.00359	.00228	.00271
SDev	.00064	.00018	.00127	.00090	.00421	.00220	.00007
%RSD	1.8796	.28982	2.2457	1.5613	117.41	96.694	2.5031
#1	.03470	.06085	.05722	.05843	.00656	.00072	.00267
#2	.03379	.06060	.05543	.05715	.00061	.00384	.00276
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00058	-.00000	-.00020	.00225	.04080	.12803	
SDev	.00170	.00328	.00162	.00084	.00009	.00060	
%RSD	292.99	72167.	828.84	37.263	.22398	.46788	
#1	-.00178	.00232	.00095	.00166	.04086	.12846	
#2	.00062	-.00233	-.00134	.00284	.04073	.12761	

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	17088	--	--	--	--	--	--
Avge	41.96651	--	--	--	--	--	--
SDev	.2455966	--	--	--	--	--	--
%RSD							
#1	17058	--	--	--	--	--	--
#2	17117	--	--	--	--	--	--

667 623

Method: METTRA Sample Name: DHQXNS

Operator: RJG

Run Time: 08/15/00 13:42:53

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
Avg	.04674	112.92	1.8843	3.1293	.05609	241.86	.04547
SDev	.00040	.28	.0064	.0140	.00014	1.32	.00018
%RSD	.85523	.25174	.33871	.44854	.25018	.54462	.40225
#1	.04702	113.12	1.8889	3.1392	.05600	242.79	.04560
#2	.04645	112.72	1.8798	3.1194	.05619	240.93	.04534
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	.53389	.38793	.53887	179.26	23.154	6.9005	.00331
SDev	.00102	.00080	.00186	.34	.088	.0186	.00051
%RSD	.19166	.20600	.34435	.18748	.37976	.27006	15.344
#1	.53461	.38849	.54018	179.50	23.216	6.9136	.00295
#2	.53316	.38736	.53756	179.02	23.092	6.8873	.00367
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	.61207	1.0058	.96760	.98033	.01280	.00922	.01042
SDev	.00623	.0097	.00347	.00555	.00496	.00068	.00120
%RSD	1.0172	.96473	.35903	.56597	38.698	7.3501	11.500
#1	.61648	1.0127	.97005	.98425	.00930	.00970	.00957
#2	.60767	.99897	.96514	.97641	.01631	.00874	.01126
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	1.7293	1.8010	1.7771	1.9035	.73017	1.2251	
SDev	.0118	.0140	.0133	.0035	.00413	.0054	
%RSD	.68287	.77573	.74564	.18425	.56633	.44193	
#1	1.7376	1.8108	1.7865	1.9059	.73309	1.2289	
#2	1.7209	1.7911	1.7677	1.9010	.72724	1.2213	
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	

667 625

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17492	--	--	--	--	--	--
SDev	105.1462	--	--	--	--	--	--
%RSD	.6010966	--	--	--	--	--	--
#1	17418	--	--	--	--	--	--
#2	17567	--	--	--	--	--	--

Method: METTRA Sample Name: DHQXND

Operator: RJG

Run Time: 08/15/00 13:47:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04759	109.63	1.8886	3.2266	.05629	428.76	.04480
SDev	.00081	.35	.0059	.0252	.00031	.77	.00024
%RSD	1.6964	.32175	.31199	.77986	.54543	.17933	.54773
#1	.04702	109.88	1.8928	3.2444	.05651	429.31	.04463
#2	.04816	109.38	1.8844	3.2088	.05608	428.22	.04498
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	.53079	.35743	.47662	171.00	26.183	6.2889	.00452
SDev	.00110	.00110	.00292	.13	.063	.0039	.00088
%RSD	.20721	.30676	.61338	.07545	.24182	.06208	19.446
#1	.53001	.35665	.47869	170.91	26.227	6.2861	.00514
#2	.53156	.35820	.47455	171.09	26.138	6.2916	.00390
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	.60548	.81401	.77692	.78927	.00844	.00502	.00616
SDev	.00207	.00538	.00723	.00661	.00072	.00018	.00012
%RSD	.34227	.66067	.93067	.83794	8.5202	3.6277	1.9187
#1	.60695	.81020	.77181	.78459	.00793	.00515	.00607
#2	.60402	.81781	.78203	.79395	.00895	.00489	.00624
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	1.7403	1.8179	1.7920	1.9332	.72330	1.1329	
SDev	.0053	.0181	.0139	.0059	.00555	.0016	
%RSD	.30718	.99684	.77381	.30389	.76779	.13712	
#1	1.7365	1.8050	1.7822	1.9374	.72722	1.1340	
#2	1.7441	1.8307	1.8018	1.9291	.71937	1.1318	
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	

667 627

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17526	--	--	--	--	--	--
SDev	38.04151	--	--	--	--	--	--
%RSD	.2170551	--	--	--	--	--	--
#1	17553	--	--	--	--	--	--
#2	17499	--	--	--	--	--	--

Method: METTRA Sample Name: DHQXQ

Operator: RJG

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

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00162	122.65	.08752	1.5899	.00864	160.01	.00202
SDev	.00015	.74	.00073	.0146	.00000	2.29	.00011
%RSD	9.4691	.60432	.83774	.92077	.00150	1.4292	5.3918
#1	.00173	123.18	.08803	1.6002	.00864	161.63	.00195
#2	.00151	122.13	.08700	1.5795	.00864	158.39	.00210
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	.07239	.20763	.27314	185.54	24.112	6.4662	.00328
SDev	.00061	.00121	.00204	1.30	.224	.0543	.00049
%RSD	.83708	.58367	.74580	.70154	.92994	.83968	14.829
#1	.07282	.20849	.27458	186.46	24.271	6.5046	.00294
#2	.07196	.20678	.27169	184.62	23.954	6.4278	.00362
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	.16682	.90554	.87456	.88488	.01943	.01462	.01622
SDev	.00261	.00596	.00492	.00526	.00019	.00067	.00051
%RSD	1.5622	.65785	.56247	.59497	1.0043	4.5993	3.1655
#1	.16866	.90976	.87804	.88860	.01929	.01415	.01586
#2	.16497	.90133	.87109	.88116	.01957	.01510	.01659
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	-.00679	.00409	.00047	.00992	.30003	.73792	
SDev	.00386	.00215	.00272	.00041	.00767	.00712	
%RSD	56.891	52.589	582.81	4.1084	2.5576	.96461	
#1	-.00406	.00561	.00239	.00964	.30546	.74296	
#2	-.00952	.00257	-.00146	.01021	.29461	.73289	
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	

667 629

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18026	--	--	--	--	--	--
SDev	122.3654	--	--	--	--	--	--
%RSD	.6788130	--	--	--	--	--	--
#1	17940	--	--	--	--	--	--
#2	18113	--	--	--	--	--	--

Method: METTRA Sample Name: DHQXR

Operator: RJG

Run Time: 08/15/00 13:55:22

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	.00021	71.172	.08199	1.6529	.00656	35.668	.00189
SDev	.00025	.141	.00010	.0009	.00006	.093	.00002
%RSD	119.03	.19769	.11926	.05227	.84050	.26039	1.1219
#1	.00038	71.072	.08192	1.6535	.00653	35.733	.00188
#2	.00003	71.271	.08206	1.6523	.00660	35.602	.00191
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	.07454	.10520	.14420	163.24	19.800	5.3112	.00281
SDev	.00028	.00022	.00003	.10	.028	.0027	.00016
%RSD	.37484	.20493	.02131	.06154	.14074	.05142	5.6575
#1	.07434	.10535	.14422	163.17	19.819	5.3092	.00292
#2	.07473	.10504	.14418	163.31	19.780	5.3131	.00270
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	.16863	.12515	.12094	.12235	.00636	.00457	.00516
SDev	.00001	.00174	.00130	.00029	.00098	.00040	.00060
%RSD	.00678	1.3878	1.0763	.23691	15.446	8.8312	11.543
#1	.16864	.12392	.12187	.12255	.00705	.00485	.00559
#2	.16862	.12638	.12002	.12214	.00566	.00428	.00474
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	-.00780	.00387	-.00002	.00454	.19718	.51957	
SDev	.00099	.00097	.00098	.00025	.00185	.00046	
%RSD	12.627	25.165	4949.1	5.5338	.93667	.08845	
#1	-.00711	.00456	.00067	.00437	.19849	.51989	
#2	-.00850	.00318	-.00071	.00472	.19587	.51924	
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	

667 631

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17770	--	--	--	--	--	--
SDev	57.66511	--	--	--	--	--	--
%RSD	.3245096	--	--	--	--	--	--
#1	17729	--	--	--	--	--	--
#2	17811	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6

Operator: RJG

Run Time: 08/15/00 13:59:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0245	24.144	.50931	1.9719	2.0952	51.761	.49220
SDev	.0005	.010	.00074	.0010	.0025	.053	.00073
%RSD	.04752	.04177	.14543	.04912	.12011	.10150	.14766
#1	1.0242	24.152	.50879	1.9726	2.0970	51.798	.49271
#2	1.0249	24.137	.50983	1.9713	2.0934	51.724	.49169
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	2.0422	2.0559	1.9504	25.614	50.450	2.0329	2.0552
SDev	.0002	.0001	.0039	.006	.042	.0019	.0124
%RSD	.01082	.00599	.20063	.02407	.08253	.09313	.60168
#1	2.0423	2.0558	1.9531	25.610	50.480	2.0315	2.0464
#2	2.0420	2.0560	1.9476	25.619	50.421	2.0342	2.0639
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	1.9941	.52406	.50648	.51233	.52892	.51076	.51681
SDev	.0055	.00310	.00141	.00197	.00241	.00595	.00477
%RSD	.27722	.59060	.27892	.38509	.45614	1.1657	.92385
#1	1.9980	.52625	.50748	.51373	.53063	.51497	.52019
#2	1.9901	.52187	.50548	.51094	.52722	.50655	.51343
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	.50800	.51593	.51329	1.0447	2.0439	2.0453	
SDev	.00161	.00368	.00192	.0023	.0039	.0026	
%RSD	.31681	.71424	.37443	.22166	.19107	.12797	
#1	.50686	.51854	.51465	1.0430	2.0467	2.0472	
#2	.50914	.51333	.51193	1.0463	2.0411	2.0435	
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	

667 633

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16897	--	--	--	--	--	--
SDev	29.73301	--	--	--	--	--	--
%RSD	.1759613	--	--	--	--	--	--
#1	16918	--	--	--	--	--	--
#2	16876	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6

Operator: RJG

Run Time: 08/15/00 14:03:42

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	-.00005	.13177	.00159	.00024	.00125	.00007	.00009
SDev	.00037	.00112	.00092	.00009	.00001	.00281	.00004
%RSD	695.82	.84944	57.774	35.369	1.0360	3962.8	42.374
#1	-.00032	.13098	.00094	.00018	.00124	-.00191	.00011
#2	.00021	.13256	.00224	.00030	.00126	.00205	.00006
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	-.00009	-.00007	-.00412	.00115	.00608	.00070	.00347
SDev	.00028	.00004	.00032	.00784	.00204	.00013	.00164
%RSD	299.96	54.616	7.7051	684.56	33.585	18.210	47.406
#1	-.00030	-.00005	-.00434	-.00440	.00464	.00061	.00463
#2	.00011	-.00010	-.00389	.00669	.00753	.00079	.00230
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	.00034	.00139	.00030	.00066	.00079	.00054	.00062
SDev	.00139	.00085	.00074	.00021	.00023	.00079	.00060
%RSD	409.06	60.898	249.91	31.686	28.947	145.85	96.563
#1	-.00064	.00079	.00082	.00081	.00063	-.00002	.00020
#2	.00132	.00199	-.00023	.00051	.00095	.00110	.00105
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	.00069	.00080	.00077	.00498	.00010	.00019	
SDev	.00030	.00040	.00037	.00160	.00019	.00005	
%RSD	43.020	50.143	48.001	32.068	184.02	23.420	
#1	.00090	.00109	.00103	.00385	-.00003	.00016	
#2	.00048	.00052	.00051	.00612	.00024	.00023	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 635

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16811	--	--	--	--	--	--
SDev	28.91956	--	--	--	--	--	--
%RSD	.1720286	--	--	--	--	--	--
#1	16831	--	--	--	--	--	--
#2	16790	--	--	--	--	--	--

Method: METTRA Sample Name: DHLMI1B
 Run Time: 08/15/00 14:17:10
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.16882	.00016	-.00002	-.00030	.00072	.00026
SDev	.00025	.01077	.00001	.00000	.00014	.00049	.00002
%RSD	178.88	6.3778	4.5866	22.587	45.107	67.844	9.2708
#1	.00032	.17643	.00015	-.00002	-.00040	.00037	.00028
#2	-.00004	.16121	.00016	-.00001	-.00021	.00106	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	.00057	-.00339	.01187	-.00003	-.00001	-.00172
SDev	.00013	.00019	.00005	.00461	.00059	.00003	.00024
%RSD	195.79	32.762	1.5222	38.821	1797.2	453.34	13.683
#1	.00003	.00070	-.00343	.01513	.00039	.00002	-.00156
#2	-.00016	.00044	-.00336	.00861	-.00045	-.00003	-.00189
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	.00228	.00223	-.00022	.00060	-.00184	.00056	-.00024
SDev	.00111	.00079	.00059	.00013	.00009	.00066	.00041
%RSD	48.589	35.440	269.95	22.067	4.8873	117.68	171.81
#1	.00150	.00167	.00020	.00069	-.00190	.00103	.00005
#2	.00306	.00279	-.00064	.00050	-.00178	.00009	-.00053
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00241	.00141	.00013	.00125	.00029	.00064	
SDev	.00289	.00079	.00149	.00155	.00040	.00003	
%RSD	119.70	56.496	1110.9	124.33	138.23	5.4985	
#1	-.00445	.00084	-.00092	.00235	.00057	.00067	
#2	-.00037	.00197	.00119	.00015	.00001	.00062	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

667 637

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16106	--	--	--	--	--	--
SDev	66.32717	--	--	--	--	--	--
%RSD	.4118178	--	--	--	--	--	--
#1	16059	--	--	--	--	--	--
#2	16153	--	--	--	--	--	--

Method: METTRA Sample Name: DHLMLC

Operator: RJG

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

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	.04907	1.9445	2.0057	1.9349	.05285	L.03384	.04991
SDev	.00005	.0033	.0030	.0036	.00004	.00060	.00037
%RSD	.10920	.17096	.15027	.18505	.07477	1.7789	.74405
#1	.04910	1.9469	2.0078	1.9323	.05288	L.03342	.04965
#2	.04903	1.9422	2.0035	1.9374	.05283	L.03427	.05017
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	.51957	.20763	.23573	1.0041	L.01097	.50590	L-.00147
SDev	.00081	.00041	.00069	.0008	.00002	.00047	.00051
%RSD	.15624	.19591	.29343	.07850	.14690	.09372	34.676
#1	.51899	.20734	.23524	1.0047	L.01099	.50556	L-.00183
#2	.52014	.20791	.23621	1.0036	L.01096	.50624	L-.00111
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	.50612	.51000	.49360	.49906	-.00129	.00143	L.00052
SDev	.00404	.00005	.00152	.00100	.00146	.00105	.00119
%RSD	.79808	.01036	.30785	.19956	113.32	73.586	227.49
#1	.50897	.50997	.49467	.49977	-.00233	.00069	L-.00032
#2	.50326	.51004	.49253	.49836	-.00026	.00217	L.00136
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	1.9636	2.0052	1.9914	2.0282	.50940	.52547	
SDev	.0017	.0011	.0013	.0040	.00103	.00132	
%RSD	.08798	.05705	.06721	.19687	.20166	.25107	
#1	1.9624	2.0044	1.9904	2.0310	.50867	.52640	
#2	1.9648	2.0060	1.9923	2.0254	.51013	.52454	
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	

667 639

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16467	--	--	--	--	--	--
SDev	35.07360	--	--	--	--	--	--
%RSD	.2129881	--	--	--	--	--	--
#1	16443	--	--	--	--	--	--
#2	16492	--	--	--	--	--	--

Method: METTRA Sample Name: DHKOV

Operator: RJG

Run Time: 08/15/00 14:25:31

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	-.00029	.19040	.00296	.09710	.00030	80.637	-.00008
SDev	.00026	.01504	.00070	.00040	.00013	.270	.00000
%RSD	91.212	7.9006	23.699	.41744	43.027	.33494	2.4276
#1	-.00048	.20104	.00346	.09738	.00021	80.828	-.00008
#2	-.00010	.17976	.00247	.09681	.00038	80.446	-.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.00043	-.00048	.82179	21.115	.27879	-.00116
SDev	.00032	.00021	.00016	.00529	.060	.00056	.00007
%RSD	53.870	47.782	33.645	.64322	.28516	.19903	5.9286
#1	-.00036	.00058	-.00060	.82553	21.157	.27918	-.00121
#2	-.00081	.00029	-.00037	.81805	21.072	.27840	-.00111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00363	.00487	.00144	.00258	-.00067	.00122	.00059
SDev	.00064	.00225	.00194	.00054	.00113	.00240	.00122
%RSD	17.543	46.248	134.40	21.051	169.08	196.19	206.34
#1	.00318	.00327	.00281	.00297	.00013	-.00047	-.00027
#2	.00408	.00646	.00007	.00220	-.00147	.00292	.00146
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00292	-.00008	.00092	.00329	.00122	.04448	
SDev	.00017	.00245	.00157	.00031	.00019	.00009	
%RSD	5.8540	3202.7	170.61	9.4643	15.305	.19456	
#1	.00280	.00165	.00204	.00351	.00109	.04442	
#2	.00305	-.00181	-.00019	.00307	.00136	.04454	
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	

667 641

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16480	--	--	--	--	--	--
SDev	26.12704	--	--	--	--	--	--
%RSD	.1585367	--	--	--	--	--	--
#1	16462	--	--	--	--	--	--
#2	16499	--	--	--	--	--	--

Method: METTRA Sample Name: DHK0VP5

Operator: RJG

Run Time: 08/15/00 14:29:40

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	-.00080	.16135	.00123	.01921	.00059	16.275	-.00003
SDev	.00003	.01587	.00088	.00007	.00005	.093	.00007
%RSD	3.1366	9.8376	71.565	.37870	7.6957	.57056	237.11
#1	-.00082	.17257	.00185	.01915	.00056	16.341	.00002
#2	-.00078	.15012	.00061	.01926	.00062	16.210	-.00008

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00099	-.00085	-.00425	.15248	4.1245	.05616	-.00195
SDev	.00009	.00005	.00011	.02123	.0180	.00015	.00028
%RSD	9.5755	5.9872	2.6355	13.924	.43579	.27338	14.302
#1	-.00092	-.00082	-.00433	.16749	4.1372	.05627	-.00215
#2	-.00105	-.00089	-.00417	.13746	4.1118	.05605	-.00176

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00116	-.00077	.00203	.00110	.00186	-.00107	-.00010
SDev	.00026	.00561	.00081	.00133	.00262	.00082	.00033
%RSD	22.767	730.30	39.665	120.96	140.63	76.516	341.82
#1	.00135	-.00474	.00260	.00016	.00372	-.00165	.00013
#2	.00097	.00320	.00146	.00204	.00001	-.00049	-.00032

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00137	.00056	-.00008	.00218	-.00077	.00901
SDev	.00472	.00053	.00192	.00235	.00001	.00010
%RSD	345.20	94.036	2342.0	107.92	.95743	1.1088
#1	-.00471	.00019	-.00144	.00385	-.00077	.00908
#2	.00197	-.00093	.00128	.00052	-.00078	.00894

Analysis Report

08/15/00 02:33:46 PM

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643

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16596	--	--	--	--	--	--
SDev	91.39356	--	--	--	--	--	--
%RSD	.5507120	--	--	--	--	--	--
#1	16531	--	--	--	--	--	--
#2	16660	--	--	--	--	--	--

Method: METTRA Sample Name: DHK0VS

Operator: RJG

Run Time: 08/15/00 14:33:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05018	2.1788	2.0270	2.0793	.05294	81.161	.04868
SDev	.00018	.0187	.0108	.0105	.00036	.673	.00016
%RSD	.36455	.85627	.53489	.50601	.67319	.82982	.32729
#1	.05031	2.1920	2.0347	2.0867	.05319	81.638	.04879
#2	.05006	2.1656	2.0194	2.0719	.05269	80.685	.04857
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	.51202	.20677	.24918	1.8697	21.300	.79330	-.00113
SDev	.00211	.00099	.00098	.0071	.138	.00412	.00024
%RSD	.41244	.48002	.39364	.37854	.65020	.51907	21.006
#1	.51352	.20747	.24988	1.8647	21.398	.79621	-.00096
#2	.51053	.20607	.24849	1.8747	21.202	.79039	-.00130
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	.50163	.52171	.50500	.51057	.00193	-.00083	.00009
SDev	.00422	.00476	.00485	.00482	.00139	.00104	.00023
%RSD	.84162	.91252	.95932	.94340	72.246	125.69	261.14
#1	.50462	.52508	.50843	.51397	.00094	-.00009	.00025
#2	.49865	.51834	.50158	.50716	.00291	-.00157	-.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	1.9882	2.0454	2.0263	2.1209	.50988	.56892	
SDev	.0137	.0108	.0118	.0205	.00509	.00415	
%RSD	.68936	.52944	.58199	.96741	.99760	.72958	
#1	1.9979	2.0530	2.0347	2.1354	.51347	.57185	
#2	1.9785	2.0377	2.0180	2.1063	.50628	.56598	
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	

667

645

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16326	--	--	--	--	--	--
SDev	76.04919	--	--	--	--	--	--
%RSD	.4658100	--	--	--	--	--	--
#1	16272	--	--	--	--	--	--
#2	16380	--	--	--	--	--	--

Method: METTRA Sample Name: DHK0VD

Operator: RJG

Run Time: 08/15/00 14:38:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05139	2.2011	2.0370	2.0912	.05314	81.741	.04900
SDev	.00023	.0114	.0147	.0029	.00008	.418	.00015
%RSD	.44475	.51643	.71937	.13821	.15223	.51141	.31216
#1	.05155	2.2091	2.0474	2.0933	.05320	82.037	.04911
#2	.05123	2.1930	2.0267	2.0892	.05308	81.446	.04889
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	.51512	.20822	.25052	1.8790	21.476	.79428	-.00132
SDev	.00036	.00096	.00061	.0056	.094	.00246	.00050
%RSD	.06964	.46316	.24286	.29890	.43896	.30976	38.143
#1	.51538	.20890	.25095	1.8830	21.542	.79602	-.00168
#2	.51487	.20754	.25009	1.8751	21.409	.79254	-.00097
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	.50483	.53035	.50705	.51481	.00013	.00039	.00030
SDev	.00265	.00550	.00440	.00477	.00005	.00020	.00012
%RSD	.52571	1.0377	.86691	.92551	34.118	52.130	39.604
#1	.50671	.53424	.51016	.51818	.00016	.00025	.00022
#2	.50295	.52646	.50394	.51144	.00010	.00053	.00039
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0231	2.0642	2.0506	2.1418	.51569	.57276	
SDev	.0047	.0198	.0147	.0159	.00162	.00434	
%RSD	.23067	.95678	.71851	.74338	.31423	.75858	
#1	2.0264	2.0782	2.0610	2.1530	.51684	.57583	
#2	2.0198	2.0503	2.0401	2.1305	.51454	.56968	
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	16229	--	--	--	--	--	--
SDev	99.98448	--	--	--	--	--	--
%RSD	.6160929	--	--	--	--	--	--
#1	16158	--	--	--	--	--	--
#2	16300	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-7

Operator: RJG

Run Time: 08/15/00 14:42:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0238	24.177	.50740	1.9712	2.0979	51.497	.48963
SDev	.0014	.022	.00282	.0016	.0108	.288	.00110
%RSD	.13680	.09153	.55596	.07903	.51443	.55931	.22396
#1	1.0247	24.161	.50940	1.9701	2.1055	51.700	.49041
#2	1.0228	24.192	.50541	1.9723	2.0902	51.293	.48885
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	2.0358	2.0491	1.9555	25.472	50.529	2.0342	2.0582
SDev	.0057	.0042	.0009	.037	.092	.0027	.0049
%RSD	.28169	.20345	.04749	.14578	.18174	.13405	.23879
#1	2.0399	2.0520	1.9549	25.498	50.594	2.0361	2.0548
#2	2.0318	2.0461	1.9562	25.445	50.464	2.0323	2.0617
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	1.9815	.52095	.50176	.50815	.53054	.51197	.51816
SDev	.0161	.00097	.00341	.00260	.00163	.00288	.00246
%RSD	.81275	.18614	.67974	.51123	.30639	.56177	.47470
#1	1.9929	.52163	.50417	.50998	.53169	.51400	.51989
#2	1.9701	.52026	.49934	.50631	.52939	.50994	.51642
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	.50836	.51990	.51606	1.0453	2.0358	2.0401	
SDev	.00089	.00064	.00013	.0000	.0076	.0104	
%RSD	.17568	.12397	.02569	.00125	.37466	.50807	
#1	.50773	.52035	.51615	1.0453	2.0412	2.0474	
#2	.50899	.51944	.51596	1.0453	2.0304	2.0328	
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	16526	--	--	--	--	--	--
SDev	24.60787	--	--	--	--	--	--
%RSD	.1489062	--	--	--	--	--	--
#1	16508	--	--	--	--	--	--
#2	16543	--	--	--	--	--	--

Method: METTRA Sample Name: CCB7

Operator: RJG

Run Time: 08/15/00 14:46:20

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	.00010	.17522	.00021	.00036	.00090	.00843	.00024
SDev	.00014	.00241	.00171	.00017	.00003	.00226	.00010
%RSD	142.75	1.3725	825.61	48.371	3.2364	26.748	40.821
#1	-.00000	.17352	.00141	.00024	.00092	.00684	.00017
#2	.00020	.17692	-.00100	.00048	.00088	.01002	.00031
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	.00026	.00027	-.00471	-.00396	.00696	.00030	.00306
SDev	.00082	.00025	.00086	.02585	.00031	.00012	.00165
%RSD	308.41	92.792	18.148	652.17	4.4641	37.999	53.954
#1	-.00031	.00009	-.00532	-.02224	.00674	.00022	.00422
#2	.00084	.00044	-.00411	.01432	.00718	.00038	.00189
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	.00094	.00104	.00144	.00130	.00089	-.00012	.00022
SDev	.00006	.00431	.00341	.00084	.00297	.00280	.00088
%RSD	6.1237	415.72	237.14	64.285	335.47	2354.1	407.76
#1	.00098	.00409	-.00097	.00071	-.00122	.00186	.00084
#2	.00090	-.00201	.00385	.00190	.00299	-.00210	-.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	
Avge	.00075	.00194	.00154	.00372	.00025	.00087	
SDev	.00187	.00317	.00149	.00407	.00037	.00006	
%RSD	248.41	163.76	96.789	109.41	147.30	6.2627	
#1	.00208	-.00031	.00049	.00660	.00051	.00083	
#2	-.00057	.00418	.00260	.00084	-.00001	.00091	
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	16579	--	--	--	--	--	--
SDev	70.92336	--	--	--	--	--	--
%RSD	.4277929	--	--	--	--	--	--
#1	16629	--	--	--	--	--	--
#2	16529	--	--	--	--	--	--

Method: METTRA Sample Name: DHM01B

Operator: RJG

Run Time: 08/15/00 14:50:30

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
Avg	-.00007	H.20023	.00055	.00010	-.00008	.11857	.00019
SDev	.00018	.00520	.00068	.00012	.00006	.00074	.00017
%RSD	275.52	2.5969	122.01	118.01	77.097	.62318	91.406
#1	.00006	H.20391	.00103	.00002	-.00012	.11805	.00031
#2	-.00020	.19655	.00008	.00019	-.00004	.11909	.00007
Errors	LC Pass	LC High	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	-.00078	.00044	.01146	.01338	.00232	.00023	.00030
SDev	.00003	.00021	.00033	.00365	.00154	.00007	.00046
%RSD	3.7152	48.897	2.8700	27.275	66.382	28.662	153.74
#1	-.00080	.00059	.01170	.01080	.00341	.00028	.00063
#2	-.00076	.00029	.01123	.01596	.00123	.00019	-.00003
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	.00156	.02128	.01712	H.01850	.00087	.00131	.00116
SDev	.00020	.00012	.00028	.00015	.00002	.00146	.00098
%RSD	12.910	.55887	1.6576	.80867	2.4283	111.14	83.988
#1	.00170	.02120	.01732	H.01861	.00089	.00234	.00186
#2	.00142	.02137	.01692	H.01840	.00086	.00028	.00047
Errors	LC Pass	NOCHECK	NOCHECK	LC High	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00652	.00470	.00096	-.00377	-.00012	.00849	
SDev	.00193	.00025	.00047	.00033	.00060	.00001	
%RSD	29.524	5.3465	49.170	8.7488	499.82	.08075	
#1	-.00788	.00488	.00063	-.00354	.00030	.00849	
#2	-.00516	.00452	.00130	-.00401	-.00054	.00848	
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	15905	--	--	--	--	--	--
SDev	13.39912	--	--	--	--	--	--
%RSD	.0842456	--	--	--	--	--	--
#1	15895	--	--	--	--	--	--
#2	15914	--	--	--	--	--	--

Method: METTRA Sample Name: DHM01C
 Run Time: 08/15/00 14:54:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04879	2.0075	1.9988	1.9518	.05372	L.14622	.04991
SDev	.00008	.0004	.0012	.0092	.00022	.00084	.00026
%RSD	.16584	.02172	.06122	.47113	.41104	.57224	.51296
#1	.04873	2.0072	1.9996	1.9453	.05356	L.14681	.04973
#2	.04885	2.0078	1.9979	1.9583	.05387	L.14562	.05009
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	.52247	.21036	.29337	1.0350	L.01386	.51122	L-.00132
SDev	.00126	.00059	.00160	.0150	.00332	.00231	.00052
%RSD	.24018	.27928	.54574	1.4492	23.926	.45095	39.474
#1	.52158	.20995	.29223	1.0244	L.01620	.50959	L-.00095
#2	.52335	.21078	.29450	1.0457	L.01151	.51285	L-.00169
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	.50786	.55124	.53583	.54096	.00016	.00015	L.00015
SDev	.00060	.00025	.00058	.00047	.00296	.00158	.00007
%RSD	.11852	.04596	.10773	.08677	1837.7	1054.3	44.971
#1	.50744	.55106	.53542	.54063	-.00193	.00127	L.00020
#2	.50829	.55141	.53624	.54129	.00225	-.00097	L.00010
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	1.9287	1.9802	1.9631	2.0432	.50987	.53788	
SDev	.0187	.0005	.0059	.0010	.00015	.00004	
%RSD	.97031	.02761	.29887	.05028	.02937	.00746	
#1	1.9155	1.9806	1.9589	2.0425	.50976	.53785	
#2	1.9419	1.9798	1.9672	2.0439	.50997	.53791	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

Analysis Report

08/15/00 02:58:46 PM

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	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16229	--	--	--	--	--	--
SDev	4.596194	--	--	--	--	--	--
%RSD	.0283207	--	--	--	--	--	--
#1	16232	--	--	--	--	--	--
#2	16226	--	--	--	--	--	--

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655

Method: METTRA Sample Name: DHK3T
 Run Time: 08/15/00 14:58:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	15.985	.01067	.66666	.00460	28.899	.00032
SDev	.00037	.091	.00001	.00372	.00015	.281	.00008
%RSD	395.44	.56645	.09124	.55831	3.1692	.97262	24.195
#1	.00017	16.049	.01066	.66929	.00450	29.098	.00027
#2	-.00036	15.921	.01068	.66402	.00471	28.701	.00038
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	.03267	.01815	.04873	16.304	7.5873	.19336	-.00048
SDev	.00019	.00021	.00003	.106	.0546	.00120	.00068
%RSD	.58194	1.1503	.06498	.64747	.72012	.62333	140.98
#1	.03280	.01829	.04875	16.379	7.6259	.19422	-.00097
#2	.03253	.01800	.04871	16.229	7.5487	.19251	-.00000
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	.05179	.04642	.04685	.04671	-.00021	.00103	.00062
SDev	.00019	.00016	.00191	.00133	.00085	.00012	.00020
%RSD	.37023	.34409	4.0714	2.8379	405.68	11.758	32.597
#1	.05192	.04653	.04820	.04764	-.00081	.00112	.00048
#2	.05165	.04630	.04550	.04577	.00039	.00095	.00076
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	.00199	.00260	.00240	.00452	.03221	.06460	
SDev	.00010	.00087	.00055	.00149	.00008	.00079	
%RSD	5.2224	33.392	22.749	33.059	.25286	1.2184	
#1	.00206	.00199	.00201	.00346	.03227	.06516	
#2	.00191	.00322	.00278	.00557	.03215	.06405	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	---	---	---	---	---	---
Wavlen	371.030	--	--	--	--	--	--
Avge	16937	--	--	--	--	--	--
SDev	143.3314	--	--	--	--	--	--
%RSD	.8462443	--	--	--	--	--	--
#1	16836	--	--	--	--	--	--
#2	17039	--	--	--	--	--	--

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657

Method: METTRA Sample Name: DHK3TP5 Operator: RJG
 Run Time: 08/15/00 15:03:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	3.3672	.00090	.13634	.00147	6.0006	-.00004
SDev	.00007	.0894	.00113	.00146	.00039	.1689	.00016
%RSD	71.467	2.6543	125.54	1.0676	26.552	2.8142	378.19

#1	-.00015	3.4304	.00010	.13737	.00175	6.1200	-.00016
#2	-.00005	3.3040	.00170	.13531	.00120	5.8812	.00007

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00644	.00370	.00336	3.3251	1.5372	.03959	-.00157
SDev	.00016	.00024	.00260	.0243	.0182	.00021	.00081
%RSD	2.5365	6.3690	77.342	.72994	1.1836	.53237	51.465

#1	.00633	.00353	.00152	3.3422	1.5501	.03974	-.00215
#2	.00656	.00387	.00519	3.3079	1.5243	.03944	-.00100

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01073	.01147	.00843	.00944	.00042	.00002	.00015
SDev	.00076	.00184	.00006	.00065	.00230	.00165	.00033
%RSD	7.1180	16.015	.67382	6.8797	549.11	8943.3	219.66

#1	.01127	.01276	.00847	.00990	.00204	-.00115	-.00008
#2	.01019	.01017	.00839	.00898	-.00121	.00118	.00039

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00093	-.00178	-.00150	.00061	.00780	.01393
SDev	.00190	.00103	.00005	.00122	.00057	.00030
%RSD	203.90	57.457	3.4216	199.08	7.3445	2.1704

#1	-.00227	-.00106	-.00146	.00148	.00739	.01415
#2	.00041	-.00251	-.00154	-.00025	.00820	.01372

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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	16486	--	--	--	--	--	--
SDev	11.95038	--	--	--	--	--	--
%RSD	.0724880	--	--	--	--	--	--
#1	16494	--	--	--	--	--	--
#2	16478	--	--	--	--	--	--

Method: METTRA Sample Name: DHK3TS

Operator: RJG

Run Time: 08/15/00 15:07:58

Comment: STL PITTSBURGH ICP METALS 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	.04190	15.328	1.7019	2.1382	.04896	23.948	.04185
SDev	.00006	.020	.0024	.0049	.00034	.091	.00024
%RSD	.14230	.12943	.13932	.23125	.70308	.37818	.57837
#1	.04186	15.342	1.7036	2.1417	.04921	24.012	.04202
#2	.04194	15.314	1.7002	2.1347	.04872	23.884	.04168
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	.46903	.18817	.25869	17.398	6.3789	.62083	-.00093
SDev	.00062	.00037	.00029	.029	.0152	.00070	.00065
%RSD	.13140	.19877	.11168	.16383	.23808	.11275	70.304
#1	.46947	.18843	.25889	17.418	6.3896	.62133	-.00139
#2	.46859	.18790	.25849	17.378	6.3682	.62034	-.00047
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	.47167	.46986	.45105	.45731	.00093	.00226	.00182
SDev	.00311	.00074	.00143	.00120	.00100	.00034	.00056
%RSD	.65888	.15802	.31672	.26243	106.93	15.167	30.848
#1	.47387	.47038	.45206	.45816	.00164	.00250	.00221
#2	.46947	.46933	.45004	.45646	.00023	.00202	.00142
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	1.6772	1.7155	1.7028	1.6293	.44784	.49753	
SDev	.0068	.0021	.0009	.0157	.00275	.00252	
%RSD	.40801	.12193	.05188	.96373	.61357	.50686	
#1	1.6820	1.7141	1.7034	1.6404	.44978	.49931	
#2	1.6723	1.7170	1.7021	1.6182	.44590	.49575	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16913	--	--	--	--	--	--
SDev	52.64355	--	--	--	--	--	--
%RSD	.3112539	--	--	--	--	--	--
#1	16951	--	--	--	--	--	--
#2	16876	--	--	--	--	--	--

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661

Method: METTRA Sample Name: DHK3TD

Operator: RJG

Run Time: 08/15/00 15:12:08

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	.04475	15.334	1.8144	2.3116	.05191	26.606	.04480
SDev	.00018	.066	.0082	.0159	.00029	.112	.00006
%RSD	.39306	.43056	.45315	.68737	.56440	.42012	.14168
#1	.04462	15.381	1.8202	2.3228	.05212	26.685	.04484
#2	.04487	15.287	1.8086	2.3004	.05170	26.527	.04475
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	.49412	.20388	.27475	16.168	6.7695	.65834	.00060
SDev	.00084	.00006	.00105	.039	.0266	.00206	.00043
%RSD	.16932	.03072	.38362	.24049	.39318	.31283	71.655
#1	.49472	.20384	.27549	16.196	6.7883	.65980	.00030
#2	.49353	.20393	.27400	16.141	6.7506	.65689	.00090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48780	.47199	.45297	.45930	.00016	.00033	.00027
SDev	.00380	.00090	.00014	.00020	.00040	.00106	.00084
%RSD	.77967	.18980	.03127	.04438	253.66	321.36	308.39
#1	.49049	.47136	.45307	.45916	.00044	.00108	.00087
#2	.48511	.47262	.45287	.45945	-.00012	-.00042	-.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	1.7661	1.8049	1.7920	1.7315	.48477	.50488	
SDev	.0098	.0048	.0000	.0123	.00746	.00304	
%RSD	.55298	.26625	.00262	.71004	1.5392	.60217	
#1	1.7592	1.8083	1.7920	1.7402	.49004	.50702	
#2	1.7730	1.8015	1.7921	1.7228	.47949	.50273	
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	49.03827	--	--	--	--	--	--
%RSD	.3003098	--	--	--	--	--	--
#1	16295	--	--	--	--	--	--
#2	16364	--	--	--	--	--	--

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663

Method: METTRA Sample Name: DHM01B Rerun Operator: RJG
 Run Time: 08/15/00 15:16:18
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00017	H.22652	.00050	.00034	.00014	.11504	.00013
SDev	.00030	.01049	.00136	.00015	.00041	.00116	.00006
%RSD	177.03	4.6298	272.31	45.646	298.99	1.0071	44.658
#1	.00004	H.23393	.00146	.00045	-.00015	.11586	.00009
#2	-.00039	H.21910	-.00046	.00023	.00042	.11422	.00017
Errors	LC Pass	LC High	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	-.00102	.00038	.01045	.02190	-.00138	.00018	-.00152
SDev	.00005	.00001	.00026	.00008	.00304	.00012	.00079
%RSD	4.6236	2.0707	2.4830	.35638	220.50	69.687	51.793
#1	-.00105	.00037	.01064	.02195	.00077	.00026	-.00096
#2	-.00099	.00038	.01027	.02184	-.00353	.00009	-.00208
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	.00138	.02190	.01712	H.01871	.00145	.00116	.00126
SDev	.00008	.00103	.00042	.00007	.00024	.00055	.00029
%RSD	6.1248	4.7270	2.4232	.36340	16.747	47.721	22.955
#1	.00144	.02263	.01683	H.01876	.00128	.00155	.00146
#2	.00132	.02117	.01741	H.01866	.00162	.00077	.00105
Errors	LC Pass	NOCHECK	NOCHECK	LC High	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00694	.00492	.00097	-.00415	-.00039	.00890	
SDev	.00234	.00212	.00063	.00409	.00060	.00008	
%RSD	33.784	43.074	65.206	98.524	152.68	.89180	
#1	-.00859	.00641	.00142	-.00126	.00003	.00884	
#2	-.00528	.00342	.00052	-.00704	-.00082	.00895	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15876	--	--	--	--	--	--
SDev	151.6392	--	--	--	--	--	--
%RSD	.9551187	--	--	--	--	--	--
#1	15769	--	--	--	--	--	--
#2	15984	--	--	--	--	--	--

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665

Method: METTRA Sample Name: CCV3-8

Operator: RJG

Run Time: 08/15/00 15:20:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0234	24.043	.50732	1.9562	2.1049	51.728	.49108
SDev	.0031	.040	.00333	.0035	.0111	.330	.00282
%RSD	.29850	.16799	.65701	.17910	.52899	.63810	.57366
#1	1.0255	24.072	.50968	1.9587	2.1127	51.962	.49307
#2	1.0212	24.015	.50496	1.9537	2.0970	51.495	.48909
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	2.0348	2.0484	1.9467	25.439	50.685	2.0348	2.0594
SDev	.0084	.0084	.0042	.101	.172	.0075	.0065
%RSD	.41270	.40966	.21534	.39852	.33843	.37030	.31608
#1	2.0408	2.0544	1.9497	25.511	50.806	2.0401	2.0548
#2	2.0289	2.0425	1.9437	25.368	50.564	2.0295	2.0640
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	1.9862	.52062	.50451	.50988	.53183	.50763	.51569
SDev	.0147	.00090	.00106	.00041	.00170	.00063	.00099
%RSD	.74169	.17216	.21028	.08025	.32018	.12403	.19139
#1	1.9966	.51999	.50526	.51017	.53303	.50807	.51638
#2	1.9758	.52126	.50376	.50959	.53062	.50718	.51499
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	.50608	.51631	.51290	1.0507	2.0323	2.0418	
SDev	.00016	.00080	.00059	.0058	.0100	.0118	
%RSD	.03126	.15562	.11476	.55274	.49317	.57657	
#1	.50619	.51687	.51332	1.0548	2.0394	2.0502	
#2	.50596	.51574	.51248	1.0466	2.0252	2.0335	
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

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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	16629	--	--	--	--	--	--
SDev	32.03111	--	--	--	--	--	--
%RSD	.1926179	--	--	--	--	--	--
#1	16607	--	--	--	--	--	--
#2	16652	--	--	--	--	--	--

Method: METTRA Sample Name: CCB8

Operator: RJG

Run Time: 08/15/00 15:24:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00011	H.21491	-.00092	.00035	.00126	.00083	.00017
SDev	.00002	.00673	.00045	.00018	.00008	.00196	.00003
%RSD	19.750	3.1300	49.213	52.189	6.2968	236.57	17.047

#1	.00012	H.21967	-.00060	.00022	.00120	-.00056	.00015
#2	.00009	H.21015	-.00124	.00048	.00131	.00221	.00019

Errors	LC Pass	LC High	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	-.00002	.00023	-.00604	-.00858	.00716	.00030	.00341
SDev	.00016	.00011	.00019	.00045	.00117	.00008	.00145
%RSD	936.95	47.880	3.0828	5.2170	16.395	26.817	42.354

#1	-.00013	.00030	-.00617	-.00889	.00799	.00024	.00444
#2	.00009	.00015	-.00590	-.00826	.00633	.00036	.00239

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	.00030	.00319	-.00044	.00077	-.00070	.00141	.00071
SDev	.00096	.00253	.00023	.00069	.00014	.00093	.00067
%RSD	315.76	79.365	51.757	89.961	19.523	65.929	93.936

#1	.00098	.00498	-.00060	.00126	-.00060	.00207	.00118
#2	-.00037	.00140	-.00028	.00028	-.00080	.00075	.00024

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	.00132	-.00280	-.00143	.00277	.00038	.00056
SDev	.00163	.00170	.00168	.00051	.00019	.00003
%RSD	123.23	60.808	117.65	18.400	49.184	5.7976

#1	.00248	-.00160	-.00024	.00314	.00052	.00053
#2	.00017	-.00401	-.00262	.00241	.00025	.00058

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

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16589	--	--	--	--	--	--
SDev	29.23859	--	--	--	--	--	--
%RSD	.1762563	--	--	--	--	--	--
#1	16609	--	--	--	--	--	--
#2	16568	--	--	--	--	--	--

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Metals Preparation Log



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

667 670

5216

Method: 30508		Matrix: Soils		Start Time: 0900		SDG: —		Balance# 6131		Reagents: 10ml 1:1 HNO3, 5ml conc. HNO3, 10ml 30% H2O2, 10ml conc. HCl		0057-020-6, 4023N34021Mallinckrodt, 524494027, 5582744467, 5582744467	
Analyst: Melinda Mahan		Date: 8.14.00		Lot Number: COLH120157		Lab Lot No. (book, page, line): 0014-162-6		MS		MS-81REV			
Reviewed By: [Signature]		Date: 8.14.00		Sample ID		Init Wt/Vol		Final Vol		Comments		Pre Post Pre Post Pre Post	
1. DHOXN		10500ml		50100ml		7mm 1-4-00							
2. DHOXN		1.0g				7mm 1-4-00							
3. DHOXN						7mm 1-4-00							
4. DHOXN						7mm 1-4-00							
5. DHOXN						7mm 1-4-00							
6. DHOXN						7mm 1-4-00							
7. DHOXN						7mm 1-4-00							
8. DHOXN						7mm 1-4-00							
9. DHOXN						7mm 1-4-00							
10. DHOXN						7mm 1-4-00							
11. DHOXN						7mm 1-4-00							
12. DHOXN						7mm 1-4-00							
13. DHOXN						7mm 1-4-00							
14. DHOXN						7mm 1-4-00							
15. DHOXN						7mm 1-4-00							
16. DHOXN						7mm 1-4-00							
17. DHOXN						7mm 1-4-00							
18. DHOXN						7mm 1-4-00							
19. DHOXN						7mm 1-4-00							
20. DHOXN						7mm 1-4-00							
21. DHOXN						7mm 1-4-00							
22. DHOXN						7mm 1-4-00							
23. DHOXN						7mm 1-4-00							
24. DHOXN						7mm 1-4-00							

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>
21E CLP1	DHQXN	— — —	258849	399411	A-46-QM	COH120157	001		SOLID	0	3 1
21E CLP1	DHQXQ	— — —	258850	399411	A-46-QM	COH120157	002		SOLID	0	3 1
21E CLP1	DHQXR	— — —	258851	399411	A-46-QM	COH120157	003		SOLID	0	3 1

RELINQUISHED BYRECEIVED BYDATE/TIMEAmber A. HallMelissa Mahan8-14-00 0815Melissa MahanAmber A. Hall8-14-00 1000

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

667 672

**TCLP
METALS DATA**

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S1/0224/GRAB/005	DHQXNT
DF/S1/0224/SDC/024	DHQXQT
DF/S1/0224/SDC/025	DHQXRT

Comments: UXB/DUNN FIELD
C0H120157
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: <u>MTW</u>
DATE: <u>8-18-00</u>

667 674

**TCLP
METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

667 675

Sample Results

Lab Sample ID: DHQXNT Client ID: DF/S1/0224/GRAB/005
Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000072	0.00020	0.000072	U	1	CVAA	8/16/00	10:25

Comments: Lot #: C0H120157 Sample #: 1

Version 4.10.2

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

Form 1 Equivalent

667 676

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHQXQT Client ID: DF/S1/0224/SDC/024
Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000072	0.000020	0.000072	U	1	CVAA	8/16/00	10:26

Comments: Lot #: C0H120157 Sample #: 2

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHQXRT Client ID: DF/S1/0224/SDC/025
Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000072	0.00020	0.000072	U	1	CVAA	8/16/00	10:28

Comments: Lot #: C0H120157 Sample #: 3

Version 4.10.2

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

Form 1 Equivalent

667 678

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHQXNT Client ID: DF/S1/0224/GRAB/005
Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104
Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.043	0.50	0.22	B	1	ICP	8/16/00	15:30
Barium	493.41	0.00044	10.0	1.2	B	1	ICP	8/16/00	15:30
Cadmium	228.80	0.0038	0.10	0.0038	U	1	ICP	8/16/00	15:30
Chromium	267.72	0.0039	0.50	0.034	B	1	ICP	8/16/00	15:30
Lead	220.35	0.033	0.50	0.036	B	1	ICP	8/16/00	15:30
Selenium	196.03	0.053	0.25	0.053	U	1	ICP	8/16/00	15:30
Silver	328.07	0.0028	0.50	0.0028	U	1	ICP	8/16/00	15:30

Comments: Lot #: C0H120157 Sample #: 1

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

B Result is between IDL and RL

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHQQQT Client ID: DF/S1/0224/SDC/024
 Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.043	0.50	0.16	B	1	ICP	8/16/00	15:33
Barium	493.41	0.00044	10.0	1.1	B	1	ICP	8/16/00	15:33
Cadmium	228.80	0.0038	0.10	0.0038	U	1	ICP	8/16/00	15:33
Chromium	267.72	0.0039	0.50	0.0082	B	1	ICP	8/16/00	15:33
Lead	220.35	0.033	0.50	0.035	B	1	ICP	8/16/00	15:33
Selenium	196.03	0.053	0.25	0.053	U	1	ICP	8/16/00	15:33
Silver	328.07	0.0028	0.50	0.0028	U	1	ICP	8/16/00	15:33

Comments: Lot #: C0H120157 Sample #: 2

Version 4.10.2

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

Form 1 Equivalent

667 680

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHQXRT Client ID: DF/S1/0224/SDC/025
Matrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104
Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.043	0.50	0.19	B	1	ICP	8/16/00	15:36
Barium	493.41	0.00044	10.0	1.0	B	1	ICP	8/16/00	15:36
Cadmium	228.80	0.0038	0.10	0.0038	U	1	ICP	8/16/00	15:36
Chromium	267.72	0.0039	0.50	0.0039	U	1	ICP	8/16/00	15:36
Lead	220.35	0.033	0.50	0.033	U	1	ICP	8/16/00	15:36
Selenium	196.03	0.053	0.25	0.053	U	1	ICP	8/16/00	15:36
Silver	328.07	0.0028	0.50	0.0028	U	1	ICP	8/16/00	15:36

Comments: Lot #: C0H120157 Sample #: 3

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 1 Equivalent

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0816HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-026-14

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

667 682

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00816B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 8/16/00 11:51 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000.0	985.18	98.5								
Barium	493.409	1000.0	999.40	99.9								
Cadmium	228.802	1000.0	1021.56	102.2								
Chromium	267.716	1000.0	1021.66	102.2								
Lead	220.353	1000.0	1045.44	104.5								
Selenium	196.026	1000.0	994.56	99.5								
Silver	328.068	500.0	511.44	102.3								

Metals Data Reporting Form

Continuing Calibration Verification

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

Element	WL/ Mass	True Conc	CCV5-1 8/16/00 9:50 AM		CCV5-2 8/16/00 10:10 AM		CCV5-3 8/16/00 10:31 AM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.07	101.4	5.12	102.4	5.02	100.4		

STL-Pittsburgh

667 684

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00816B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-011-1 ⁰²⁵⁻⁵ ₈₋₁₈₋₀₀ ^{MTW}

Element	WL/ Mass	True Conc	CCV2-1 8/16/00 12:21 PM		CCV2-2 8/16/00 12:59 PM		CCV2-3 8/16/00 1:36 PM		CCV2-4 8/16/00 2:19 PM		CCV2-5 8/16/00 2:57 PM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	4921.72	98.4	4997.57	100.0	4979.47	99.6	4961.04	99.2	4932.09	98.6
Barium	493.409	5000.0	4859.91	97.2	4938.26	98.8	4881.65	97.6	4793.80	95.9	4811.98	96.2
Cadmium	228.802	5000.0	4982.37	99.6	5048.11	101.0	5093.98	101.9	5045.19	100.9	5066.42	101.3
Chromium	267.716	5000.0	4898.04	98.0	4968.88	99.4	4987.30	99.7	4938.55	98.8	4965.98	99.3
Lead	220.353	5000.0	4999.77	100.0	5056.43	101.1	5068.21	101.4	5015.81	100.3	5034.62	100.7
Selenium	196.026	5000.0	4896.35	97.9	5037.32	100.7	4983.06	99.7	4944.75	98.9	5029.25	100.6
Silver	328.068	1000.0	991.42	99.1	1006.23	100.6	1007.22	100.7	997.20	99.7	995.90	99.6

STL-Pittsburgh
Metals Data Reporting Form

667 685

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J00816B.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-011-1 ⁰²⁵⁻⁵ ₈₋₁₈₋₀₀

Element	WL/ Mass	True Conc	CCV2-6 8/16/00 3:39 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5050.68	101.0								
Barium	493.409	5000.0	5015.30	100.3								
Cadmium	228.802	5000.0	5061.17	101.2								
Chromium	267.716	5000.0	5025.25	100.5								
Lead	220.353	5000.0	5052.04	101.0								
Selenium	196.026	5000.0	5198.09	104.0								
Silver	328.068	1000.0	1010.17	101.0								

667 686

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

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

Standard Source: _____

Standard ID: _____

			ICB1 8/16/00 9:49 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U				

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00816B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/16/00 11:54 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	42.6	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	3.8	U						
Chromium	267.716	500	3.9	U						
Lead	220.353	500	33.0	U						
Selenium	196.026	250	52.5	U						
Silver	328.068	500	2.8	U						

667 688

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

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

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/16/00 9:52 AM	CCB2 8/16/00 10:12 AM	CCB3 8/16/00 10:33 AM		
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.1 U	0.1 U	0.1 U		

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00816B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/16/00 12:24 PM	CCB2 8/16/00 1:02 PM	CCB3 8/16/00 1:40 PM	CCB4 8/16/00 2:22 PM	CCB5 8/16/00 3:00 PM
			Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	193.696	500	42.6 U	42.6 U	42.6 U	42.6 U	42.6 U
Barium	493.409	10000	0.6 B	0.4 U	0.7 B	0.7 B	0.8 B
Cadmium	228.802	100	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chromium	267.716	500	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Lead	220.353	500	33.0 U	36.8 B	33.0 U	33.0 U	33.0 U
Selenium	196.026	250	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U
Silver	328.068	500	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U

667 690

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00816B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB6 8/16/00 3:42 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	193.696	500	42.6	U								
Barium	493.409	10000	0.8	B								
Cadmium	228.802	100	3.8	U								
Chromium	267.716	500	3.9	U								
Lead	220.353	500	33.0	U								
Selenium	196.026	250	52.5	U								
Silver	328.068	500	2.8	U								

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DHVFXBTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000072	0.00020	0.000072	U	1	CVAA	8/16/00	9:57

Comments: Lot #: C0H120157

Version 4.10.2

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

Form 3 Equivalent

667 692

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DHVJ0BTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000072	0.00020	0.000072	U	1	CVAA	8/16/00	9:54

Comments: Lot #: C0H120157

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DHVFXBTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.043	0.50	0.11	B	1	ICP	8/16/00	14:29
Barium	493.409	0.00044	10.0	0.00092	B	1	ICP	8/16/00	14:29
Cadmium	228.802	0.0038	0.10	0.0038	U	1	ICP	8/16/00	14:29
Chromium	267.716	0.0039	0.50	0.0039	U	1	ICP	8/16/00	14:29
Lead	220.353	0.033	0.50	0.033	U	1	ICP	8/16/00	14:29
Selenium	196.026	0.053	0.25	0.053	U	1	ICP	8/16/00	14:29
Silver	328.068	0.0028	0.50	0.0028	U	1	ICP	8/16/00	14:29

Comments: Lot #: C0H120157

Version 4.10.2

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

Form 3 Equivalent

667 694

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DHWJKBTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.043	0.50	0.043	U	1	ICP	8/16/00	14:26
Barium	493.409	0.00044	10.0	0.00056	B	1	ICP	8/16/00	14:26
Cadmium	228.802	0.0038	0.10	0.0038	U	1	ICP	8/16/00	14:26
Chromium	267.716	0.0039	0.50	0.0039	U	1	ICP	8/16/00	14:26
Lead	220.353	0.033	0.50	0.033	U	1	ICP	8/16/00	14:26
Selenium	196.026	0.053	0.25	0.053	U	1	ICP	8/16/00	14:26
Silver	328.068	0.0028	0.50	0.0028	U	1	ICP	8/16/00	14:26

Comments: Lot #: C0H120157

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

667 695

Interference Check Standard A

Instrument: ICP

Units: ug/L

Chart Number: J00816B.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/16/00 11:57 AM	Found	Found	Found	Found
				Found				
Arsenic	193.696	500		-95				
Barium	493.409	10000		2				
Cadmium	228.802	100		-2				
Chromium	267.716	500		-1				
Lead	220.353	500		94				
Selenium	196.026	250		-100				
Silver	328.068	500		-2				

667 696

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00816B.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 8/16/00 12.00 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	900.7	90.1								
Barium	493.409	500	461.9	92.4								
Cadmium	228.802	1000	953.0	95.3								
Chromium	267.716	500	442.3	88.5								
Lead	220.353	1000	957.0	95.7								
Selenium	196.026	1000	848.3	84.8								
Silver	328.068	1000	944.4	94.4								

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DHVJ0CTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0228339Weight: 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	0.0025	101.6		80-120	1	CVAA	8/16/00	9:55

Comments: Lot #: C0H120157

Version 4.10.2

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

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DHWJKCTMatrix: TCLP Units: mg/L Prep Date: 8/16/00 Prep Batch: 0229104Weight: 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	105.8		80-120	1	ICP	8/16/00	14:32
Barium	493.409	2.0	1.8	90.6	B	80-120	1	ICP	8/16/00	14:32
Cadmium	228.802	0.050	0.048	95.6	B	80-120	1	ICP	8/16/00	14:32
Chromium	267.716	0.20	0.19	96.2	B	80-120	1	ICP	8/16/00	14:32
Lead	220.353	0.50	0.49	97.8	B	80-120	1	ICP	8/16/00	14:32
Selenium	196.026	2.0	2.1	103.4		80-120	1	ICP	8/16/00	14:32
Silver	328.068	0.050	0.047	93.8	B	80-120	1	ICP	8/16/00	14:32

Comments: Lot #: C0H120157

Version 4.10.2

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

Form 7 Equivalent

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAAUnits: ppb

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Mercury	253.70	0.2	0.072	7/15/00

667 700

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Arsenic	193.70	500	42.6	7/8/00
Barium	493.41	10000	0.44	7/8/00
Cadmium	228.80	100	3.8	7/8/00
Chromium	267.72	500	3.9	7/8/00
Lead	220.35	500	33.0	7/8/00
Selenium	196.03	250	52.5	7/8/00
Silver	328.07	500	2.8	7/8/00

Metals Data Reporting Form

Inter-Element Correction Factors

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

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

667 702

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

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

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	7/8/00
Barium	493.41	100000	7/8/00
Cadmium	228.80	100000	7/8/00
Chromium	267.72	100000	7/8/00
Lead	220.35	100000	7/8/00
Selenium	196.03	100000	7/8/00
Silver	328.07	2000	7/8/00

667 704

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0228339 Instrument: CVAA Matrix: TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DHVFXBT	8/16/00	NA	100	NA
DHVJ0BT	8/16/00	NA	100	NA
DHVJ0CT	8/16/00	NA	100	NA
DHQXNT	8/16/00	NA	100	NA
DHQQQT	8/16/00	NA	100	NA
DHQXRT	8/16/00	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

667 705

Preparation Log

Preparation Batch: 0229104 **Instrument:** ICP **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DHVFXT	8/16/00	NA	50	NA
DHWJBT	8/16/00	NA	50	NA
DHWJCT	8/16/00	NA	50	NA
DHQXT	8/16/00	NA	50	NA
DHQQT	8/16/00	NA	50	NA
DHQRT	8/16/00	NA	50	NA

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0816HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		8/16/00	9:35
Std2Rep1		8/16/00	9:36
Std3Rep1		8/16/00	9:38
Std4Rep1		8/16/00	9:41
Std5Rep1		8/16/00	9:43
Std6Rep1		8/16/00	9:44
ICV5-1		8/16/00	9:47
ICB1		8/16/00	9:49
CCV5-1		8/16/00	9:50
CCB1		8/16/00	9:52
DHVJ0BT		8/16/00	9:54
DHVJ0CT		8/16/00	9:55
DHVFXBT		8/16/00	9:57
ZZZZZZ		8/16/00	9:59
ZZZZZZ		8/16/00	10:00
ZZZZZZ		8/16/00	10:02
ZZZZZZ		8/16/00	10:04
ZZZZZZ		8/16/00	10:05
ZZZZZZ		8/16/00	10:07
ZZZZZZ		8/16/00	10:09
CCV5-2		8/16/00	10:10
CCB2		8/16/00	10:12
ZZZZZZ		8/16/00	10:14
ZZZZZZ		8/16/00	10:15
ZZZZZZ		8/16/00	10:18
ZZZZZZ		8/16/00	10:20
ZZZZZZ		8/16/00	10:22
ZZZZZZ		8/16/00	10:23
DHGXNT	DF/S1/0224/GRAB/005	8/16/00	10:25
DHGXQT	DF/S1/0224/SDC/024	8/16/00	10:26
DHGXRT	DF/S1/0224/SDC/025	8/16/00	10:28
ZZZZZZ		8/16/00	10:30
CCV5-3		8/16/00	10:31
CCB3		8/16/00	10:33
ZZZZZZ		8/16/00	10:35
ZZZZZZ		8/16/00	10:36
ZZZZZZ		8/16/00	10:38
ZZZZZZ		8/16/00	10:40
ZZZZZZ		8/16/00	10:41

STL-Pittsburgh
Metals Data Reporting Form

667 707

Instrument Runlog

Instrument: CVAA

Chart Number: 0816HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	10:43
ZZZZZZ		8/16/00	10:44
ZZZZZZ		8/16/00	10:46
ZZZZZZ		8/16/00	10:49
ZZZZZZ		8/16/00	10:50
ZZZZZZ		8/16/00	10:52
ZZZZZZ		8/16/00	10:54
ZZZZZZ		8/16/00	10:56
ZZZZZZ		8/16/00	10:57
ZZZZZZ		8/16/00	10:59
ZZZZZZ		8/16/00	11:00
ZZZZZZ		8/16/00	11:02
ZZZZZZ		8/16/00	11:03
ZZZZZZ		8/16/00	11:05
ZZZZZZ		8/16/00	11:07
ZZZZZZ		8/16/00	11:09
ZZZZZZ		8/16/00	11:11
ZZZZZZ		8/16/00	11:13
ZZZZZZ		8/16/00	11:14
ZZZZZZ		8/16/00	11:16
ZZZZZZ		8/16/00	11:19
ZZZZZZ		8/16/00	11:21
ZZZZZZ		8/16/00	11:23
ZZZZZZ		8/16/00	11:24
ZZZZZZ		8/16/00	11:26
ZZZZZZ		8/16/00	11:31
ZZZZZZ		8/16/00	11:32
ZZZZZZ		8/16/00	11:34
ZZZZZZ		8/16/00	11:36
ZZZZZZ		8/16/00	11:39

STL-Pittsburgh

667 708

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00816B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	10:43
ZZZZZZ		8/16/00	10:46
ZZZZZZ		8/16/00	10:49
ZZZZZZ		8/16/00	10:53
ZZZZZZ		8/16/00	10:58
ZZZZZZ		8/16/00	11:01
ZZZZZZ		8/16/00	11:04
ZZZZZZ		8/16/00	11:07
ZZZZZZ		8/16/00	11:12
ZZZZZZ		8/16/00	11:15
ZZZZZZ		8/16/00	11:18
ZZZZZZ		8/16/00	11:22
ZZZZZZ		8/16/00	11:27
ZZZZZZ		8/16/00	11:30
ZZZZZZ		8/16/00	11:33
ZZZZZZ		8/16/00	11:36
STD1		8/16/00	11:41
STD5A		8/16/00	11:44
STD5B		8/16/00	11:48
ICV2-1		8/16/00	11:51
ICB1		8/16/00	11:54
ICSA		8/16/00	11:57
ICSAB		8/16/00	12:00
ZZZZZZ		8/16/00	12:05
ZZZZZZ		8/16/00	12:09
ZZZZZZ		8/16/00	12:12
ZZZZZZ		8/16/00	12:15
ZZZZZZ		8/16/00	12:18
CCV2-1		8/16/00	12:21
CCB1		8/16/00	12:24
ZZZZZZ		8/16/00	12:27
ZZZZZZ		8/16/00	12:31
ZZZZZZ		8/16/00	12:34
ZZZZZZ		8/16/00	12:37
ZZZZZZ		8/16/00	12:40
ZZZZZZ		8/16/00	12:43
ZZZZZZ		8/16/00	12:46
ZZZZZZ		8/16/00	12:49
ZZZZZZ		8/16/00	12:53

STL-Pittsburgh
Metals Data Reporting Form

667 709

Instrument Runlog

Instrument: ICP

Chart Number: J00816B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	12:56
CCV2-2		8/16/00	12:59
CCB2		8/16/00	13:02
ZZZZZZ		8/16/00	13:05
ZZZZZZ		8/16/00	13:08
ZZZZZZ		8/16/00	13:11
ZZZZZZ		8/16/00	13:15
ZZZZZZ		8/16/00	13:18
ZZZZZZ		8/16/00	13:21
ZZZZZZ		8/16/00	13:24
ZZZZZZ		8/16/00	13:27
ZZZZZZ		8/16/00	13:30
ZZZZZZ		8/16/00	13:33
CCV2-3		8/16/00	13:36
CCB3		8/16/00	13:40
ZZZZZZ		8/16/00	13:51
ZZZZZZ		8/16/00	13:54
ZZZZZZ		8/16/00	13:57
ZZZZZZ		8/16/00	14:00
ZZZZZZ		8/16/00	14:04
ZZZZZZ		8/16/00	14:07
ZZZZZZ		8/16/00	14:10
ZZZZZZ		8/16/00	14:13
ZZZZZZ		8/16/00	14:16
CCV2-4		8/16/00	14:19
CCB4		8/16/00	14:22
DHWJKBT		8/16/00	14:26
DHVFXBT		8/16/00	14:29
DHWJKCT		8/16/00	14:32
ZZZZZZ		8/16/00	14:35
ZZZZZZ		8/16/00	14:38
ZZZZZZ		8/16/00	14:41
ZZZZZZ		8/16/00	14:45
ZZZZZZ		8/16/00	14:48
ZZZZZZ		8/16/00	14:51
ZZZZZZ		8/16/00	14:54
CCV2-5		8/16/00	14:57
CCB5		8/16/00	15:00
ZZZZZZ		8/16/00	15:07

667 710

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00816B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	15:11
ZZZZZZ		8/16/00	15:14
ZZZZZZ		8/16/00	15:17
ZZZZZZ		8/16/00	15:20
ZZZZZZ		8/16/00	15:23
ZZZZZZ		8/16/00	15:26
DHGXNT	DF/S1/0224/GRAB/005	8/16/00	15:30
DHGXQT	DF/S1/0224/SDC/024	8/16/00	15:33
DHGXRT	DF/S1/0224/SDC/025	8/16/00	15:36
CCV2-6		8/16/00	15:39
CCB6		8/16/00	15:42
ZZZZZZ		8/16/00	15:46
ZZZZZZ		8/16/00	15:49
ZZZZZZ		8/16/00	15:52
ZZZZZZ		8/16/00	15:55
ZZZZZZ		8/16/00	15:58
ZZZZZZ		8/16/00	16:01
ZZZZZZ		8/16/00	16:04
ZZZZZZ		8/16/00	16:08
ZZZZZZ		8/16/00	16:11
ZZZZZZ		8/16/00	16:14
ZZZZZZ		8/16/00	16:17
ZZZZZZ		8/16/00	16:20
ZZZZZZ		8/16/00	16:32
ZZZZZZ		8/16/00	16:35
ZZZZZZ		8/16/00	16:38
ZZZZZZ		8/16/00	16:41
ZZZZZZ		8/16/00	16:44
ZZZZZZ		8/16/00	16:47
ZZZZZZ		8/16/00	16:51
ZZZZZZ		8/16/00	16:54
ZZZZZZ		8/16/00	16:57
ZZZZZZ		8/16/00	17:00
ZZZZZZ		8/16/00	17:03
ZZZZZZ		8/16/00	17:06
ZZZZZZ		8/16/00	17:09
ZZZZZZ		8/16/00	17:13
ZZZZZZ		8/16/00	17:16
ZZZZZZ		8/16/00	17:19

STL-Pittsburgh
Metals Data Reporting Form

667- 711

Instrument Runlog

Instrument: ICP

Chart Number: J00816B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	17:22
ZZZZZZ		8/16/00	17:25
ZZZZZZ		8/16/00	17:28
ZZZZZZ		8/16/00	17:31
ZZZZZZ		8/16/00	17:35
ZZZZZZ		8/16/00	17:38
ZZZZZZ		8/16/00	17:41
ZZZZZZ		8/16/00	17:44
ZZZZZZ		8/16/00	17:47
ZZZZZZ		8/16/00	17:50
ZZZZZZ		8/16/00	17:53
ZZZZZZ		8/16/00	17:57
ZZZZZZ		8/16/00	18:00
ZZZZZZ		8/16/00	18:03
ZZZZZZ		8/16/00	18:06
ZZZZZZ		8/16/00	18:09
ZZZZZZ		8/16/00	18:12
ZZZZZZ		8/16/00	18:15
ZZZZZZ		8/16/00	18:19
ZZZZZZ		8/16/00	18:22
ZZZZZZ		8/16/00	18:25
ZZZZZZ		8/16/00	18:28
ZZZZZZ		8/16/00	18:31
ZZZZZZ		8/16/00	18:34
ZZZZZZ		8/16/00	18:37
ZZZZZZ		8/16/00	18:41
ZZZZZZ		8/16/00	18:44
ZZZZZZ		8/16/00	18:47
ZZZZZZ		8/16/00	18:50
ZZZZZZ		8/16/00	18:53
ZZZZZZ		8/16/00	18:56
ZZZZZZ		8/16/00	19:00
ZZZZZZ		8/16/00	19:03

667 712

**TCLP
METALS
RAW DATA**

Michael T. Wesolowski 8-17-00

667

713

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.00065	-.00085	-.00005	0	.0004	.00019
2	STD5A	.27394	.55314	4.0932	.94768	3.9386	.26355
3	STD5B						
4	ICV2-1 0057-005-2	.51144	.98518	.99940	1.0216	1.0217	1.0454
5	ICB1	-.00142	.02115	.00012	-.00025	.00000	.01847
6	ICSA 0057-011-1	-.00240	-.09459	.00171	-.00164	-.00063	.09350
7	ICSAB 0014-187-1	.94439	.90073	.46191	.95299	.44232	.95700
8	DHDJV/2 NA	-.00122	.02302	.02870	-.00098	.00202	.00657
9	DHDJVP10 NA	.00146	.00540	.00628	.00112	.00279	.00907
10	DHDJVS/5 NA	.01021	.39247	.39641	.01025	.03898	.10881
11	DHDJVD/5 NA	.00915	.37561	.40068	.00865	.04051	.11988
12	DHK24/2 NA	.00015	.02821	.03850	-.00275	.00000	.00531
13	CCV2-1 0057-025-5	.99142	4.9217	4.8599	4.9824	4.8980	4.9998
14	CCB1	.00143	.00814	.00056	.00012	.00152	.01102
15	DHV4FB	-.00177	-.01928	.00014	.00178	-.00076	.00177
16	DHV4FC	.04521	1.8892	1.9166	.04515	.19190	.49881
17	DHRQD	-.00049	-.00726	.07754	.00098	.00215	.01040
18	DHRQN	.00144	.01787	.00051	-.00155	.00101	.03502
19	DHRQQ	-.00068	-.00310	.00033	.00037	.00101	.01838
20	DHRQT	.00072	.03388	.11664	-.00096	.01459	.03000
21	DHRQTP5	-.00019	.00359	.02335	-.00114	.00291	.02595
22	DHRQTS	.04669	1.9119	2.0276	.04646	.20599	.53093
23	DHRQTD	.04604	1.9150	2.0476	.04849	.20790	.53470
24	DHRQX	-.00205	.00080	.08895	.00113	.00748	.00873
25	CCV2-2	1.0062	4.9976	4.9383	5.0481	4.9689	5.0564
26	CCB2	.00001	.02190	.00043	-.00015	.00037	.03684
27	DHV6HB	.00035	.00912	.00041	-.00142	.00088	.00915
28	DHV6HC	.04778	1.9741	1.9750	.04759	.19889	.51397
29	DHRPW	.00228	.03867	.23335	-.00082	.07004	.06275
30	DHRPWP5	.00211	.01040	.04781	-.00022	.01510	.03549
31	DHRPWS	.04963	1.9080	2.1315	.04775	.26929	.55843
32	DHRPWD	.04319	1.8370	2.0986	.04359	.25101	.53927
33	DHRQ4	-.00069	.00806	.23112	-.00051	.07372	.06106
34	DHRQA	.00030	.03042	.28947	.00158	.09164	.43437
35	DHRQAP5	-.00139	.01345	.06000	-.00020	.01814	.09490
36	DHRQAS	.04474	1.8889	2.1598	.04506	.27870	.81823
37	CCV2-3	1.0072	4.9795	4.8816	5.0940	4.9873	5.0682
38	CCB3	.00036	.02649	.00073	.00045	.00165	.01844
39	DHRQAD	.04153	1.8632	2.1204	.04383	.30131	.71933
40	DHRQE	.00002	.09147	.28028	-.00199	.07817	.29103
41	DHV45BF	-.00071	-.00740	.00017	-.00067	.00050	-.00922
42	DHV45CF	.04625	1.8978	1.8892	.04523	.19606	.48927
43	DH9EAF	-.00060	.02447	.03324	.00071	.00025	.02866
44	DH9EAP5F	-.00147	-.03483	.00698	.00156	-.00088	.01089
45	DH9EASF	.04567	1.9567	1.9709	.04760	.19707	.50871
46	DH9EADF	.04564	1.9499	1.9227	.04617	.19314	.48090
47	DH9EKF	-.00024	.00868	.05409	-.00053	-.00038	.02210
48	CCV2-4	.99720	4.9610	4.7938	5.0452	4.9386	5.0158
49	CCB4	.00000	.00640	.00073	-.00138	.00076	.00370
50	DHWJKBT	-.00034	.03107	.00056	-.00057	.00075	.01656
51	DHVFXBT	-.00105	.10727	.00092	.00081	.00152	.00001
52	DHWJKCT	.04692	2.1163	1.8111	.04779	.19238	.48896
53	DHPDWT	.00055	.15593	.40892	.00557	.01015	.33743

#	Sample Name	667 AG	714 AS	BA	CD	CR	PB
54	DHPDWP5T	.00197	.04828	.08715	.00163	.00266	.09690
55	DHPDWST	.96037	5.1425	46.636	.98363	4.7261	5.0948
56	DHPDWDT	.95574	5.1695	46.514	.98902	4.7095	5.0857
57	DHPE3T	.00706	.19022	.42902	.09138	.01572	.59296
58	DHPE4T	.00058	.18061	.60391	.12280	.00354	1.7724
59	DHPE6T	-.00250	.13160	.27122	.00136	-.00076	.02382
60	CCV2-5	.99590	4.9321	4.8120	5.0664	4.9660	5.0346
61	CCB5	.00106	.02467	.00075	.00069	.00012	.00000
62	DHPE7T	-.00220	.16742	.55631	.01329	.00113	.04223
63	DHPE8T	.00004	.20683	.01888	.00046	.00342	.00309
64	DHPE9T	.00071	.21723	.03559	-.00093	.00075	-.00599
65	DHPEAT	-.00092	.18721	.30119	-.00080	.00253	.03536
66	DHPEDT	.00090	.25048	.26066	-.00171	.00177	.02482
67	DHPEET	-.00034	.17956	.19242	-.00080	.00215	.04006
68	DHPF2T	.00163	.17097	.39381	-.00216	.00367	.01251
69	DHQQNT	-.00305	.21920	1.1523	-.00093	.03364	.03581
70	DHQQQT	-.00390	.15951	1.1449	.00049	.00824	.03529
71	DHQQRT	.00010	.18989	1.0015	.00022	.00278	.02170
72	CCV2-6	1.0102	5.0507	5.0153	5.0612	5.0253	5.0520
73	CCB6	.00000	.02192	.00075	.00035	-.00025	.01469
74	DHWJFB	.00141	.06785	.00043	.00201	-.00050	.00551
75	DHWJFC	.04958	1.9966	2.0121	.04899	.20303	.52480
76	DHT3F	-.00170	.03172	.07503	-.00162	.00469	.01326
77	DHT3M	-.00312	.01684	.06706	.00374	.01320	.04540
78	DHT3N	-.00166	.06543	.05611	.00423	.01193	.03440
79	DHT3V	-.00116	.02657	.06459	.00031	.00228	.01548
80	DHT3W	-.00152	.00120	.10410	-.00113	.00456	.01481
81	DHT3WP5	.00013	.01822	.02095	.00055	.00126	.00665
82	DHT3WS	.04799	1.9860	2.0648	.04612	.20215	.48770
83	DHT3WD	.04872	1.9612	2.0542	.04471	.20329	.51718
84	CCV2-7	1.0170	5.0783	5.0070	5.0933	5.0329	5.1353
85	CCB7	-.00071	.01645	.00012	.00281	-.00114	.02395
86	DHT4M	-.00004	.04948	.01167	.00169	.00355	.01653
87	DHT4Q	.00152	.01542	.01458	.00124	.00279	.01455
88	DHT4T	.00015	.00139	.06257	.00143	.00977	.00666
89	DHT4X	-.00051	.00290	.06618	.00012	.00088	-.00055
90	DHT50	-.00060	.03671	.08133	.00011	.00622	.02233
91	DHT51	.00040	.02936	.01402	.00054	.00291	.03672
92	DHT52	-.00206	.00185	.07461	.00165	.00075	-.00636
93	DHT59	-.00053	.01663	.08756	.00196	.00329	.01737
94	DHT5A	-.00105	.03499	.08553	-.00117	.00088	.01932
95	DHTQC	-.00131	.00451	.07656	.00113	.00457	.02554
96	CCV2-8	1.0187	5.0671	4.9891	5.1351	5.0449	5.1060
97	CCB8	.00000	.00541	.00058	-.00134	.00076	.01476
98	DHTQD	-.00181	.00140	.08817	-.00003	.00304	.02239
99	DHTQE	-.00195	.01433	.07778	-.00041	.00291	.02495
100	CCV2-9	1.0194	5.0557	4.9549	5.1523	5.0498	5.1524
101	CCB9	.00071	.00540	.00048	.00154	.00000	.00184
102	DHEVFB	-.00176	.02471	.00036	.00142	.00126	-.00186
103	DHEVFC	.04774	1.9311	1.9545	.04555	.19622	.49537
104	DGLR3	.00062	.17226	.42592	-.00306	.21387	.24180
105	DGLR3P5	.00138	.03371	.08900	-.00200	.04658	.05032
106	DGLR3S	.04389	1.8524	2.3757	.04026	.39419	.63490
107	DGLR3D	.04557	1.9936	2.4059	.03875	.41184	.69136

#	Sample Name	AG	AS	BA	CD	CR	PB
108	DGLR4	.00052	.09297	.37637	-.00057	.10201	.54544
109	DGLR5	.00146	.06960	.38426	-.00135	.10581	.47496
110	DGLR7	.00167	.05050	.42360	.00111	.12931	.42312
111	DGLRA	.00148	.09393	.52054	.00028	.15597	.27996
112	CCV2-10	1.0319	5.1071	4.9997	5.2490	5.1155	5.2313
113	CCB10	-.00069	.00910	.00024	.00000	.00126	.01843
114	DGLRC	.00089	.11261	.44979	-.00052	.11484	.17344
115	DGLRD	.00194	.07227	.52587	.00096	.15392	.17408
116	DGLRF	.00159	.11109	.39303	-.00142	.13248	.20240
117	DGLRJ	.00121	.07643	.45223	-.00148	.15101	.16485
118	DGLRK	.00039	.09982	.41622	-.00131	.11712	.19629
119	DGNP2	.00120	.07956	.82130	.00250	.20509	.72064
120	DGNQ3	.96686	.16737	1.7561	.01076	.67022	9.9513
121	DGNQ4	.02484	.15361	9.9854	.10617	1.8985	22.002
122	DGNQ5	.00140	.07262	.72827	-.00314	.15253	.16821
123	DGNQC	-.00026	.07445	.47449	-.00094	.20181	.17604
124	CCV2-11	1.0296	5.1468	4.9958	5.2102	5.0937	5.1794
125	CCB11	-.00033	.01736	.00036	.00065	-.00063	.01103
126	DGNQG	.00062	.07141	.35809	-.00039	.11168	.19026
127	DGNQH	.00091	.05894	.35245	-.00087	.14975	.17937
128	DGNQJ	.00114	.08084	.35050	.00166	.14174	.15982
129	DGNQL	-.00028	.06218	.36408	-.00094	.17084	.31844
130	DGNQM	-.00023	.11531	.39589	-.00232	.17056	.25803
131	DGNQ3/2 FE	.52283	.05701	.90692	.00553	.35841	5.3502
132	DGNQ4/2 FE	.01438	.04382	5.2236	.05844	1.0141	11.862
133	CCV2-12	1.0208	5.0522	4.9798	5.1642	5.0433	5.1212
134	CCB12	-.00034	.00539	.00036	-.00081	.00177	.03317

#	Sample Name	SE		
1	STD1	.00069		
2	STD5A	.5299		
3	STD5B			
4	ICV2-1 0057-005-2	.99456		
5	ICB1	-.02266		
6	ICSA 0057-011-1	-.10034		
7	ICSAB 0014-187-1	.84830		
8	DHDJV/2 NA	.00256		
9	DHDJVP10 NA	-.01721		
10	DHDJVS/5 NA	.38655		
11	DHDJVD/5 NA	.37622		
12	DHK24/2 NA	-.04834		
13	CCV2-1 0057-025-5	4.8964		
14	CCB1	-.00848		
15	DHV4FB	-.02360		
16	DHV4FC	1.8782		
17	DHRQD	-.01769		
18	DHRQN	-.02998		
19	DHRQQ	-.00817		
20	DHRQT	.00561		
21	DHRQTP5	-.02165		
22	DHRQTS	1.9102		
23	DHRQTD	1.9322		

667 715

#	Sample Name	SE
24	DHRQX	-.00334
25	CCV2-2	5.0373
26	CCB2	-.01982
27	DHV6HB	-.01793
28	DHV6HC	1.9614
29	DHRPW	-.01121
30	DHRPWP5	.01068
31	DHRPWS	1.8611
32	DHRPWD	1.8396
33	DHRQ4	-.04587
34	DHRQA	-.04199
35	DHRQAP5	-.02970
36	DHRQAS	1.7963
37	CCV2-3	4.9831
38	CCB3	-.01037
39	DHRQAD	1.8451
40	DHRQE	-.04807
41	DHV45BF	-.02735
42	DHV45CF	1.8810
43	DH9EAF	.01332
44	DH9EAP5F	-.03096
45	DH9EASF	1.8953
46	DH9EADF	1.8952
47	DH9EKF	-.00557
48	CCV2-4	4.9448
49	CCB4	-.00093
50	DHWJKBT	-.00281
51	DHVFXBT	-.00278
52	DHWJKCT	2.0671
53	DHPDWT	-.01745
54	DHPDWP5T	.00399
55	DHPDWST	1.0690
56	DHPDWDT	1.0565
57	DHPE3T	-.00270
58	DHPE4T	-.04332
59	DHPE6T	-.04454
60	CCV2-5	5.0293
61	CCB5	-.00754
62	DHPE7T	-.02490
63	DHPE8T	-.01746
64	DHPE9T	.03033
65	DHPEAT	-.03516
66	DHPEDT	-.05067
67	DHPEET	-.00631
68	DHPF2T	-.01582
69	DHGXNT	-.02834
70	DHGXQT	-.03380
71	DHGXRT	.00487
72	CCV2-6	5.1981
73	CCB6	.01607
74	DHWJFB	-.01888
75	DHWJFC	2.0002
76	DHT3F	-.01106
77	DHT3M	.00755

#	Sample Name	SE
78	DHT3N	-.02022
79	DHT3V	-.04442
80	DHT3W	-.04675
81	DHT3WP5	-.00819
82	DHT3WS	2.0099
83	DHT3WD	1.9629
84	CCV2-7	5.0706
85	CCB7	.03023
86	DHT4M	-.01487
87	DHT4Q	-.01533
88	DHT4T	-.01993
89	DHT4X	-.05001
90	DHT50	-.02013
91	DHT51	.00681
92	DHT52	-.02260
93	DHT59	-.00269
94	DHT5A	-.01967
95	DHTQC	-.00091
96	CCV2-8	5.0790
97	CCB8	-.00660
98	DHTQD	-.03393
99	DHTQE	-.01862
100	CCV2-9	5.0439
101	CCB9	-.01132
102	DHEVFB	-.01790
103	DHEVFC	1.9132
104	DGLR3	-.21814
105	DGLR3P5	-.04602
106	DGLR3S	1.5376
107	DGLR3D	1.6564
108	DGLR4	-.08753
109	DGLR5	-.15885
110	DGLR7	-.13404
111	DGLRA	-.14732
112	CCV2-10	5.1180
113	CCB10	-.02644
114	DGLRC	-.14841
115	DGLRD	-.08034
116	DGLRF	-.08622
117	DGLRJ	-.08690
118	DGLRK	-.04538
119	DGNP2	-.20860
120	DGNQ3	L-.37653
121	DGNQ4	L-.36107
122	DGNQ5	-.13861
123	DGNQC	-.16932
124	CCV2-11	5.0515
125	CCB11	.01324
126	DGNQG	-.09810
127	DGNQH	-.11719
128	DGNQJ	-.08835
129	DGNQL	-.14971
130	DGNQM	-.14956
131	DGNQ3/2 FE	-.14195

#	Sample Name	SE	667	718
132	DGNQ4/2 FE	-.15801		
133	CCV2-12	5.0780		
134	CCB12	-.00753		

mtw 8-17-00

667 719

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00816B	QUANMET	08/16/00	11:41		X	IR
2	STD5A	J00816B	QUANMET	08/16/00	11:44		X	IR
3	STD5B	J00816B	QUANMET	08/16/00	11:48		X	IR
4	ICV2-1 0057-005-2	J00816B	QUANMET	08/16/00	11:51	MTW	S	CONC
5	ICB1	J00816B	QUANMET	08/16/00	11:54	MTW	S	CONC
6	ICSA 0057-011-1	J00816B	QUANMET	08/16/00	11:57	MTW	Q	CONC
7	ICSAB 0014-187-1	J00816B	QUANMET	08/16/00	12:00	MTW	Q	CONC
8	DHDJV/2 NA	J00816B	QUANMET	08/16/00	12:05	MTW	S	CONC
9	DHDJVP10 NA	J00816B	QUANMET	08/16/00	12:09	MTW	S	CONC
10	DHDJVS/5 NA	J00816B	QUANMET	08/16/00	12:12	MTW	S	CONC
11	DHDJVD/5 NA	J00816B	QUANMET	08/16/00	12:15	MTW	S	CONC
12	DHK24/2 NA	J00816B	QUANMET	08/16/00	12:18	MTW	S	CONC
13	CCV2-1 0057-025-5	J00816B	QUANMET	08/16/00	12:21	MTW	S	CONC
14	CCB1	J00816B	QUANMET	08/16/00	12:24	MTW	S	CONC
15	DHV4FB	J00816B	QUANMET	08/16/00	12:27	MTW	S	CONC
16	DHV4FC	J00816B	QUANMET	08/16/00	12:31	MTW	S	CONC
17	DHRQD	J00816B	QUANMET	08/16/00	12:34	MTW	S	CONC
18	DHRQN	J00816B	QUANMET	08/16/00	12:37	MTW	S	CONC
19	DHRQQ	J00816B	QUANMET	08/16/00	12:40	MTW	S	CONC
20	DHRQT	J00816B	QUANMET	08/16/00	12:43	MTW	S	CONC
21	DHRQTP5	J00816B	QUANMET	08/16/00	12:46	MTW	S	CONC
22	DHRQTS	J00816B	QUANMET	08/16/00	12:49	MTW	S	CONC
23	DHRQTD	J00816B	QUANMET	08/16/00	12:53	MTW	S	CONC
24	DHRQX	J00816B	QUANMET	08/16/00	12:56	MTW	S	CONC
25	CCV2-2	J00816B	QUANMET	08/16/00	12:59	MTW	S	CONC
26	CCB2	J00816B	QUANMET	08/16/00	13:02	MTW	S	CONC
27	DHV6HB	J00816B	QUANMET	08/16/00	13:05	MTW	S	CONC
28	DHV6HC	J00816B	QUANMET	08/16/00	13:08	MTW	S	CONC
29	DHRPW	J00816B	QUANMET	08/16/00	13:11	MTW	S	CONC
30	DHRPWP5	J00816B	QUANMET	08/16/00	13:15	MTW	S	CONC
31	DHRPWS	J00816B	QUANMET	08/16/00	13:18	MTW	S	CONC
32	DHRPWD	J00816B	QUANMET	08/16/00	13:21	MTW	S	CONC
33	DHRQ4	J00816B	QUANMET	08/16/00	13:24	MTW	S	CONC
34	DHRQA	J00816B	QUANMET	08/16/00	13:27	MTW	S	CONC
35	DHRQAP5	J00816B	QUANMET	08/16/00	13:30	MTW	S	CONC
36	DHRQAS	J00816B	QUANMET	08/16/00	13:33	MTW	S	CONC
37	CCV2-3	J00816B	QUANMET	08/16/00	13:36	MTW	S	CONC
38	CCB3	J00816B	QUANMET	08/16/00	13:40	MTW	S	CONC
39	DHRQAD	J00816B	QUANMET	08/16/00	13:51	MTW	S	CONC
40	DHRQE	J00816B	QUANMET	08/16/00	13:54	MTW	S	CONC
41	DHV45BF	J00816B	QUANMET	08/16/00	13:57	MTW	S	CONC
42	DHV45CF	J00816B	QUANMET	08/16/00	14:00	MTW	S	CONC
43	DH9EAF	J00816B	QUANMET	08/16/00	14:04	MTW	S	CONC
44	DH9EAP5F	J00816B	QUANMET	08/16/00	14:07	MTW	S	CONC
45	DH9EASF	J00816B	QUANMET	08/16/00	14:10	MTW	S	CONC
46	DH9EADF	J00816B	QUANMET	08/16/00	14:13	MTW	S	CONC
47	DH9EKF	J00816B	QUANMET	08/16/00	14:16	MTW	S	CONC
48	CCV2-4	J00816B	QUANMET	08/16/00	14:19	MTW	S	CONC
49	CCB4	J00816B	QUANMET	08/16/00	14:22	MTW	S	CONC
50	DHWJKBT	J00816B	QUANMET	08/16/00	14:26	MTW	S	CONC
51	DHVFXBT	J00816B	QUANMET	08/16/00	14:29	MTW	S	CONC
52	DHWJKCT	J00816B	QUANMET	08/16/00	14:32	MTW	S	CONC
53	DHPDWT	J00816B	QUANMET	08/16/00	14:35	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHPDWP5T	J00816B	QUANMET	08/16/00	14:38	MTW	S	CONC
55	DHPDWST	J00816B	QUANMET	08/16/00	14:41	MTW	S	CONC
56	DHPDWDT	J00816B	QUANMET	08/16/00	14:45	MTW	S	CONC
57	DHPE3T	J00816B	QUANMET	08/16/00	14:48	MTW	S	CONC
58	DHPE4T	J00816B	QUANMET	08/16/00	14:51	MTW	S	CONC
59	DHPE6T	J00816B	QUANMET	08/16/00	14:54	MTW	S	CONC
60	CCV2-5	J00816B	QUANMET	08/16/00	14:57	MTW	S	CONC
61	CCB5	J00816B	QUANMET	08/16/00	15:00	MTW	S	CONC
62	DHPE7T	J00816B	QUANMET	08/16/00	15:07	MTW	S	CONC
63	DHPE8T	J00816B	QUANMET	08/16/00	15:11	MTW	S	CONC
64	DHPE9T	J00816B	QUANMET	08/16/00	15:14	MTW	S	CONC
65	DHPEAT	J00816B	QUANMET	08/16/00	15:17	MTW	S	CONC
66	DHPEDT	J00816B	QUANMET	08/16/00	15:20	MTW	S	CONC
67	DHPEET	J00816B	QUANMET	08/16/00	15:23	MTW	S	CONC
68	DHPF2T	J00816B	QUANMET	08/16/00	15:26	MTW	S	CONC
69	DHQQNT	J00816B	QUANMET	08/16/00	15:30	MTW	S	CONC
70	DHQQQT	J00816B	QUANMET	08/16/00	15:33	MTW	S	CONC
71	DHQQRT	J00816B	QUANMET	08/16/00	15:36	MTW	S	CONC
72	CCV2-6	J00816B	QUANMET	08/16/00	15:39	MTW	S	CONC
73	CCB6	J00816B	QUANMET	08/16/00	15:42	MTW	S	CONC
74	DHWJFB	J00816B	QUANMET	08/16/00	15:46	MTW	S	CONC
75	DHWJFC	J00816B	QUANMET	08/16/00	15:49	MTW	S	CONC
76	DHT3F	J00816B	QUANMET	08/16/00	15:52	MTW	S	CONC
77	DHT3M	J00816B	QUANMET	08/16/00	15:55	MTW	S	CONC
78	DHT3N	J00816B	QUANMET	08/16/00	15:58	MTW	S	CONC
79	DHT3V	J00816B	QUANMET	08/16/00	16:01	MTW	S	CONC
80	DHT3W	J00816B	QUANMET	08/16/00	16:04	MTW	S	CONC
81	DHT3WP5	J00816B	QUANMET	08/16/00	16:08	MTW	S	CONC
82	DHT3WS	J00816B	QUANMET	08/16/00	16:11	MTW	S	CONC
83	DHT3WD	J00816B	QUANMET	08/16/00	16:14	MTW	S	CONC
84	CCV2-7	J00816B	QUANMET	08/16/00	16:17	MTW	S	CONC
85	CCB7	J00816B	QUANMET	08/16/00	16:20	MTW	S	CONC
86	DHT4M	J00816B	QUANMET	08/16/00	16:32	MTW	S	CONC
87	DHT4Q	J00816B	QUANMET	08/16/00	16:35	MTW	S	CONC
88	DHT4T	J00816B	QUANMET	08/16/00	16:38	MTW	S	CONC
89	DHT4X	J00816B	QUANMET	08/16/00	16:41	MTW	S	CONC
90	DHT50	J00816B	QUANMET	08/16/00	16:44	MTW	S	CONC
91	DHT51	J00816B	QUANMET	08/16/00	16:47	MTW	S	CONC
92	DHT52	J00816B	QUANMET	08/16/00	16:51	MTW	S	CONC
93	DHT59	J00816B	QUANMET	08/16/00	16:54	MTW	S	CONC
94	DHT5A	J00816B	QUANMET	08/16/00	16:57	MTW	S	CONC
95	DHTQC	J00816B	QUANMET	08/16/00	17:00	MTW	S	CONC
96	CCV2-8	J00816B	QUANMET	08/16/00	17:03	MTW	S	CONC
97	CCB8	J00816B	QUANMET	08/16/00	17:06	MTW	S	CONC
98	DHTQD	J00816B	QUANMET	08/16/00	17:09	MTW	S	CONC
99	DHTQE	J00816B	QUANMET	08/16/00	17:13	MTW	S	CONC
100	CCV2-9	J00816B	QUANMET	08/16/00	17:16	MTW	S	CONC
101	CCB9	J00816B	QUANMET	08/16/00	17:19	MTW	S	CONC
102	DHEVFB	J00816B	QUANMET	08/16/00	17:22	MTW	S	CONC
103	DHEVFC	J00816B	QUANMET	08/16/00	17:25	MTW	S	CONC
104	DGLR3	J00816B	QUANMET	08/16/00	17:28	MTW	S	CONC
105	DGLR3P5	J00816B	QUANMET	08/16/00	17:31	MTW	S	CONC
106	DGLR3S	J00816B	QUANMET	08/16/00	17:35	MTW	S	CONC
107	DGLR3D	J00816B	QUANMET	08/16/00	17:38	MTW	S	CONC

667 720

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DGLR4	J00816B	QUANMET	08/16/00	17:41	MTW	S	CONC
109	DGLR5	J00816B	QUANMET	08/16/00	17:44	MTW	S	CONC
110	DGLR7	J00816B	QUANMET	08/16/00	17:47	MTW	S	CONC
111	DGLRA	J00816B	QUANMET	08/16/00	17:50	MTW	S	CONC
112	CCV2-10	J00816B	QUANMET	08/16/00	17:53	MTW	S	CONC
113	CCB10	J00816B	QUANMET	08/16/00	17:57	MTW	S	CONC
114	DGLRC	J00816B	QUANMET	08/16/00	18:00	MTW	S	CONC
115	DGLRD	J00816B	QUANMET	08/16/00	18:03	MTW	S	CONC
116	DGLRF	J00816B	QUANMET	08/16/00	18:06	MTW	S	CONC
117	DGLRJ	J00816B	QUANMET	08/16/00	18:09	MTW	S	CONC
118	DGLRK	J00816B	QUANMET	08/16/00	18:12	MTW	S	CONC
119	DGNP2	J00816B	QUANMET	08/16/00	18:15	MTW	S	CONC
120	DGNQ3	J00816B	QUANMET	08/16/00	18:19	MTW	S	CONC
121	DGNQ4	J00816B	QUANMET	08/16/00	18:22	MTW	S	CONC
122	DGNQ5	J00816B	QUANMET	08/16/00	18:25	MTW	S	CONC
123	DGNQC	J00816B	QUANMET	08/16/00	18:28	MTW	S	CONC
124	CCV2-11	J00816B	QUANMET	08/16/00	18:31	MTW	S	CONC
125	CCB11	J00816B	QUANMET	08/16/00	18:34	MTW	S	CONC
126	DGNQG	J00816B	QUANMET	08/16/00	18:37	MTW	S	CONC
127	DGNQH	J00816B	QUANMET	08/16/00	18:41	MTW	S	CONC
128	DGNQJ	J00816B	QUANMET	08/16/00	18:44	MTW	S	CONC
129	DGNQL	J00816B	QUANMET	08/16/00	18:47	MTW	S	CONC
130	DGNQM	J00816B	QUANMET	08/16/00	18:50	MTW	S	CONC
131	DGNQ3/2 FE	J00816B	QUANMET	08/16/00	18:53	MTW	S	CONC
132	DGNQ4/2 FE	J00816B	QUANMET	08/16/00	18:56	MTW	S	CONC
133	CCV2-12	J00816B	QUANMET	08/16/00	19:00	MTW	S	CONC
134	CCB12	J00816B	QUANMET	08/16/00	19:03	MTW	S	CONC

667 721

Method: QUANMET Standard: STD1
Run Time: 08/16/00 11:41:43

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00065	.00885	-.00085	.00034	-.00006	.00270	.00189
SDev	.00025	.00070	.00256	.00018	.00007	.00012	.00125
%RSD	38.717	7.9096	301.55	51.839	115.47	4.2767	66.223

#1	-.00100	.00780	-.00460	.00020	.00000	.00260	.00081
#2	-.00060	.00920	-.00040	.00028	-.00012	.00260	.00095
#3	-.00040	.00920	.00080	.00028	.00000	.00280	.00234
#4	-.00060	.00920	.00080	.00060	-.00012	.00280	.00346

Elem	CD	CO	CR	CU	FE	K	LI
Avge	-.00001	.00000	.00040	.00025	.00020	-.02725	-.00010
SDev	.00024	.00016	.00052	.00010	.00033	.00703	.00012
%RSD	2667.5	.00000	129.10	40.000	163.30	25.785	115.47

#1	-.00020	.00000	.00020	.00020	.00020	-.02700	-.00020
#2	.00028	-.00020	-.00020	.00020	-.00020	-.03720	.00000
#3	-.00020	.00020	.00060	.00040	.00020	-.02140	.00000
#4	.00008	.00000	.00100	.00020	.00060	-.02340	-.00020

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00020	.00005	.00030	.06240	-.00102	.00020	.00005
SDev	.00033	.00010	.00012	.00188	.00125	.00040	.00041
%RSD	163.30	200.00	38.490	3.0067	122.11	200.00	824.62

#1	-.00020	.00000	.00020	.06000	-.00071	.00000	-.00040
#2	-.00060	.00000	.00040	.06200	-.00252	.00000	-.00020
#3	-.00020	.00020	.00040	.06320	.00047	.00000	.00040
#4	.00020	.00000	.00020	.06440	-.00133	.00080	.00040

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00070	.00195	.00090	-.00001	.00220	-.00035	.00000
SDev	.00184	.00019	.00240	.00009	.00016	.00044	.00000
%RSD	262.38	9.8198	266.98	804.14	7.4227	126.71	.00000

#1	.00320	.00180	.00440	-.00008	.00200	-.00020	.00000
#2	.00060	.00180	.00040	.00000	.00220	-.00060	.00000
#3	-.00120	.00220	-.00100	-.00008	.00240	.00020	.00000
#4	.00020	.00200	-.00020	.00012	.00220	-.00080	.00000

Elem	ZN
Avge	.00032
SDev	.00014
%RSD	44.752

#1	.00020
#2	.00052
#3	.00032
#4	.00024

667 722

Method: QUANMET Standard: STD5A 0014-155-1
 Run Time: 08/16/00 11:44:52

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27395	.55315	.60406	4.0932	16.388	.94769	1.5152
SDev	.00034	.00556	.00272	.0230	.042	.00373	.0045
%RSD	.12468	1.0043	.45024	.56210	.25740	.39340	.29893

#1	.27440	.55820	.60019	4.0632	16.326	.95155	1.5218
#2	.27380	.54680	.60652	4.1156	16.419	.94712	1.5136
#3	.27360	.55740	.60452	4.0881	16.410	.94928	1.5114
#4	.27400	.55020	.60504	4.1059	16.396	.94280	1.5142

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.9386	2.2958	4.0652	2.0970	.41915	1.8330	.26355
SDev	.0141	.0146	.0448	.0044	.00143	.0047	.00104
%RSD	.35702	.63652	1.1014	.20997	.34048	.25573	.39371

#1	3.9594	2.2754	4.0019	2.1032	.41920	1.8362	.26480
#2	3.9348	2.3082	4.0970	2.0970	.42060	1.8350	.26400
#3	3.9292	2.2954	4.0650	2.0934	.41720	1.8347	.26260
#4	3.9310	2.3042	4.0968	2.0944	.41960	1.8260	.26280

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.19740	.52990	.34845	1.0120	8.0086	6.2550	.35355
SDev	.00141	.00549	.00208	.0129	.0388	.0127	.00216
%RSD	.71642	1.0357	.59718	1.2748	.48442	.20366	.60992

#1	.19780	.52720	.34560	1.0206	7.9566	6.2404	.35560
#2	.19900	.53560	.34880	1.0168	8.0439	6.2696	.35200
#3	.19720	.53320	.35060	1.0178	8.0024	6.2496	.35140
#4	.19560	.52360	.34880	.99280	8.0316	6.2606	.35520

Elem	V	ZN	
Avge	1.6798	1.5781	667 723
SDev	.0020	.0027	
%RSD	.12195	.17077	

#1	1.6806	1.5814
#2	1.6812	1.5791
#3	1.6768	1.5760
#4	1.6808	1.5758

Method: QUANMET Standard: STD5B 0014-155-2
Run Time: 08/16/00 11:48:01

Elem	AL	CA	FE	K	MG	NA
Avge	11.199	26.314	30.637	2.2562	7.5873	46.213
SDev	.063	.123	.076	.0130	.0391	.534
%RSD	.56207	.46890	.24723	.57433	.51575	1.1548
#1	11.185	26.453	30.697	2.2538	7.5822	46.026
#2	11.282	26.152	30.681	2.2738	7.6416	46.959
#3	11.130	26.332	30.529	2.2426	7.5484	45.702
#4	11.198	26.317	30.642	2.2544	7.5770	46.165

667 724

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.10606	.004619	08/16/00 11:48:01
AL	308.215	STD5B	STD1	8.93679	-.079091	08/16/00 11:48:01
AS	193.696	STD5A	STD1	18.3618	.015608	08/16/00 11:48:01
B ₋	249.600	STD5A	STD1	16.5972	-.005663	08/16/00 11:48:01
BA	493.409	STD5A	STD1	2.44304	.000144	08/16/00 11:48:01
BE	313.042	STD5A	STD1	.611930	-.001652	08/16/00 11:48:01
CA	317.933	STD5B	STD1	3.80060	-.007188	08/16/00 11:48:01
CD	228.802	STD5A	STD1	10.7100	.000094	08/16/00 11:48:01
CO	228.616	STD5A	STD1	6.63109	.000000	08/16/00 11:48:01
CR	267.716	STD5A	STD1	2.53993	-.001016	08/16/00 11:48:01
CU	324.754	STD5A	STD1	4.35229	-.001088	08/16/00 11:48:01
FE	259.940	STD5B	STD1	3.26402	-.000653	08/16/00 11:48:01
K	766.491	STD5B	STD1	43.7943	1.19340	08/16/00 11:48:01
L _I	670.789	STD5A	STD1	2.45987	.000246	08/16/00 11:48:01
MG	279.079	STD5B	STD1	13.1796	.002636	08/16/00 11:48:01
MN	257.610	STD5A	STD1	4.76726	-.000238	08/16/00 11:48:01
MO	202.030	STD5A	STD1	23.8749	-.007162	08/16/00 11:48:01
NA	588.995	STD5B	STD1	2.16681	-.135209	08/16/00 11:48:01
NI	231.604	STD5A	STD1	5.45016	.005562	08/16/00 11:48:01
PB	220.353	STD5A	STD1	36.8552	-.007371	08/16/00 11:48:01
SB	206.838	STD5A	STD1	50.7301	-.002537	08/16/00 11:48:01
SE	196.026	STD5A	STD1	18.8964	-.013228	08/16/00 11:48:01
SI	288.158	STD5A	STD1	28.4917	-.055559	08/16/00 11:48:01
SN	189.989	STD5A	STD1	9.87990	-.008892	08/16/00 11:48:01
SR	409.552	STD5A	STD1	1.24865	.000015	08/16/00 11:48:01
TI	334.941	STD5A	STD1	1.59927	-.003518	08/16/00 11:48:01
TL	190.864	STD5A	STD1	56.7781	.019872	08/16/00 11:48:01
V ₋	292.402	STD5A	STD1	5.82614	.000000	08/16/00 11:48:01
ZN	213.856	STD5A	STD1	6.35983	-.002020	08/16/00 11:48:01

667 725

Analysis Report

08/16/00 11:54:16 AM

page 1

Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: MTW
 Run Time: 08/16/00 11:51:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

667 726

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51145	25.524	.98518	1.0216	.99940	.98365	25.910
SDev	.00294	.045	.04816	.0007	.00290	.00398	.091
%RSD	.57531	.17805	4.8889	.06681	.29006	.40467	.35268
#1	.51467	25.552	1.0574	1.0210	1.0004	.98505	26.024
#2	.51180	25.491	.96255	1.0221	.99630	.98102	25.866
#3	.50753	25.573	.96187	1.0210	1.0029	.98862	25.813
#4	.51181	25.480	.95892	1.0222	.99797	.97991	25.938
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	1.0216	1.0114	1.0217	.99470	26.410	25.153	.99958
SDev	.0082	.0061	.0034	.00417	.057	.181	.00668
%RSD	.79938	.59840	.33065	.41947	.21552	.71843	.66880
#1	1.0229	1.0124	1.0228	.99514	26.478	25.263	.99913
#2	1.0235	1.0177	1.0228	.99253	26.348	25.307	.99490
#3	1.0102	1.0031	1.0167	1.0004	26.431	25.140	1.0092
#4	1.0296	1.0124	1.0243	.99078	26.381	24.904	.99510
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	25.656	1.0140	.98759	25.188	1.0133	1.0454	1.0236
SDev	.092	.0026	.01263	.097	.0071	.0221	.0226
%RSD	.35928	.25578	1.2789	.38602	.69633	2.1135	2.2068
#1	25.737	1.0179	.97567	25.164	1.0211	1.0768	1.0517
#2	25.608	1.0121	.98042	25.107	1.0151	1.0401	1.0111
#3	25.729	1.0131	.98999	25.329	1.0041	1.0249	1.0006
#4	25.550	1.0131	1.0043	25.151	1.0128	1.0400	1.0312
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	.99456	1.0228	1.0115	.99605	.99195	5.0153	1.0034
SDev	.01932	.0345	.0215	.00255	.00214	.0686	.0023
%RSD	1.9424	3.3763	2.1240	.25599	.21610	1.3684	.23112
#1	.99758	1.0456	.99927	.99612	.99411	4.9493	1.0043
#2	1.0199	1.0342	.99512	.99287	.98995	4.9846	1.0044

#3	.98611	.97151	1.0425	.99911	.99347	5.0180	.99993
#4	.97464	1.0400	1.0090	.99612	.99027	5.1092	1.0049
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	1.0192
SDev	.0037
%RSD	.36777

667 727

#1	1.0177
#2	1.0231
#3	1.0147
#4	1.0213

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 08/16/00 11:54:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 728

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00142	-.00531	.02116	.00601	.00012	-.00003	-.00278
SDev	.00213	.01409	.03610	.00709	.00020	.00006	.00261
%RSD	150.07	265.50	170.64	118.03	164.57	200.00	93.601

#1	-.00391	-.02541	-.00989	.00293	.00014	-.00006	-.00643
#2	.00036	.00672	.05594	.00157	.00014	-.00006	-.00281
#3	.00036	.00140	-.01011	.01660	-.00014	.00006	-.00137
#4	-.00249	-.00394	.04869	.00293	.00034	-.00006	-.00053

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	-.00026	.00166	-.00000	.00000	.00261	.05912	-.00020
SDev	.00163	.00199	.00199	.00131	.00220	.23530	.00102
%RSD	631.04	119.76	197960.	76070.	84.236	397.98	523.27

#1	.00059	-.00000	-.00102	-.00109	-.00000	-.17299	-.00172
#2	-.00267	.00001	-.00203	-.00109	.00522	-.11168	.00045
#3	.00023	.00265	.00051	.00066	.00196	.22992	.00025
#4	.00083	.00398	.00254	.00153	.00326	.29123	.00025

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00132	-.00024	-.00358	.00249	.00592	.01848	.00010
SDev	.01436	.00000	.00239	.00491	.00651	.01854	.01282
%RSD	1089.3	.45130	66.681	196.95	110.01	100.33	13364.

#1	-.01054	-.00024	-.00716	-.00260	.00551	-.00733	.01791
#2	.00264	-.00024	-.00239	.00867	.00126	.03683	-.01267
#3	-.00791	-.00024	-.00239	-.00000	.01524	.02218	-.00237
#4	.02109	-.00024	-.00239	.00390	.00165	.02222	-.00249

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	-.02267	-.00712	-.00642	.00021	-.00032	.04254	-.00007
SDev	.04499	.03240	.01376	.00025	.00058	.02073	.00005
%RSD	198.45	454.90	214.36	117.11	182.57	48.717	68.826

#1	-.05102	-.05556	-.02264	-.00009	-.00096	.03123	-.00014
#2	.02458	.00712	.01081	.00026	-.00000	.01982	-.00005

#3	.00567	.00712	-.00495	.00016	.00032	.06525	-.00005
#4	-.06991	.01282	-.00890	.00051	-.00064	.05387	-.00004

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

Elem	ZN						
Units	ppm					667	729
Avge	-.00071						
SDev	.00118						
%RSD	166.13						

#1	-.00001
#2	.00052
#3	-.00207
#4	-.00128

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0057-011-1 Operator: MTW

Run Time: 08/16/00 11:57:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 730

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00240	496.13	-.09460	-.01761	.00171	-.00007	482.41
SDev	.00311	1.36	.11675	.00229	.00012	.00001	1.61
%RSD	129.43	.27380	123.42	13.014	6.7924	10.644	.33335
#1	.00189	494.50	.06901	-.01582	.00181	-.00007	484.05
#2	-.00238	496.21	-.11370	-.01901	.00161	-.00006	483.18
#3	-.00536	496.01	-.12611	-.02010	.00181	-.00006	480.32
#4	-.00376	497.82	-.20760	-.01552	.00161	-.00007	482.09
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	-.00165	.00965	-.00064	-.00717	184.97	-.35692	.00025
SDev	.00423	.00200	.00209	.00123	.29	.30901	.00000
%RSD	256.86	20.677	327.87	17.126	.15839	86.576	.00000
#1	.00145	.01064	.00203	-.00542	185.04	.05474	.00025
#2	-.00207	.00800	-.00102	-.00803	185.11	-.43575	.00025
#3	-.00748	.01199	-.00051	-.00720	184.54	-.35692	.00025
#4	.00151	.00799	-.00305	-.00803	185.20	-.68976	.00025
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	486.91	.00687	-.00218	.00899	-.00046	.09351	-.02757
SDev	.76	.00008	.00602	.00617	.01427	.02797	.01957
%RSD	.15657	1.1882	275.77	68.650	3094.9	29.915	70.985
#1	486.78	.00692	-.00337	.01777	.01717	.12034	-.00202
#2	486.66	.00690	-.00813	.00823	-.01356	.11179	-.04298
#3	486.22	.00675	-.00344	.00347	-.01042	.08267	-.04283
#4	488.00	.00690	.00621	.00650	.00498	.05922	-.02246
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	-.10034	.07838	-.10273	.01360	-.02071	.44622	.00229
SDev	.11189	.02889	.02729	.00010	.00084	.22131	.00277
%RSD	111.51	36.860	26.561	.75550	4.0617	49.596	121.24
#1	.04724	.09265	-.11792	.01359	-.01951	.77760	.00460
#2	-.08109	.03561	-.06276	.01359	-.02079	.34551	-.00016

#3	-.21108	.08690	-.12215	.01374	-.02143	.31722	-.00007
#4	-.15645	.09835	-.10810	.01349	-.02111	.34455	.00477

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

667 731

Elem	ZN
Units	ppm
Avge	-.00021
SDev	.00198
%RSD	929.88

#1	.00214
#2	-.00257
#3	-.00080
#4	.00038

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: MTW
 Run Time: 08/16/00 12:00:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

667 732

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94439	490.33	.90073	.90719	.46191	.44991	476.40
SDev	.00439	3.46	.01761	.01033	.00343	.00251	3.22
%RSD	.46438	.70593	1.9554	1.1387	.74329	.55858	.67547
#1	.93989	487.43	.88580	.90981	.45967	.44753	474.01
#2	.94148	491.04	.88901	.89929	.46309	.45058	473.37
#3	.94729	487.92	.92443	.89894	.45869	.44838	479.93
#4	.94892	494.94	.90369	.92071	.46622	.45315	478.31
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	.95300	.45004	.44233	.47116	182.84	9.7924	.99395
SDev	.01059	.00437	.00157	.00401	.86	.2330	.01508
%RSD	1.1107	.97158	.35527	.85145	.46840	2.3793	1.5173
#1	.94304	.44411	.44144	.46912	181.89	9.9785	.98691
#2	.94479	.45073	.44094	.47353	182.52	9.4793	1.0062
#3	.96362	.45466	.44245	.46661	183.05	9.9610	.97603
#4	.96054	.45068	.44449	.47538	183.91	9.7508	1.0067
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	.50000	200.00	10.000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	479.75	.45264	.87609	9.9812	.89182	.95700	.91779
SDev	2.60	.00379	.01060	.0997	.01965	.01919	.05987
%RSD	.54094	.83717	1.2102	.99895	2.2038	2.0054	6.5229
#1	476.98	.44884	.86998	9.9028	.88875	.97165	.85926
#2	480.07	.44991	.88918	10.035	.86848	.96968	1.0012
#3	478.80	.45584	.86538	9.8924	.91634	.95669	.91066
#4	483.15	.45595	.87983	10.095	.89370	.92999	.90005
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	.84831	1.0187	.82030	.92728	.88088	9.4691	.45447
SDev	.05922	.0296	.04242	.00715	.00498	.1930	.00226
%RSD	6.9816	2.9046	5.1714	.77163	.56564	2.0385	.49619
#1	Q.76454	1.0443	.88211	.92198	.87512	9.6294	.45114
#2	.90225	1.0443	.80383	.92897	.88088	9.5320	.45501

#3	.85453	.99305	.80944	.92148	.88024	9.5265	.45572
#4	.87191	.99306	Q.78581	.93671	.88728	9.1883	.45600
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 .92959
SDev .00314
%RSD .33826

667 733

#1 .92845
#2 .92569
#3 .93165
#4 .93257

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DHDJV/2 NA

Operator: MTW

Run Time: 08/16/00 12:05:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 667 734

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00122	.92768	.02302	.32278	.02871	-.00004	32.098
SDev	.00136	.01430	.03265	.00038	.00032	.00007	.134
%RSD	111.72	1.5414	141.83	.11780	1.1339	171.62	.41827
#1	.00056	.90932	.03602	.32295	.02848	-.00007	31.991
#2	-.00228	.92538	.01750	.32298	.02848	-.00007	31.975
#3	-.00086	.93263	-.01926	.32299	.02917	-.00007	32.188
#4	-.00230	.94338	.05783	.32221	.02868	.00006	32.237
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00099	.00197	.00203	.00294	1.3324	5.3867	.47548
SDev	.00182	.00077	.00042	.00050	.0114	.0691	.00762
%RSD	184.04	38.979	20.447	17.097	.85902	1.2829	1.6032
#1	-.00113	.00263	.00254	.00250	1.3161	5.3801	.46426
#2	-.00219	.00131	.00152	.00337	1.3330	5.3539	.47914
#3	.00163	.00130	.00203	.00337	1.3389	5.4852	.47743
#4	-.00225	.00264	.00203	.00250	1.3415	5.3276	.48108
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.3898	.66635	-.00577	359.89	.00676	.00658	.02546
SDev	.0279	.00415	.00457	4.37	.00963	.02760	.01734
%RSD	.82294	.62261	79.219	1.2148	142.53	419.50	68.126
#1	3.3529	.66086	-.00219	353.55	.00403	.01397	.01779
#2	3.3845	.66564	-.00219	361.60	-.00552	.03605	.02792
#3	3.4056	.66849	-.01174	360.86	.01230	-.03032	.00776
#4	3.4161	.67040	-.00696	363.53	.01623	.00662	.04835
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	.00257	4.8664	-.00063	.20216	.00424	.00699	.00310
SDev	.01459	.0028	.01587	.00191	.00048	.04576	.00224
%RSD	568.86	.05830	2514.2	.94467	11.321	654.53	72.449
#1	.00914	4.8622	.00724	.19937	.00384	-.01276	.00462
#2	-.01727	4.8679	-.02433	.20252	.00384	.05524	.00462

#3	.01676	4.8679	.00917	.20312	.00480	.03249	.00327
#4	.00164	4.8678	.00540	.20362	.00448	-.04700	-.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	.00754
SDev	.00188
%RSD	24.955

667 735

#1	.00570
#2	.00880
#3	.00948
#4	.00616

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHDJVP10 NA

Operator: MTW

Run Time: 08/16/00 12:09:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

667 736

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00146	.19892	.00541	.06561	.00628	-.00003	6.4527
SDev	.00071	.01740	.01597	.00377	.00028	.00006	.0205
%RSD	48.710	8.7482	295.21	5.7424	4.3818	200.00	.31764

#1	.00182	.18371	.00278	.06067	.00650	-.00006	6.4264
#2	.00182	.18909	-.00828	.06984	.00650	.00006	6.4542
#3	.00039	.19990	.02836	.06594	.00621	-.00006	6.4765
#4	.00182	.22299	-.00122	.06597	.00592	-.00006	6.4536

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00113	.00264	.00279	.00090	.28136	1.2459	.09644
SDev	.00225	.00187	.00088	.00043	.00659	.1201	.00093
%RSD	199.75	70.827	31.516	48.487	2.3433	9.6389	.96430

#1	.00008	.00265	.00203	.00068	.27744	1.3248	.09696
#2	.00450	.00396	.00406	.00068	.27745	1.3423	.09592
#3	-.00019	.00397	.00254	.00068	.27941	1.2372	.09543
#4	.00012	-.00001	.00254	.00155	.29115	1.0795	.09745

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	.68666	.13547	-.00473	71.364	.00341	.00908	-.01515
SDev	.01021	.00091	.00478	.194	.00509	.01941	.00969
%RSD	1.4868	.67308	100.89	.27168	149.24	213.74	63.948

#1	.67216	.13427	-.00235	71.171	-.00182	.02936	-.01264
#2	.69061	.13618	-.00235	71.629	.00947	-.00744	-.00249
#3	.69588	.13618	-.01190	71.366	.00042	.02201	-.02271
#4	.68797	.13523	-.00234	71.291	.00555	-.00760	-.02276

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	-.01721	.94735	-.01138	.04111	.00128	.01203	-.00009
SDev	.02170	.00000	.01824	.00013	.00026	.03410	.00009
%RSD	126.08	.00000	160.26	.30370	20.412	283.44	107.79

#1	-.02761	.94735	-.02273	.04093	.00096	.02910	-.00004
#2	-.02006	.94735	.01486	.04118	.00128	.05181	-.00004

#3	-.03517	.94735	-.02476	.04118	.00160	-.01634	-.00022
#4	.01399	.94735	-.01290	.04118	.00128	-.01644	-.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	.00218						
SDev	.00071						
%RSD	32.445						

667 737

#1	.00147
#2	.00173
#3	.00251
#4	.00301

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHDJVS/5 NA

Operator: MTW

Run Time: 08/16/00 12:12:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 738

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01021	1.0985	.39248	.31462	.39641	.00959	22.783
SDev	.00184	.0163	.02107	.00068	.00310	.00001	.186
%RSD	18.056	1.4809	5.3673	.21759	.78272	.06080	.81837
#1	.00951	1.0972	.39339	.31428	.39712	.00958	22.843
#2	.01093	1.0812	.36781	.31427	.39204	.00958	22.920
#3	.00806	1.0953	.41919	.31428	.39937	.00959	22.508
#4	.01235	1.1205	.38952	.31565	.39712	.00958	22.860
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01025	.09627	.03899	.04868	.76462	11.890	.37851
SDev	.00116	.00343	.00319	.00123	.00355	.526	.00664
%RSD	11.307	3.5576	8.1930	2.5353	.46449	4.4258	1.7536
#1	.01109	.09494	.03962	.04781	.76446	11.993	.37733
#2	.01138	.09759	.03962	.04868	.76184	12.378	.37206
#3	.00953	.09229	.03455	.04780	.76249	11.143	.38781
#4	.00901	.10025	.04216	.05042	.76968	12.046	.37684
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	11.281	.36162	.18753	150.37	.09851	.10882	.09034
SDev	.018	.00163	.00816	1.58	.00477	.01286	.02914
%RSD	.15543	.44970	4.3485	1.0533	4.8432	11.820	32.253
#1	11.303	.36138	.18395	150.59	.09826	.11986	.10809
#2	11.261	.36328	.17918	148.56	.09185	.11257	.10809
#3	11.284	.35948	.19828	152.38	.10196	.09022	.04722
#4	11.276	.36233	.18873	149.96	.10198	.11261	.09798
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	.38656	4.4545	.39160	.27263	.19439	.44689	.10041
SDev	.04765	.0420	.00855	.00190	.00040	.05188	.00220
%RSD	12.326	.94261	2.1840	.69688	.20704	11.609	2.1902
#1	.44608	4.4246	.40206	.27306	.19447	.40999	.10151
#2	.37049	4.4987	.39415	.26996	.19447	.43272	.10142

#3	.33270	4.4132	.38201	.27445	.19383	.42141	.09712
#4	.39696	4.4816	.38818	.27306	.19479	.52345	.10161

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	667	739
Avge	.10267		
SDev	.00255		
%RSD	2.4865		

#1	.10414
#2	.10468
#3	.09902
#4	.10284

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHDJVD/5 NA

Operator: MTW

Run Time: 08/16/00 12:15:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

667 740

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00916	1.1342	.37562	.31549	.40069	.00971	22.830
SDev	.00179	.0123	.03506	.00084	.00108	.00010	.081
%RSD	19.523	1.0819	9.3342	.26537	.26992	1.0297	.35664
#1	.00951	1.1347	.34166	.31569	.40132	.00971	22.849
#2	.00667	1.1436	.40399	.31568	.40132	.00983	22.810
#3	.01093	1.1419	.40768	.31628	.40103	.00971	22.927
#4	.00951	1.1168	.34913	.31431	.39908	.00958	22.732
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00866	.09826	.04051	.05064	.78780	12.326	.38547
SDev	.00140	.00229	.00120	.00084	.00454	.108	.00162
%RSD	16.177	2.3346	2.9601	1.6482	.57594	.87993	.42169
#1	.00828	.09759	.03962	.05042	.78796	12.230	.38436
#2	.01062	.10157	.03963	.05130	.78992	12.475	.38781
#3	.00842	.09627	.04216	.04955	.79188	12.335	.38436
#4	.00731	.09760	.04064	.05129	.78143	12.265	.38535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	11.404	.36282	.19470	151.59	.10098	.11989	.08273
SDev	.045	.00165	.00457	.36	.00781	.00853	.02418
%RSD	.39473	.45516	2.3479	.23642	7.7347	7.1179	29.233
#1	11.390	.36329	.19350	151.44	.10332	.11252	.09798
#2	11.448	.36330	.19828	152.05	.10504	.12732	.06754
#3	11.432	.36425	.18873	151.65	.10615	.12724	.10810
#4	11.348	.36043	.19828	151.21	.08939	.11248	.05728
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	.37623	4.5201	.38514	.27515	.19623	.41257	.10143
SDev	.03214	.0523	.01705	.00093	.00081	.06647	.00060
%RSD	8.5420	1.1573	4.4274	.33646	.41021	16.112	.59664
#1	.38567	4.4531	.38422	.27495	.19639	.37568	.10053
#2	.32899	4.5557	.38606	.27610	.19639	.34155	.10179

#3	.38946	4.5671	.40600	.27560	.19703	.48920	.10161
#4	.40077	4.5044	.36428	.27395	.19511	.44385	.10179
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	.10228
SDev	.00165
%RSD	1.6105

667 741

#1	.10208
#2	.10462
#3	.10081
#4	.10161

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHK24/2 NA

Operator: MTW

Run Time: 08/16/00 12:18:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 742

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.04469	.02822	.43118	.03851	-.00012	.69994
SDev	.00136	.00635	.02818	.00184	.00032	.00012	.00733
%RSD	882.27	14.216	99.843	.42650	.83645	94.490	1.0469

#1	-.00092	.04604	.00711	.43122	.03846	-.00018	.69405
#2	-.00092	.03541	.02189	.42985	.03817	-.00018	.69315
#3	.00052	.04775	.01438	.43376	.03846	.00005	.70630
#4	.00193	.04956	.06950	.42987	.03894	-.00018	.70625

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00275	-.00101	-.00000	.00614	.65574	1.5854	.70247
SDev	.00129	.00127	.00190	.00083	.00304	.4334	.00753
%RSD	46.851	126.01	128980.	13.548	.46354	27.337	1.0724

#1	-.00122	-.00002	-.00051	.00593	.65542	1.4649	.69656
#2	-.00353	-.00001	-.00204	.00506	.65476	1.1496	.70354
#3	-.00220	-.00267	.00254	.00680	.65280	2.1831	.69706
#4	-.00407	-.00134	.00000	.00680	.65999	1.5438	.71271

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	.12389	.02998	-.00348	216.17	.00133	.00531	-.00245
SDev	.01762	.00055	.00601	1.72	.00739	.03918	.02482
%RSD	14.220	1.8365	172.50	.79396	555.98	737.41	1014.0

#1	.11598	.02951	-.00229	215.35	.00645	-.04446	-.03283
#2	.11334	.03046	-.01184	216.15	-.00951	-.00757	-.01262
#3	.15025	.02950	-.00229	214.62	.00281	.03662	.01778
#4	.11598	.03046	.00249	218.57	.00557	.03665	.01788

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	-.04835	2.0130	-.02558	.17509	.00048	.06721	.00081
SDev	.03454	.0047	.01715	.00132	.00032	.08102	.00177
%RSD	71.449	.23114	67.051	.75541	66.667	120.54	219.48

#1	-.03040	2.0072	-.03066	.17440	.00032	.05869	-.00005
#2	-.05307	2.0186	-.03056	.17490	.00032	.13820	-.00023

#3	-.01529	2.0130	-.00078	.17405	.00032	-.04348	.00346
#4	-.09463	2.0129	-.04030	.17700	.00096	.11544	.00005

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					667	743
Units	ppm						
Avge	.04334						
SDev	.00109						
%RSD	2.5194						

#1	.04261
#2	.04319
#3	.04263
#4	.04493

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-1 0057-025-5 Operator: MTW

Run Time: 08/16/00 12:21:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 744

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99142	49.833	4.9217	4.9327	4.8599	4.8375	50.291
SDev	.00410	.227	.0648	.0319	.0295	.0218	.216
%RSD	.41328	.45651	1.3161	.64756	.60732	.44977	.42963
#1	.99445	50.073	4.9090	4.9476	4.8868	4.8599	50.478
#2	.99420	49.580	5.0167	4.9286	4.8264	4.8124	50.463
#3	.99141	49.970	4.8776	4.8902	4.8825	4.8508	50.040
#4	.98564	49.710	4.8836	4.9646	4.8439	4.8270	50.180
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9824	4.8977	4.8980	4.8592	51.033	49.400	4.9129
SDev	.0286	.0175	.0118	.0339	.151	.321	.0449
%RSD	.57456	.35653	.24093	.69718	.29552	.64911	.91422
#1	4.9709	4.9153	4.9134	4.8899	51.250	49.840	4.9481
#2	5.0210	4.9073	4.9012	4.8193	50.979	49.104	4.8599
#3	4.9535	4.8756	4.8890	4.8846	51.002	49.420	4.9521
#4	4.9842	4.8928	4.8885	4.8428	50.902	49.236	4.8913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.828	4.8970	4.8865	49.645	4.8766	4.9998	4.9607
SDev	.151	.0152	.0200	.406	.0145	.0324	.0546
%RSD	.30310	.31130	.40978	.81747	.29755	.64883	1.1006
#1	49.966	4.9197	4.8949	49.987	4.8851	4.9891	5.0139
#2	49.727	4.8920	4.8948	49.171	4.8927	5.0481	4.9430
#3	49.948	4.8881	4.8566	49.979	4.8638	4.9807	4.9938
#4	49.671	4.8881	4.8996	49.443	4.8648	4.9812	4.8921
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.8964	4.9944	4.9008	4.8597	4.8632	9.8203	4.8973
SDev	.0707	.0282	.0471	.0260	.0195	.1246	.0183
%RSD	1.4446	.56500	.96116	.53494	.40037	1.2683	.37340
#1	4.8081	5.0161	4.9544	4.8854	4.8883	9.9712	4.9237
#2	4.8981	5.0043	4.9225	4.8317	4.8464	9.8720	4.8875

#3	4.9813	5.0044	4.8476	4.8779	4.8688	9.7016	4.8949
#4	4.8979	4.9529	4.8788	4.8438	4.8493	9.7366	4.8829
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	4.9455
SDev	.0154
%RSD	.31109

667 745

#1	4.9685
#2	4.9389
#3	4.9356
#4	4.9391

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 08/16/00 12:24:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 746

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.00755	.00814	.00514	.00056	.00039	.00244
SDev	.00137	.00830	.02707	.00462	.00022	.00025	.00447
%RSD	95.227	109.91	332.35	89.823	38.943	63.755	183.39

#1	.00036	-.00223	.03031	.00762	.00043	.00018	-.00263
#2	.00037	.00483	.02652	-.00097	.00034	.00017	.00019
#3	.00180	.01736	-.02867	.00958	.00083	.00054	.00497
#4	.00322	.01024	.00442	.00432	.00063	.00066	.00721

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	.00013	-.00066	.00152	.00022	.00571	.06788	.00012
SDev	.00142	.00076	.00110	.00087	.00407	.43832	.00025
%RSD	1134.6	114.67	72.067	400.48	71.290	645.72	200.00

#1	-.00025	-.00133	-.00000	-.00022	.00326	.37882	.00025
#2	-.00109	-.00132	.00203	-.00022	.00196	-.04160	-.00025
#3	.00218	-.00001	.00254	.00152	.00653	.44013	.00025
#4	-.00034	-.00000	.00152	-.00022	.01110	-.50582	.00025

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01384	.00024	.00000	.01170	.00591	.01102	-.00754
SDev	.01084	.00055	.00276	.00281	.00658	.04600	.01314
%RSD	78.343	229.87	322510.	24.003	111.33	417.29	174.43

#1	.02109	-.00024	-.00239	.00867	.00742	.03680	-.01260
#2	.01054	-.00024	.00239	.00997	-.00144	.05890	-.02284
#3	.02372	.00072	.00239	.01387	.01415	-.00738	-.00239
#4	.00000	.00072	-.00239	.01430	.00351	-.04422	.00769

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	-.00849	.01571	-.01140	.00064	.00072	.04251	.00292
SDev	.02767	.00734	.00540	.00032	.00055	.01603	.00204
%RSD	325.97	46.763	47.372	50.493	75.903	37.713	69.901

#1	-.04723	.01852	-.00500	.00031	-.00000	.03120	-.00005
#2	.00945	.01287	-.00900	.00041	.00064	.03119	.00355

#3	-.00943	.02426	-.01681	.00091	.00096	.06521	.00355
#4	.01326	.00718	-.01479	.00091	.00128	.04244	.00462

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					667	747
Units	ppm						
Avge	-.00083						
SDev	.00099						
%RSD	119.37						

#1	-.00002
#2	-.00200
#3	-.00131
#4	.00001

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV4FB

Operator: MTW

Run Time: 08/16/00 12:27:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 748

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00178	.00001	-.01929	.00031	.00014	-.00012	.06108
SDev	.00142	.00808	.01257	.00282	.00000	.00007	.00098
%RSD	80.032	54964.	65.196	917.49	.00000	57.735	1.5987
#1	-.00107	-.00042	-.01377	-.00233	.00014	-.00006	.06024
#2	-.00391	-.00942	-.00636	-.00038	.00014	-.00018	.06064
#3	-.00106	-.00043	-.03581	-.00038	.00014	-.00006	.06248
#4	-.00107	.01033	-.02120	.00432	.00014	-.00018	.06095
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	.00179	-.00199	-.00076	-.00065	.00571	-.10073	-.00084
SDev	.00121	.00171	.00066	.00050	.00124	.18364	.00110
%RSD	68.011	85.878	85.961	76.828	21.659	182.32	130.53
#1	.00150	-.00266	-.00000	-.00109	.00653	-.21678	-.00045
#2	.00357	-.00133	-.00102	-.00109	.00391	.02847	-.00172
#3	.00088	-.00000	-.00051	-.00022	.00653	.08102	-.00172
#4	.00120	-.00398	-.00153	-.00022	.00587	-.29561	.00054
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	.00395	-.00024	-.00477	.00043	.00511	.00178	-.00752
SDev	.01169	.00000	.00616	.00296	.00493	.03034	.01311
%RSD	295.65	.83463	129.12	683.14	96.559	1708.2	174.32
#1	.00791	-.00024	-.00716	-.00087	-.00041	-.03696	-.02279
#2	.01845	-.00024	.00239	-.00260	.00806	-.00742	-.01257
#3	-.00791	-.00024	-.00239	.00433	.01031	.02948	-.00238
#4	-.00264	-.00024	-.01194	.00087	.00249	.02201	.00766
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	-.02361	.00997	-.00695	.00015	-.00056	-.01708	-.00009
SDev	.03427	.00329	.01799	.00010	.00031	.01085	.00012
%RSD	145.19	32.991	258.98	68.235	54.710	63.559	127.33
#1	-.04722	.00712	-.00307	.00016	-.00032	-.01424	-.00014
#2	.00190	.00712	-.02278	.00001	-.00096	-.02558	.00004

#3	-.05856	.01282	-.01878	.00026	-.00032	-.00291	-.00005
#4	.00946	.01282	.01684	.00016	-.00064	-.02558	-.00023

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	667	749
Avge	.00290		
SDev	.00080		
%RSD	27.536		

#1	.00255
#2	.00327
#3	.00199
#4	.00381

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV4FC

Operator: MTW

Run Time: 08/16/00 12:31:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 750

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04521	1.9346	1.8892	.94505	1.9166	.04735	49.026
SDev	.00180	.0089	.0280	.00761	.0119	.00021	.232
%RSD	3.9800	.45781	1.4826	.80494	.61889	.45241	.47295

#1	.04699	1.9311	1.9112	.94471	1.9030	.04713	49.271
#2	.04271	1.9436	1.8598	.95270	1.9320	.04763	48.730
#3	.04557	1.9239	1.9149	.93475	1.9151	.04725	48.972
#4	.04558	1.9399	1.8707	.94803	1.9163	.04738	49.130

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	.04516	.47381	.19190	.24011	1.0218	48.027	.97111
SDev	.00403	.00198	.00183	.00151	.0027	.121	.01102
%RSD	8.9230	.41875	.95200	.62744	.26220	.25138	1.1349

#1	.04577	.47481	.19356	.23793	1.0236	48.036	.95896
#2	.04118	.47480	.18949	.24054	1.0184	48.193	.98573
#3	.04318	.47083	.19153	.24141	1.0210	47.922	.96978
#4	.05050	.47479	.19304	.24054	1.0243	47.957	.96999

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.658	.47944	.95515	48.510	.48578	.49882	.47707
SDev	.187	.00055	.00914	.400	.01274	.03132	.00965
%RSD	.38490	.11515	.95729	.82506	2.6237	6.2789	2.0219

#1	48.488	.47992	.94799	48.047	.50039	.48410	.46961
#2	48.891	.47896	.95754	49.022	.48943	.52833	.47963
#3	48.527	.47896	.94799	48.451	.46981	.46188	.46938
#4	48.728	.47992	.96709	48.520	.48347	.52097	.48964

Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8782	9.6050	1.8762	.96273	.94413	1.8927	.47910
SDev	.0473	.0055	.0108	.00490	.00262	.0943	.00231
%RSD	2.5209	.05683	.57497	.50891	.27714	4.9814	.48205

#1	1.8716	9.6093	1.8831	.95726	.94133	1.9012	.48013
#2	1.8678	9.6035	1.8752	.96915	.94741	2.0149	.47564

#3	1.8300	9.6093	1.8613	.96176	.94293	1.7877	.48012
#4	1.9434	9.5979	1.8851	.96276	.94485	1.8672	.48049

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					667	751
Avge	.47688						
SDev	.00216						
%RSD	.45266						

#1	.47937
#2	.47735
#3	.47414
#4	.47665

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHRQD

Operator: MTW

Run Time: 08/16/00 12:34:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 752

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00050	.72615	-.00727	.06283	.07754	-.00000	20.451
SDev	.00136	.00343	.02643	.00136	.00056	.00007	.047
%RSD	273.74	.47182	363.77	2.1651	.72757	2430.7	.23216
#1	-.00083	.72877	-.03581	.06103	.07803	-.00007	20.474
#2	.00056	.72889	-.01736	.06297	.07706	.00006	20.430
#3	.00056	.72168	.02676	.06434	.07706	.00006	20.503
#4	-.00228	.72524	-.00265	.06298	.07803	-.00006	20.395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00188	.00216	.00271	1.1732	5.2947	.00193
SDev	.00312	.00172	.00243	.00084	.0031	.3859	.00198
%RSD	317.27	91.240	112.77	30.836	.26101	7.2892	102.69
#1	.00521	.00121	-.00051	.00249	1.1765	5.3977	.00467
#2	.00085	.00255	.00305	.00336	1.1693	5.6079	.00025
#3	-.00229	.00388	.00508	.00336	1.1726	5.4414	.00074
#4	.00017	-.00011	.00102	.00162	1.1745	4.7320	.00207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.2468	.35405	-.00221	139.48	.00752	.01040	.01019
SDev	.0115	.00091	.00390	1.27	.00399	.04193	.02097
%RSD	.35310	.25823	176.26	.90793	53.023	403.08	205.80
#1	3.2580	.35477	-.00221	139.54	.00736	-.00805	.00766
#2	3.2316	.35286	-.00699	138.90	.00556	.05830	-.01264
#3	3.2527	.35382	.00256	138.26	.00403	.02889	.00753
#4	3.2448	.35477	-.00221	141.21	.01315	-.03753	.03820
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	-.01770	6.6600	-.01568	.13527	.04038	.02960	.00113
SDev	.04082	.0417	.01920	.00093	.00048	.03753	.00233
%RSD	230.70	.62637	122.40	.68707	1.1881	126.80	206.63
#1	.00499	6.6002	-.00483	.13549	.03998	.03239	.00462
#2	-.04416	6.6628	-.01678	.13474	.03998	.07790	-.00013

#3	.02765	6.6913	.00110	.13438	.04062	-.01298	.00006
#4	-.05926	6.6856	-.04223	.13649	.04094	.02110	-.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					667	753
Avge	.03953						
SDev	.00177						
%RSD	4.4760						

#1	.03825
#2	.03801
#3	.04004
#4	.04181

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQN

Operator: MTW

Run Time: 08/16/00 12:37:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 754

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00144	.04610	.01788	.00930	.00051	-.00006	.14030
SDev	.00179	.01175	.01727	.00903	.00024	.00000	.00377
%RSD	123.71	25.479	96.602	97.045	47.887	2.2018	2.6865
#1	-.00104	.03179	-.00681	.00447	.00014	-.00006	.13634
#2	.00180	.04432	.03350	.01873	.00063	-.00006	.13808
#3	.00322	.06033	.02235	.01482	.00063	-.00006	.14461
#4	.00180	.04796	.02246	-.00080	.00063	-.00006	.14215
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00155	.00199	.00101	.00327	.09352	.14671	-.00030
SDev	.00234	.00230	.00176	.00101	.00247	.24882	.00032
%RSD	150.84	115.24	173.74	30.748	2.6358	169.60	109.33
#1	.00020	.00132	.00051	.00414	.09074	.19488	.00004
#2	-.00491	.00134	-.00051	.00240	.09270	-.17299	-.00025
#3	-.00011	.00530	.00356	.00415	.09662	.43137	-.00025
#4	-.00140	.00000	.00050	.00240	.09401	.13357	-.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
Avg	.01384	.00169	-.00595	.02492	.04875	.03502	.00304
SDev	.01084	.00078	.00984	.00271	.00913	.00921	.02107
%RSD	78.343	46.002	165.31	10.861	18.736	26.298	693.67
#1	.02636	.00074	-.00715	.02167	.05287	.03682	-.02225
#2	.00000	.00265	-.00715	.02774	.05346	.04422	.00817
#3	.01582	.00170	.00718	.02644	.05360	.02224	.02834
#4	.01318	.00169	-.01670	.02383	.03506	.03680	-.00211
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	-.02999	.03562	-.01133	.00034	.00128	.02174	.00018
SDev	.02478	.00001	.00996	.00022	.00037	.04283	.00060
%RSD	82.627	.01841	87.838	65.362	28.868	197.04	335.59
#1	-.00165	.03563	-.02479	.00051	.00096	-.02650	.00103
#2	-.05078	.03561	-.01082	.00001	.00160	.03028	-.00014

#3	-.05077	.03561	-.00084	.00041	.00160	.07562	.00015
#4	-.01676	.03561	-.00889	.00041	.00096	.00756	-.00032

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					667	755
Units	ppm						
Avge	.00560						
SDev	.00119						
%RSD	21.214						

#1	.00437	
#2	.00616	
#3	.00488	
#4	.00697	

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQQ

Operator: MTW

Run Time: 08/16/00 12:40:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 756

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00068	.02463	-.00310	.00283	.00034	-.00003	.04922
SDev	.00136	.01142	.04377	.00993	.00035	.00006	.00279
%RSD	199.78	46.373	1411.2	350.90	103.62	200.00	5.6707
#1	-.00246	.02289	-.01410	.00063	.00014	-.00006	.04557
#2	.00038	.04073	.05920	-.00269	.00063	-.00006	.04987
#3	.00039	.01384	-.04341	.01743	-.00006	.00006	.05233
#4	-.00104	.02107	-.01409	-.00405	.00063	-.00006	.04911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00038	-.00000	.00101	.00480	.12632	-.00000	-.00044
SDev	.00174	.00217	.00161	.00044	.00084	.22128	.00053
%RSD	462.73	53669.	158.40	9.0707	.66692	177e6	121.07
#1	.00029	.00265	.00254	.00502	.12534	.29123	-.00025
#2	.00072	-.00001	.00051	.00502	.12665	-.12919	-.00025
#3	.00236	-.00266	.00203	.00501	.12600	.04598	-.00123
#4	-.00186	.00000	-.00102	.00414	.12730	-.20802	-.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	.01450	.00075	-.00595	.01528	.05155	.01838	.00052
SDev	.00975	.00000	.00239	.00467	.00326	.00956	.01519
%RSD	67.215	.12185	40.126	30.587	6.3190	51.980	2924.3
#1	.02900	.00075	-.00714	.01430	.05198	.02950	-.01214
#2	.01054	.00075	-.00714	.02210	.05153	.00730	-.01216
#3	.01054	.00075	-.00237	.01170	.04738	.01466	.01820
#4	.00791	.00075	-.00714	.01300	.05532	.02208	.00818
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	-.00817	.04844	-.01233	.00015	.00176	.04980	-.00011
SDev	.01210	.02564	.00614	.00017	.00041	.06710	.00005
%RSD	148.09	52.941	49.812	110.49	23.473	134.73	42.105
#1	.00222	.03561	-.02079	-.00009	.00160	.04127	-.00013
#2	-.02045	.03561	-.00893	.00026	.00224	-.01550	-.00014

#3	-.01667	.08690	-.01274	.00016	.00192	.02995	-.00004
#4	.00223	.03561	-.00686	.00026	.00128	.14347	-.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	.00374
SDev	.00083
%RSD	22.280

667 757

#1	.00361
#2	.00286
#3	.00363
#4	.00487

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQT

Operator: MTW

Run Time: 08/16/00 12:43:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 758

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00072	10.357	.03388	.07079	.11664	.00044	22.468
SDev	.00183	.043	.01522	.00191	.00066	.00007	.053
%RSD	254.43	.41628	44.921	2.7025	.56848	16.069	.23516
#1	.00000	10.323	.02959	.07348	.11683	.00050	22.408
#2	.00142	10.320	.03330	.06936	.11566	.00038	22.461
#3	.00286	10.409	.05454	.07085	.11704	.00050	22.537
#4	-.00140	10.375	.01809	.06949	.11704	.00038	22.465
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00493	.01459	.00761	10.738	7.0772	.00762
SDev	.00295	.00171	.00134	.00455	.035	.4043	.00328
%RSD	305.66	34.703	9.1588	59.805	.32988	5.7131	42.985
#1	.00141	.00426	.01574	.00325	10.711	7.2721	.00823
#2	.00012	.00692	.01523	.01109	10.703	6.9918	.00956
#3	-.00012	.00558	.01472	.00413	10.769	7.4910	.00985
#4	L-.00527	.00295	.01269	.01196	10.767	6.5538	.00282
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1862	.78781	-.00436	143.31	.01637	.03000	.01178
SDev	.0338	.00166	.00457	.70	.00443	.02438	.01751
%RSD	.65155	.21064	104.67	.49088	27.043	81.249	148.58
#1	5.2270	.78638	-.00079	143.06	.01302	.05769	.03704
#2	5.1453	.78637	-.00079	142.43	.01839	.01350	.00676
#3	5.1796	.78925	-.01033	143.79	.01243	.04288	.00673
#4	5.1928	.78925	-.00555	143.95	.02166	.00595	-.00340
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	.00561	18.952	.01078	.15072	.60165	.02398	.01859
SDev	.04398	.040	.01665	.00072	.00254	.05407	.00009
%RSD	783.36	.21190	154.40	.47897	.42309	225.49	.48092
#1	-.03414	18.926	.02868	.15037	.60197	.02709	.01866
#2	-.01148	18.909	-.00702	.14987	.59813	-.05233	.01866

#3	.00003	18.983	.00088	.15137	.60420	.04921	.01847
#4	.06805	18.989	.02060	.15126	.60229	.07196	.01856
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	.05089
SDev	.00173
%RSD	3.4028

667 759

#1	.05210
#2	.05055
#3	.04858
#4	.05233

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQTP5

Operator: MTW

Run Time: 08/16/00 12:46:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

667 760

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	2.0729	.00359	.01101	.02336	.00005	4.5275
SDev	.00179	.0060	.03132	.00138	.00010	.00001	.0190
%RSD	898.86	.29075	872.45	12.525	.43063	20.304	.41896
#1	.00229	2.0711	.00727	.01180	.02351	.00005	4.5452
#2	-.00055	2.0800	.01454	.00985	.02331	.00005	4.5408
#3	-.00053	2.0657	-.04049	.01255	.02331	.00004	4.5191
#4	-.00200	2.0748	.03303	.00984	.02331	.00006	4.5047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00114	.00344	.00292	.00257	2.1787	1.4496	.00025
SDev	.00158	.00127	.00306	.00123	.0076	.3869	.00000
%RSD	138.04	36.992	104.81	47.838	.34992	26.688	.00000
#1	-.00116	.00245	.00203	.00344	2.1814	1.6138	.00025
#2	-.00086	.00244	.00558	.00344	2.1854	1.7627	.00025
#3	.00064	.00377	.00507	.00257	2.1677	1.5350	.00025
#4	-.00320	.00510	-.00102	.00083	2.1801	.88684	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0504	.15886	-.00564	28.397	.00675	.02595	-.00519
SDev	.0082	.00048	.00239	.172	.00230	.03261	.00971
%RSD	.78021	.30029	42.321	.60685	34.145	125.64	187.12
#1	1.0544	.15957	-.00684	28.369	.00902	.05725	-.00267
#2	1.0570	.15862	-.00206	28.389	.00807	.00567	.00750
#3	1.0517	.15862	-.00684	28.205	.00607	.04991	-.01278
#4	1.0386	.15862	-.00684	28.624	.00383	-.00903	-.01282
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	-.02166	3.7595	.00687	.03019	.12043	.03796	.00456
SDev	.04143	.0379	.01736	.00000	.00106	.02854	.00381
%RSD	191.28	1.0084	252.69	.00000	.88091	75.189	83.614
#1	.01520	3.7795	.02664	.03019	.12122	.04362	.00453
#2	-.06794	3.7909	-.01283	.03019	.12122	.04357	.00463

#3	.01138	3.7055	-.00107	.03019	.11899	-.00171	.00920
#4	-.04528	3.7623	.01474	.03019	.12027	.06635	-.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					667	761
Avge	.01111						
SDev	.00157						
%RSD	14.106						

#1	.01046
#2	.01248
#3	.01229
#4	.00920

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQTS

Operator: MTW

Run Time: 08/16/00 12:49:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 762

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04670	14.775	1.9119	1.0029	2.0276	.04802	72.212
SDev	.00330	.061	.0282	.0156	.0176	.00017	.479
%RSD	7.0598	.41582	1.4749	1.5538	.86986	.34620	.66318
#1	.04955	14.687	1.9016	.99445	2.0054	.04782	72.723
#2	.04383	14.800	1.9081	1.0263	2.0415	.04809	71.566
#3	.04955	14.784	1.8861	.99643	2.0215	.04795	72.292
#4	.04385	14.829	1.9519	.99454	2.0420	.04821	72.268
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04646	.47860	.20600	.25819	12.097	56.753	.97863
SDev	.00517	.00127	.00264	.00218	.024	.218	.01683
%RSD	11.122	.26426	1.2835	.84305	.20191	.38333	1.7200
#1	.04967	.47762	.20930	.25536	12.084	56.620	.95696
#2	.04620	.48025	.20676	.26058	12.074	56.760	.99461
#3	.05071	.47760	.20320	.25884	12.099	56.576	.97409
#4	.03927	.47893	.20473	.25797	12.130	57.057	.98885
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	53.862	1.2697	.94964	194.67	.48247	.53093	.49865
SDev	.287	.0027	.01949	2.33	.00966	.03375	.01427
%RSD	.53335	.21629	2.0527	1.1975	2.0029	6.3565	2.8618
#1	53.493	1.2714	.97829	191.60	.49560	.56969	.51882
#2	53.936	1.2656	.94009	196.78	.48386	.52543	.48872
#3	53.833	1.2704	.93532	194.15	.47540	.54011	.49869
#4	54.186	1.2714	.94487	196.15	.47501	.48850	.48838
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	1.9102	H33.456	1.8937	1.1122	1.6270	1.9332	.49213
SDev	.0391	.099	.0480	.0081	.0052	.0577	.00329
%RSD	2.0455	.29541	2.5358	.73113	.31876	2.9849	.66884
#1	1.8667	H33.349	1.9264	1.1016	1.6201	1.9163	.49589
#2	1.9611	H33.400	1.8255	1.1184	1.6284	2.0186	.48932

#3	1.9121	H33.508	1.8947	1.1101	1.6271	1.9048	.49388
#4	1.9008	H33.565	1.9282	1.1189	1.6325	1.8931	.48941
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	.53169
SDev	.00244
%RSD	.45861

667 763

#1	.53097
#2	.53200
#3	.53483
#4	.52897

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQTD

Operator: MTW

Run Time: 08/16/00 12:53:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

667 764

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04604	14.815	1.9151	1.0122	2.0476	.04861	72.679
SDev	.00246	.032	.0460	.0183	.0101	.00015	.242
%RSD	5.3373	.21502	2.4008	1.8051	.49272	.31104	.33257
#1	.04959	14.773	1.9044	.99656	2.0342	.04843	72.901
#2	.04530	14.811	1.9776	.99658	2.0466	.04856	72.466
#3	.04536	14.828	1.8671	1.0245	2.0513	.04878	72.473
#4	.04392	14.848	1.9111	1.0312	2.0581	.04867	72.875
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04850	.48353	.20790	.25885	12.192	57.233	.98539
SDev	.00286	.00636	.00225	.00101	.017	.356	.00950
%RSD	5.8985	1.3160	1.0810	.38820	.13769	.62165	.96413
#1	.04541	.49084	.20625	.25799	12.181	56.812	.97236
#2	.04756	.47890	.20574	.25798	12.177	57.066	.98729
#3	.04879	.47756	.20930	.25972	12.194	57.487	.99516
#4	.05225	.48682	.21031	.25973	12.214	57.565	.98674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	54.243	1.2769	.96040	195.92	.49381	.53470	.49605
SDev	.130	.0036	.00601	1.14	.00536	.03593	.00516
%RSD	.24057	.28220	.62570	.57955	1.0844	6.7203	1.0395
#1	54.152	1.2781	.95920	194.32	.49861	.55520	.49861
#2	54.110	1.2723	.95443	195.93	.48687	.48850	.48831
#3	54.337	1.2762	.96876	196.64	.49239	.52532	.49853
#4	54.371	1.2809	.95921	196.80	.49739	.56978	.49873
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	1.9322	H33.645	1.9416	1.1216	1.6450	1.9321	.49933
SDev	.0622	.043	.0415	.0045	.0036	.0914	.00396
%RSD	3.2169	.12897	2.1400	.39743	.21768	4.7323	.79363
#1	1.9123	H33.622	1.9717	1.1159	1.6425	1.9719	.49901
#2	1.8594	H33.639	1.9776	1.1212	1.6418	1.8812	.49426

#3	2.0068	H33.611	1.9282	1.1228	1.6463	1.8356	.50386
#4	1.9502	H33.708	1.8887	1.1266	1.6495	2.0398	.50018

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	.53040
SDev	.00438
%RSD	.82558

667 765

#1	.52385
#2	.53277
#3	.53226
#4	.53275

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQX

Operator: MTW

Run Time: 08/16/00 12:56:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 763

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00205	5.0466	.00080	.06086	.08896	.00019	20.502
SDev	.00143	.0114	.01470	.00227	.00023	.00007	.055
%RSD	69.705	.22645	1834.8	3.7318	.25983	34.852	.27057
#1	-.00136	5.0309	-.01643	.05951	.08878	.00029	20.492
#2	-.00132	5.0542	.01627	.05953	.08878	.00015	20.470
#3	-.00420	5.0454	.00912	.06424	.08927	.00017	20.462
#4	-.00133	5.0560	-.00575	.06017	.08898	.00016	20.583
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00113	.00475	.00749	.00586	5.1855	6.1203	.00578
SDev	.00243	.00390	.00105	.00051	.0190	.1217	.00189
%RSD	213.91	82.013	13.970	8.6248	.36588	1.9882	32.630
#1	.00133	-.00055	.00609	.00542	5.1634	5.9845	.00369
#2	-.00077	.00608	.00761	.00630	5.1778	6.2473	.00629
#3	.00449	.00872	.00762	.00630	5.1935	6.0546	.00812
#4	-.00052	.00476	.00863	.00543	5.2072	6.1947	.00502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.9888	.65665	-.00281	137.58	.00404	.00874	.00460
SDev	.0182	.00123	.00239	.78	.00354	.02199	.01523
%RSD	.45585	.18810	85.062	.56920	87.565	251.63	330.83
#1	3.9644	.65521	-.00162	136.62	.00344	.00305	-.01315
#2	3.9855	.65713	-.00161	137.78	.00030	.00323	-.00303
#3	4.0040	.65618	-.00639	138.50	.00358	-.01141	.01735
#4	4.0013	.65809	-.00161	137.43	.00884	.04007	.01725
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	-.00334	12.511	-.00505	.13866	.30706	.04375	.00783
SDev	.03226	.028	.02221	.00066	.00186	.06846	.00399
%RSD	964.34	.22138	440.07	.47596	.60739	156.51	51.008
#1	-.04120	12.469	-.01896	.13788	.30450	.07242	.00464
#2	.00797	12.521	-.00113	.13898	.30738	.04946	.01280

#3	-.01466	12.526	-.02475	.13938	.30898	-.05287	.00455
#4	.03451	12.527	.02466	.13838	.30738	.10597	.00931
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	.02684
SDev	.00085
%RSD	3.1734

667	767
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#1	.02746
#2	.02676
#3	.02566
#4	.02746

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 08/16/00 12:59:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

667 763

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0062	50.606	4.9976	4.9894	4.9383	4.9322	51.109
SDev	.0035	.124	.0411	.0493	.0236	.0159	.181
%RSD	.34404	.24530	.82164	.98848	.47707	.32193	.35329
#1	1.0062	50.596	5.0061	4.9446	4.9404	4.9233	50.969
#2	1.0105	50.462	4.9702	4.9488	4.9076	4.9145	51.372
#3	1.0062	50.602	4.9620	5.0310	4.9400	4.9434	51.074
#4	1.0020	50.766	5.0521	5.0331	4.9651	4.9476	51.021
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	5.0481	4.9680	4.9689	4.9450	51.823	50.013	4.9802
SDev	.0124	.0073	.0107	.0247	.056	.569	.0440
%RSD	.24494	.14659	.21587	.50035	.10761	1.1383	.88423
#1	5.0607	4.9627	4.9566	4.9448	51.743	50.725	4.9885
#2	5.0476	4.9787	4.9825	4.9118	51.842	50.191	4.9223
#3	5.0314	4.9641	4.9703	4.9526	51.833	49.428	4.9810
#4	5.0527	4.9666	4.9662	4.9709	51.873	49.709	5.0292
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	50.579	4.9714	4.9678	50.439	4.9621	5.0564	5.0089
SDev	.116	.0060	.0172	.318	.0250	.0557	.0303
%RSD	.23023	.12042	.34545	.62984	.50344	1.1007	.60581
#1	50.530	4.9647	4.9713	50.517	4.9511	5.0784	4.9835
#2	50.459	4.9790	4.9427	50.022	4.9897	5.1011	5.0245
#3	50.591	4.9723	4.9761	50.427	4.9332	5.0711	5.0440
#4	50.733	4.9695	4.9809	50.789	4.9746	4.9752	4.9836
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	5.0373	5.0781	4.9943	4.9445	4.9408	10.115	4.9814
SDev	.1268	.0340	.0096	.0198	.0101	.134	.0086
%RSD	2.5164	.66958	.19207	.39945	.20355	1.3231	.17188
#1	4.8623	5.0282	4.9996	4.9436	4.9366	10.068	4.9777
#2	5.0704	5.0967	4.9821	4.9194	4.9306	10.294	4.9841

#3	5.1649	5.1022	5.0038	4.9474	4.9417	10.124	4.9720
#4	5.0516	5.0854	4.9917	4.9675	4.9542	9.9755	4.9918
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	5.0085
SDev	.0058
%RSD	.11652

667 769

#1	5.0127
#2	5.0104
#3	5.0109
#4	4.9998

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 08/16/00 13:02:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 770

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.00980	.02191	.00572	.00044	.00036	.00168
SDev	.00214	.01103	.01310	.00611	.00024	.00016	.00154
%RSD	16561.	112.53	59.809	106.76	54.437	43.806	91.769
#1	.00180	.02452	.04103	.01466	.00034	.00029	.00189
#2	.00178	-.00223	.01929	.00099	.00014	.00018	.00095
#3	-.00104	.00841	.01545	.00430	.00063	.00042	.00015
#4	-.00249	.00851	.01186	.00294	.00063	.00055	.00372
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	-.00016	-.00066	.00038	.00022	.00539	.03723	.00025
SDev	.00154	.00077	.00162	.00050	.00098	.21774	.00000
%RSD	993.48	115.44	428.42	231.42	18.178	584.93	.00000
#1	-.00163	-.00132	.00203	-.00022	.00588	-.08540	.00025
#2	.00113	-.00133	-.00102	-.00022	.00588	-.03285	.00025
#3	-.00134	.00000	.00152	.00065	.00392	-.09416	.00025
#4	.00122	-.00000	-.00102	.00065	.00587	.36130	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00659	.00048	-.00119	.01062	.00395	.03684	.00771
SDev	.00697	.00048	.00239	.00573	.00399	.02555	.01659
%RSD	105.83	99.800	200.12	53.995	101.10	69.361	215.05
#1	.01054	.00072	-.00239	.01387	.00371	-.00004	.00772
#2	-.00264	-.00024	-.00239	.00303	.00376	.04417	-.01258
#3	.00527	.00072	.00239	.01603	-.00072	.05897	.00766
#4	.01318	.00072	-.00239	.00953	.00904	.04426	.02805
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	-.01983	.01712	-.02615	.00057	.00032	.07375	.00231
SDev	.03550	.00857	.00521	.00020	.00045	.02341	.00272
%RSD	179.07	50.027	19.928	34.209	141.42	31.747	117.89
#1	-.04723	.02998	-.03059	.00041	.00064	.05386	.00462
#2	-.02833	.01282	-.02278	.00041	.00064	.08795	-.00005

#3	-.03589	.01288	-.03059	.00066	.00032	.09929	.00471
#4	.03214	.01282	-.02061	.00081	-.00032	.05388	-.00005

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					667	771
Avge	.00076						
SDev	.00156						
%RSD	204.46						

#1	.00001
#2	-.00024
#3	.00309
#4	.00019

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6HB

Operator: MTW

Run Time: 08/16/00 13:05:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 772

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00673	.00912	.00880	.00042	-.00006	.12349
SDev	.00201	.00840	.03292	.01036	.00028	.00000	.00106
%RSD	564.49	124.85	360.93	117.70	66.030	.00000	.85915
#1	.00178	-.00044	.00092	-.00233	.00063	-.00006	.12360
#2	-.00249	-.00042	.04498	.01661	.00034	-.00006	.12239
#3	.00178	.01570	.02282	.00236	.00063	-.00006	.12306
#4	.00036	.01207	-.03224	.01856	.00006	-.00006	.12489
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	-.00143	-.00132	.00089	-.00000	.00522	.13138	-.00020
SDev	.00182	.00109	.00113	.00083	.00119	.20928	.00049
%RSD	127.43	82.143	126.89	105850.	22.835	159.29	249.77
#1	-.00080	-.00132	.00203	.00065	.00392	.22116	-.00025
#2	.00084	-.00265	.00051	.00065	.00457	.37006	-.00074
#3	-.00318	.00001	.00152	-.00022	.00653	.04598	.00045
#4	-.00257	-.00132	-.00051	-.00109	.00588	-.11168	-.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00593	-.00000	-.00477	.03001	.00559	.00915	-.01520
SDev	.00995	.00048	.00276	.00500	.00443	.01521	.01521
%RSD	167.77	231580.	57.743	16.648	79.215	166.15	100.04
#1	.01318	-.00024	-.00239	.03554	.00358	.02946	.00761
#2	.01318	-.00024	-.00716	.02427	.00940	.00727	-.02281
#3	-.00791	-.00024	-.00716	.03250	.00908	-.00741	-.02274
#4	.00527	.00072	-.00239	.02774	.00029	.00730	-.02286
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	-.01794	.03277	.02068	.00040	.00016	-.00288	-.00009
SDev	.05693	.00329	.01493	.00017	.00032	.02780	.00005
%RSD	317.39	10.041	72.210	41.559	200.00	964.71	58.596
#1	-.00944	.03561	.01090	.00051	-.00000	-.03694	-.00004
#2	-.10014	.02992	.04238	.00016	-.00000	-.01422	-.00014

#3	.02836	.03561	.01076	.00041	.00064	.01980	-.00014
#4	.00946	.02992	.01867	.00051	-.00000	.01983	-.00005

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	667	773
Avge	.00411		
SDev	.00077		
%RSD	18.709		

#1	.00507
#2	.00326
#3	.00431
#4	.00382

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6HC

Operator: MTW

Run Time: 08/16/00 13:08:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 774

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04778	2.0720	1.9741	1.0842	1.9750	.04872	51.235
SDev	.00273	.0133	.0393	.0178	.0090	.00016	.334
%RSD	5.7197	.64196	1.9933	1.6398	.45340	.32818	.65236
#1	.04992	2.0683	1.9171	1.0908	1.9764	.04868	51.240
#2	.04421	2.0650	1.9797	1.0941	1.9864	.04894	50.797
#3	.04708	2.0917	2.0051	1.0576	1.9724	.04868	51.609
#4	.04992	2.0631	1.9943	1.0941	1.9649	.04856	51.294
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	.04759	.49196	.19889	.24840	1.0658	49.494	.99164
SDev	.00139	.00287	.00295	.00071	.0031	.167	.00922
%RSD	2.9229	.58256	1.4811	.28624	.29361	.33717	.92951
#1	.04791	.49196	.20016	.24840	1.0688	49.428	.99149
#2	.04935	.49062	.19458	.24926	1.0616	49.323	1.0045
#3	.04607	.49594	.19966	.24840	1.0655	49.507	.98746
#4	.04704	.48932	.20118	.24752	1.0674	49.718	.98312
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	50.189	.49567	.98500	49.938	.50016	.51398	.48437
SDev	.098	.00123	.01128	.319	.00852	.02763	.00586
%RSD	.19427	.24884	1.1455	.63922	1.7043	5.3755	1.2094
#1	50.277	.49615	1.0005	50.018	.49546	.52135	.47914
#2	50.270	.49424	.97664	50.331	.49271	.47710	.48957
#3	50.109	.49710	.98619	49.830	.50046	.54357	.48932
#4	50.101	.49519	.97664	49.573	.51200	.51391	.47947
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9614	1.6118	1.9986	.99479	.97460	2.0256	.49367
SDev	.0512	.0177	.0472	.00403	.00183	.0622	.00245
%RSD	2.6103	1.1010	2.3625	.40533	.18758	3.0726	.49650
#1	1.8944	1.6204	2.0095	.99576	.97619	2.0369	.49514
#2	2.0115	1.5861	1.9443	.99947	.97556	2.1051	.49000

#3	1.9888	1.6147	2.0569	.99422	.97460	1.9574	.49486
#4	1.9510	1.6261	1.9838	.98973	.97204	2.0028	.49468
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					667	775
Units	ppm						
Avge	.51075						
SDev	.00102						
%RSD	.19865						
#1	.50993						
#2	.51223						
#3	.51043						
#4	.51040						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DHRPW

Operator: MTW

Run Time: 08/16/00 13:11:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 776

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00229	53.077	.03868	.02169	.23335	.00304	9.0898
SDev	.00236	.201	.05500	.01262	.00123	.00006	.0438
%RSD	103.31	.37894	142.20	58.176	.52728	2.0906	.48187
#1	.00224	52.781	.10097	.03217	.23206	.00309	9.0955
#2	-.00059	53.146	.03188	.01151	.23450	.00298	9.0334
#3	.00231	53.232	-.03155	.01005	.23430	.00298	9.0900
#4	.00519	53.150	.05341	.03303	.23255	.00309	9.1402
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00083	.03649	.07005	.07364	85.039	10.090	.06399
SDev	.00154	.00353	.00110	.00070	.208	.123	.00020
%RSD	186.98	9.6626	1.5675	.95299	.24461	1.2222	.31875
#1	-.00048	.04116	.06852	.07450	84.810	10.092	.06423
#2	.00116	.03449	.07056	.07363	84.921	9.9260	.06403
#3	-.00241	.03316	.07005	.07278	85.177	10.119	.06374
#4	-.00158	.03715	.07106	.07366	85.250	10.224	.06394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	15.987	1.9470	.00555	.75492	.05375	.06275	.00884
SDev	.062	.0047	.00388	.00694	.01149	.00726	.02797
%RSD	.38480	.24389	69.915	.91968	21.372	11.568	316.29
#1	15.900	1.9434	.00552	.75102	.03859	.05944	.02146
#2	15.987	1.9425	.01031	.76055	.06352	.05896	-.01898
#3	16.032	1.9511	.00080	.76098	.06175	.07363	.04192
#4	16.029	1.9511	.00559	.74712	.05115	.05897	-.00902
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	-.01121	2.3276	.02356	.03566	3.9675	.07153	.10033
SDev	.03435	.0000	.02420	.00047	.0111	.08116	.00255
%RSD	306.34	.00148	102.75	1.3255	.27935	113.47	2.5413
#1	.03637	2.3277	.02264	.03498	3.9515	.11925	.10254
#2	-.01625	2.3276	.00660	.03573	3.9703	.01598	.09822

#3	-.01935	2.3276	.00691	.03598	3.9771	-.00932	.09803
#4	-.04562	2.3277	.05808	.03598	3.9710	.16021	.10254
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	.26814
SDev	.00249
%RSD	.92770

667 777

#1	.26496
#2	.26740
#3	.27045
#4	.26974

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRPWP5

Operator: MTW

Run Time: 08/16/00 13:15:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

667 778

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00212	10.863	.01041	.00475	.04781	.00058	1.8965
SDev	.00214	.027	.02428	.00292	.00014	.00006	.0110
%RSD	101.04	.24525	233.29	61.339	.30057	9.4256	.58219
#1	.00461	10.870	.03143	.00038	.04774	.00061	1.9018
#2	.00319	10.824	-.01226	.00623	.04774	.00061	1.9027
#3	.00035	10.877	.03137	.00625	.04774	.00061	1.9015
#4	.00032	10.881	-.00892	.00615	.04803	.00050	1.8799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.00893	.01510	.01404	17.684	2.2620	.01550
SDev	.00145	.00066	.00288	.00165	.023	.4799	.00040
%RSD	638.01	7.3807	19.099	11.742	.13028	21.216	2.5921
#1	-.00138	.00927	.01726	.01513	17.694	2.7350	.01550
#2	-.00127	.00794	.01726	.01513	17.689	2.4109	.01501
#3	.00001	.00926	.01472	.01426	17.702	2.3058	.01550
#4	.00173	.00926	.01117	.01165	17.650	1.5963	.01599
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.3081	.40127	.00026	.15720	.01260	.03550	-.00382
SDev	.0233	.00078	.00390	.00365	.00553	.02783	.02032
%RSD	.70373	.19537	1517.4	2.3215	43.911	78.394	531.43
#1	3.3213	.40128	.00026	.15644	.00459	.04101	-.01406
#2	3.3133	.40128	.00503	.16251	.01517	.06312	-.01399
#3	3.3239	.40223	-.00452	.15558	.01353	.04106	.02666
#4	3.2738	.40031	.00025	.15428	.01710	-.00321	-.01391
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	.01069	.44190	.01178	.00746	.80755	.00680	.02217
SDev	.02809	.02250	.00181	.00026	.00129	.09823	.00234
%RSD	262.89	5.0916	15.393	3.4675	.15966	1444.7	10.539
#1	-.03086	.43480	.01321	.00780	.80763	-.10404	.02334
#2	.01826	.42340	.01322	.00726	.80571	.00959	.02344

#3	.02963	.47468	.00945	.00751	.80827	.13436	.02325
#4	.02572	.43474	.01123	.00726	.80859	-.01271	.01867
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	.05652
SDev	.00091
%RSD	1.6052

667 779

#1	.05553
#2	.05699
#3	.05753
#4	.05601

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRPWS

Operator: MTW

Run Time: 08/16/00 13:18:11

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	.04963	70.189	1.9080	.96339	2.1315	.05006	62.885
SDev	.00076	.288	.0927	.02272	.0099	.00015	.246
%RSD	1.5222	.41033	4.8570	2.3579	.46295	.30257	.39114
#1	.05076	70.377	1.8135	.97358	2.1374	.05011	63.020
#2	.04927	70.191	1.9401	.97193	2.1297	.05001	63.001
#3	.04936	70.407	2.0225	.97848	2.1406	.05024	63.002
#4	.04914	69.782	1.8560	.92957	2.1184	.04988	62.516
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04775	.51796	.26929	.29893	99.272	59.105	1.0255
SDev	.00280	.00448	.00270	.00204	.386	.423	.0073
%RSD	5.8600	.86544	1.0018	.68167	.38858	.71628	.71089
#1	.05182	.52157	.27221	.30069	99.473	59.703	1.0292
#2	.04734	.51233	.27069	.29719	99.316	58.713	1.0265
#3	.04609	.52157	.26815	.30070	99.584	58.949	1.0313
#4	.04575	.51638	.26612	.29714	98.718	59.054	1.0149
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	67.674	2.6793	.94358	48.678	.53702	.55843	.33911
SDev	.299	.0107	.01031	.243	.01096	.02458	.01426
%RSD	.44228	.39850	1.0931	.50008	2.0406	4.4011	4.2036
#1	67.804	2.6836	.94361	48.771	.52983	.55286	.34909
#2	67.590	2.6836	.92926	48.583	.54822	.53060	.31893
#3	68.001	2.6865	.95317	48.963	.54438	.56017	.33918
#4	67.303	2.6634	.94827	48.397	.52566	.59011	.34924
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	1.8611	4.5236	1.8886	1.0113	6.3062	1.9398	.59904
SDev	.1022	.0257	.0274	.0047	.0270	.1322	.00281
%RSD	5.4897	.56734	1.4529	.46947	.42813	6.8165	.46826
#1	1.9004	4.5108	1.9193	1.0146	6.3219	1.9178	.60138
#2	1.7110	4.5107	1.9033	1.0102	6.3053	1.9991	.59644

Analysis Report

08/16/00 01:21:16 PM

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#3	1.8931	4.5621	1.8599	1.0154	6.3290	2.0757	.60156
#4	1.9400	4.5107	1.8719	1.0051	6.2685	1.7666	.59680
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	.78332
SDev	.00388
%RSD	.49562

#1	.78799
#2	.77926
#3	.78486
#4	.78119

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRPWD

Operator: MTW

Run Time: 08/16/00 13:21:18

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	.04319	67.082	1.8370	.91918	2.0986	.05007	57.963
SDev	.00073	.149	.0628	.00319	.0018	.00017	.409
%RSD	1.6957	.22161	3.4207	.34689	.08368	.33979	.70477
#1	.04340	66.870	1.7696	.91928	2.0962	.04996	57.421
#2	.04210	67.096	1.9031	.91675	2.0997	.04994	57.878
#3	.04363	67.149	1.7993	.91704	2.1002	.05007	58.311
#4	.04363	67.212	1.8759	.92365	2.0982	.05031	58.244
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04359	.48980	.25102	.29717	99.353	56.076	1.0394
SDev	.00279	.00364	.00209	.00160	.414	.456	.0021
%RSD	6.4019	.74272	.83239	.53776	.41659	.81241	.20323
#1	.04141	.48553	.24835	.29625	98.818	55.560	1.0397
#2	.04337	.49345	.25140	.29803	99.235	56.173	1.0422
#3	.04201	.48812	.25089	.29545	99.685	55.928	1.0379
#4	.04759	.49209	.25343	.29894	99.675	56.646	1.0377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	63.972	2.3108	.91972	47.920	.50975	.53928	.36556
SDev	.292	.0121	.00553	.031	.01632	.01331	.01760
%RSD	.45715	.52367	.60145	.06568	3.2011	2.4677	4.8133
#1	63.594	2.2954	.91486	47.924	.48719	.52465	.35030
#2	63.931	2.3070	.92447	47.907	.51215	.53205	.38080
#3	64.069	2.3195	.91499	47.887	.51348	.55383	.35035
#4	64.293	2.3214	.92454	47.962	.52619	.54658	.38081
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	1.8396	7.4508	1.7793	.98288	5.7060	1.9345	.57175
SDev	.0284	.0456	.0343	.00123	.0165	.1468	.00240
%RSD	1.5411	.61143	1.9296	.12512	.28938	7.5902	.41944
#1	1.8231	7.5191	1.7318	.98132	5.6857	1.8662	.56815
#2	1.8280	7.4280	1.7814	.98282	5.6998	1.8845	.57300

667 783

#3	1.8254	7.4280	1.7911	.98432	5.7225	2.1525	.57282
#4	1.8820	7.4280	1.8130	.98307	5.7158	1.8346	.57301

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	.78798
SDev	.00372
%RSD	.47227

#1	.78806
#2	.78893
#3	.79196
#4	.78300

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQ4

Operator: MTW

Run Time: 08/16/00 13:24:26

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	-.00069	54.369	.00807	.02526	.23113	.00294	8.5899
SDev	.00080	.180	.03006	.00029	.00116	.00011	.0225
%RSD	116.57	.33054	372.55	1.1636	.50324	3.8820	.26192
#1	-.00142	54.202	.00219	.02503	.22990	.00297	8.6155
#2	.00001	54.472	.04029	.02536	.23235	.00286	8.5805
#3	-.00135	54.569	-.03051	.02564	.23186	.00285	8.5638
#4	-.00000	54.233	.02031	.02503	.23039	.00309	8.5997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00052	.03651	.07373	.06289	81.207	9.7004	.06156
SDev	.00240	.00228	.00240	.00070	.151	.4454	.00089
%RSD	461.46	6.2430	3.2503	1.1145	.18647	4.5919	1.4481
#1	.00176	.03951	.07208	.06289	81.088	10.031	.06096
#2	-.00334	.03418	.07361	.06289	81.254	9.4793	.06206
#3	-.00166	.03549	.07207	.06204	81.401	9.1815	.06255
#4	.00116	.03685	.07716	.06375	81.086	10.110	.06067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	15.916	1.6286	.00140	.79695	.05291	.06106	.02121
SDev	.028	.0021	.00600	.00728	.01163	.00702	.02992
%RSD	.17389	.12848	428.94	.91315	21.987	11.495	141.04
#1	15.892	1.6286	.00019	.79652	.04385	.06680	.02122
#2	15.916	1.6296	.00976	.79262	.06275	.06640	-.01942
#3	15.955	1.6306	-.00454	.80735	.06316	.05906	.05177
#4	15.902	1.6257	.00019	.79132	.04187	.05198	.03128
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	-.04587	2.3105	.01330	.03704	4.1593	.02129	.10155
SDev	.06064	.0104	.01586	.00013	.0135	.07347	.00222
%RSD	132.18	.44938	119.26	.33713	.32501	345.08	2.1895
#1	-.10949	2.2992	-.00050	.03697	4.1450	-.02577	.10269
#2	.03456	2.3219	.03482	.03722	4.1687	.02937	.09821

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						667	785
#3	-.04064	2.3049	.01541	.03697	4.1728	-.04032	.10259
#4	-.06792	2.3163	.00347	.03697	4.1507	.12188	.10270
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 .25061
SDev .00291
%RSD 1.1617

#1 .25391
#2 .25150
#3 .24694
#4 .25010

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHRQA

Operator: MTW

Run Time: 08/16/00 13:27:34

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	.00031	41.156	.03043	.02591	.28947	.00224	29.363
SDev	.00213	.165	.02867	.00241	.00194	.00006	.201
%RSD	691.12	.40196	94.242	9.3076	.66884	2.7187	.68399

#1	-.00153	41.123	.05213	.02438	.29020	.00227	29.086
#2	.00140	41.262	.01384	.02783	.29041	.00215	29.362
#3	-.00141	41.303	-.00135	.02809	.29069	.00227	29.453
#4	.00277	40.937	.05709	.02333	.28658	.00227	29.553

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00159	.03021	.09164	.12587	63.313	12.657	.04579
SDev	.00241	.00228	.00236	.00414	.224	.367	.00068
%RSD	151.91	7.5435	2.5805	3.2914	.35367	2.9035	1.4744

#1	-.00071	.03122	.08834	.12672	63.051	12.273	.04669
#2	.00274	.02721	.09189	.11978	63.423	12.414	.04522
#3	-.00010	.02986	.09240	.12850	63.560	12.930	.04533
#4	.00442	.03255	.09393	.12847	63.220	13.009	.04591

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	14.538	1.6142	.00111	.89435	.05986	.43438	.01837
SDev	.052	.0054	.00455	.00871	.00997	.02508	.01311
%RSD	.35910	.33420	409.21	.97424	16.648	5.7734	71.397

#1	14.490	1.6065	.00227	.88449	.05148	.40317	.02337
#2	14.561	1.6161	-.00245	.90573	.06289	.45447	.01337
#3	14.600	1.6190	-.00243	.89359	.05244	.42499	.00310
#4	14.500	1.6151	.00707	.89359	.07265	.45489	.03363

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	-.04200	2.8460	.03981	.11470	2.7191	.08121	.08876
SDev	.03712	.0434	.02137	.00072	.0111	.04725	.00009
%RSD	88.380	1.5248	53.683	.62491	.40693	58.189	.10014

#1	-.08521	2.8688	.05264	.11466	2.7149	.03561	.08878
#2	-.05777	2.8802	.01706	.11480	2.7252	.12270	.08869

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#3	-.00072	2.8517	.02690	.11555	2.7306	.12128	.08869
#4	-.02429	2.7833	.06263	.11380	2.7056	.04525	.08888
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	.51584
SDev	.00083
%RSD	.16082

#1	.51477
#2	.51570
#3	.51673
#4	.51617

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQAP5

Operator: MTW

Run Time: 08/16/00 13:30:43

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
Avg	- .00139	8.6132	.01345	.00843	.06001	.00038	6.2238
SDev	.00082	.0224	.02748	.00751	.00040	.00001	.0283
%RSD	59.218	.25971	204.27	89.018	.66413	1.6471	.45485
#1	-.00068	8.6020	.04384	.00529	.06044	.00038	6.2152
#2	-.00211	8.6020	-.02220	.00335	.05967	.00039	6.1906
#3	-.00209	8.6021	.01076	.01960	.06024	.00038	6.2315
#4	-.00068	8.6468	.02141	.00548	.05967	.00039	6.2580
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.00468	.01815	.02393	13.468	2.1722	.00812
SDev	.00128	.00294	.00076	.00151	.045	.3350	.00000
%RSD	638.53	62.884	4.2101	6.3001	.33539	15.423	.00000
#1	-.00205	.00568	.01878	.02611	13.436	2.6386	.00812
#2	.00081	.00169	.01879	.02262	13.439	1.9467	.00812
#3	.00048	.00832	.01726	.02350	13.465	2.1919	.00812
#4	-.00004	.00302	.01777	.02350	13.533	1.9116	.00812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.0682	.34099	-.00634	.19090	.01477	.09490	.01437
SDev	.0057	.00079	.00716	.00372	.00758	.01993	.02790
%RSD	.18559	.23076	112.87	1.9485	51.308	20.999	194.13
#1	3.0682	.34098	-.00038	.18635	.00404	.10973	.04725
#2	3.0629	.34098	-.00038	.19371	.01794	.10218	-.00340
#3	3.0761	.34003	-.01470	.19415	.01549	.06549	-.01348
#4	3.0656	.34196	-.00991	.18938	.02160	.10221	.02711
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	-.02971	.58714	-.00437	.02371	.56654	-.00388	.01652
SDev	.01158	.01426	.01272	.00010	.00151	.04257	.00239
%RSD	38.988	2.4288	291.23	.43340	.26631	1097.5	14.498
#1	-.02318	.60569	-.01805	.02359	.56518	.05321	.01867
#2	-.01939	.57145	-.01038	.02370	.56614	-.04897	.01518

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#3	-.03066	.58289	.01131	.02384	.56614	-.00389	.01839
#4	-.04560	.58853	-.00035	.02370	.56870	-.01587	.01383
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	.12428
SDev	.00124
%RSD	.99658

#1	.12254
#2	.12504
#3	.12528
#4	.12426

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQAS

Operator: MTW

Run Time: 08/16/00 13:33:51

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	.04474	53.245	1.8889	.95554	2.1598	.04946	80.901
SDev	.00180	.254	.0695	.00749	.0091	.00026	.492
%RSD	4.0310	.47721	3.6805	.78383	.41974	.53114	.60805
#1	.04647	52.893	1.8286	.94632	2.1473	.04909	80.993
#2	.04220	53.276	1.8990	.95842	2.1676	.04946	80.225
#3	.04509	53.312	1.9829	.95347	2.1593	.04959	80.978
#4	.04520	53.499	1.8450	.96395	2.1651	.04969	81.406

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04507	.48849	.27870	.34726	69.991	60.889	.99463
SDev	.00055	.00226	.00243	.00179	.259	.237	.00652
%RSD	1.2210	.46181	.87344	.51562	.37020	.38999	.65585
#1	.04445	.48821	.27985	.34529	69.792	60.535	.98634
#2	.04489	.48551	.27527	.34964	69.785	61.034	1.0023
#3	.04576	.49081	.28086	.34705	70.059	60.981	.99519
#4	.04516	.48945	.27883	.34707	70.330	61.008	.99470

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	63.864	2.2126	.92368	48.131	.52512	.81823	.38965
SDev	.255	.0096	.01061	.326	.01339	.02652	.01522
%RSD	.39916	.43205	1.1488	.67798	2.5507	3.2411	3.9070
#1	63.512	2.2054	.92962	47.659	.52768	.83509	.40237
#2	63.850	2.2044	.91052	48.409	.50548	.78316	.38198
#3	63.997	2.2159	.92011	48.216	.53375	.81269	.37192
#4	64.095	2.2246	.93448	48.241	.53357	.84200	.40232

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	1.7963	6.4521	1.8095	1.0722	4.8600	1.9617	.57304
SDev	.0489	.0314	.0134	.0044	.0188	.0472	.00392
%RSD	2.7245	.48630	.74134	.41070	.38785	2.4054	.68427
#1	1.7882	6.4251	1.7987	1.0661	4.8372	1.9950	.57316
#2	1.7844	6.4764	1.7985	1.0746	4.8583	1.8929	.57278

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#3	1.8645	6.4250	1.8262	1.0719	4.8615	1.9696	.56832
#4	1.7480	6.4821	1.8145	1.0761	4.8832	1.9895	.57791
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 .97862
SDev .00806
%RSD .82354

#1 .97215
#2 .97115
#3 .98531
#4 .98586

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-3

Operator: MTW

Run Time: 08/16/00 13:36:59

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	1.0072	50.273	4.9795	4.9420	4.8817	4.9049	51.569
SDev	.0018	.125	.0391	.0044	.0199	.0130	.215
%RSD	.17926	.24842	.78470	.08946	.40768	.26593	.41711

#1	1.0076	50.412	5.0259	4.9425	4.8968	4.9201	51.593
#2	1.0090	50.162	4.9877	4.9456	4.8642	4.8963	51.798
#3	1.0075	50.173	4.9731	4.9443	4.8647	4.8920	51.604
#4	1.0047	50.344	4.9313	4.9357	4.9009	4.9111	51.279

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	5.0940	4.9849	4.9873	4.8787	51.668	49.534	4.8758
SDev	.0257	.0111	.0126	.0241	.055	.413	.0410
%RSD	.50456	.22271	.25317	.49465	.10712	.83428	.84140

#1	5.1300	4.9971	4.9947	4.8970	51.728	49.875	4.9003
#2	5.0822	4.9800	4.9972	4.8525	51.696	49.901	4.8330
#3	5.0931	4.9906	4.9881	4.8639	51.649	49.113	4.8500
#4	5.0707	4.9720	4.9693	4.9013	51.601	49.245	4.9200

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.317	4.9720	4.9725	49.604	4.9653	5.0682	5.0163
SDev	.092	.0093	.0137	.312	.0209	.0280	.0524
%RSD	.18303	.18720	.27598	.62873	.42082	.55184	1.0455

#1	50.407	4.9771	4.9904	49.833	4.9728	5.0647	4.9833
#2	50.293	4.9799	4.9713	49.313	4.9547	5.1088	5.0947
#3	50.198	4.9723	4.9713	49.359	4.9907	5.0500	4.9937
#4	50.370	4.9589	4.9570	49.912	4.9430	5.0494	4.9936

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	4.9831	5.0709	5.0488	4.9029	4.9019	9.9237	4.9728
SDev	.0520	.0285	.0552	.0171	.0084	.0838	.0069
%RSD	1.0440	.56280	1.0928	.34919	.17052	.84475	.13915

#1	5.0135	5.0853	5.0432	4.9177	4.9133	9.9315	4.9828
#2	5.0398	5.0851	5.1010	4.8879	4.8976	9.9207	4.9719

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						667	793
#3	4.9301	5.0281	5.0769	4.8883	4.8941	9.8189	4.9672
#4	4.9489	5.0851	4.9741	4.9177	4.9027	10.024	4.9692
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	5.0015						
SDev	.0157						
%RSD	.31404						
#1	5.0052						
#2	5.0202						
#3	4.9982						
#4	4.9824						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

Method: QUANMET Sample Name: CCB3

Operator: MTW

Run Time: 08/16/00 13:40:07

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	.00036	.01204	.02649	.00216	.00073	.00049	.00187
SDev	.00116	.00762	.04296	.00515	.00012	.00007	.00227
%RSD	317.69	63.261	162.17	238.35	15.849	14.052	121.42
#1	.00038	.01918	-.01769	.00099	.00083	.00054	.00050
#2	.00178	.01749	.05953	-.00233	.00083	.00043	.00296
#3	-.00106	.00307	-.00281	.00958	.00063	.00043	-.00048
#4	.00036	.00843	.06694	.00041	.00063	.00055	.00448
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	.00046	.00033	.00165	.00000	.00784	-.06788	.00025
SDev	.00194	.00167	.00113	.00110	.00185	.11576	.00000
%RSD	423.06	506.76	68.203	118370.	23.573	170.53	.00000
#1	.00243	-.00001	.00254	-.00022	.00914	-.19926	.00025
#2	.00158	.00265	.00203	-.00021	.00784	.01095	.00025
#3	-.00026	-.00133	.00000	-.00109	.00522	-.12919	.00025
#4	-.00192	.00000	.00203	.00152	.00914	.04598	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00988	.00072	.00119	.01148	.00525	.01845	.01272
SDev	.00897	.00000	.00457	.00769	.00189	.01762	.03160
%RSD	90.758	.23381	382.60	66.975	35.939	95.532	248.52
#1	.01845	.00072	-.00239	.02253	.00274	.00737	.00762
#2	.01318	.00072	-.00239	.00477	.00732	.04437	.05846
#3	-.00264	.00072	.00239	.00867	.00556	.01469	-.01268
#4	.01054	.00072	.00716	.00997	.00537	.00736	-.00254
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	-.01037	.00714	-.00044	.00093	.00072	.05101	.00148
SDev	.03197	.02713	.01578	.00012	.00031	.03866	.00216
%RSD	308.24	379.84	3622.4	12.764	42.552	75.790	145.87
#1	.00191	.01288	.00893	.00091	.00096	.06517	.00462
#2	-.02832	.02422	-.02245	.00101	.00096	-.00294	-.00004

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#3	.02836	-.03275	-.01278	.00076	.00032	.08796	.00121
#4	-.04344	.02422	-.00100	.00101	.00064	.05385	.00014
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 .00094
SDev .00192
%RSD 204.02

#1	.00383
#2	-.00002
#3	-.00001
#4	-.00002

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHRQAD

Operator: MTW

Run Time: 08/16/00 13:51:31

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	.04153	51.770	1.8632	.93052	2.1204	.04950	73.211
SDev	.00089	.301	.0290	.01556	.0128	.00029	.346
%RSD	2.1362	.58142	1.5560	1.6721	.60410	.58813	.47198
#1	.04070	51.349	1.8965	.90727	2.1021	.04915	72.880
#2	.04224	51.773	1.8779	.93795	2.1221	.04951	73.212
#3	.04083	51.916	1.8436	.94006	2.1256	.04951	73.064
#4	.04236	52.041	1.8347	.93680	2.1317	.04986	73.687
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04384	.47955	.30131	.33987	70.223	59.070	.99691
SDev	.00169	.00388	.00105	.00253	.346	.195	.00751
%RSD	3.8500	.80889	.34715	.74438	.49327	.32965	.75335
#1	.04238	.47829	.30017	.33657	69.782	58.800	.98680
#2	.04437	.47956	.30220	.34009	70.204	59.063	.99580
#3	.04599	.47555	.30067	.34009	70.282	59.168	1.0037
#4	.04262	.48480	.30220	.34274	70.625	59.247	1.0013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	62.329	2.0682	.90581	47.783	.51077	.71933	.39015
SDev	.404	.0104	.01029	.374	.00402	.01518	.02788
%RSD	.64886	.50238	1.1360	.78306	.78612	2.1104	7.1458
#1	61.794	2.0547	.91529	47.282	.51255	.71049	.42298
#2	62.268	2.0673	.91058	47.716	.51208	.73221	.37240
#3	62.524	2.0711	.89149	48.108	.50483	.70250	.36229
#4	62.732	2.0798	.90587	48.026	.51363	.73213	.40292
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	1.8451	6.9334	1.7448	1.0378	4.4649	1.8707	.55439
SDev	.0655	.0388	.0462	.0059	.0270	.2658	.00329
%RSD	3.5482	.55949	2.6495	.57033	.60443	14.207	.59356
#1	1.7806	6.8807	1.8121	1.0296	4.4316	1.7560	.55078
#2	1.9291	6.9491	1.7328	1.0379	4.4597	1.8766	.55419

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#3	1.8084	6.9320	1.7268	1.0405	4.4719	1.6147	.55382
#4	1.8622	6.9719	1.7072	1.0433	4.4965	2.2356	.55876

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	.90519
SDev	.00864
%RSD	.95392

#1	.89328
#2	.90797
#3	.90574
#4	.91377

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHRQE

Operator: MTW

Run Time: 08/16/00 13:54:39

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	.00002	44.068	.09148	.02381	.28028	.00236	27.928
SDev	.00114	.172	.03756	.01128	.00134	.00010	.103
%RSD	5141.5	.39085	41.054	47.381	.47721	4.2935	.36826
#1	.00146	44.021	.10187	.03365	.28023	.00236	28.008
#2	-.00005	43.909	.12894	.01344	.27925	.00249	27.782
#3	.00002	44.029	.03949	.03348	.27945	.00224	27.932
#4	-.00134	44.313	.09561	.01465	.28219	.00237	27.991
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00199	.02808	.07817	.10284	69.257	15.039	.05261
SDev	.00250	.00188	.00072	.00072	.261	.239	.00124
%RSD	125.80	6.6793	.92101	.69959	.37686	1.5874	2.3612
#1	-.00358	.02942	.07868	.10197	69.300	15.234	.05289
#2	.00163	.02544	.07716	.10281	68.941	15.216	.05077
#3	-.00376	.02942	.07817	.10284	69.212	14.980	.05338
#4	-.00225	.02806	.07868	.10374	69.574	14.726	.05338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	16.214	1.5691	.00439	.99348	.05514	.29103	-.01247
SDev	.041	.0048	.00602	.01012	.00646	.00930	.01762
%RSD	.25081	.30642	137.30	1.0183	11.714	3.1945	141.26
#1	16.232	1.5701	.01275	.99327	.06320	.28925	-.00736
#2	16.153	1.5633	-.00163	.99067	.04833	.28192	-.00747
#3	16.240	1.5682	.00319	.98287	.05705	.30402	.00283
#4	16.229	1.5749	.00324	1.0071	.05197	.28893	-.03789
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	-.04807	2.7721	.03478	.10220	3.0141	.09333	.10132
SDev	.03701	.0000	.01860	.00071	.0119	.04074	.00224
%RSD	76.995	.00103	53.485	.69464	.39331	43.649	2.2149
#1	-.01205	2.7721	.03483	.10211	3.0105	.06164	.10294
#2	-.09614	2.7721	.06047	.10157	3.0031	.06535	.10150

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#3	-.02740	2.7721	.01707	.10192	3.0121	.09660	.10276
#4	-.05668	2.7721	.02676	.10321	3.0309	.14972	.09810
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 .49733
SDev .00299
%RSD .60206

#1 .49724
#2 .49477
#3 .49577
#4 .50156

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHV45BF

Operator: MTW

Run Time: 08/16/00 13:57:47

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	-.00071	.00763	-.00741	-.00509	.00017	-.00006	.08253
SDev	.00135	.00420	.05343	.00187	.00023	.00001	.00325
%RSD	189.01	55.028	721.35	36.722	134.03	20.408	3.9402
#1	-.00248	.00323	-.02483	-.00232	.00034	-.00006	.07812
#2	.00034	.01036	.07067	-.00621	.00034	-.00005	.08349
#3	-.00104	.01199	-.02499	-.00562	.00014	-.00007	.08590
#4	.00034	.00496	-.05047	-.00621	-.00014	-.00005	.08260
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	-.00067	-.00066	.00051	-.00022	.01795	-.15328	.00025
SDev	.00270	.00255	.00124	.00071	.00173	.23831	.00000
%RSD	400.57	384.84	244.94	328.25	9.6214	155.47	.00000
#1	-.00390	.00266	-.00000	.00066	.01632	.10730	.00025
#2	-.00158	.00000	.00153	-.00109	.02024	-.12043	.00025
#3	.00037	-.00265	.00152	-.00022	.01828	-.12919	.00025
#4	.00241	-.00266	-.00101	-.00022	.01697	-.47079	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00527	.00024	-.00358	.00899	.00390	-.00923	.01022
SDev	.00962	.00055	.00239	.00230	.00601	.02365	.02533
%RSD	182.57	227.15	66.721	25.615	154.03	256.33	247.80
#1	.01582	.00072	-.00716	.00650	.00396	.00743	-.00243
#2	-.00527	.00072	-.00238	.00997	-.00083	.00005	.04822
#3	.00000	-.00023	-.00238	.01170	.01236	-.00009	-.00237
#4	.01054	-.00023	-.00238	.00780	.00011	-.04431	-.00253
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	-.02735	.02705	-.01428	.00001	.00016	.00835	-.00123
SDev	.00476	.00739	.00755	.00034	.00032	.01608	.00446
%RSD	17.385	27.336	52.856	3076.0	200.00	192.72	361.27
#1	-.03208	.02422	-.00890	-.00009	-.00000	.00833	-.00014
#2	-.02829	.02986	-.02249	-.00019	-.00000	.01970	-.00470

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#3	-.02830	.03567	-.01878	.00051	.00064	-.01440	.00462
#4	-.02074	.01846	.000692	-.00019	-.00000	.01975	-.00471
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	.00578
SDev	.00111
%RSD	19.128

#1	.00687
#2	.00634
#3	.00432
#4	.00559

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV45CF

Operator: MTW

Run Time: 08/16/00 14:00:55

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	.04625	1.9034	1.8978	.94338	1.8892	.04770	L.24068
SDev	.00359	.0067	.0469	.00764	.0146	.00025	.00247
%RSD	7.7570	.35257	2.4695	.81028	.77169	.52673	1.0244

#1	.04126	1.8985	1.8529	.94800	1.8941	.04777	L.23730
#2	.04695	1.9040	1.9079	.93473	1.8846	.04765	L.24191
#3	.04981	1.8985	1.8712	.93943	1.8719	.04739	L.24298
#4	.04699	1.9127	1.9591	.95134	1.9063	.04799	L.24052

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	.04524	.48432	.19606	.23663	1.0264	L.16204	.91703
SDev	.00226	.00188	.00264	.00112	.0043	.28859	.01439
%RSD	4.9916	.38820	1.3457	.47479	.42324	178.10	1.5696

#1	.04558	.48432	.19531	.23707	1.0210	L.13357	.92469
#2	.04334	.48698	.19276	.23620	1.0256	L.12481	.90973
#3	.04373	.48301	.19886	.23533	1.0275	L.54524	.90088
#4	.04829	.48298	.19733	.23794	1.0314	L-.15547	.93280

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.01054	.48151	-.00820	L.02969	.48960	.48927	L-.00356
SDev	.00714	.00191	.00239	.00259	.00968	.02785	.01511
%RSD	67.700	.39626	29.107	8.7185	1.9777	5.6926	424.93

#1	L.00527	.48055	-.00701	L.02860	.47998	.48376	L.00400
#2	L.00791	.48055	-.01178	L.03294	.49934	.49854	L-.01616
#3	L.02109	.48056	-.00701	L.02687	.48268	.52059	L.01407
#4	L.00791	.48437	-.00701	L.03034	.49639	.45420	L-.01614

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8810	-.01817	.00117	.95412	.00016	1.9097	.47419
SDev	.0447	.00573	.02310	.00662	.00055	.0494	.00400
%RSD	2.3744	31.522	1981.6	.69439	346.41	2.5885	.84244

#1	1.8980	-.01536	-.02053	.95545	-.00064	1.9353	.47100
#2	1.8980	-.02676	.02482	.95221	.00032	1.9580	.47091

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#3	1.8149	-.01530	.01705	.94646	.00064	1.9012	.47567
#4	1.9131	-.01525	-.01668	.96234	.00032	1.8443	.47916

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	.49239
SDev	.00343
%RSD	.69630

#1	.48756
#2	.49438
#3	.49521
#4	.49240

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DH9EAF

Operator: MTW

Run Time: 08/16/00 14:04:08

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	-.00060	2.7191	.02448	.05224	.03325	.00058	34.589
SDev	.00142	.0080	.03004	.00408	.00024	.00006	.127
%RSD	234.75	.29591	122.73	7.8184	.73482	10.619	.36661
#1	-.00273	2.7079	.02639	.04677	.03337	.00055	34.440
#2	.00011	2.7240	.05933	.05536	.03337	.00055	34.631
#3	.00010	2.7258	.02626	.05536	.03337	.00067	34.739
#4	.00011	2.7187	-.01407	.05146	.03288	.00055	34.547
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.03347	.00025	.37871	.39461	2.8488	.00672
SDev	.00202	.00128	.00128	.00044	.00113	.1400	.00026
%RSD	283.27	3.8087	508.26	.11487	.28642	4.9129	3.8088
#1	-.00180	.03447	.00051	.37849	.39494	2.7525	.00693
#2	.00123	.03314	-.00153	.37936	.39494	2.7087	.00635
#3	.00035	.03447	.00152	.37849	.39559	2.9977	.00684
#4	.00306	.03181	.00050	.37849	.39298	2.9364	.00676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	8.8264	1.7060	-.00830	8.2270	.01770	.02866	.00288
SDev	.0134	.0048	.00239	.0303	.00529	.02169	.00587
%RSD	.15130	.28316	28.777	.36843	29.909	75.684	203.78
#1	8.8198	1.7017	-.00710	8.2231	.01236	.02869	-.00225
#2	8.8171	1.7075	-.00710	8.2456	.01627	-.00083	.00798
#3	8.8461	1.7122	-.00710	8.2534	.01717	.03605	-.00215
#4	8.8224	1.7027	-.01188	8.1858	.02499	.05074	.00795
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	.01332	6.0716	-.00040	.07051	-.00240	.01947	.00013
SDev	.03400	.0097	.02678	.00027	.00041	.01965	.00060
%RSD	255.19	.16018	6749.0	.38226	17.213	100.96	456.10
#1	.05962	6.0588	.00501	.07035	-.00288	.03646	.00103
#2	-.01219	6.0816	-.01470	.07025	-.00192	.00244	-.00014

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#3	.01805	6.0759	-.02660	.07085	-.00256	.03652	-.00013
#4	-.01219	6.0702	.03470	.07060	-.00224	.00245	-.00023

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

Elem	ZN
Units	ppm
Avge	1.1703
SDev	.0052
%RSD	.44099

#1	1.1637
#2	1.1722
#3	1.1760
#4	1.1693

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DH9EAP5F

Operator: MTW

Run Time: 08/16/00 14:07:16

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	-.00147	.55243	-.03484	.00610	.00698	.00006	7.1294
SDev	.00213	.00837	.02197	.00117	.00000	.00000	.0214
%RSD	144.75	1.5156	63.074	19.193	.00000	.00000	.30071
#1	-.00254	.55566	-.05873	.00443	.00698	.00006	7.1411
#2	.00030	.55190	-.04401	.00638	.00698	.00006	7.0976
#3	-.00396	.54118	-.00720	.00718	.00698	.00006	7.1430
#4	.00030	.56098	-.02940	.00639	.00698	.00006	7.1361
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00156	.00729	-.00089	.07727	.08046	.39196	-.00067
SDev	.00436	.00315	.00133	.00123	.00111	.21124	.00105
%RSD	278.78	43.284	149.97	1.5965	1.3848	53.894	158.14
#1	.00420	.00927	-.00102	.07727	.08094	.24744	.00025
#2	-.00454	.00797	-.00203	.07814	.07899	.34379	.00025
#3	.00145	.00265	-.00152	.07552	.08029	.27371	-.00158
#4	.00513	.00927	.00101	.07814	.08160	.70290	-.00158
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	1.8063	.35136	-.00357	1.6723	.00795	.01089	-.00746
SDev	.0142	.00143	.00815	.0072	.00457	.02281	.02420
%RSD	.78474	.40658	228.47	.43103	57.449	209.47	324.28
#1	1.7898	.35255	-.01193	1.6736	.00339	-.00009	.00781
#2	1.8030	.34969	.00717	1.6619	.01120	-.00751	-.00243
#3	1.8082	.35255	-.00238	1.6754	.00471	.04389	-.04303
#4	1.8241	.35064	-.00715	1.6784	.01249	.00728	.00780
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	-.03097	1.2194	-.00743	.01425	-.00080	.00393	-.00007
SDev	.02190	.0108	.01196	.00012	.00041	.01133	.00016
%RSD	70.726	.88457	161.07	.85561	51.640	288.36	220.66
#1	-.00168	1.2209	-.02464	.01435	-.00128	-.00176	-.00023
#2	-.03192	1.2038	.00297	.01410	-.00032	-.00175	.00013

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#3	-.05459	1.2266	-.00315	.01435	-.00096	-.00170	-.00005
#4	-.03569	1.2266	-.00489	.01421	-.00064	.02093	-.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	.24351
SDev	.00270
%RSD	1.1087

#1	.24638
#2	.23999
#3	.24309
#4	.24455

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DH9EASF

Operator: MTW

Run Time: 08/16/00 14:10:24

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	.04568	4.7690	1.9567	1.0052	1.9709	.05006	36.133
SDev	.00136	.0198	.0375	.0000	.0130	.00026	.157
%RSD	2.9691	.41536	1.9144	.00190	.65800	.51807	.43500

#1	.04674	4.7462	1.9321	1.0051	1.9525	.04970	35.926
#2	.04531	4.7659	1.9173	1.0051	1.9728	.05007	36.152
#3	.04675	4.7694	1.9870	1.0052	1.9754	.05018	36.308
#4	.04391	4.7944	1.9904	1.0052	1.9828	.05030	36.146

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04761	.52108	.19708	.64125	1.4352	2.6846	.96224
SDev	.00373	.00200	.00169	.00423	.0081	.2488	.00723
%RSD	7.8410	.38322	.85549	.65905	.56386	9.2680	.75177

#1	.05092	.52274	.19733	.63581	1.4264	2.9977	.95416
#2	.04251	.52275	.19733	.64016	1.4335	2.5072	.95994
#3	.04978	.51875	.19885	.64364	1.4460	2.7700	.96339
#4	.04722	.52008	.19479	.64538	1.4349	2.4634	.97146

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	9.2152	2.2612	-.00695	8.6810	.50272	.50871	-.00326
SDev	.0621	.0113	.00390	.0485	.00650	.02443	.00505
%RSD	.67407	.50192	56.107	.55908	1.2925	4.8023	154.83

#1	9.1387	2.2455	-.00217	8.6126	.51159	.52720	-.00571
#2	9.2283	2.2617	-.00695	8.6872	.50107	.47559	-.00583
#3	9.2046	2.2722	-.00695	8.6976	.50223	.52708	.00431
#4	9.2890	2.2655	-.01172	8.7266	.49601	.50498	-.00581

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	1.8953	6.3242	-.00467	1.0508	-.00248	1.9435	.48237
SDev	.0702	.0171	.01084	.0060	.00031	.0929	.00234
%RSD	3.7061	.27058	231.86	.57194	12.354	4.7797	.48548

#1	1.9217	6.2985	-.02050	1.0425	-.00224	1.9861	.48042
#2	1.8311	6.3327	.00124	1.0509	-.00256	2.0429	.48033

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#3	1.9823	6.3328	.00327	1.0532	-.00224	1.9179	.48383
#4	1.8462	6.3328	-.00271	1.0567	-.00288	1.8272	.48489
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.7124
SDev	.0065
%RSD	.37876

#1	1.7044
#2	1.7118
#3	1.7133
#4	1.7202

Errors	LC Pass
High.	100.00
Low	-.02000

Method: QUANMET Sample Name: DH9EADF

Operator: MTW

Run Time: 08/16/00 14:13:32

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	.04564	4.6152	1.9499	.99932	1.9227	.04880	34.815
SDev	.00072	.0150	.0242	.00736	.0068	.00020	.243
%RSD	1.5750	.32561	1.2392	.73694	.35153	.40980	.69736
#1	.04525	4.5978	1.9446	.98852	1.9153	.04851	34.454
#2	.04530	4.6318	1.9809	1.0051	1.9285	.04898	34.898
#3	.04672	4.6228	1.9516	1.0018	1.9186	.04886	34.978
#4	.04530	4.6086	1.9223	1.0018	1.9283	.04886	34.931
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	.04617	.51149	.19314	.61991	1.4099	2.7809	.93808
SDev	.00390	.00588	.00253	.00149	.0078	.2861	.00345
%RSD	8.4350	1.1486	1.3122	.24036	.55608	10.288	.36728
#1	.04301	.50288	.18972	.61838	1.3983	2.3671	.93697
#2	.04819	.51347	.19479	.62187	1.4153	2.9539	.94168
#3	.05066	.51347	.19530	.62013	1.4120	2.9890	.93381
#4	.04282	.51614	.19276	.61926	1.4140	2.8138	.93986
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	8.8593	2.1906	-.00815	8.2781	.50580	.48090	-.00328
SDev	.0495	.0119	.00457	.0231	.00377	.02840	.01277
%RSD	.55821	.54199	56.132	.27895	.74564	5.9060	389.13
#1	8.7855	2.1730	-.01173	8.2543	.50504	.48988	-.01598
#2	8.8804	2.1949	-.00695	8.2889	.50551	.49756	.01448
#3	8.8804	2.1959	-.00218	8.2642	.50178	.49754	-.00592
#4	8.8909	2.1987	-.01173	8.3050	.51088	.43865	-.00570
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	1.8952	6.1246	.00322	1.0250	-.00200	1.9435	.47331
SDev	.0509	.0350	.00852	.0035	.00031	.0665	.00471
%RSD	2.6863	.57192	264.32	.33942	15.319	3.4215	.99560
#1	1.8196	6.0761	.00316	1.0208	-.00192	1.9749	.46624
#2	1.9104	6.1218	-.00064	1.0281	-.00224	1.9066	.47566

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#3	1.9255	6.1503	.01507	1.0235	-.00160	2.0202	.47576
#4	1.9255	6.1503	-.00469	1.0277	-.00224	1.8725	.47557
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.6455
SDev	.0102
%RSD	.61787

#1	1.6324
#2	1.6561
#3	1.6434
#4	1.6503

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DH9EKF

Operator: MTW

Run Time: 08/16/00 14:16:39

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	-.00024	.05142	.00868	.05518	.05409	-.00004	71.809
SDev	.00137	.00998	.02105	.00392	.00000	.00006	.243
%RSD	563.19	19.411	242.49	7.1123	.00000	154.71	.33835
#1	.00154	.05850	.03705	.05494	.05409	.00005	71.518
#2	-.00132	.04788	-.00318	.05279	.05409	-.00006	71.702
#3	.00012	.06036	-.01070	.05220	.05409	-.00007	72.034
#4	-.00132	.03892	.01156	.06080	.05409	-.00006	71.982
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00064	-.00038	.00087	.03573	2.4218	.00812
SDev	.00252	.00132	.00146	.00044	.00063	.1993	.00000
%RSD	472.77	205.69	379.61	49.938	1.7521	8.2280	.00000
#1	.00220	-.00003	-.00000	.00066	.03654	2.3320	.00812
#2	-.00365	-.00001	-.00254	.00066	.03524	2.1831	.00812
#3	.00061	.00263	.00050	.00153	.03524	2.5948	.00812
#4	-.00129	-.00002	.00051	.00066	.03589	2.5773	.00812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	10.633	1.3162	-.00596	7.6849	.00226	.02210	.01024
SDev	.055	.0041	.00239	.0258	.00237	.02085	.01919
%RSD	.52038	.31500	40.037	.33575	104.68	94.309	187.34
#1	10.552	1.3108	-.00238	7.6662	.00217	-.00741	.00774
#2	10.649	1.3155	-.00716	7.7069	.00255	.03681	-.00239
#3	10.673	1.3184	-.00716	7.6592	.00507	.02219	.03811
#4	10.660	1.3203	-.00716	7.7074	-.00072	.03682	-.00249
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	-.00557	7.0019	-.00833	.24267	-.00400	.00135	.00251
SDev	.00436	.0450	.02590	.00066	.00041	.04384	.00243
%RSD	78.271	.64215	310.95	.27214	10.328	3256.6	96.994
#1	-.00935	6.9649	-.03255	.24168	-.00352	.04956	.00461
#2	-.00180	7.0218	-.02469	.24303	-.00448	.02692	-.00014

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#3	-.00936	6.9649	.02490	.24293	-.00384	-.02989	.00452
#4	-.00180	7.0560	-.00098	.24303	-.00416	-.04120	.00103

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	.01569
SDev	.00130
%RSD	8.2751

#1	.01602
#2	.01420
#3	.01526
#4	.01728

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-4

Operator: MTW

Run Time: 08/16/00 14:19:47

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	.99720	49.579	4.9610	4.9079	4.7938	4.8785	51.131
SDev	.00373	.194	.0981	.0274	.0236	.0190	.197
%RSD	.37423	.39207	1.9772	.55811	.49251	.38856	.38437
#1	.99874	49.843	4.9107	4.9224	4.8190	4.8972	51.126
#2	.99575	49.609	4.8545	4.9380	4.8085	4.8923	50.889
#3	.99284	49.426	5.0030	4.8774	4.7701	4.8602	51.139
#4	1.0015	49.439	5.0760	4.8936	4.7776	4.8642	51.370
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	5.0452	4.9371	4.9386	4.8072	51.113	48.574	4.7722
SDev	.0156	.0132	.0110	.0268	.117	.238	.0398
%RSD	.30905	.26643	.22291	.55816	.22923	.48953	.83341
#1	5.0584	4.9390	4.9459	4.8264	51.264	48.842	4.8031
#2	5.0312	4.9338	4.9281	4.8342	51.050	48.614	4.8096
#3	5.0322	4.9219	4.9302	4.7845	50.996	48.579	4.7435
#4	5.0590	4.9537	4.9500	4.7837	51.140	48.264	4.7325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.608	4.9158	4.9092	48.808	4.9375	5.0158	5.0065
SDev	.213	.0095	.0224	.293	.0200	.0312	.0226
%RSD	.42854	.19330	.45630	.60090	.40494	.62303	.45154
#1	49.853	4.9273	4.8996	49.116	4.9628	5.0341	4.9941
#2	49.713	4.9063	4.8996	49.002	4.9141	4.9973	5.0345
#3	49.394	4.9101	4.8948	48.570	4.9391	4.9824	5.0142
#4	49.471	4.9197	4.9426	48.545	4.9341	5.0495	4.9833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9448	5.0203	4.9920	4.8238	4.8440	9.9583	4.9129
SDev	.0288	.0029	.0566	.0218	.0137	.1424	.0127
%RSD	.58270	.05757	1.1334	.45213	.28306	1.4300	.25939
#1	4.9442	5.0219	4.9860	4.8495	4.8618	10.107	4.9296
#2	4.9210	5.0159	4.9190	4.8337	4.8458	10.053	4.9086

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#3	4.9284	5.0215	5.0079	4.8021	4.8292	9.8263	4.8992
#4	4.9855	5.0217	5.0552	4.8098	4.8391	9.8472	4.9142
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 4.9627
SDev .0181
%RSD .36491

#1	4.9438
#2	4.9808
#3	4.9508
#4	4.9754

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: MTW

Run Time: 08/16/00 14:22:55

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	.00000	.00272	.00640	.00196	.00073	.00018	.00169
SDev	.00071	.00674	.02624	.00339	.00012	.00017	.00304
%RSD	143470.	248.00	409.98	172.98	15.849	94.281	180.36
#1	-.00107	-.00575	-.00271	-.00098	.00063	.00006	.00193
#2	.00036	.00134	.04130	.00098	.00083	.00018	-.00137
#3	.00036	.00497	.00822	.00098	.00063	.00006	.00041
#4	.00036	.01030	-.02120	.00684	.00083	.00043	.00578
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	-.00139	.00100	.00076	.00000	.00343	.13357	.00025
SDev	.00309	.00198	.00188	.00083	.00135	.08612	.00000
%RSD	222.47	199.00	246.67	70447.	39.316	64.472	.00000
#1	.00014	.00265	-.00051	.00066	.00196	.23868	.00025
#2	L-.00554	-.00131	-.00102	-.00022	.00261	.16861	.00025
#3	-.00175	.00266	.00305	-.00109	.00457	.05474	.00025
#4	.00159	-.00001	.00152	.00065	.00457	.07226	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00857	.00048	-.00239	.01387	.00854	.00370	-.00496
SDev	.00995	.00048	.00000	.00203	.00663	.00954	.02673
%RSD	116.15	99.945	.00844	14.658	77.611	257.58	539.26
#1	.00000	.00071	-.00239	.01300	.01532	.01484	.01790
#2	.01582	.00072	-.00239	.01300	.00029	-.00010	-.04308
#3	.00000	.00072	-.00239	.01690	.00639	-.00730	-.00241
#4	.01845	-.00024	-.00239	.01257	.01217	.00737	.00775
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	-.00094	-.01852	-.01188	.00041	.00016	.06809	-.00004
SDev	.02055	.00329	.01714	.00034	.00055	.02685	.00000
%RSD	2196.4	17.765	144.28	81.337	346.41	39.428	8.3382
#1	.02835	-.01567	.00898	.00031	-.00032	.06526	-.00005
#2	-.01322	-.02137	-.00909	.00051	-.00032	.08799	-.00005

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#3	-.01699	-.02137	-.03262	.00001	.00064	.03116	-.00004
#4	-.00188	-.01567	-.01479	.00081	.00064	.08796	-.00004

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

Elem	ZN
Units	ppm
Avge	.00010
SDev	.00094
%RSD	913.08

#1	.00047
#2	.00075
#3	-.00129
#4	.00048

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHWJKBT

Operator: MTW

Run Time: 08/16/00 14:26:03

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	-.00035	.01435	.03107	-.00149	.00056	-.00003	.05433
SDev	.00184	.00170	.02723	.00288	.00029	.00015	.00084
%RSD	529.70	11.824	87.641	192.89	52.381	461.88	1.5374
#1	.00180	.01388	.02643	-.00428	.00063	-.00007	.05411
#2	.00036	.01568	.03016	.00100	.00063	-.00006	.05335
#3	-.00106	.01568	.00078	-.00369	.00014	-.00018	.05447
#4	-.00249	.01215	.06691	.00099	.00083	.00018	.05537
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	-.00057	-.00066	.00076	.00000	.00914	-.09854	.00025
SDev	.00170	.00133	.00173	.00044	.00092	.12843	.00000
%RSD	297.47	200.52	228.54	339170.	10.103	130.34	.00000
#1	-.00021	-.00133	.00152	-.00022	.00849	-.09416	.00025
#2	-.00277	-.00132	.00051	.00065	.00914	.01971	.00025
#3	.00135	-.00133	-.00153	-.00022	.01044	-.27809	.00025
#4	-.00065	.00133	.00254	-.00022	.00849	-.04160	.00025
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	.01120	.00024	-.00835	.01647	.00199	.01656	.00512
SDev	.01587	.00055	.00239	.00383	.00695	.02653	.00971
%RSD	141.67	231.49	28.577	23.241	349.09	160.15	189.40
#1	.03163	-.00024	-.01194	.01733	-.00329	.02206	-.00245
#2	.01582	.00072	-.00716	.01083	.00685	-.00002	.01783
#3	.00000	-.00024	-.00716	.01907	.00902	-.00742	-.00247
#4	-.00264	.00071	-.00716	.01863	-.00463	.05164	.00759
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	-.00281	.00571	.00497	.00029	-.00040	.03113	.00101
SDev	.03682	.03136	.02035	.00020	.00016	.02933	.00229
%RSD	1310.1	548.89	409.68	71.734	40.000	94.207	227.32
#1	-.01698	.02997	-.02076	.00031	-.00032	.01976	.00443
#2	.04727	-.02137	.00898	.00001	-.00064	.06522	-.00014

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#3	-.03966	.03561	.02864	.00051	-.00032	-.00294	-.00014
#4	-.00187	-.02137	.00300	.00031	-.00032	.04249	-.00013

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

Elem	ZN
Units	ppm
Avge	.00217
SDev	.00080
%RSD	36.739

#1	.00257
#2	.00125
#3	.00304
#4	.00181

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHVFXBT

Operator: MTW

Run Time: 08/16/00 14:29:11

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	-.00105	.01120	.10727	.00633	.00093	-.00007	.16429
SDev	.00117	.00592	.05307	.00334	.00014	.00001	.00331
%RSD	111.24	52.908	49.469	52.772	14.626	9.3426	2.0146

#1	-.00106	.01215	.11465	.00764	.00092	-.00006	.16250
#2	-.00248	.00315	.09635	.00296	.00083	-.00006	.16326
#3	-.00104	.01206	.17334	.01039	.00112	-.00007	.16920
#4	.00038	.01743	.04474	.00433	.00083	-.00007	.16219

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	.00082	.00066	.00152	.00109	.01877	.30437	-.00371
SDev	.00278	.00076	.00110	.00112	.00195	.19618	.00218
%RSD	339.56	115.72	72.228	103.14	10.390	64.454	58.628

#1	.00184	.00132	.00152	.00153	.01632	.29123	-.00488
#2	.00368	-.00001	.00254	.00065	.01828	.49269	-.00476
#3	.00068	.00132	.00203	.00240	.02089	.39634	-.00045
#4	-.00292	.00001	-.00000	-.00022	.01958	.03723	-.00476

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	.03690	.00120	-.00477	S-.13521	.00220	.00001	.00260
SDev	.01444	.00055	.00276	.00000	.00771	.01044	.01302
%RSD	39.123	46.043	57.772	.00000	350.64	92606.	500.76

#1	.03427	.00167	-.00716	S-.13521	-.00424	.00741	.00766
#2	.05272	.00072	-.00238	S-.13521	.00844	-.01476	-.01257
#3	.04217	.00167	-.00238	S-.13521	-.00469	.00005	.01769
#4	.01845	.00072	-.00716	S-.13521	.00928	.00735	-.00238

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	-.00279	.03564	-.00789	.00181	.00016	.02818	.00195
SDev	.02358	.00003	.01847	.00015	.00032	.04080	.00239
%RSD	846.51	.08391	234.09	8.1776	200.00	144.76	122.76

#1	.00193	.03561	-.02466	.00181	-.00000	.01970	-.00014
#2	-.01696	.03561	-.01883	.00176	-.00000	-.00302	-.00004

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#3	-.02451	.03566	.01688	.00201	.00064	.00828	.00345
#4	.02840	.03567	-.00495	.00166	-.00000	.08778	.00452

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

Elem	ZN
Units	ppm
Avge	.00998
SDev	.00089
%RSD	8.9204

#1	.01070
#2	.00962
#3	.01072
#4	.00889

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHWJKCT

Operator: MTW

Run Time: 08/16/00 14:32:20

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	.04692	1.9149	2.1163	.91933	1.8111	.04567	L.22374
SDev	.00115	.0271	.0778	.02479	.0248	.00032	.00402
%RSD	2.4509	1.4169	3.6742	2.6965	1.3697	.69886	1.7956

#1	.04832	1.8859	2.1579	.89824	1.7843	.04547	L.22483
#2	.04693	1.9019	1.9998	.89824	1.7964	.04533	L.22881
#3	.04693	1.9485	2.1500	.94609	1.8368	.04594	L.22183
#4	.04551	1.9234	2.1575	.93476	1.8270	.04594	L.21951

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	.04779	.47341	.19239	.22574	1.0270	L.44670	.91321
SDev	.00430	.00292	.00140	.00123	.0051	.41929	.01664
%RSD	8.9979	.61702	.72741	.54621	.49597	93.864	1.8223

#1	.04390	.47244	.19328	.22487	1.0223	L.84304	.89862
#2	.04439	.46978	.19175	.22487	1.0229	L.72042	.89960
#3	.05041	.47638	.19074	.22575	1.0314	L-.07664	.93150
#4	.05247	.47505	.19379	.22749	1.0314	L.29999	.92313

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.03888	.47102	-.00223	S860.20	.47578	.48897	L.00131
SDev	.00871	.00135	.00000	1720.7	.01343	.02118	.02091
%RSD	22.400	.28641	.03410	200.03	2.8234	4.3317	1598.0

#1	L.04481	.47007	-.00223	S3441.2	.49101	.47606	L.00396
#2	L.04481	.47007	-.00223	S-.13521	.48076	.47601	L.02415
#3	L.02636	.47293	-.00223	S-.13521	.45933	.48350	L.00371
#4	L.03954	.47102	-.00223	S-.13521	.47202	.52030	L-.02658

Errors	LC Low	LC Pass	NOCHECK	LC High	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0671	.02731	.00168	.92331	.00016	1.9098	.46526
SDev	.0945	.02848	.01473	.01100	.00055	.0978	.00233
%RSD	4.5701	104.30	875.72	1.1918	346.41	5.1215	.50064

#1	2.0378	.04151	.00120	.91119	.00064	1.7651	.46177
#2	2.1701	.04157	.01513	.91694	.00032	1.9808	.46643

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#3	1.9509	.04157	.00910	.93417	.00032	1.9466	.46643
#4	2.1097	-.01542	-.01870	.93092	-.00064	1.9466	.46643
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	.49022
SDev	.00485
%RSD	.98871

#1	.48679
#2	.48557
#3	.49274
#4	.49576

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHPDWT

Operator: MTW

Run Time: 08/16/00 14:35:33

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
Avg	.00055	4.5703	.15593	.38457	.40892	.00043	16.509
SDev	.00338	.0342	.04140	.01435	.00200	.00005	.100
%RSD	612.37	.74765	26.551	3.7311	.48907	12.570	.60733
#1	-.00160	4.5431	.12500	.40590	.40914	.00041	16.375
#2	-.00298	4.5536	.21658	.37473	.40885	.00051	16.541
#3	.00410	4.5645	.14680	.37883	.40641	.00040	16.615
#4	.00268	4.6198	.13534	.37884	.41129	.00040	16.506
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00557	.00714	.01015	.80809	3.7734	2.4153	.00160
SDev	.00147	.00293	.00242	.00462	.0168	.4456	.00069
%RSD	26.457	41.026	23.816	.57227	.44471	18.450	42.892
#1	.00404	.01013	.00863	.80788	3.7483	2.0956	.00074
#2	.00552	.00615	.01371	.80788	3.7816	3.0240	.00161
#3	.00757	.00877	.00964	.80265	3.7830	2.4722	.00164
#4	.00516	.00351	.00863	.81397	3.7809	2.0693	.00242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	2.6814	.22315	-.00302	S-.13521	.02214	.33744	.00247
SDev	.0359	.00092	.00457	.00000	.00298	.03027	.01753
%RSD	1.3392	.41082	151.57	.00000	13.473	8.9703	711.19
#1	2.6465	.22195	-.00660	S-.13521	.02037	.29884	-.00257
#2	2.7124	.22291	.00295	S-.13521	.02640	.37242	-.01273
#3	2.7124	.22387	-.00660	S-.13521	.01981	.34305	.02777
#4	2.6544	.22386	-.00182	S-.13521	.02198	.33546	-.00260
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	-.01746	7.4521	.00015	.07186	.16089	.04165	.01016
SDev	.01522	.0362	.01350	.00038	.01114	.01942	.00267
%RSD	87.192	.48591	9282.2	.52554	6.9212	46.612	26.270
#1	-.01091	7.4208	-.00482	.07200	.15929	.05041	.00805
#2	.00051	7.4835	-.01276	.07225	.15737	.06142	.01407

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#3	-.02594	7.4835	.01898	.07135	.17656	.03871	.00921
#4	-.03350	7.4208	-.00083	.07185	.15033	.01606	.00930
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	2.8117
SDev	.0142
%RSD	.50380

#1	2.7913
#2	2.8129
#3	2.8228
#4	2.8195

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPDWP5T

Operator: MTW

Run Time: 08/16/00 14:38:41

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
Avg	.00197	.94865	.04828	.06611	.08715	.00005	3.4450
SDev	.00233	.02869	.02553	.00197	.00176	.00010	.1035
%RSD	117.86	3.0246	52.876	2.9787	2.0149	179.51	3.0033
#1	.00483	.97364	.06180	.06366	.08850	.00005	3.5654
#2	.00196	.96828	.04357	.06697	.08801	-.00006	3.4767
#3	-.00087	.94155	.07313	.06557	.08752	.00005	3.4192
#4	.00197	.91111	.01462	.06826	.08459	.00017	3.3187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00163	.00023	.00266	.16763	.79801	.59998	.00025
SDev	.00196	.00066	.00064	.00329	.02078	.17870	.00000
%RSD	120.07	289.35	23.968	1.9612	2.6042	29.784	.00000
#1	.00247	.00121	.00203	.16872	.81810	.65035	.00025
#2	.00267	-.00011	.00254	.17133	.80894	.59779	.00025
#3	.00271	-.00010	.00253	.16697	.79457	.36130	.00025
#4	-.00130	-.00010	.00355	.16349	.77043	.79049	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.57463	.04693	-.00466	274.65	.01080	.09690	-.00501
SDev	.01309	.00163	.00617	5.42	.00658	.02115	.01276
%RSD	2.2782	3.4836	132.45	1.9729	60.913	21.830	254.92
#1	.58517	.04860	-.00227	278.42	.01523	.10978	-.02272
#2	.57463	.04765	.00251	278.42	.01621	.10978	-.00254
#3	.58254	.04669	-.01182	274.85	.00993	.10244	.00773
#4	.55618	.04478	-.00705	266.93	.00184	.06560	-.00248
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	.00399	1.5115	-.00444	.01537	.03438	.00903	.00312
SDev	.03796	.0429	.02295	.00042	.00329	.04487	.00214
%RSD	950.77	2.8366	516.74	2.7324	9.5623	496.70	68.433
#1	.06073	1.5343	-.00701	.01575	.03870	.04572	.00462
#2	-.01488	1.5571	.02669	.01560	.03390	-.04499	.00005

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#3	-.01113	1.4944	-.00882	.01535	.03071	-.01080	.00327
#4	-.01876	1.4603	-.02864	.01479	.03422	.04620	.00453

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	.57455
SDev	.01519
%RSD	2.6434

#1	.59236
#2	.57602
#3	.57458
#4	.55525

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPDWST

Operator: MTW

Run Time: 08/16/00 14:41:49

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	.96038	2.4581	5.1425	.35777	46.636	.00036	15.391
SDev	.00619	.0187	.0742	.00770	.391	.00006	.083
%RSD	.64426	.76150	1.4434	2.1527	.83875	18.002	.53731
#1	.95717	2.4394	5.1941	.35059	46.545	.00031	15.380
#2	.96144	2.4662	5.2159	.35470	46.248	.00030	15.419
#3	.96856	2.4804	5.0982	.36857	47.180	.00042	15.482
#4	.95434	2.4464	5.0618	.35723	46.572	.00042	15.284
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98363	.00256	4.7261	.76026	1.5813	2.0649	.00025
SDev	.00817	.00245	.0237	.00463	.0053	.3615	.00000
%RSD	.83026	95.623	.50242	.60949	.33561	17.505	.00000
#1	.98392	.00426	4.7162	.75982	1.5781	1.9905	.00025
#2	.99437	.00305	4.7233	.75460	1.5833	1.8678	.00025
#3	.98158	.00395	4.7598	.76592	1.5879	2.5948	.00025
#4	.97466	-.00103	4.7050	.76069	1.5761	1.8065	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.3895	.19396	-.00454	S3442.8	.01702	5.0948	-.00065
SDev	.0281	.00163	.00616	.3	.00629	.0234	.01839
%RSD	1.1761	.83957	135.82	.00757	36.937	.45902	2838.8
#1	2.3934	.19372	-.00693	S3443.1	.02345	5.0875	-.01060
#2	2.3671	.19467	-.01170	S3442.5	.00891	5.1096	.01963
#3	2.4277	.19563	-.00215	S3442.8	.01563	5.1170	.00921
#4	2.3697	.19181	.00262	S3442.8	.02011	5.0652	-.02082
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	1.0690	4.4517	-.01775	.06658	.07205	.05570	.00227
SDev	.0860	.0470	.01391	.00049	.00379	.03530	.00224
%RSD	8.0495	1.0558	78.349	.73936	5.2576	63.369	98.477
#1	.98110	4.4118	-.03458	.06660	.07005	.05006	-.00012
#2	1.1587	4.4802	-.02064	.06611	.07772	.10679	.00096

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#3	1.1247	4.5031	-.01473	.06725	.07037	.03858	.00472
#4	1.0113	4.4119	-.00104	.06635	.07005	.02737	.00353
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 2.6247
SDev .0172
%RSD .65368

#1	2.6144
#2	2.6193
#3	2.6502
#4	2.6149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPDWDT Operator: MTW
 Run Time: 08/16/00 14:45:02
 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	.95575	2.5404	5.1695	.36809	46.514	.00033	15.391
SDev	.00307	.0104	.0756	.00414	.413	.00006	.043
%RSD	.32065	.41006	1.4620	1.1245	.88883	17.964	.27699
#1	.95716	2.5287	5.2596	.36375	46.905	.00031	15.359
#2	.95859	2.5539	5.2043	.37370	46.791	.00030	15.362
#3	.95149	2.5413	5.1052	.36706	46.007	.00042	15.391
#4	.95576	2.5376	5.1089	.36786	46.351	.00029	15.451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98902	.00754	4.7095	.75569	1.5197	2.0802	.00030
SDev	.00729	.00351	.0119	.00690	.0008	.1223	.00010
%RSD	.73671	46.596	.25237	.91375	.05509	5.8784	34.146
#1	.98622	.00669	4.7151	.76243	1.5194	2.1218	.00025
#2	.98597	.01072	4.7146	.76069	1.5188	2.1131	.00045
#3	.98405	.00980	4.6918	.74851	1.5207	2.1831	.00025
#4	.99986	.00295	4.7167	.75111	1.5201	1.9029	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.4072	.19274	-.00455	S2582.2	.02202	5.0857	-.00054
SDev	.0106	.00078	.00477	1721.5	.00736	.0332	.01656
%RSD	.44140	.40373	105.00	66.670	33.417	.65363	3081.6
#1	2.4198	.19275	.00261	S3442.9	.02563	5.0654	-.00065
#2	2.4119	.19370	-.00694	S-.13521	.02928	5.0876	-.02075
#3	2.4013	.19179	-.00694	S3443.1	.01224	5.1318	.01982
#4	2.3960	.19274	-.00694	S3442.8	.02095	5.0579	-.00057
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	1.0565	4.7623	.00587	.06696	.09572	.02790	.00311
SDev	.0435	.0119	.01724	.00054	.00205	.01604	.00211
%RSD	4.1199	.24906	293.91	.81305	2.1376	57.505	67.681
#1	1.0754	4.7594	.02266	.06750	.09596	.01657	.00006
#2	1.1019	4.7766	-.00905	.06725	.09724	.05060	.00337

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#3	1.0490	4.7481	.01882	.06625	.09276	.02785	.00449
#4	.99985	4.7652	-.00896	.06685	.09692	.01656	.00454

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

Elem	ZN
Units	ppm
Avge	2.6231
SDev	.0086
%RSD	.32933

#1	2.6198
#2	2.6335
#3	2.6132
#4	2.6259

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPE3T

Operator: MTW

Run Time: 08/16/00 14:48:15

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	.00706	7.6643	.19023	.43649	.42903	.00051	268.35
SDev	.00243	.0641	.05182	.01859	.00479	.00007	1.03
%RSD	34.340	.83600	27.239	4.2598	1.1168	13.902	.38542
#1	.00387	7.6545	.20223	.44743	.43084	.00057	267.76
#2	.00671	7.6885	.11384	.44214	.42937	.00045	267.84
#3	.00955	7.5812	.22125	.40885	.42233	.00045	267.91
#4	.00813	7.7331	.22359	.44753	.43357	.00058	269.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09139	.01063	.01573	8.2414	6.8642	6.4597	.00556
SDev	.00679	.00128	.00144	.1007	.0445	.3040	.00186
%RSD	7.4279	12.008	9.1276	1.2218	.64889	4.7054	33.518
#1	.08473	.00963	.01674	8.2915	6.8660	6.2385	.00493
#2	.08698	.00962	.01674	8.2488	6.8562	6.4400	.00812
#3	.09435	.01229	.01573	8.0982	6.8131	6.8954	.00551
#4	.09949	.01097	.01370	8.3271	6.9214	6.2648	.00369
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	16.129	5.7542	.00341	S-.13521	.15865	.59297	.04653
SDev	.115	.0296	.00390	.00000	.00457	.02110	.05699
%RSD	.71148	.51405	114.32	.00000	2.8828	3.5587	122.47
#1	16.187	5.7576	.00341	S-.13521	.15737	.59852	.07950
#2	16.084	5.7442	-.00136	S-.13521	.16413	.57628	-.00165
#3	15.992	5.7223	.00341	S-.13521	.15321	.57658	.10989
#4	16.253	5.7929	.00820	S-.13521	.15990	.62050	-.00163
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	-.00270	16.023	.03001	.87530	.31634	.04352	.03709
SDev	.05080	.145	.01140	.00891	.01566	.10250	.00052
%RSD	1880.4	.90736	37.992	1.0184	4.9514	235.52	1.4166
#1	-.07828	15.963	.01531	.87907	.32657	.06056	.03739
#2	.03129	15.980	.04060	.87453	.33137	.16279	.03729

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#3	.01606	15.912	.03724	.86333	.31026	-.08674	.03738
#4	.02013	16.236	.02691	.88427	.29714	.03747	.03631
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	17.830
SDev	.104
%RSD	.58534

#1	17.842
#2	17.811
#3	17.707
#4	17.961

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPE4T

Operator: MTW

Run Time: 08/16/00 14:51:23

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
Avge	.00058	1.0597	.18062	.57229	.60391	.00014	489.64
SDev	.00136	.0120	.02036	.00337	.00686	.00006	2.13
%RSD	232.78	1.1329	11.270	.58810	1.1368	41.845	.43551

#1	.00023	1.0558	.17421	.57287	.60372	.00023	491.22
#2	.00167	1.0467	.15593	.56739	.59492	.00011	487.38
#3	-.00119	1.0610	.20354	.57483	.60547	.00011	488.28
#4	.00162	1.0754	.18880	.57408	.61154	.00012	491.69

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12280	.01858	.00354	5.1504	1.1294	13.684	.00640
SDev	.00228	.00172	.00181	.0675	.0097	.249	.00111
%RSD	1.8538	9.2425	51.061	1.3115	.86257	1.8203	17.264

#1	.12257	.02057	.00202	5.1434	1.1261	13.894	.00595
#2	.12579	.01925	.00253	5.0625	1.1202	13.324	.00754
#3	.12260	.01658	.00354	5.1713	1.1281	13.727	.00508
#4	.12025	.01791	.00608	5.2244	1.1431	13.789	.00705

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	39.874	9.7169	.00972	S-.13521	.14518	1.7724	.06735
SDev	.305	.0610	.00616	.00000	.00696	.0373	.02535
%RSD	.76579	.62812	63.425	.00000	4.7907	2.1060	37.645

#1	39.934	9.7415	.00256	S-.13521	.15448	1.7614	.07002
#2	39.452	9.6356	.01210	S-.13521	.14632	1.7245	.03944
#3	39.929	9.7110	.01688	S-.13521	.14116	1.7982	.10026
#4	40.182	9.7796	.00733	S-.13521	.13877	1.8056	.05967

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	-.04332	7.0862	-.00496	1.5654	.01447	.06829	.02699
SDev	.04087	.0810	.01328	.0167	.00535	.05432	.00236
%RSD	94.351	1.1435	267.89	1.0688	36.952	79.530	8.7449

#1	-.04049	7.1361	.00346	1.5662	.01343	.01734	.02802
#2	-.02539	6.9652	.00926	1.5430	.00736	.13037	.02820

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#3	-.10096	7.1190	-.01618	1.5692	.01791	.02854	.02830
#4	-.00644	7.1247	-.01637	1.5834	.01919	.09693	.02346
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	33.380
SDev	.203
%RSD	.60854

#1	33.455
#2	33.104
#3	33.376
#4	33.585

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPE6T

Operator: MTW

Run Time: 08/16/00 14:54:31

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	-.00250	.59176	.13161	.24869	.27122	.00021	276.75
SDev	.00116	.00530	.05561	.00162	.00155	.00006	1.49
%RSD	46.342	.89622	42.257	.65078	.57326	28.994	.53813
#1	-.00108	.59664	.16460	.24914	.27164	.00017	276.86
#2	-.00392	.59308	.13892	.25050	.27261	.00017	274.61
#3	-.00252	.58421	.05094	.24660	.27164	.00018	277.86
#4	-.00250	.59312	.17197	.24854	.26899	.00029	277.68
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	.00137	.01146	-.00076	.01331	.30666	1.7058	.00069
SDev	.00122	.00227	.00088	.00050	.00145	.3281	.00118
%RSD	89.458	19.768	115.00	3.7787	.47436	19.233	170.29
#1	.00046	.01046	-.00102	.01287	.30814	1.7540	.00025
#2	.00038	.01180	.00050	.01287	.30486	1.9379	.00025
#3	.00298	.00914	-.00102	.01374	.30615	1.2284	.00245
#4	.00165	.01445	-.00153	.01375	.30747	1.9029	-.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.0148	.53544	-.00354	S-.13521	.02558	.02382	-.00986
SDev	.0383	.00180	.00239	.00000	.00379	.03212	.03028
%RSD	.42507	.33707	67.533	.00000	14.830	134.82	307.19
#1	9.0359	.53568	-.00234	S-.13521	.02711	.05147	.01802
#2	9.0122	.53282	-.00234	S-.13521	.02967	-.00011	-.00220
#3	9.0491	.53663	-.00712	S-.13521	.02073	-.00762	-.05296
#4	8.9621	.53663	-.00234	S-.13521	.02480	.05156	-.00229
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	-.04454	4.1955	.01236	.56954	.00048	.05084	.00343
SDev	.01134	.0298	.02183	.00234	.00371	.05197	.00238
%RSD	25.453	.70973	176.59	.41023	772.68	102.23	69.381
#1	-.03509	4.2240	.02285	.57077	.00544	.04230	.00461
#2	-.03510	4.1727	.00301	.57127	.00032	.06502	.00462

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#3	-.05777	4.2182	-.01302	.57002	-.00352	.11051	-.00014
#4	-.05021	4.1670	.03660	.56612	-.00032	-.01449	.00461

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	.07049
SDev	.00091
%RSD	1.2948

#1	.07182
#2	.06979
#3	.07032
#4	.07003

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-5

Operator: MTW

Run Time: 08/16/00 14:57:40

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	.99591	49.578	4.9321	4.8881	4.8120	4.8798	51.512
SDev	.00427	.132	.0738	.0019	.0146	.0161	.192
%RSD	.42909	.26674	1.4955	.03927	.30306	.32984	.37334
#1	1.0003	49.734	4.9441	4.8862	4.8262	4.9004	51.782
#2	.99733	49.635	4.9491	4.8906	4.8221	4.8843	51.480
#3	.99587	49.437	4.8297	4.8870	4.7955	4.8641	51.460
#4	.99013	49.507	5.0056	4.8885	4.8041	4.8705	51.327
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	5.0664	4.9523	4.9660	4.8094	51.269	48.833	4.7578
SDev	.0216	.0253	.0135	.0153	.146	.356	.0178
%RSD	.42616	.50989	.27273	.31766	.28435	.72858	.37348
#1	5.0741	4.9814	4.9850	4.8238	51.467	48.824	4.7583
#2	5.0835	4.9588	4.9622	4.8203	51.291	49.245	4.7759
#3	5.0734	4.9483	4.9530	4.7915	51.164	48.885	4.7336
#4	5.0348	4.9205	4.9637	4.8020	51.155	48.377	4.7635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.576	4.9292	4.9175	48.509	4.9816	5.0346	4.9965
SDev	.132	.0154	.0222	.102	.0162	.0160	.0094
%RSD	.26590	.31201	.45145	.21056	.32576	.31721	.18845
#1	49.698	4.9503	4.9331	48.563	4.9935	5.0427	5.0040
#2	49.669	4.9312	4.9378	48.582	4.9696	5.0126	4.9938
#3	49.521	4.9178	4.8901	48.359	4.9975	5.0493	4.9844
#4	49.415	4.9178	4.9092	48.531	4.9657	5.0338	5.0039
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	5.0293	5.0219	5.0166	4.8564	4.8638	9.8884	4.9309
SDev	.0295	.0048	.0464	.0159	.0160	.1034	.0133
%RSD	.58578	.09597	.92480	.32788	.32931	1.0458	.27065
#1	4.9977	5.0278	5.0710	4.8728	4.8829	9.8549	4.9490
#2	5.0463	5.0219	5.0255	4.8669	4.8711	10.039	4.9304

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#3	5.0611	5.0219	4.9583	4.8398	4.8519	9.8582	4.9271
#4	5.0119	5.0160	5.0118	4.8460	4.8493	9.8018	4.9170

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	4.9415
SDev	.0054
%RSD	.10896

#1	4.9430
#2	4.9477
#3	4.9408
#4	4.9347

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB5

Operator: MTW

Run Time: 08/16/00 15:00:48

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	.01297	.02468	.00128	.00075	.00034	.00625
SDev	.00082	.00857	.03861	.00575	.00024	.00018	.00308
%RSD	76.933	66.068	156.44	449.70	32.381	54.545	49.249
#1	.00178	.01739	.05953	-.00038	.00063	.00018	.00533
#2	.00036	.00494	.02291	.00957	.00063	.00018	.00229
#3	.00178	.02283	-.02865	-.00038	.00063	.00055	.00855
#4	.00036	.00672	.04493	-.00370	.00112	.00043	.00882
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	.00070	-.00000	.00013	.00109	.00457	.21021	.00025
SDev	.00110	.00108	.00113	.00050	.00131	.17899	.00000
%RSD	156.55	34456.	889.41	46.178	28.571	85.145	.00000
#1	.00068	-.00133	.00051	.00152	.00522	.40510	.00025
#2	.00110	-.00000	-.00102	.00065	.00261	.03723	.00025
#3	.00181	.00132	.00152	.00152	.00522	.31751	.00025
#4	-.00079	.00000	-.00051	.00065	.00522	.08102	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01054	.00024	-.00119	.02438	.00462	.00001	.01274
SDev	.00834	.00055	.00239	.00918	.00562	.00852	.00583
%RSD	79.057	230.51	200.12	37.639	121.67	105630.	45.726
#1	.00791	.00072	.00239	.01950	.00948	-.00740	.01784
#2	.00000	-.00024	-.00239	.01387	-.00289	.00739	.01773
#3	.01845	.00072	-.00239	.03207	.00832	-.00734	.00768
#4	.01582	-.00024	-.00239	.03207	.00358	.00738	.00771
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	-.00755	-.00712	-.00439	.00059	.00056	.01415	-.00002
SDev	.01464	.02887	.01411	.00015	.00016	.01466	.00005
%RSD	193.95	405.30	321.58	25.739	28.571	103.58	204.75
#1	.00946	.03561	-.01079	.00056	.00064	-.00288	.00005
#2	-.00188	-.02707	.01095	.00047	.00032	.01984	-.00005

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#3	-.02455	-.02137	.00300	.00081	.00064	.03117	-.00004
#4	-.01321	-.01567	-.02071	.00051	.00064	.00846	-.00005

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

Elem	ZN
Units	ppm
Avge	.00005
SDev	.00068
%RSD	1257.9

#1	-.00004
#2	-.00052
#3	-.00026
#4	.00103

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHPE7T

Operator: MTW

Run Time: 08/16/00 15:07:58

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
Avg	-.00221	.48084	.16742	.26032	.55632	.00017	286.88
SDev	.00178	.00305	.02128	.00001	.00302	.00010	1.35
%RSD	80.507	.63479	12.710	.00395	.54280	57.486	.47166
#1	-.00258	.48045	.15461	.26032	.55299	.00017	284.95
#2	-.00255	.48221	.19491	.26032	.56032	.00016	287.53
#3	-.00397	.47679	.14722	.26031	.55612	.00028	287.00
#4	.00027	.48393	.17294	.26033	.55583	.00005	288.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.01330	.00633	.00114	.06727	.22845	3.2233	.00293
SDev	.00158	.00287	.00133	.00051	.00307	.3294	.00021
%RSD	11.868	45.327	117.29	.75005	1.3423	10.219	7.3191
#1	.01470	.00633	.00050	.06683	.22780	3.0065	.00320
#2	.01262	.00898	.00304	.06770	.22975	3.5670	.00300
#3	.01139	.00766	.00101	.06770	.22453	3.4357	.00282
#4	.01448	.00234	-.00000	.06683	.23172	2.8839	.00271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	19.431	.83218	-.00474	S-.13521	.11989	.04223	.01641
SDev	.088	.00374	.00276	.00000	.00542	.00700	.01735
%RSD	.45091	.44877	58.150	.00000	4.5174	16.578	105.69
#1	19.303	.82836	-.00713	S-.13521	.11765	.04408	.01897
#2	19.498	.83313	-.00713	S-.13521	.11328	.03675	-.00139
#3	19.471	.83027	-.00235	S-.13521	.12419	.03673	.00882
#4	19.453	.83695	-.00235	S-.13521	.12446	.05136	.03925
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	-.02491	7.9108	-.00775	.79426	-.00904	.02494	.00690
SDev	.03980	.0406	.01074	.00486	.00146	.09516	.00269
%RSD	159.78	.51266	138.59	.61204	16.189	381.55	39.025
#1	.02894	7.8766	-.02256	.78846	-.00928	-.10281	.00452
#2	-.04664	7.9336	-.00487	.80020	-.00928	.12426	.00919

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#3	-.02019	7.8767	.003093	.79520	-.01056	.02211	.00928
#4	-.06175	7.9564	-.00666	.79320	-.00704	.05621	.00462
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	.24466
SDev	.00265
%RSD	1.0833

#1	.24532
#2	.24812
#3	.24299
#4	.24223

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPE8T

Operator: MTW

Run Time: 08/16/00 15:11:06

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	.00004	.96657	.20684	.10526	.01888	.00003	.66117
SDev	.00213	.00734	.08331	.00406	.00023	.00006	.00372
%RSD	4975.6	.75908	40.279	3.8562	1.2240	200.00	.56331

#1	.00182	.97381	.32338	.10228	.01871	-.00006	.66060
#2	-.00102	.96119	.16557	.11087	.01920	.00006	.66650
#3	-.00244	.95939	.20598	.10228	.01871	.00006	.65966
#4	.00182	.97192	.13243	.10560	.01891	.00006	.65792

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00047	.00131	.00343	.00546	.18442	.62188	-.00072
SDev	.00178	.00108	.00112	.00087	.00164	.28779	.00111
%RSD	380.47	82.646	32.836	15.955	.89092	46.277	155.56

#1	-.00137	.00264	.00457	.00502	.18475	.84304	.00025
#2	.00002	.00131	.00406	.00676	.18606	.86056	-.00178
#3	.00031	-.00001	.00203	.00502	.18214	.52772	.00025
#4	.00291	.00131	.00305	.00502	.18475	.25620	-.00158

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	.34662	.00361	-.00475	S-.13521	.00149	.00310	.00256
SDev	.01169	.00000	.00477	.00000	.00504	.02294	.01755
%RSD	3.3724	.04629	100.58	.00000	337.48	740.94	686.38

#1	.34267	.00361	-.01191	S-.13521	-.00001	.03631	.00764
#2	.36376	.00361	-.00236	S-.13521	.00607	-.01536	-.02278
#3	.33740	.00361	-.00236	S-.13521	-.00495	-.00061	.00761
#4	.34267	.00361	-.00236	S-.13521	.00487	-.00794	.01776

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	-.01747	1.4317	-.00292	.00301	.00216	.03217	-.00008
SDev	.03400	.0332	.01663	.00000	.00031	.06514	.00009
%RSD	194.66	2.3208	568.69	.00000	14.184	202.46	106.86

#1	.02505	1.4032	.00303	.00301	.00256	-.01610	-.00022
#2	-.00518	1.4545	-.00502	.00301	.00192	.10881	-.00004

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#3	-.04676	1.4032	-.02464	.00301	.00192	-.02741	-.00004
#4	-.04298	1.4659	.01493	.00301	.00224	.06340	-.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	.00981
SDev	.00102
%RSD	10.372

#1	.01013
#2	.01063
#3	.01015
#4	.00832

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPE9T

Operator: MTW

Run Time: 08/16/00 15:14:15

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	.83703	.21724	.06494	.03560	.00003	.61831
SDev	.00179	.00592	.02914	.00322	.00029	.00006	.00461
%RSD	248.97	.70787	13.413	4.9626	.82474	200.00	.74563

#1	.00036	.83076	.22555	.06607	.03552	.00006	.61267
#2	-.00106	.83614	.18144	.06021	.03532	.00006	.62380
#3	.00321	.84505	.21075	.06744	.03601	.00006	.61933
#4	.00036	.83616	.25122	.06606	.03552	-.00006	.61745

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00093	.00231	.00076	.00523	.03737	.29342	-.00169
SDev	.00177	.00127	.00128	.00110	.00033	.12456	.00132
%RSD	189.68	55.256	168.22	20.947	.87434	42.452	78.086

#1	-.00028	.00131	.00051	.00501	.03721	.35254	.00025
#2	.00022	.00263	.00254	.00675	.03721	.42262	-.00198
#3	-.00011	.00131	.00051	.00501	.03786	.26496	-.00236
#4	-.00357	.00397	-.00051	.00414	.03721	.13357	-.00265

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	1.2046	.00261	-.00716	S-.13521	.01421	-.00600	-.01253
SDev	.0078	.00000	.00000	.00000	.00364	.00926	.02193
%RSD	.64418	.00200	.00068	.00000	25.640	154.41	175.09

#1	1.2072	.00261	-.00716	S-.13521	.01319	-.01522	-.00237
#2	1.2125	.00261	-.00716	S-.13521	.01074	-.00687	-.04298
#3	1.2046	.00261	-.00716	S-.13521	.01934	-.00787	-.01256
#4	1.1941	.00261	-.00716	S-.13521	.01358	-.00777	.00780

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	.03033	.56841	.00785	.00496	.00016	.01948	-.00014
SDev	.05644	.00987	.02320	.00006	.00018	.02453	.00000
%RSD	186.06	1.7364	295.40	1.1975	115.47	125.88	1.8496

#1	.03978	.55986	-.00297	.00491	-.00000	-.01457	-.00014
#2	.00577	.57696	-.00711	.00501	.00032	.01948	-.00013

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#3	.10403	.55986	.04243	.00491	.00032	.04220	-.00014
#4	-.02825	.57696	-.00094	.00501	-.00000	.03083	-.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	.01532
SDev	.00083
%RSD	5.4128

#1	.01444
#2	.01519
#3	.01644
#4	.01520

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPEAT

Operator: MTW

Run Time: 08/16/00 15:17:23

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
Avge	-.00092	2.3116	.18722	.17119	.30120	.00043	1.9988
SDev	.00000	.0083	.04515	.00209	.00094	.00000	.0050
%RSD	.07957	.36083	24.117	1.2218	.31063	.00000	.24991

#1	-.00092	2.3197	.17981	.17421	.30047	.00043	2.0028
#2	-.00092	2.3053	.12850	.17011	.30047	.00043	2.0023
#3	-.00092	2.3035	.20564	.16954	.30144	.00043	1.9921
#4	-.00092	2.3179	.23491	.17091	.30242	.00043	1.9978

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00080	.00277	.00254	.00528	.63743	1.6291	-.00021
SDev	.00306	.00382	.00272	.00084	.00145	.2989	.00091
%RSD	381.23	137.66	107.20	15.849	.22733	18.350	434.48

#1	.00152	.00377	.00406	.00593	.63595	1.6401	.00025
#2	-.00343	.00775	.00559	.00593	.63792	2.0255	-.00158
#3	-.00344	-.00021	-.00000	.00419	.63663	1.3073	.00025
#4	.00215	-.00022	.00050	.00506	.63923	1.5438	.00025

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.66952	.04233	-.00587	S860.36	.00907	.03536	-.01265
SDev	.01775	.00055	.00601	1721.0	.00711	.04220	.00009
%RSD	2.6508	1.2986	102.30	200.03	78.363	119.34	.72376

#1	.65898	.04280	-.00707	S-.13521	.01466	.08698	-.01264
#2	.69588	.04185	.00248	S-.13521	-.00028	.05024	-.01279
#3	.65898	.04280	-.00707	S3441.9	.01453	-.00894	-.01259
#4	.66425	.04185	-.01184	S-.13521	.00735	.01316	-.01260

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	-.03517	2.4175	.00585	.00793	.03782	.01635	-.00011
SDev	.05185	.0267	.01296	.00005	.00359	.07555	.00012
%RSD	147.43	1.1056	221.49	.64845	9.5020	462.17	111.01

#1	.00357	2.4574	.02266	.00790	.03390	.05894	-.00013
#2	-.00399	2.4061	.00487	.00790	.03678	.01346	.00006

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#3	-.03045	2.4004	.00485	.00801	.04254	.08168	-.00014
#4	-.10980	2.4061	-.00897	.00790	.03806	-.08869	-.00023

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	.04968
SDev	.00055
%RSD	1.0997

#1	.05022
#2	.04899
#3	.05000
#4	.04950

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPEDT

Operator: MTW

Run Time: 08/16/00 15:20:36

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	.00091	1.4840	.25049	.15446	.26067	.00021	8.0896
SDev	.00137	.0038	.01863	.00165	.00176	.00006	.0146
%RSD	150.83	.25319	7.4392	1.0684	.67656	28.516	.17994

#1	.00197	1.4886	.24494	.15528	.25913	.00017	8.0709
#2	.00056	1.4795	.24132	.15529	.25971	.00017	8.0868
#3	.00198	1.4831	.23761	.15528	.26069	.00029	8.1052
#4	-.00088	1.4849	.27807	.15199	.26313	.00018	8.0955

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00172	.00381	.00177	.00355	.84824	3.0766	.00186
SDev	.00301	.00374	.00153	.00110	.00145	.4296	.00113
%RSD	175.29	98.256	85.966	30.861	.17051	13.965	60.659

#1	-.00133	.00646	.00101	.00334	.84677	2.8663	.00123
#2	-.00042	.00381	-.00000	.00247	.84873	2.9277	.00143
#3	.00090	.00645	.00304	.00508	.84743	3.7159	.00355
#4	L-.00602	-.00148	.00305	.00333	.85004	2.7963	.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	4.1568	.10342	-.00704	S1720.2	.00812	.02482	.01529
SDev	.0373	.00055	.00390	1986.5	.00295	.03542	.01271
%RSD	.89678	.53329	55.415	115.48	36.299	142.71	83.138

#1	4.1463	.10294	-.01181	S-.13521	.01011	.00644	-.00235
#2	4.1094	.10295	-.00704	S3440.1	.00827	.02853	.02798
#3	4.1779	.10390	-.00226	S-.13521	.01019	.07281	.01780
#4	4.1937	.10390	-.00704	S3441.1	.00390	-.00849	.01772

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	-.05068	3.7367	.00755	.05320	.02503	-.00539	.00307
SDev	.02360	.0401	.01496	.00023	.00123	.04948	.00222
%RSD	46.577	1.0745	198.07	.42922	4.9357	918.18	72.324

#1	-.05635	3.7054	-.01476	.05296	.02431	-.03379	.00327
#2	-.01855	3.6997	.01305	.05306	.02431	-.02244	.00452

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#3	-.07524	3.7795	.01694	.05331	.02687	.06840	.00462
#4	-.05256	3.7623	.01497	.05346	.02463	-.03373	-.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	.04237
SDev	.00118
%RSD	2.7795

#1	.04238
#2	.04367
#3	.04260
#4	.04082

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPEET

Operator: MTW

Run Time: 08/16/00 15:23:50

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	-.00034	.94068	.17957	.01100	.19243	.00024	2.1944
SDev	.00083	.00314	.02896	.00248	.00132	.00007	.0072
%RSD	242.57	.33346	16.126	22.592	.68567	30.765	.32945

#1	.00039	.93795	.17677	.00919	.19082	.00017	2.1976
#2	-.00106	.93980	.16583	.01446	.19257	.00031	2.2020
#3	.00036	.93976	.15481	.00919	.19403	.00018	2.1851
#4	-.00106	.94520	.22087	.01114	.19228	.00031	2.1929

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00080	.00453	.00216	.00654	.11263	1.3861	-.00284
SDev	.00257	.00133	.00105	.00083	.00196	.4407	.00205
%RSD	319.69	29.227	48.492	12.752	1.7392	31.793	72.025

#1	-.00398	.00521	.00304	.00763	.11557	1.5788	-.00016
#2	.00042	.00519	.00102	.00589	.11165	1.3948	-.00467
#3	-.00161	.00255	.00152	.00589	.11165	.77297	-.00418
#4	.00195	.00519	.00305	.00676	.11166	1.7978	-.00236

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	2.2656	.09178	-.00356	S-.13521	.04682	.04006	-.00465
SDev	.0153	.00055	.00239	.00000	.01016	.02448	.03251
%RSD	.67508	.59886	66.984	.00000	21.706	61.099	698.64

#1	2.2853	.09131	-.00237	S-.13521	.06052	.05853	.00812
#2	2.2511	.09226	-.00237	S-.13521	.04279	.03633	-.05290
#3	2.2695	.09131	-.00237	S-.13521	.03654	.00687	.01815
#4	2.2563	.09226	-.00715	S-.13521	.04744	.05852	.00802

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	-.00632	.64678	.00837	.02336	.00744	.03906	.00110
SDev	.05768	.03132	.02346	.00012	.00031	.02518	.00235
%RSD	913.05	4.8428	280.20	.50576	4.1180	64.485	213.27

#1	-.01670	.61691	.02276	.02345	.00768	.03048	.00462
#2	.07021	.62254	.01654	.02345	.00704	.03055	-.00004

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#3	-.06962	.67383	-.02660	.02320	.00736	.01921	-.00004
#4	-.00915	.67383	.02078	.02334	.00768	.07598	-.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	.11270
SDev	.00213
%RSD	1.8885

#1	.11119
#2	.11557
#3	.11305
#4	.11099

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHPF2T

Operator: MTW

Run Time: 08/16/00 15:26:58

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
Avg	.00164	3.3394	.17097	.42521	.39382	.00114	15.955
SDev	.00136	.0228	.01247	.00071	.00323	.00001	.145
%RSD	82.905	.68341	7.2911	.16591	.81990	.62392	.90856
#1	.00056	3.3421	.18385	.42554	.39399	.00115	15.895
#2	.00058	3.3225	.15456	.42415	.39037	.00114	15.878
#3	.00200	3.3224	.16922	.42557	.39281	.00114	16.172
#4	.00341	3.3707	.17625	.42558	.39810	.00115	15.874
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00217	.01426	.00368	.00697	2.5984	3.5692	.00292
SDev	.00330	.00153	.00162	.00000	.0140	.0914	.00092
%RSD	152.05	10.721	44.195	.02283	.53786	2.5611	31.579
#1	-.00396	.01294	.00253	.00697	2.5906	3.6546	.00308
#2	.00243	.01558	.00507	.00697	2.5828	3.6284	.00221
#3	L-.00504	.01560	.00507	.00697	2.6089	3.5408	.00221
#4	-.00210	.01294	.00203	.00697	2.6115	3.4532	.00415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	5.9479	2.1734	-.00916	S1720.6	.03056	.01251	.02054
SDev	.0467	.0140	.00276	1986.9	.00688	.01803	.02254
%RSD	.78487	.64296	30.114	115.48	22.505	144.06	109.74
#1	5.9440	2.1667	-.01155	S-.13521	.03000	.02723	.02818
#2	5.8834	2.1590	-.01155	S3442.2	.02584	-.00954	.02812
#3	5.9809	2.1915	-.00677	S3440.4	.02595	.02726	-.01249
#4	5.9835	2.1762	-.00677	S-.13521	.04046	.00511	.03836
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	-.01583	7.5475	-.00168	.06656	.07996	.05055	.00682
SDev	.07260	.0675	.00797	.00078	.00145	.05787	.00269
%RSD	458.65	.89410	475.24	1.1782	1.8184	114.48	39.502
#1	-.08577	7.4891	-.01251	.06669	.08028	-.02887	.00444
#2	.01247	7.4892	-.00264	.06550	.08188	.07331	.00911

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#3	.07301	7.6031	.00312	.06665	.07900	.10729	.00920
#4	-.06304	7.6088	.00533	.06740	.07868	.05046	.00453
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	.09658
SDev	.00215
%RSD	2.2221

#1	.09376
#2	.09836
#3	.09813
#4	.09605

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHQXNT

Operator: MTW

Run Time: 08/16/00 15:30:11

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	-.00305	3.4661	.21921	.67409	1.1523	.00028	535.52
SDev	.00116	.0142	.02625	.01420	.0050	.00001	.62
%RSD	37.999	.40864	11.973	2.1065	.43017	1.6131	.11647
#1	-.00306	3.4599	.19633	.66743	1.1502	.00028	535.44
#2	-.00164	3.4795	.20350	.69168	1.1556	.00028	536.19
#3	-.00448	3.4759	.22189	.67839	1.1571	.00028	534.71
#4	-.00304	3.4491	.25511	.65884	1.1463	.00027	535.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00094	.00096	.03365	.02140	3.5843	2.9649	.00221
SDev	.00362	.00200	.00217	.00087	.0087	.2595	.00134
%RSD	386.78	208.86	6.4547	4.0721	.24366	8.7516	60.386
#1	.00231	.00195	.03403	.02183	3.5750	2.9277	.00103
#2	-.00079	-.00070	.03504	.02183	3.5946	3.2255	.00135
#3	.00076	-.00071	.03505	.02009	3.5881	2.6211	.00250
#4	L-.00602	.00329	.03047	.02183	3.5796	3.0853	.00398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	19.866	.26292	-.00782	S1721.0	.02018	.03582	.02519
SDev	.052	.00078	.00457	1987.4	.01003	.01741	.02085
%RSD	.26103	.29688	58.459	115.48	49.730	48.594	82.797
#1	19.862	.26292	-.00663	S-.13521	.01469	.04878	.04793
#2	19.933	.26292	-.01140	S3442.0	.03430	.03393	.02786
#3	19.862	.26388	-.00185	S-.13521	.01167	.04867	.02758
#4	19.806	.26197	-.01140	S3442.2	.02005	.01190	-.00264
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	-.02835	12.336	.02128	1.0080	.07437	.10350	.01011
SDev	.02398	.074	.00907	.0036	.00277	.06322	.00170
%RSD	84.587	.59684	42.638	.35580	3.7248	61.082	16.805
#1	.00375	12.281	.03325	1.0057	.07101	.13198	.00926
#2	-.05289	12.384	.01537	1.0104	.07325	.16587	.00917

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#3	-.03779	12.413	.02326	1.0116	.07613	.01831	.00936
#4	-.02647	12.264	.01323	1.0042	.07708	.09783	.01266
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	.05449
SDev	.00108
%RSD	1.9802

#1	.05454
#2	.05492
#3	.05298
#4	.05551

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHQXQT

Operator: MTW

Run Time: 08/16/00 15:33:24

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	-.00391	4.1399	.15952	.39961	1.1449	.00021	597.80
SDev	.00269	.0079	.04195	.00340	.0047	.00007	3.00
%RSD	68.974	.19172	26.296	.85153	.40665	33.943	.50176

#1	-.00568	4.1480	.18242	.39676	1.1475	.00015	594.64
#2	-.00569	4.1301	.09811	.39674	1.1392	.00027	596.51
#3	-.00426	4.1444	.18977	.40149	1.1497	.00027	598.37
#4	.00001	4.1372	.16777	.40347	1.1434	.00015	H601.68

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	.00050	.00391	.00825	.01994	4.3823	2.8510	.00428
SDev	.00247	.00133	.00254	.00044	.0201	.3250	.00034
%RSD	495.93	33.910	30.757	2.1831	.45785	11.400	7.9772

#1	-.00177	.00457	.00456	.01929	4.3735	2.3846	.00467
#2	.00043	.00457	.01015	.02016	4.3598	3.1379	.00418
#3	-.00061	.00192	.00863	.02016	4.3898	2.9189	.00386
#4	.00394	.00457	.00964	.02016	4.4061	2.9627	.00438

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	20.373	.23763	-.00531	S-.13521	.01840	.03529	.03302
SDev	.069	.00197	.00239	.00000	.00561	.01840	.02418
%RSD	.33756	.82918	44.891	.00000	30.480	52.138	73.238

#1	20.402	.23739	-.00651	S-.13521	.01346	.03344	.01781
#2	20.273	.23548	-.00174	S-.13521	.02007	.05559	.02790
#3	20.428	.23740	-.00651	S-.13521	.01448	.04074	.01778
#4	20.389	.24026	-.00650	S-.13521	.02560	.01140	.06858

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	-.03381	14.279	-.00183	1.1249	.09492	.00706	.01390
SDev	.05078	.036	.00982	.0036	.00307	.05896	.00005
%RSD	150.22	.25553	537.56	.31955	3.2366	835.37	.35109

#1	-.05839	14.265	-.01030	1.1264	.09692	.07812	.01387
#2	-.08111	14.253	.00554	1.1203	.09788	-.03531	.01397

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						667	853
#3	.03613	14.265	-.01029	1.1287	.09372	.03255	.01387
#4	-.03185	14.333	.00774	1.1241	.09116	-.04712	.01388
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 .05653
SDev .00195
%RSD 3.4482

#1 .05876
#2 .05417
#3 .05725
#4 .05595

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHQXRT

Operator: MTW

Run Time: 08/16/00 15:36:33

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	.00011	.51971	.18989	.37687	1.0015	.00042	111.06
SDev	.00214	.00887	.04666	.01991	.0047	.00014	.41
%RSD	1969.9	1.7073	24.573	5.2843	.46574	33.070	.37022
#1	.00189	.53040	.20540	.36693	1.0061	.00029	111.32
#2	.00189	.52148	.19445	.36691	.99630	.00054	110.79
#3	-.00095	.50895	.23495	.40675	.99883	.00054	111.50
#4	-.00239	.51799	.12477	.36691	1.0047	.00030	110.64
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00015	.00279	.00308	.41715	1.4584	.00201
SDev	.00146	.00276	.00257	.00083	.00311	.4454	.00040
%RSD	654.04	1843.7	92.275	27.076	.74435	30.544	20.144
#1	-.00006	-.00317	.00050	.00242	.42042	.94815	.00221
#2	.00223	.00346	.00355	.00330	.41911	1.9204	.00140
#3	.00000	-.00052	.00609	.00417	.41521	1.7277	.00221
#4	-.00128	.00082	.00101	.00243	.41389	1.2372	.00221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	14.936	.04635	-.00829	S860.36	.01882	.02171	.00275
SDev	.043	.00048	.00457	1721.0	.00610	.02170	.02686
%RSD	.28833	1.0316	55.123	200.03	32.427	99.964	977.68
#1	14.948	.04659	-.01187	S-.13521	.01744	.04376	.02817
#2	14.872	.04659	-.00232	S-.13521	.01358	.02916	-.00245
#3	14.961	.04659	-.00710	S3441.8	.02763	.02172	.01799
#4	14.961	.04563	-.01188	S-.13521	.01664	-.00781	-.03272
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	.00488	5.2667	-.00289	.50729	.00392	.01864	.00363
SDev	.01676	.0543	.02085	.00186	.00210	.04943	.00180
%RSD	343.60	1.0305	722.33	.36623	53.478	265.20	49.500
#1	.01056	5.3237	-.02252	.50917	.00320	-.01828	.00443
#2	.01055	5.2326	.02278	.50528	.00256	-.02968	.00462

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#3	-.01969	5.3009	.00508	.50617	.00704	.06124	
#4	.01810	5.2097	-.01688	.50853	.00288	.06126	
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	.03589						
SDev	.00149						
%RSD	4.1428						
#1	.03627						
#2	.03681						
#3	.03369						
#4	.03679						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: CCV2-6

Operator: MTW

Run Time: 08/16/00 15:39:46

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	1.0102	51.124	5.0507	5.0295	5.0153	5.0510	51.766
SDev	.0035	.334	.0558	.0255	.0521	.0256	.119
%RSD	.34693	.65320	1.1050	.50670	1.0382	.50701	.23074
#1	1.0125	51.535	5.0073	5.0423	5.0784	5.0808	51.685
#2	1.0123	51.130	5.0330	5.0515	5.0160	5.0513	51.829
#3	1.0109	51.112	5.1326	5.0308	5.0160	5.0537	51.648
#4	1.0050	50.717	5.0298	4.9934	4.9509	5.0183	51.902
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	5.0612	5.0183	5.0253	5.0137	52.237	50.545	4.9979
SDev	.0175	.0146	.0080	.0495	.189	.379	.0762
%RSD	.34532	.29065	.16009	.98818	.36140	.74955	1.5242
#1	5.0399	5.0182	5.0363	5.0711	52.471	50.935	5.0828
#2	5.0781	5.0354	5.0261	5.0163	52.279	50.436	4.9966
#3	5.0725	5.0196	5.0195	5.0171	52.176	50.742	5.0140
#4	5.0542	4.9998	5.0190	4.9501	52.021	50.068	4.8982
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	50.962	5.0053	5.0192	50.818	5.0788	5.0520	5.1108
SDev	.311	.0123	.0262	.573	.0134	.0317	.0314
%RSD	.61005	.24480	.52164	1.1283	.26372	.62823	.61420
#1	51.290	5.0192	5.0526	51.512	5.0755	5.0057	5.1155
#2	51.031	5.0115	5.0239	50.719	5.0872	5.0728	5.1261
#3	50.986	4.9982	5.0096	50.921	5.0614	5.0724	5.1361
#4	50.541	4.9924	4.9905	50.122	5.0912	5.0573	5.0655
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	5.1981	5.1130	5.0569	5.0475	4.9978	10.184	5.0387
SDev	.0745	.0152	.0245	.0447	.0266	.112	.0185
%RSD	1.4330	.29631	.48401	.88633	.53301	1.1023	.36667
#1	5.2233	5.1147	5.0830	5.1015	5.0313	10.343	5.0598
#2	5.2908	5.1259	5.0673	5.0503	4.9996	10.130	5.0441

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#3	5.1545	5.1201	5.0516	5.0462	4.9939	10.176	5.0356
#4	5.1238	5.0914	5.0256	4.9920	4.9664	10.087	5.0154
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	4.9855
SDev	.0046
%RSD	.09205

#1	4.9901
#2	4.9793
#3	4.9875
#4	4.9851

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB6

Operator: MTW

Run Time: 08/16/00 15:42:54

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	.00000	.01251	.02193	.00084	.00075	.00040	.00471
SDev	.00136	.00607	.01651	.00304	.00024	.00021	.00419
%RSD	97927.	48.537	75.305	361.13	32.381	52.548	88.990
#1	-.00106	.00668	.01187	.00235	.00063	.00043	.00292
#2	-.00106	.01204	.04488	-.00097	.00063	.00018	.00015
#3	.00036	.01034	.00818	-.00233	.00063	.00031	.00582
#4	.00178	.02098	.02277	.00431	.00112	.00067	.00994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	-.00000	-.00025	.00000	.00604	.06569	-.00008
SDev	.00309	.00001	.00168	.00044	.00258	.07306	.00076
%RSD	871.86	559.44	662.85	90445.	42.684	111.22	960.42
#1	-.00394	.00001	-.00203	.00065	.00522	.03723	-.00025
#2	.00086	-.00000	-.00051	-.00022	.00392	.13357	-.00094
#3	.00340	-.00001	.00203	-.00022	.00522	-.02409	-.00004
#4	.00110	-.00000	-.00051	-.00022	.00979	.11605	.00091
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	.01186	.00024	.00000	.03283	.00991	.01470	-.02526
SDev	.01436	.00055	.00477	.01405	.00600	.01806	.00510
%RSD	121.04	230.08	528640.	42.809	60.531	122.86	20.190
#1	.00791	.00072	.00239	.02123	.01677	.02945	-.02271
#2	-.00264	-.00024	.00239	.02427	.01171	.00733	-.02269
#3	.01054	-.00024	-.00716	.03337	.00241	-.00742	-.03290
#4	.03163	.00072	.00239	.05244	.00876	.02944	-.02272
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	.01608	.00285	-.00802	.00059	.00016	.06523	-.00000
SDev	.04190	.00546	.01696	.00029	.00061	.08031	.00009
%RSD	260.60	191.49	211.49	49.032	382.97	123.12	18395.
#1	.04348	-.00427	.01669	.00051	-.00064	.01982	.00004
#2	.04725	.00712	-.02086	.00041	.00064	.16745	.00005

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#3	-.04345	.00712	-.01102	.00041	-.00000	.08795	-.00013
#4	.01703	.00142	-.01690	.00101	.00064	-.01429	.00005

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	-.00015
SDev	.00124
%RSD	851.70

#1	-.00006
#2	-.00131
#3	-.00076
#4	.00154

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHWJFB

Operator: MTW

Run Time: 08/16/00 15:46:03

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	.00141	.01258	.06786	.00928	.00044	.00003	.03431
SDev	.00243	.01274	.02616	.01682	.00024	.00011	.00754
%RSD	172.02	101.22	38.550	181.25	54.437	326.25	21.989
#1	-.00109	-.00568	.10387	.00430	.00034	-.00005	.02679
#2	.00461	.01931	.07055	-.00233	.00063	-.00006	.03198
#3	.00036	.02288	.04847	.00097	.00014	.00006	.03372
#4	.00178	.01382	.04854	.03419	.00063	.00018	.04472
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	.00202	.00066	-.00051	.00000	.00457	-.06569	-.00115
SDev	.00143	.00383	.00245	.00083	.00151	.34980	.00038
%RSD	70.628	581.85	482.42	86610.	33.020	532.48	32.825
#1	.00019	.00000	-.00406	-.00109	.00326	-.54962	-.00123
#2	.00272	.00132	.00051	-.00022	.00588	.03723	-.00062
#3	.00349	.00530	.00152	.00066	.00326	.28247	-.00152
#4	.00167	-.00398	-.00000	.00065	.00588	-.03285	-.00123
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	.00923	.00048	-.00477	.02438	.00466	.00551	-.02019
SDev	.01087	.00048	.00276	.00760	.00539	.01256	.02404
%RSD	117.80	99.948	57.743	31.179	115.84	227.95	119.04
#1	-.00264	.00071	-.00716	.01387	.00273	.02208	-.02276
#2	.00791	.00071	-.00716	.02904	.00652	.00739	-.00238
#3	.02372	.00071	-.00239	.02383	.01101	-.00724	-.00239
#4	.00791	-.00024	-.00239	.03077	-.00164	-.00019	-.05324
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	-.01888	.00710	-.01294	.00008	-.00000	.02267	-.00155
SDev	.02768	.00660	.01433	.00013	.00052	.03262	.00225
%RSD	146.60	92.947	110.77	161.90	1085e6	143.85	145.26
#1	.02079	.00136	.00681	.00001	-.00064	-.00283	-.00481
#2	-.03589	.00141	-.02669	.00001	.00064	.03117	-.00130

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#3	-.03967	.01282	-.01285	.00001	-.00000	-.00291	-.00004
#4	-.02077	.01282	-.01902	.00026	-.00000	.06526	-.00005

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	.00164
SDev	.00027
%RSD	16.652

#1	.00177
#2	.00177
#3	.00123
#4	.00180

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHWJFC

Operator: MTW

Run Time: 08/16/00 15:49:11

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	.04958	2.0003	1.9966	.98755	2.0121	.05057	L.05374
SDev	.00135	.0113	.0956	.02494	.0226	.00032	.00296
%RSD	2.7266	.56708	4.7868	2.5251	1.1224	.62473	5.5044

#1	.04854	2.0110	2.0680	.99122	2.0300	.05074	L.05125
#2	.04852	2.0020	2.0535	1.0065	2.0326	.05087	L.05152
#3	.04991	1.9843	2.0060	.95137	1.9879	.05015	L.05470
#4	.05136	2.0039	1.8588	1.0012	1.9977	.05051	L.05751

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	.04900	.50481	.20304	.25233	1.0726	L.37663	.97663
SDev	.00173	.00077	.00196	.00207	.0053	.39563	.01221
%RSD	3.5261	.15223	.96707	.82134	.49439	105.04	1.2498

#1	.05056	.50546	.20189	.25363	1.0778	L-.12919	.98660
#2	.04895	.50413	.20596	.25450	1.0758	L.36130	.98718
#3	.04660	.50549	.20240	.25102	1.0660	L.83428	.96278
#4	.04987	.50415	.20189	.25015	1.0706	L.44013	.96996

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.02241	.50154	-.00461	L.05796	.52431	.52480	L.01466
SDev	.01632	.00302	.00478	.00843	.00481	.03325	.01661
%RSD	72.840	.60165	103.48	14.541	.91713	6.3353	113.33

#1	L.00791	.50250	-.00700	L.05677	.52545	.48427	L.01465
#2	L.01318	.50536	.00255	L.04897	.52037	.52107	L-.00573
#3	L.04481	.49868	-.00700	L.05677	.53064	.56537	L.01476
#4	L.02372	.49964	-.00700	L.06934	.52078	.52850	L.03497

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	2.0002	.01777	-.02048	1.0161	.00008	2.0254	.49903
SDev	.0415	.00281	.02058	.0108	.00031	.0880	.00381
%RSD	2.0754	15.818	100.53	1.0676	382.97	4.3451	.76277

#1	2.0002	.01355	.00917	1.0248	-.00000	1.9912	.50364
#2	1.9586	.01919	-.02254	1.0260	-.00032	2.0140	.49917

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#3	1.9850	.01913	-.03629	1.0050	.00032	2.1504	.49432
#4	2.0569	.01919	-.03224	1.0085	.00032	1.9459	.49898
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	.49262						
SDev	.00209						
%RSD	.42345						
#1	.49308						
#2	.49001						
#3	.49506						
#4	.49235						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DHT3F

Operator: MTW

Run Time: 08/16/00 15:52:24

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	-.00170	1.6539	.03173	.04875	.07503	.00014	17.606
SDev	.00213	.0142	.03208	.00172	.00034	.00006	.049
%RSD	124.84	.85960	101.12	3.5338	.44837	43.972	.27726

#1	-.00065	1.6709	.07570	.04983	.07530	.00018	17.620
#2	-.00347	1.6440	-.00126	.04729	.07530	.00017	17.537
#3	-.00348	1.6404	.02448	.05059	.07490	.00017	17.614
#4	.00078	1.6601	.02800	.04726	.07461	.00005	17.652

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	-.00163	.00917	.00470	.03289	2.9726	6.0918	-.00037
SDev	.00288	.00108	.00096	.00083	.0082	.3187	.00048
%RSD	176.89	11.767	20.467	2.5354	.27627	5.2322	130.20

#1	-.00148	.01049	.00406	.03311	2.9802	6.3699	-.00025
#2	-.00492	.00785	.00406	.03223	2.9783	5.6341	-.00062
#3	-.00218	.00917	.00609	.03398	2.9691	6.2122	-.00085
#4	.00207	.00916	.00457	.03223	2.9626	6.1509	.00025

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5977	1.4944	-.00194	86.373	.01008	.01326	-.01266
SDev	.0188	.0020	.00000	.357	.00414	.04464	.02483
%RSD	.72465	.13152	.06320	.41331	41.068	336.57	196.17

#1	2.5990	1.4966	-.00194	86.576	.00737	-.00878	.01771
#2	2.5779	1.4927	-.00194	86.742	.00727	-.01629	-.04310
#3	2.6227	1.4927	-.00194	86.231	.00960	.07961	-.01260
#4	2.5911	1.4956	-.00194	85.943	.01607	-.00148	-.01262

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	-.01106	5.8693	-.00018	.10195	.05166	.03157	.00376
SDev	.02194	.0028	.02312	.00045	.00041	.04538	.00175
%RSD	198.30	.04842	13177.	.44010	.79938	143.76	46.522

#1	-.00915	5.8707	.02318	.10232	.05214	.00880	.00114
#2	.01729	5.8651	-.00476	.10221	.05150	.09963	.00463

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#3	-.03564	5.8708	-.03031	.10196	.05118	.00887	.00464
#4	-.01676	5.8708	.01118	.10132	.05182	.00896	.00463
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	.06320
SDev	.00176
%RSD	2.7851

#1	.06209
#2	.06570
#3	.06314
#4	.06186

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT3M

Operator: MTW

Run Time: 08/16/00 15:55:33

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	-.00312	1.8571	.01685	.05903	.06706	.00021	91.905
SDev	.00164	.0175	.01293	.00157	.00060	.00012	.583
%RSD	52.614	.93990	76.772	2.6590	.89312	55.396	.63449

#1	-.00171	1.8320	.00609	.05821	.06631	.00031	91.471
#2	-.00455	1.8660	.00580	.05825	.06708	.00006	91.342
#3	-.00453	1.8588	.02412	.05827	.06777	.00017	92.315
#4	-.00169	1.8713	.03137	.06138	.06708	.00029	92.494

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00374	.03239	.01321	.03499	1.7922	7.2808	-.00054
SDev	.00243	.00132	.00215	.00083	.0123	.3655	.00201
%RSD	64.985	4.0856	16.308	2.3843	.68620	5.0201	370.87

#1	.00667	.03304	.01118	.03564	1.7751	7.2983	.00025
#2	.00238	.03040	.01168	.03390	1.7921	6.7728	-.00259
#3	.00470	.03305	.01574	.03565	1.8032	7.4210	-.00172
#4	.00122	.03306	.01422	.03477	1.7986	7.6312	.00190

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.7269	5.3288	-.00212	44.954	.01999	.04540	-.00489
SDev	.0484	.0274	.00390	.487	.00599	.00708	.01922
%RSD	.71898	.51352	183.90	1.0825	29.972	15.591	392.97

#1	6.6636	5.2919	.00265	44.288	.02782	.04361	.00783
#2	6.7189	5.3243	-.00689	45.421	.01608	.03613	-.00236
#3	6.7479	5.3491	-.00212	45.174	.02145	.05091	-.03281
#4	6.7769	5.3501	-.00212	44.932	.01461	.05096	.00778

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	.00756	4.9747	-.01069	.34144	.03766	.05383	.00232
SDev	.01128	.0150	.01040	.00294	.00055	.07000	.00270
%RSD	149.22	.30148	97.320	.85997	1.4504	130.04	116.43

#1	.01035	4.9533	-.00470	.33714	.03774	-.02568	.00007
#2	.01795	4.9875	-.01265	.34363	.03710	.05384	-.00011

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#3	.01042	4.9818	-.00093	.34288	.03742	.14465	.00465
#4	-.00849	4.9761	-.02446	.34213	.03838	.04250	.00465

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	.18054
SDev	.00216
%RSD	1.1980

#1	.18273
#2	.18023
#3	.17768
#4	.18153

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT3N

Operator: MTW

Run Time: 08/16/00 15:58:41

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	-.00166	1.8162	.06543	.05953	.05612	.00022	109.82
SDev	.00202	.0141	.01487	.00382	.00029	.00007	.63
%RSD	121.59	.77544	22.728	6.4263	.52314	31.930	.57412
#1	-.00167	1.8139	.06182	.05591	.05605	.00029	109.13
#2	-.00023	1.8140	.05440	.05727	.05605	.00016	109.60
#3	-.00451	1.8014	.05823	.06041	.05653	.00017	109.93
#4	-.00023	1.8354	.08727	.06452	.05585	.00028	110.63
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00423	.02843	.01194	.07782	1.2871	7.7428	.00112
SDev	.00085	.00171	.00097	.00050	.0053	.1254	.00048
%RSD	20.150	6.0281	8.1428	.64423	.40893	1.6193	42.789
#1	.00512	.02777	.01118	.07825	1.2848	7.6574	.00140
#2	.00308	.03043	.01117	.07738	1.2809	7.6136	.00094
#3	.00429	.02910	.01219	.07738	1.2900	7.8589	.00054
#4	.00445	.02644	.01320	.07825	1.2926	7.8414	.00161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.0540	4.6672	.00974	43.914	.02080	.03440	.01029
SDev	.0305	.0151	.00276	.338	.00267	.02202	.02092
%RSD	.50448	.32390	28.298	.76956	12.843	64.009	203.30
#1	6.0362	4.6568	.01213	44.290	.02364	.00671	-.01250
#2	6.0204	4.6520	.00735	43.621	.02026	.02897	.03823
#3	6.0758	4.6777	.01213	44.111	.01736	.05838	.00767
#4	6.0837	4.6825	.00736	43.637	.02192	.04355	.00777
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	-.02023	4.8024	-.00523	.36759	.02495	-.00998	.00749
SDev	.01673	.0257	.01298	.00189	.00026	.05666	.00235
%RSD	82.679	.53534	248.06	.51334	1.0468	567.54	31.366
#1	-.00228	4.7995	-.02065	.36931	.02495	.06666	.00492
#2	-.03631	4.7882	-.00658	.36531	.02495	-.00152	.00949

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#3	-.00983	4.7824	.01106	.36895	.02463	-.04686	.00608
#4	-.03250	4.8394	-.00475	.36677	.02527	-.05821	.00949
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	.16597						
SDev	.00170						
%RSD	1.0246						
#1	.16429						
#2	.16791						
#3	.16484						
#4	.16686						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DHT3V

Operator: MTW

Run Time: 08/16/00 16:01:49

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	-.00116	1.2816	.02658	.05126	.06460	.00012	19.732
SDev	.00136	.0040	.04703	.00163	.00020	.00012	.044
%RSD	117.19	.30914	176.95	3.1726	.31357	98.443	.22234
#1	.00061	1.2830	.04678	.05155	.06455	.00006	19.681
#2	-.00224	1.2776	.02479	.04902	.06484	.00006	19.709
#3	-.00224	1.2794	-.03765	.05292	.06464	.00006	19.765
#4	-.00079	1.2866	.07239	.05155	.06435	.00029	19.772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00620	.00228	.00627	2.1438	6.2670	-.00086
SDev	.00091	.00167	.00192	.00044	.0038	.3620	.00107
%RSD	292.70	26.932	84.182	6.9573	.17638	5.7765	124.61
#1	-.00034	.00388	.00355	.00605	2.1387	6.0020	-.00123
#2	.00118	.00653	-.00051	.00605	2.1479	5.9495	-.00152
#3	.00100	.00653	.00356	.00605	2.1446	6.3962	-.00143
#4	-.00060	.00786	.00254	.00692	2.1440	6.7202	.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	3.0320	1.2994	-.00445	95.000	.01075	.01549	.01526
SDev	.0147	.0012	.00276	.153	.00345	.03091	.00969
%RSD	.48340	.09482	61.900	.16131	32.089	199.62	63.494
#1	3.0260	1.2990	-.00684	95.066	.00769	.00623	.02787
#2	3.0155	1.2999	-.00207	95.161	.01044	-.01584	.00769
#3	3.0498	1.3009	-.00207	94.974	.00922	.05787	.00761
#4	3.0366	1.2980	-.00684	94.801	.01564	.01369	.01785
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	-.04443	6.3209	.01169	.11416	.04182	.01635	.00138
SDev	.01323	.0114	.01423	.00011	.00055	.01857	.00217
%RSD	29.782	.18035	121.73	.09772	1.3062	113.55	157.54
#1	-.04916	6.3038	.02706	.11405	.04254	.03914	.00104
#2	-.03780	6.3266	-.00662	.11410	.04126	.01632	-.00004

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#3	-.03025	6.3266	.00918	.11420	.04158	-.00635	-.00003
#4	-.06049	6.3266	.01713	.11430	.04190	.01631	.00453
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 .05448
SDev .00113
%RSD 2.0808

#1 .05444
#2 .05442
#3 .05592
#4 .05315

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHT3W

Operator: MTW

Run Time: 08/16/00 16:04:58

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	-.00152	4.5882	.00120	.05434	.10410	.00044	23.554
SDev	.00136	.0119	.02652	.00456	.00053	.00006	.043
%RSD	89.284	.25978	2209.4	8.3925	.50658	14.311	.18108
#1	-.00046	4.5896	.02141	.05752	.10393	.00042	23.565
#2	-.00046	4.5718	-.02985	.05611	.10344	.00054	23.522
#3	-.00330	4.5914	.02506	.04757	.10462	.00042	23.520
#4	-.00186	4.6002	-.01181	.05616	.10442	.00040	23.610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00113	.00642	.00457	.01187	4.1287	8.1436	.00086
SDev	.00313	.00287	.00161	.00112	.0087	.2642	.00069
%RSD	275.74	44.735	35.158	9.4764	.21020	3.2440	80.222
#1	.00179	.00509	.00406	.01056	4.1306	8.0516	.00074
#2	L-.00543	.01042	.00558	.01318	4.1163	8.3056	.00172
#3	-.00128	.00642	.00254	.01144	4.1365	7.8151	.00004
#4	.00039	.00377	.00609	.01230	4.1313	8.4019	.00094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8768	1.9988	-.00655	96.038	.01075	.01481	-.01778
SDev	.0208	.0042	.00000	.274	.00410	.01857	.01309
%RSD	.53645	.20799	.01983	.28484	38.165	125.40	73.659
#1	3.8484	2.0022	-.00654	96.035	.01331	.03318	-.03295
#2	3.8748	1.9936	-.00655	95.797	.00831	.01861	-.02290
#3	3.8880	1.9974	-.00654	96.422	.00633	.01851	-.00254
#4	3.8959	2.0022	-.00654	95.899	.01505	-.01106	-.01271
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	-.04676	8.1430	.00085	.13057	.09596	.04235	.00571
SDev	.01285	.0108	.02023	.00038	.00045	.05191	.00233
%RSD	27.474	.13250	2386.4	.28831	.47140	122.58	40.858
#1	-.03636	8.1501	-.01256	.13074	.09596	-.01157	.00454
#2	-.03640	8.1273	.01713	.13014	.09532	.06797	.00455

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#3	-.06280	8.1501	-.02032	.13099	.09628	.10189	.00454
#4	-.05147	8.1445	.01915	.13039	.09628	.01111	.00921
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 .07738
SDev .00108
%RSD 1.3930

#1 .07891
#2 .07637
#3 .07713
#4 .07712

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHT3WP5

Operator: MTW

Run Time: 08/16/00 16:08:06

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	.00013	.91340	.01822	.00560	.02096	.00002	4.7803
SDev	.00243	.00623	.01495	.00484	.00024	.00006	.0311
%RSD	1806.1	.68202	82.061	86.346	1.1384	255.03	.64963
#1	.00334	.91115	.02923	.00589	.02115	.00005	4.8130
#2	-.00095	.90585	.00366	.00862	.02087	-.00006	4.7388
#3	-.00235	.91655	.03286	-.00132	.02067	.00005	4.7790
#4	.00050	.92006	.00713	.00922	.02115	.00005	4.7902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00056	.00161	.00127	.00224	.83484	1.6226	-.00076
SDev	.00112	.00127	.00065	.00084	.00504	.3326	.00106
%RSD	201.27	78.713	51.748	37.187	.60359	20.499	139.36
#1	.00107	.00261	.00101	.00246	.83500	2.0255	.00054
#2	.00097	-.00004	.00050	.00159	.82782	1.2109	-.00172
#3	-.00111	.00262	.00203	.00333	.83957	1.6226	-.00152
#4	.00131	.00128	.00152	.00159	.83696	1.6313	-.00033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	.78418	.40448	-.00943	18.858	.00521	.00666	-.00495
SDev	.00975	.00143	.00276	.084	.00332	.02889	.01282
%RSD	1.2426	.35402	29.252	.44325	63.724	434.04	258.85
#1	.78550	.40520	-.00704	18.736	.00196	-.00808	-.02282
#2	.77232	.40233	-.01181	18.903	.00947	-.02286	-.00235
#3	.79605	.40520	-.01181	18.921	.00607	.04354	-.00235
#4	.78287	.40520	-.00704	18.870	.00332	.01403	.00771
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	-.00819	1.6298	-.01821	.02613	.01879	.00782	.00332
SDev	.03834	.0391	.02422	.00013	.00048	.07328	.00236
%RSD	467.90	2.3963	133.02	.47786	2.5532	937.49	71.246
#1	.04566	1.6084	.01678	.02619	.01919	-.04330	.00453
#2	-.01861	1.5856	-.02857	.02594	.01855	-.03183	-.00023

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#3	-.04503	1.6654	-.03845	.02619	.01823	-.00928	.00444
#4	-.01480	1.6597	-.02260	.02619	.01919	.11567	.00453
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	.01657
SDev	.00193
%RSD	11.663

#1	.01773
#2	.01821
#3	.01389
#4	.01646

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT3WS

Operator: MTW

Run Time: 08/16/00 16:11:14

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	.04799	6.4879	1.9860	1.0488	2.0648	.05074	23.280
SDev	.00072	.0111	.0540	.0047	.0049	.00012	.052
%RSD	1.4915	.17058	2.7185	.44664	.23772	.22815	.22472
#1	.04763	6.4722	1.9394	1.0422	2.0656	.05065	23.257
#2	.04906	6.4936	2.0493	1.0521	2.0593	.05064	23.359
#3	.04764	6.4973	2.0126	1.0521	2.0710	.05089	23.256
#4	.04763	6.4884	1.9429	1.0488	2.0632	.05077	23.250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04613	.49701	.20215	.25786	5.1146	8.2092	.97247
SDev	.00198	.00294	.00147	.00207	.0031	.3379	.00649
%RSD	4.2945	.59099	.72510	.80411	.06109	4.1166	.66710
#1	.04478	.49336	.20190	.25743	5.1170	8.3406	.96984
#2	.04445	.49867	.20037	.25656	5.1105	8.2881	.96550
#3	.04877	.49998	.20393	.26091	5.1137	8.4895	.98078
#4	.04651	.49601	.20241	.25656	5.1170	7.7188	.97378
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.8326	2.4624	-.00162	94.590	.51096	.48770	-.00348
SDev	.0078	.0037	.00390	.381	.00959	.00857	.01282
%RSD	.20247	.14998	240.24	.40238	1.8769	1.7569	367.94
#1	3.8247	2.4639	-.00162	94.488	.52205	.48027	.01438
#2	3.8326	2.4658	.00315	94.156	.50915	.49511	-.00606
#3	3.8300	2.4629	-.00162	95.073	.51363	.49514	-.01615
#4	3.8432	2.4572	-.00640	94.644	.49902	.48030	-.00611
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	2.0099	8.0595	-.00186	1.1233	.09508	1.9948	.49268
SDev	.0571	.0114	.00995	.0028	.00016	.1065	.00207
%RSD	2.8406	.14160	535.17	.24848	.16821	5.3392	.42058
#1	1.9353	8.0651	-.01412	1.1237	.09500	1.9494	.49093
#2	2.0297	8.0652	.00949	1.1205	.09532	1.9267	.49451

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#3	2.0713	8.0652	.00154	1.1270	.09500	2.1538	.49443
#4	2.0033	8.0424	-.00434	1.1220	.09500	1.9493	.49084

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	.55849
SDev	.00371
%RSD	.66440

#1	.55518
#2	.55554
#3	.56261
#4	.56064

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT3WD

Operator: MTW

Run Time: 08/16/00 16:14:22

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
Avg	.04872	6.5938	1.9612	1.0271	2.0542	.05028	23.915
SDev	.00137	.0275	.0441	.0179	.0109	.00017	.100
%RSD	2.8102	.41666	2.2480	1.7453	.52943	.34482	.41659
#1	.04765	6.6099	1.9932	1.0489	2.0544	.05028	23.841
#2	.04905	6.5616	1.9312	1.0124	2.0441	.05017	23.818
#3	.04766	6.6224	1.9159	1.0125	2.0693	.05052	24.004
#4	.05052	6.5813	2.0043	1.0347	2.0490	.05014	23.998
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.04472	.49966	.20329	.25700	5.2060	8.4063	.96609
SDev	.00486	.00477	.00285	.00113	.0147	.0817	.00484
%RSD	10.865	.95437	1.4039	.43836	.28234	.97185	.50123
#1	.04204	.49602	.20190	.25656	5.1953	8.2881	.96599
#2	.04237	.49735	.20038	.25569	5.1927	8.4195	.96177
#3	.05200	.49864	.20698	.25831	5.2241	8.4720	.97288
#4	.04247	.50663	.20393	.25745	5.2117	8.4457	.96373
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.9282	2.5151	-.00280	96.639	.50374	.51719	.00663
SDev	.0301	.0117	.00239	.487	.01792	.01595	.00974
%RSD	.76582	.46688	85.222	.50442	3.5573	3.0842	146.90
#1	3.9091	2.5106	-.00639	96.704	.48518	.53183	.01406
#2	3.9091	2.5011	-.00161	96.150	.50261	.49502	-.00605
#3	3.9723	2.5278	-.00161	97.286	.52814	.51715	.01450
#4	3.9222	2.5211	-.00161	96.414	.49902	.52475	.00402
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9629	8.2319	-.01316	1.1200	.09740	2.0367	.49440
SDev	.0822	.0277	.02814	.0055	.00018	.0566	.00381
%RSD	4.1868	.33616	213.79	.48726	.18961	2.7776	.77039
#1	2.0564	8.2418	-.00029	1.1200	.09724	1.9602	.49433
#2	1.8750	8.2475	-.02212	1.1145	.09724	2.0283	.48976

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#3	1.9166	8.1906	-.04770	1.1275	.09756	2.0735	.49443
#4	2.0035	8.2476	.01745	1.1182	.09756	2.0849	.49909
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 .55640
SDev .00074
%RSD .13376

#1 .55583
#2 .55598
#3 .55748
#4 .55633

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-7

Operator: MTW

Run Time: 08/16/00 16:17:31

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	1.0170	51.207	5.0783	5.0473	5.0070	5.0563	52.014
SDev	.0032	.148	.0658	.0026	.0229	.0088	.104
%RSD	.31412	.28939	1.2952	.05170	.45743	.17314	.19980
#1	1.0181	51.277	5.1747	5.0502	5.0102	5.0654	52.124
#2	1.0180	51.062	5.0448	5.0469	4.9910	5.0455	52.045
#3	1.0195	51.380	5.0639	5.0482	5.0382	5.0609	52.010
#4	1.0123	51.107	5.0298	5.0440	4.9886	5.0532	51.875
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	5.0933	5.0324	5.0329	5.0082	52.256	50.644	4.9747
SDev	.0073	.0141	.0111	.0165	.100	.233	.0298
%RSD	.14386	.27946	.21988	.32861	.19211	.45984	.59948
#1	5.0858	5.0434	5.0470	5.0102	52.357	50.777	4.9859
#2	5.0982	5.0314	5.0292	4.9919	52.212	50.348	4.9437
#3	5.1008	5.0420	5.0348	5.0302	52.317	50.874	5.0109
#4	5.0884	5.0129	5.0206	5.0006	52.136	50.576	4.9582
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	51.220	5.0063	5.0275	50.798	5.0926	5.1353	5.1236
SDev	.175	.0081	.0090	.231	.0210	.0125	.0408
%RSD	.34124	.16251	.17994	.45383	.41222	.24434	.79729
#1	51.342	5.0144	5.0335	50.849	5.0738	5.1246	5.1563
#2	51.118	5.0058	5.0144	50.576	5.1195	5.1244	5.1466
#3	51.392	5.0096	5.0335	51.099	5.0988	5.1465	5.1261
#4	51.029	4.9953	5.0287	50.668	5.0783	5.1458	5.0653
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	5.0706	5.1217	5.0732	5.0457	4.9990	10.209	5.0468
SDev	.0631	.0029	.0502	.0202	.0121	.128	.0100
%RSD	1.2437	.05623	.98939	.39939	.24139	1.2579	.19830
#1	4.9811	5.1204	5.0912	5.0502	5.0035	10.276	5.0594
#2	5.0790	5.1202	5.1188	5.0299	4.9897	10.017	5.0381

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#3	5.0944	5.1260	5.0811	5.0723	5.0140	10.277	5.0501
#4	5.1279	5.1202	5.0019	5.0303	4.9888	10.267	5.0395

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	4.9891
SDev	.0143
%RSD	.28668

#1	4.9980
#2	5.0004
#3	4.9889
#4	4.9690

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: MTW

Run Time: 08/16/00 16:20:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	.00804	.01646	.00605	.00012	.00009	-.00063
SDev	.00179	.01127	.03486	.00746	.00020	.00006	.00345
%RSD	251.89	140.11	211.81	123.16	164.57	66.667	551.67

#1	.00178	.02462	.03377	.01660	.00034	.00006	.00444
#2	-.00107	.00305	-.03583	.00430	-.00014	.00018	-.00178
#3	-.00249	-.00041	.03397	.00429	.00014	.00006	-.00334
#4	-.00106	.00491	.03393	-.00097	.00014	.00006	-.00182

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	.00281	.00066	-.00114	.00022	.00147	-.09197	-.00096
SDev	.00105	.00133	.00146	.00050	.00180	.21268	.00093
%RSD	37.303	202.16	127.73	229.89	122.51	231.25	97.032

#1	.00149	.00132	-.00203	.00065	.00327	.22116	-.00054
#2	.00263	-.00133	-.00152	.00065	.00065	-.25182	-.00025
#3	.00400	.00132	-.00203	-.00022	-.00066	-.15547	-.00233
#4	.00312	.00132	.00102	-.00022	.00261	-.18175	-.00074

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	-.00923	-.00024	.00119	.01116	.00343	.02396	-.00753
SDev	.01246	.00000	.00457	.00969	.00377	.02201	.02416
%RSD	135.02	.67016	382.90	86.801	109.89	91.858	321.04

#1	.00791	-.00024	-.00239	.02557	.00696	.04421	-.02271
#2	-.00791	-.00024	.00716	.00650	.00594	.02943	-.01261
#3	-.01845	-.00024	-.00239	.00780	.00205	.02956	.02800
#4	-.01845	-.00024	.00239	.00477	-.00124	-.00737	-.02279

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	.03024	.00142	-.02078	.00005	-.00016	.03121	.00002
SDev	.04030	.00658	.00928	.00015	.00041	.05642	.00009
%RSD	133.26	461.88	44.646	291.84	258.20	180.80	429.35

#1	.06993	-.00427	-.00900	.00001	.00032	-.03695	-.00005
#2	-.02456	.00712	-.02476	.00026	-.00000	.06530	.00014

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#3	.02834	-.00427	-.01864	.00001	-.00064	.08800	-.00005
#4	.04725	.00712	-.03073	-.00009	-.00032	.00848	.00005
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	.00010
SDev	.00112
%RSD	1121.9

#1	.00147
#2	-.00002
#3	.00022
#4	-.00127

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHT4M

Operator: MTW

Run Time: 08/16/00 16:32:17

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
Avg	-.00005	.10906	.04949	.06651	.01168	-.00003	11.522
SDev	.00072	.00473	.03667	.00219	.00024	.00006	.049
%RSD	1552.1	4.3399	74.100	3.2901	2.0435	188.65	.42428
#1	.00030	.10685	.08808	.06949	.01187	-.00006	11.499
#2	-.00112	.10866	.02197	.06422	.01138	-.00006	11.481
#3	.00033	.10495	.01457	.06618	.01158	-.00007	11.517
#4	.00030	.11579	.07333	.06617	.01187	.00006	11.592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00169	.00132	.00355	.00567	.09172	8.1611	.00137
SDev	.00197	.00187	.00083	.00044	.00155	.3475	.00092
%RSD	116.06	142.40	23.370	7.7076	1.6946	4.2575	67.127
#1	.00253	.00264	.00356	.00589	.09269	8.5421	.00250
#2	-.00102	.00132	.00355	.00588	.09074	8.1217	.00082
#3	.00169	-.00134	.00254	.00501	.09335	7.7100	.00045
#4	.00357	.00264	.00457	.00589	.09009	8.2706	.00172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4656	.36543	-.00357	47.217	.00731	.01654	.00012
SDev	.0114	.00123	.00239	.169	.00434	.04360	.01276
%RSD	.77706	.33665	66.926	.35740	59.421	263.71	10702.
#1	1.4656	.36400	-.00237	47.321	.01223	.01471	-.01254
#2	1.4708	.36591	-.00715	47.389	.00832	.04417	-.00243
#3	1.4498	.36496	-.00237	47.021	.00171	-.04435	-.00243
#4	1.4761	.36686	-.00237	47.135	.00698	.05160	.01788
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	-.01488	1.5457	-.02270	.04408	-.00032	.03232	.00110
SDev	.03658	.0268	.01441	.00012	.00052	.05325	.00234
%RSD	245.88	1.7311	63.449	.26796	163.30	164.74	212.53
#1	-.06589	1.5343	-.01486	.04417	-.00096	.11179	-.00004
#2	.00969	1.5343	-.00691	.04417	-.00032	-.00172	-.00013

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#3	.01347	1.5856	-.03853	.04392	.00032	.00959	.00462
#4	-.01677	1.5286	-.03053	.04407	-.00032	.00963	-.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	.07295
SDev	.00090
%RSD	1.2300

#1	.07370
#2	.07371
#3	.07248
#4	.07192

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT4Q

Operator: MTW

Run Time: 08/16/00 16:35:25

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	.00152	.15511	.01542	.01337	.01459	.00006	7.0545
SDev	.00269	.00754	.07004	.00302	.00014	.00001	.0156
%RSD	176.86	4.8641	454.19	22.602	.98522	7.7874	.22096
#1	.00187	.14979	.10913	.01487	.01451	.00006	7.0383
#2	.00331	.16397	-.05631	.01489	.01451	.00005	7.0679
#3	.00330	.15871	-.01214	.00884	.01480	.00006	7.0677
#4	-.00239	.14796	.02100	.01488	.01451	.00006	7.0440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00164	.00279	.00702	.63552	22.447	.00003
SDev	.00201	.00128	.00236	.00044	.00343	.208	.00082
%RSD	161.38	77.686	84.657	6.2028	.54040	.92477	2824.3
#1	-.00109	.00264	.00305	.00680	.63062	22.329	.00074
#2	.00378	-.00002	.00508	.00680	.63715	22.696	.00016
#3	.00152	.00131	.00355	.00767	.63845	22.530	.00036
#4	.00078	.00264	-.00051	.00680	.63584	22.232	-.00114
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	1.4959	.26548	-.00468	29.999	.01433	.01455	.00780
SDev	.0090	.00055	.00276	.281	.00804	.05000	.02874
%RSD	.60188	.20757	58.911	.93750	56.111	343.58	368.74
#1	1.4867	.26500	-.00707	29.731	.01129	.05149	.04843
#2	1.4972	.26500	-.00229	29.832	.02435	.03662	.00783
#3	1.5077	.26595	-.00707	30.068	.00536	.02926	-.01262
#4	1.4919	.26595	-.00229	30.364	.01633	-.05916	-.01246
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	-.01533	2.2865	-.02110	.04802	.00336	.03182	.00079
SDev	.04608	.0332	.02214	.00012	.00041	.02705	.00178
%RSD	300.55	1.4538	104.96	.25397	12.295	85.015	225.85
#1	-.00401	2.2523	-.05203	.04792	.00320	.04890	-.00013
#2	.01491	2.3150	-.01072	.04792	.00384	-.00795	.00346

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#3	.01113	2.3150	-.00094	.04817	.00352	.03748	-.00013
#4	-.08336	2.2637	-.02070	.04807	.00288	.04885	-.00005

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	.56867
SDev	.00288
%RSD	.50676

#1	.56589
#2	.56714
#3	.57249
#4	.56917

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT4T

Operator: MTW

Run Time: 08/16/00 16:38:34

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	.00015	.75657	.00140	.06062	.06257	.00009	22.627
SDev	.00244	.00591	.01738	.00266	.00033	.00006	.085
%RSD	1616.6	.78085	1242.5	4.3850	.52642	61.950	.37400
#1	-.00092	.76107	.00047	.05676	.06211	.00006	22.535
#2	-.00234	.74855	.02627	.06146	.06269	.00006	22.584
#3	.00050	.75568	-.01052	.06283	.06260	.00006	22.660
#4	.00337	.76098	-.01063	.06145	.06289	.00017	22.728
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00390	.00978	.10109	1.4002	6.2889	.00030
SDev	.00420	.00186	.00113	.00149	.0053	.3742	.00167
%RSD	291.75	47.759	11.518	1.4712	.37941	5.9497	563.18
#1	.00103	.00258	.00863	.09913	1.3932	5.9144	.00025
#2	-.00354	.00259	.01016	.10174	1.4036	6.0371	.00111
#3	.00154	.00390	.00914	.10261	1.4049	6.5013	-.00201
#4	.00672	.00654	.01117	.10087	1.3990	6.7027	.00184
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.1848	.93882	-.00337	108.81	.00804	.00667	-.01776
SDev	.0151	.00316	.00457	.89	.00247	.03192	.01947
%RSD	.47485	.33708	135.59	.81933	30.720	478.73	109.67
#1	3.1657	.93453	-.00695	108.06	.01024	-.00811	-.01265
#2	3.1842	.93834	-.00695	109.77	.00645	-.02287	-.03300
#3	3.2026	.94121	-.00218	109.35	.00542	.00665	-.03304
#4	3.1868	.94121	.00260	108.04	.01005	.05100	.00766
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	-.01993	5.9021	-.00336	.12334	.02359	.03905	.00112
SDev	.01615	.0365	.01616	.00052	.00055	.04397	.00241
%RSD	81.035	.61855	480.94	.42494	2.3157	112.58	215.25
#1	-.03979	5.8707	-.00087	.12300	.02367	.02209	-.00012
#2	-.01331	5.9277	.00299	.12379	.02303	.05607	-.00011

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						667	895
#3	-.02464	5.8707	.01090	.12379	.02335	.09013	-.00002
#4	-.00198	5.9392	-.02646	.12279	.02431	-.01207	.00473
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.09591						
SDev	.00209						
%RSD	2.1817						
#1	.09604						
#2	.09349						
#3	.09858						
#4	.09553						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DHT4X

Operator: MTW

Run Time: 08/16/00 16:41:42

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	-.00052	.44512	.00291	.05258	.06618	-.00000	20.283
SDev	.00337	.01406	.02189	.00293	.00042	.00007	.098
%RSD	649.55	3.1593	752.36	5.5701	.64155	1751.8	.48167
#1	.00198	.45716	.00644	.05687	.06582	.00005	20.356
#2	.00198	.45713	-.01193	.05161	.06602	-.00007	20.296
#3	-.00514	.43034	-.01532	.05025	.06611	-.00006	20.141
#4	-.00090	.43587	.03245	.05161	.06680	.00007	20.338
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00012	.00226	.00089	.00404	1.4565	5.5903	-.00040
SDev	.00024	.00251	.00146	.00110	.0039	.4735	.00105
%RSD	192.18	110.97	164.58	27.185	.26646	8.4693	264.46
#1	.00009	.00259	.00203	.00512	1.4519	6.1772	.00085
#2	.00030	.00392	.00203	.00425	1.4578	5.5378	-.00036
#3	.00031	-.00138	-.00102	.00251	1.4551	5.0210	-.00172
#4	-.00020	.00392	.00051	.00426	1.4610	5.6254	-.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.1110	.81251	-.00694	117.43	.00563	-.00056	-.00246
SDev	.0104	.00246	.00390	1.45	.00784	.01046	.00831
%RSD	.33447	.30294	56.137	1.2379	139.41	1870.4	337.44
#1	3.1157	.81346	-.00695	115.59	.01711	-.00054	.00777
#2	3.1025	.81156	-.00217	117.01	.00408	-.00791	-.01259
#3	3.1025	.80965	-.00694	118.91	-.00002	-.00802	-.00255
#4	3.1236	.81537	-.01172	118.21	.00133	.01423	-.00249
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	-.05002	5.7753	.00021	.12376	.01551	-.00765	.00162
SDev	.00645	.0085	.01620	.00069	.00055	.05970	.00393
%RSD	12.894	.14757	7752.7	.55765	3.5712	780.19	243.36
#1	-.04720	5.7625	.00717	.12300	.01567	-.09279	.00453
#2	-.05852	5.7796	-.02256	.12340	.01599	.04339	.00462

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						667	897
#3	-.04341	5.7796	.01503	.12454	.01471	-.00194	.00103
#4	-.05095	5.7795	.00120	.12409	.01567	.02073	-.00372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.73501
SDev	.00062
%RSD	.08477

#1	.73447
#2	.73452
#3	.73527
#4	.73576

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT50

Operator: MTW

Run Time: 08/16/00 16:44:50

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	- .00060	1.7552	.03671	.06245	.08133	.00018	22.462
SDev	.00116	.0148	.01347	.00253	.00061	.00001	.034
%RSD	192.15	.84065	36.688	4.0466	.75594	3.5763	.15280

#1	- .00201	1.7404	.03127	.06211	.08145	.00017	22.470
#2	- .00061	1.7477	.02029	.06013	.08048	.00018	22.424
#3	.00083	1.7744	.04938	.06603	.08145	.00017	22.505
#4	- .00061	1.7583	.04590	.06152	.08194	.00018	22.451

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.00419	.00622	.01589	2.7565	5.9954	.00030
SDev	.00264	.00332	.00127	.00044	.0046	.1763	.00041
%RSD	2325.9	79.173	20.407	2.7373	.16676	2.9397	139.66

#1	.00163	.00519	.00813	.01568	2.7576	6.0546	.00074
#2	- .00177	.00785	.00559	.01568	2.7504	6.0458	.00025
#3	.00304	- .00012	.00558	.01567	2.7615	5.7392	- .00025
#4	- .00245	.00387	.00559	.01655	2.7563	6.1422	.00045

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.3661	1.0167	- .00078	122.21	.00801	.02233	- .01274
SDev	.0201	.0023	.00457	.38	.00432	.02910	.01168
%RSD	.59638	.22159	584.92	.31382	53.874	130.28	91.680

#1	3.3740	1.0169	.00280	122.08	.01004	.06474	- .02289
#2	3.3397	1.0150	- .00198	121.77	.00581	- .00153	- .02281
#3	3.3871	1.0198	- .00675	122.67	.01293	.01300	- .00254
#4	3.3634	1.0150	.00280	122.34	.00325	.01312	- .00271

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	- .02014	6.7241	.01265	.12969	.04574	.07374	.00204
SDev	.05735	.0396	.02328	.00040	.00026	.07087	.00239
%RSD	284.80	.58906	184.02	.30848	.57098	96.107	117.59

#1	.05073	6.7426	.01507	.12989	.04542	- .00295	.00473
#2	- .03999	6.6913	- .02050	.12924	.04574	.16746	- .00003

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#3	-.00595	6.7711	.02307	.13014	.04574	.07657	.00338
#4	-.08533	6.6913	.03295	.12949	.04606	.05388	.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	.06453
SDev	.00138
%RSD	2.1330

#1	.06250
#2	.06503
#3	.06555
#4	.06504

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT51

Operator: MTW

Run Time: 08/16/00 16:47:59

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	.00041	.16583	.02936	.01211	.01403	.00006	6.7678
SDev	.00116	.01248	.02109	.00111	.00000	.00000	.0164
%RSD	285.31	7.5244	71.847	9.1520	.00000	.00000	.24186
#1	.00041	.15507	.03955	.01177	.01403	.00006	6.7532
#2	.00041	.15513	.03220	.01176	.01403	.00006	6.7556
#3	-.00101	.17475	-.00101	.01118	.01403	.00006	6.7876
#4	.00183	.17837	.04671	.01372	.01403	.00006	6.7748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00055	.00164	.00292	.01135	.43462	22.618	-.00060
SDev	.00219	.00167	.00105	.00149	.00112	.298	.00059
%RSD	399.75	101.55	35.849	13.099	.25657	1.3186	97.692
#1	-.00159	-.00001	.00203	.00939	.43478	22.416	-.00123
#2	.00066	.00396	.00203	.01114	.43348	22.442	-.00094
#3	.00353	.00130	.00356	.01200	.43609	23.056	-.00027
#4	-.00040	.00131	.00406	.01288	.43413	22.556	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	1.4932	.25898	-.00352	30.205	.01051	.03672	.01783
SDev	.0157	.00091	.00239	.198	.00475	.03243	.02189
%RSD	1.0542	.35214	67.900	.65631	45.159	88.315	122.72
#1	1.4761	.25827	-.00232	30.074	.00710	-.00020	-.00249
#2	1.4867	.25827	-.00232	30.458	.01724	.02205	.01792
#3	1.5130	.25922	-.00232	30.264	.00725	.07360	.04818
#4	1.4972	.26017	-.00710	30.023	.01044	.05143	.00772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00681	2.3135	.00608	.04854	.00448	.02535	-.00006
SDev	.01927	.0442	.01314	.00032	.00026	.05669	.00004
%RSD	282.82	1.9118	216.18	.66415	5.8321	223.65	71.825
#1	.01437	2.2580	.00499	.04817	.00448	-.01723	-.00004
#2	-.01964	2.3150	-.00281	.04892	.00416	.01682	-.00004

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						667	901
#3	.00682	2.3662	.02499	.04867	.00448	-.00589	-.00004
#4	.02571	2.3150	-.00286	.04842	.00480	.10769	-.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	.52027
SDev	.00304
%RSD	.58367

#1	.52087
#2	.51627
#3	.52363
#4	.52032

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT52

Operator: MTW

Run Time: 08/16/00 16:51:07

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	-.00206	1.0323	.00186	.06206	.07461	.00006	23.949
SDev	.00071	.0098	.02227	.00199	.00069	.00010	.161
%RSD	34.400	.94645	1199.9	3.2045	.92611	174.43	.67024
#1	-.00240	1.0344	.02382	.06021	.07510	.00005	23.780
#2	-.00243	1.0257	-.00908	.06488	.07364	.00018	24.064
#3	-.00243	1.0239	.01664	.06156	.07510	-.00006	23.847
#4	-.00100	1.0452	-.02396	.06160	.07461	.00006	24.107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00166	.00454	.00076	.00578	1.4631	6.9742	-.00027
SDev	.00261	.00230	.00267	.00043	.0061	.3062	.00087
%RSD	157.30	50.657	351.70	7.5137	.42020	4.3902	323.89
#1	.00115	.00255	-.00102	.00599	1.4611	7.0969	.00025
#2	.00456	.00652	.00305	.00600	1.4598	7.3158	.00065
#3	-.00165	.00654	-.00203	.00513	1.4591	6.5976	-.00074
#4	.00257	.00254	.00305	.00600	1.4722	6.8867	-.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	3.7865	1.4356	-.00456	119.27	.00853	-.00637	.00764
SDev	.0174	.0060	.00276	1.27	.00487	.02432	.01168
%RSD	.46001	.41487	60.521	1.0662	57.083	381.86	152.80
#1	3.8036	1.4294	-.00217	119.81	.01370	-.00828	-.00244
#2	3.7667	1.4342	-.00694	117.40	.01083	-.00077	.01777
#3	3.7773	1.4351	-.00694	120.24	.00716	-.03765	-.00250
#4	3.7984	1.4437	-.00217	119.63	.00243	.02122	.01773
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	-.02260	6.7426	.01055	.14037	.03838	.01565	.00137
SDev	.04203	.0378	.01541	.00101	.00026	.02984	.00225
%RSD	185.95	.56071	146.11	.71627	.68041	190.68	163.86
#1	.03975	6.7483	.00507	.14063	.03838	.04685	.00462
#2	-.05095	6.6913	.02492	.13888	.03838	-.00988	-.00013

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#3	-.04340	6.7483	.02088	.14098	.03806	-.00987	-.00014
#4	-.03580	6.7825	-.00867	.14098	.03870	.03549	.00113

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

Elem	ZN
Units	ppm
Avge	.04128
SDev	.00063
%RSD	1.5246

#1	.04051
#2	.04102
#3	.04178
#4	.04180

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT59

Operator: MTW

Run Time: 08/16/00 16:54:15

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	-.00053	.91793	.01663	.06452	.08756	.00009	22.549
SDev	.00115	.00641	.02385	.00362	.00063	.00006	.096
%RSD	215.27	.69827	143.38	5.6089	.72039	71.491	.42546
#1	-.00194	.91300	.02671	.06633	.08829	.00005	22.521
#2	-.00054	.91480	.01942	.06633	.08683	.00018	22.598
#3	-.00054	.91662	-.01731	.06631	.08732	.00006	22.649
#4	.00088	.92728	.03771	.05909	.08781	.00006	22.429
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00196	.00654	.00330	.01003	2.9212	6.4443	.00017
SDev	.00191	.00153	.00152	.00112	.0064	.2163	.00084
%RSD	97.092	23.386	46.189	11.208	.21772	3.3560	483.14
#1	-.00007	.00788	.00203	.00960	2.9279	6.6151	-.00062
#2	.00253	.00522	.00508	.01047	2.9253	6.2122	.00045
#3	.00434	.00786	.00406	.01134	2.9168	6.6414	.00123
#4	.00106	.00522	.00203	.00872	2.9148	6.3086	-.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.4504	.86226	-.00553	135.82	.01039	.01737	.01279
SDev	.0200	.00211	.00239	.85	.00829	.01410	.00584
%RSD	.57845	.24516	43.147	.62669	79.806	81.183	45.646
#1	3.4636	.86155	-.00672	136.46	-.00078	.00634	.00764
#2	3.4214	.86346	-.00673	135.24	.01647	.00629	.01785
#3	3.4636	.86441	-.00673	134.94	.01692	.02109	.00782
#4	3.4530	.85964	-.00195	136.63	.00897	.03576	.01784
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	-.00270	6.2497	-.00638	.14152	.02255	-.01969	.00165
SDev	.05248	.0285	.01820	.00034	.00018	.08419	.00199
%RSD	1946.3	.45581	285.11	.23754	.81893	427.56	120.85
#1	-.05842	6.2355	-.00443	.14173	.02271	-.13051	.00454
#2	.01338	6.2354	.01735	.14123	.02239	.07397	.00105

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#3	.06248	6.2924	-.02617	.14123	.02271	-.00545	.00104
#4	-.02822	6.2354	-.01229	.14188	.02239	-.01678	-.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	.02802
SDev	.00028
%RSD	1.0114

#1	.02820
#2	.02812
#3	.02760
#4	.02815

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHT5A

Operator: MTW

Run Time: 08/16/00 16:57:23

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	-.00106	.90537	.03499	.06268	.08554	.00008	22.372
SDev	.00212	.00790	.02767	.00329	.00046	.00012	.022
%RSD	200.36	.87244	79.075	5.2421	.53903	145.43	.10057

#1	-.00212	.89692	.07544	.06632	.08487	-.00007	22.402
#2	.00212	.91115	.02399	.06303	.08556	.00018	22.369
#3	-.00212	.90044	.01298	.06302	.08585	.00005	22.348
#4	-.00212	.91299	.02757	.05833	.08585	.00017	22.368

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00118	.00422	.00089	.00497	2.2142	6.1268	.00006
SDev	.00318	.00274	.00134	.00044	.0025	.1901	.00111
%RSD	270.49	64.777	151.15	8.7948	.11391	3.1023	1923.8

#1	.00062	.00787	.00152	.00519	2.2105	6.3699	-.00036
#2	.00205	.00123	.00203	.00431	2.2157	5.9670	.00172
#3	L-.00512	.00390	.00101	.00519	2.2151	5.9845	-.00056
#4	-.00227	.00389	-.00102	.00519	2.2157	6.1860	-.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
Avg	3.4247	.90687	-.00683	132.85	.00701	.01932	.01280
SDev	.0220	.00091	.00390	.87	.01076	.02646	.02113
%RSD	.64204	.10076	57.071	.65622	153.40	136.94	165.10

#1	3.3924	.90616	-.00683	131.88	.00448	.01391	.01783
#2	3.4293	.90711	-.00206	132.35	.01456	.04323	.03817
#3	3.4399	.90807	-.00683	133.62	.01615	-.01570	.00781
#4	3.4372	.90616	-.01161	133.56	-.00714	.03586	-.01261

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	-.01968	6.3380	-.01840	.13979	.02895	-.00362	.00337
SDev	.01729	.0267	.01135	.00052	.00055	.03407	.00227
%RSD	87.876	.42190	61.706	.36828	1.9139	941.84	67.388

#1	-.04520	6.3266	-.00454	.13923	.02847	.01341	.00453
#2	-.00739	6.3209	-.01828	.13948	.02943	.01345	-.00004

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#3	-.01117	6.3266	-.01842	.14023	.02943	-.05473	.00453
#4	-.01495	6.3779	-.03234	.14023	.02847	.01339	.00443
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	.04517
SDev	.00179
%RSD	3.9586

#1	.04683
#2	.04274
#3	.04499
#4	.04612

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHTQC

Operator: MTW

Run Time: 08/16/00 17:00:32

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	-.00131	.35350	.00451	.05928	.07657	.00006	20.279
SDev	.00180	.00618	.03251	.00255	.00000	.00001	.152
%RSD	137.17	1.7486	720.56	4.3084	.00000	11.487	.75069

#1	-.00097	.35178	.01558	.06074	.07657	.00006	20.160
#2	-.00095	.34808	-.02852	.05743	.07657	.00005	20.230
#3	-.00381	.35174	-.01380	.05684	.07657	.00006	20.222
#4	.00048	.36240	.04478	.06212	.07657	.00005	20.502

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00113	.00458	.00457	.03075	.72856	5.3714	.00025
SDev	.00150	.00254	.00110	.00087	.00365	.3370	.00105
%RSD	132.79	55.352	23.997	2.8360	.50161	6.2747	426.46

#1	.00124	.00657	.00356	.03031	.72726	5.3801	.00172
#2	.00083	.00127	.00457	.03031	.72530	5.1524	.00025
#3	-.00059	.00393	.00406	.03031	.72791	5.1086	-.00062
#4	.00305	.00657	.00609	.03205	.73379	5.8444	-.00036

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.1269	.36514	-.00108	138.41	.00430	.02555	.00510
SDev	.0151	.00206	.00239	.52	.00635	.02296	.01277
%RSD	.48365	.56452	220.13	.37647	147.82	89.870	250.67

#1	3.1183	.36323	-.00228	138.62	.00267	.02926	-.01263
#2	3.1288	.36418	-.00228	138.46	.01262	-.00769	.01787
#3	3.1130	.36514	-.00228	138.87	-.00271	.04396	.00755
#4	3.1473	.36800	.00250	137.67	.00460	.03665	.00759

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	-.00091	5.7810	-.00284	.13627	.01008	.04558	.00203
SDev	.02835	.0029	.01199	.00052	.00018	.02340	.00244
%RSD	3098.0	.04968	422.59	.38098	1.8329	51.342	120.26

#1	-.03021	5.7795	-.01675	.13603	.01024	.02571	-.00004
#2	.03026	5.7796	-.00871	.13628	.00992	.07118	.00346

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#3	-.01887	5.7795	.00508	.13698	.00992	.02574	-.00004
#4	.01516	5.7853	.00903	.13578	.01024	.05971	.00472

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	.04634
SDev	.00101
%RSD	2.1858

#1	.04505
#2	.04608
#3	.04686
#4	.04737

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-8

Operator: MTW

Run Time: 08/16/00 17:03:40

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	1.0187	51.123	5.0671	5.0555	4.9891	5.0319	52.263
SDev	.0045	.161	.0775	.0259	.0196	.0150	.109
%RSD	.44259	.31530	1.5289	.51304	.39191	.29909	.20919

#1	1.0137	50.893	4.9840	5.0492	4.9616	5.0205	52.240
#2	1.0166	51.132	5.0184	5.0336	4.9892	5.0180	52.245
#3	1.0238	51.246	5.1382	5.0930	5.0058	5.0405	52.413
#4	1.0209	51.221	5.1277	5.0461	4.9997	5.0487	52.152

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	5.1351	5.0353	5.0449	4.9821	52.235	50.337	4.9336
SDev	.0302	.0126	.0155	.0191	.123	.184	.0312
%RSD	.58750	.25028	.30785	.38350	.23473	.36510	.63147

#1	5.1204	5.0208	5.0383	4.9614	52.093	50.357	4.8921
#2	5.1419	5.0300	5.0333	4.9710	52.207	50.094	4.9284
#3	5.1739	5.0498	5.0678	4.9937	52.389	50.541	4.9515
#4	5.1040	5.0407	5.0404	5.0024	52.252	50.357	4.9626

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	51.151	5.0101	5.0430	50.650	5.1011	5.1060	5.1336
SDev	.110	.0069	.0256	.230	.0442	.0516	.0305
%RSD	.21571	.13756	.50728	.45465	.86614	1.0100	.59496

#1	51.089	5.0048	5.0191	50.362	5.0839	5.1684	5.1464
#2	51.029	5.0067	5.0239	50.576	5.1382	5.0506	5.1670
#3	51.266	5.0202	5.0717	50.778	5.1359	5.1247	5.0955
#4	51.218	5.0087	5.0574	50.884	5.0466	5.0803	5.1255

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	5.0790	5.1317	5.0881	5.0360	4.9895	10.218	5.0471
SDev	.0546	.0272	.0533	.0176	.0139	.167	.0129
%RSD	1.0746	.53082	1.0473	.35005	.27802	1.6336	.25601

#1	5.0031	5.1258	5.0220	5.0126	4.9725	10.268	5.0312
#2	5.1168	5.1145	5.1209	5.0332	4.9852	10.301	5.0452

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#3	5.0757	5.1717	5.1403	5.0530	5.0048	10.333	5.0625
#4	5.1207	5.1146	5.0693	5.0454	4.9955	9.9708	5.0494

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	4.9958
SDev	.0060
%RSD	.11950

#1	4.9869
#2	4.9989
#3	4.9996
#4	4.9976

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB8

Operator: MTW

Run Time: 08/16/00 17:06:48

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	.00897	.00541	.00620	.00058	.00024	.00237
SDev	.00214	.01233	.00976	.01110	.00032	.00012	.00555
%RSD	33348.	137.50	180.31	178.97	55.340	49.846	234.13

#1	-.00107	.01213	.00449	.00430	.00063	.00006	.00122
#2	-.00107	-.00400	.01931	.00294	.00063	.00031	-.00003
#3	-.00107	.00315	.00089	-.00429	.00014	.00031	-.00214
#4	.00322	.02459	-.00304	.02187	.00092	.00029	.01043

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	-.00135	.00100	.00076	.00065	.00343	.30656	-.00086
SDev	.00196	.00199	.00097	.00174	.00163	.65664	.00044
%RSD	145.55	199.48	127.83	266.48	47.610	214.20	51.665

#1	-.00121	.00000	-.00000	-.00022	.00131	.00219	-.00132
#2	-.00315	.00001	.00102	-.00022	.00326	.13357	-.00114
#3	.00134	-.00000	-.00000	-.00022	.00391	-.18175	-.00062
#4	-.00237	.00398	.00203	.00327	.00522	1.2722	-.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	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00988	-.00024	-.00358	.01376	.00471	.01477	.00261
SDev	.02057	.00000	.00239	.00605	.00685	.02628	.02418
%RSD	208.13	.51828	66.682	43.972	145.20	177.93	925.62

#1	.00527	-.00024	-.00716	.01473	.00885	.01479	.03817
#2	.00264	-.00024	-.00239	.00607	-.00175	-.00000	-.00252
#3	-.00791	-.00024	-.00239	.01343	-.00041	-.00739	-.01266
#4	.03954	-.00024	-.00239	.02080	.01216	.05167	-.01254

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	-.00660	.01284	-.00443	.00034	.00000	.01414	.00110
SDev	.04422	.00468	.00570	.00022	.00045	.07674	.00235
%RSD	669.57	36.435	128.61	65.362	929e6	542.66	213.92

#1	-.03590	.00712	-.00081	.00041	.00032	-.07099	-.00014
#2	-.03212	.01282	-.01285	.00051	-.00000	.09933	-.00004

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#3	.05859	.01282	-.00302	.00001	-.00064	.05390	-.00005
#4	-.01699	.01858	-.00105	.00041	.00032	-.02567	.00462

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	.00012
SDev	.00104
%RSD	890.11

#1	.00102
#2	.00075
#3	.00000
#4	-.00131

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHTQD

Operator: MTW

Run Time: 08/16/00 17:09:57

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	-.00182	1.9442	.00140	.06227	.08817	.00014	21.904
SDev	.00295	.0156	.04611	.00440	.00024	.00006	.247
%RSD	162.45	.80395	3284.4	7.0597	.27708	44.754	1.1265
#1	-.00503	1.9245	-.03142	.05893	.08829	.00018	21.589
#2	.00068	1.9584	.06002	.06754	.08781	.00005	21.880
#3	-.00361	1.9389	.01619	.05837	.08829	.00018	21.961
#4	.00070	1.9550	-.03917	.06423	.08829	.00016	22.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00004	.00220	.00305	.03105	1.8226	5.5444	.00063
SDev	.00271	.00331	.00252	.00084	.0097	.4945	.00140
%RSD	7335.8	150.30	82.830	2.6936	.53330	8.9183	223.02
#1	.00050	-.00144	-.00051	.03039	1.8097	4.9860	-.00065
#2	-.00391	.00122	.00457	.03127	1.8215	5.7217	.00221
#3	.00087	.00253	.00508	.03040	1.8267	5.3363	-.00045
#4	.00239	.00651	.00304	.03214	1.8326	6.1334	.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
Avg	3.3990	.66885	-.00331	140.18	.00551	.02240	-.00509
SDev	.0322	.00315	.00457	1.05	.00538	.02853	.00975
%RSD	.94872	.47126	138.15	.74598	97.610	127.39	191.52
#1	3.3555	.66480	-.00212	141.70	.00101	-.00902	-.00254
#2	3.4161	.66862	.00266	139.78	.00075	.04262	-.01279
#3	3.3951	.66957	-.00689	139.90	.00947	.00581	-.01266
#4	3.4293	.67243	-.00689	139.33	.01082	.05016	.00764
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	-.03394	6.7725	.00214	.14318	.04486	-.00090	.00315
SDev	.02714	.0200	.02033	.00065	.00080	.06448	.00397
%RSD	79.984	.29489	952.02	.45226	1.7825	7186.7	126.04
#1	-.03869	6.7426	-.02057	.14387	.04382	-.07455	-.00004
#2	-.00465	6.7825	.00111	.14298	.04510	-.02928	.00472

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#3	-.06888	6.7825	-.00086	.14238	.04478	.07290	-.00012
#4	-.02352	6.7826	.02887	.14348	.04574	.02734	.00803

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	.04329
SDev	.00168
%RSD	3.8888

#1	.04293
#2	.04421
#3	.04110
#4	.04494

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHTQE

Operator: MTW

Run Time: 08/16/00 17:13:06

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	-.00195	1.1158	.01433	.05786	.07779	.00017	23.252
SDev	.00178	.0047	.04185	.00636	.00028	.00010	.136
%RSD	91.373	.42063	291.95	10.986	.36264	55.655	.58372

#1	-.00232	1.1132	-.00212	.04970	.07754	.00018	23.061
#2	-.00232	1.1168	.07497	.05634	.07803	.00018	23.268
#3	.00054	1.1219	-.02062	.06104	.07803	.00005	23.379
#4	-.00371	1.1112	.00511	.06436	.07754	.00028	23.300

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00041	.00387	.00292	.01272	1.1801	5.5203	-.00001
SDev	.00183	.00242	.00076	.00043	.0039	.1960	.00143
%RSD	442.07	62.554	26.069	3.4098	.33047	3.5503	19700.

#1	.00105	.00255	.00355	.01294	1.1758	5.4677	-.00143
#2	-.00281	.00653	.00254	.01207	1.1784	5.2663	-.00065
#3	-.00088	.00122	.00203	.01293	1.1811	5.6517	.00016
#4	.00098	.00520	.00355	.01294	1.1850	5.6955	.00190

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	3.1947	.60790	-.00102	134.94	.01201	.02495	.00513
SDev	.0148	.00286	.00716	.66	.00722	.03874	.00509
%RSD	.46185	.47087	704.12	.49237	60.139	155.23	99.167

#1	3.2053	.60361	-.00699	135.28	.00307	-.00825	.00758
#2	3.1763	.60933	-.00699	135.46	.02057	-.00814	.00780
#3	3.2079	.60934	.00734	135.02	.01345	.06541	-.00250
#4	3.1895	.60934	.00256	133.98	.01095	.05079	.00765

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	-.01862	6.3209	-.00286	.13525	.04038	-.00882	.00377
SDev	.01041	.0114	.00758	.00066	.00066	.06511	.00345
%RSD	55.906	.18066	264.88	.48828	1.6329	738.34	91.507

#1	-.01391	6.3038	.00703	.13538	.03966	-.10245	.00104
#2	-.02524	6.3266	-.00878	.13599	.04030	-.00028	.00104

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#3	-.02901	6.3266	-.00883	.13524	.04126	.02242	.00481
#4	-.00633	6.3267	-.00087	.13438	.04030	.04504	.00821

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	.06258
SDev	.00233
%RSD	3.7224

#1	.06013
#2	.06336
#3	.06138
#4	.06544

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: MTW

Run Time: 08/16/00 17:16:14

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
Avg	1.0194	50.869	5.0557	5.0011	4.9549	4.9916	52.457
SDev	.0031	.084	.0621	.0235	.0052	.0155	.077
%RSD	.30411	.16486	1.2292	.47013	.10454	.31027	.14648

#1	1.0194	50.985	5.1004	5.0362	4.9616	5.0086	52.452
#2	1.0222	50.820	5.0360	4.9875	4.9514	4.9748	52.494
#3	1.0150	50.798	5.1098	4.9877	4.9564	4.9829	52.352
#4	1.0208	50.873	4.9765	4.9930	4.9504	5.0003	52.530

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	5.1523	5.0410	5.0498	4.9371	52.186	50.282	4.8767
SDev	.0167	.0148	.0096	.0136	.078	.249	.0182
%RSD	.32422	.29435	.19106	.27590	.14899	.49566	.37392

#1	5.1609	5.0432	5.0551	4.9545	52.245	50.532	4.8993
#2	5.1309	5.0434	5.0571	4.9214	52.138	50.383	4.8572
#3	5.1480	5.0208	5.0358	4.9344	52.102	49.945	4.8822
#4	5.1693	5.0565	5.0510	4.9380	52.259	50.269	4.8680

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.892	5.0108	5.0394	50.159	5.1054	5.1524	5.1057
SDev	.086	.0070	.0119	.086	.0203	.0231	.0568
%RSD	.16921	.13885	.23704	.17046	.39828	.44917	1.1130

#1	50.997	5.0173	5.0430	50.279	5.0890	5.1395	5.1260
#2	50.799	5.0086	5.0239	50.091	5.1040	5.1544	5.1767
#3	50.849	5.0020	5.0382	50.161	5.0942	5.1315	5.0649
#4	50.921	5.0154	5.0526	50.105	5.1344	5.1840	5.0550

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	5.0440	5.1215	5.1034	5.0016	4.9709	10.270	5.0301
SDev	.0489	.0142	.0847	.0067	.0075	.176	.0089
%RSD	.96995	.27651	1.6606	.13453	.15054	1.7184	.17781

#1	5.0035	5.1031	4.9864	5.0114	4.9808	10.221	5.0387
#2	5.1015	5.1371	5.1052	4.9964	4.9657	10.404	5.0255

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#3	5.0031	5.1256	5.1363	5.0007	4.9645	10.041	5.0199
#4	5.0678	5.1201	5.1857	4.9981	4.9725	10.414	5.0365

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	5.0035
SDev	.0108
%RSD	.21521

#1	5.0195
#2	4.9959
#3	4.9997
#4	4.9990

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB9

Operator: MTW

Run Time: 08/16/00 17:19:23

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
Avge	.00072	.01029	.00540	.00035	.00049	.00033	.00702
SDev	.00179	.00388	.02770	.00162	.00023	.00012	.00367
%RSD	249.16	37.735	512.90	464.30	47.788	36.742	52.310
#1	.00038	.00490	.02283	.00098	.00063	.00017	.00989
#2	-.00107	.01032	.01919	.00235	.00014	.00031	.00350
#3	.00320	.01206	-.03591	-.00097	.00063	.00043	.01047
#4	.00036	.01390	.01549	-.00096	.00055	.00043	.00421
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00155	.00066	-.00000	.00065	.00441	.11168	-.00061
SDev	.00254	.00133	.00190	.00159	.00082	.56209	.00029
%RSD	164.23	201.79	142730.	243.21	18.637	503.33	47.060
#1	.00287	.00132	-.00000	.00240	.00327	.64159	-.00074
#2	-.00226	.00133	-.00203	-.00022	.00522	-.02409	-.00025
#3	.00264	.00132	.00254	.00152	.00457	.44889	-.00054
#4	.00293	-.00133	-.00051	-.00109	.00457	-.61969	-.00091
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	.00988	.00072	-.00239	.02091	.00247	.00185	-.00501
SDev	.01602	.00078	.00390	.00579	.00649	.03210	.02533
%RSD	162.02	109.01	163.34	27.671	263.22	1738.3	505.27
#1	.02372	.00072	-.00239	.02297	.01024	.04426	-.00239
#2	.01318	.00072	-.00239	.01603	-.00193	.00744	.02786
#3	.01582	.00167	.00239	.02817	.00530	-.01473	-.01259
#4	-.01318	-.00024	-.00716	.01647	-.00375	-.02957	-.03294
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	-.01133	.01426	-.00743	.00047	.00032	.05956	.00112
SDev	.02149	.01348	.02447	.00020	.00026	.04949	.00233
%RSD	189.73	94.521	329.16	42.090	81.650	83.085	208.36
#1	-.00188	.02428	-.00890	.00031	.00032	.07658	.00461
#2	-.02077	.01282	.02483	.00041	.00032	.08795	-.00005

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#3	.01324	.02422	-.03464	.00076	.00064	.08796	.00005
#4	-.03589	-.00427	-.01102	.00041	-.00000	-.01423	-.00014

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	-.00064
SDev	.00139
%RSD	217.13

#1	.00125
#2	-.00201
#3	-.00055
#4	-.00126

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHEVFB

Operator: MTW

Run Time: 08/16/00 17:22:31

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	-.00176	.00359	.02471	.01414	.00037	-.00004	.05322
SDev	.00184	.01012	.02642	.00574	.00032	.00006	.00291
%RSD	104.02	282.17	106.90	40.595	88.822	183.27	5.4686
#1	.00036	.00671	.06327	.00804	.00034	.00006	.05492
#2	-.00104	.01207	.01176	.02190	.00083	-.00007	.05644
#3	-.00391	-.01111	.01935	.01331	.00014	-.00006	.05058
#4	-.00247	.00668	.00446	.01331	.00014	-.00007	.05094
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	.00143	-.00067	.00127	.00109	.01615	.18394	-.00089
SDev	.00245	.00076	.00135	.00050	.00180	.10199	.00071
%RSD	171.64	114.90	106.08	46.158	11.135	55.448	79.498
#1	.00279	-.00133	.00102	.00065	.01828	.03723	-.00025
#2	-.00092	-.00132	-.00051	.00152	.01697	.26496	-.00172
#3	.00417	-.00001	.00254	.00065	.01436	.19488	-.00036
#4	-.00033	.00000	.00203	.00152	.01501	.23868	-.00123
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	.00725	.00024	-.00477	.02654	.01002	-.00187	-.00247
SDev	.00332	.00055	.00276	.00448	.00822	.01109	.02862
%RSD	45.757	228.21	57.766	16.882	82.018	593.01	1159.2
#1	.00791	.00072	-.00238	.02557	.02164	-.00747	-.04294
#2	.01054	.00072	-.00716	.03207	.00249	-.00740	.01773
#3	.00264	-.00024	-.00716	.02123	.00909	-.00737	-.00247
#4	.00791	-.00023	-.00239	.02730	.00685	.01476	.01780
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	-.01791	.03421	.02025	.00008	-.00080	-.00301	.00166
SDev	.01523	.00283	.01655	.00013	.00041	.05486	.00202
%RSD	85.055	8.2871	81.755	161.90	51.640	1822.0	121.69
#1	-.03586	.03561	.00870	.00001	-.00064	.04241	-.00004
#2	-.00940	.02996	.04455	.00001	-.00032	-.08251	.00336

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#3	-.02453	.03561	.01679	.00001	-.00128	.00837	-.00013
#4	-.00185	.03566	.01096	.00026	-.00096	.01969	.00345

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	.00270
SDev	.00097
%RSD	36.140

#1	.00299
#2	.00254
#3	.00146
#4	.00380

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHEVFC

Operator: MTW

Run Time: 08/16/00 17:25:40

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	.04775	2.0613	1.9311	1.1605	1.9545	.04824	51.059
SDev	.00143	.0109	.0380	.0066	.0223	.00036	.292
%RSD	2.9941	.52675	1.9685	.57225	1.1408	.74850	.57212
#1	.04845	2.0505	1.9138	1.1505	1.9235	.04773	51.264
#2	.04847	2.0667	1.9026	1.1638	1.9531	.04833	51.241
#3	.04560	2.0542	1.9211	1.1638	1.9704	.04834	50.635
#4	.04847	2.0738	1.9870	1.1638	1.9711	.04857	51.095
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	.04556	.48536	.19622	.24360	1.0449	49.347	.96996
SDev	.00320	.00108	.00173	.00219	.0039	.228	.01939
%RSD	7.0342	.22188	.88143	.89945	.37049	.46270	1.9992
#1	.04830	.48406	.19864	.24142	1.0419	49.113	.94455
#2	.04289	.48669	.19559	.24317	1.0491	49.516	.96521
#3	.04267	.48536	.19457	.24317	1.0413	49.192	.98665
#4	.04837	.48534	.19610	.24665	1.0472	49.569	.98341
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	50.045	.48661	.98380	49.856	.49873	.49538	.48187
SDev	.310	.00174	.00827	.697	.00813	.01531	.03546
%RSD	.61947	.35760	.84063	1.3981	1.6310	3.0910	7.3588
#1	49.629	.48566	.99574	48.911	.49064	.51376	.46905
#2	50.053	.48756	.98142	49.750	.50662	.47701	.49963
#3	50.125	.48470	.98141	50.401	.49288	.49164	.43890
#4	50.375	.48851	.97664	50.362	.50477	.49911	.51990
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9132	9.1920	1.9784	.98956	.96420	1.9662	.48781
SDev	.0728	.0491	.0627	.01002	.00551	.1159	.00259
%RSD	3.8063	.53453	3.1689	1.0125	.57105	5.8945	.53022
#1	1.8829	9.1421	1.9660	.97552	.95636	1.8215	.48572
#2	1.8263	9.2219	2.0234	.98936	.96500	2.1052	.49010

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#3	1.9888	9.1592	1.8947	.99550	.96628	1.9691	.48543
#4	1.9548	9.2447	2.0294	.99785	.96916	1.9690	.49001
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	.48518						
SDev	.00242						
%RSD	.49893						
#1	.48300						
#2	.48318						
#3	.48703						
#4	.48751						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DGLR3

Operator: MTW

Run Time: 08/16/00 17:28:49

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	.00063	133.84	.17227	.02890	.42592	.00730	16.436
SDev	.00210	.55	.05051	.01748	.00112	.00006	.169
%RSD	335.05	.41193	29.317	60.495	.26355	.86081	1.0255
#1	.00364	133.20	.18663	.01647	.42477	.00720	16.278
#2	-.00052	133.59	.19393	.01950	.42546	.00734	16.303
#3	-.00104	134.16	.21050	.05458	.42604	.00732	16.593
#4	.00042	134.42	.09801	.02506	.42742	.00732	16.570
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00307	.18671	.21387	.37424	350.77	15.575	.27029
SDev	.00230	.00349	.00196	.00091	2.38	.200	.00171
%RSD	74.827	1.8672	.91658	.24252	.67910	1.2865	.63218
#1	L-.00636	.18838	.21273	.37427	348.44	15.724	.26927
#2	-.00293	.18174	.21172	.37344	348.99	15.295	.26993
#3	-.00168	.18969	.21527	.37375	352.73	15.716	.26915
#4	-.00131	.18703	.21578	.37550	352.91	15.567	.27280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	63.694	6.7653	.01425	.50313	.39536	.24181	-.00041
SDev	.251	.0480	.00240	.00203	.00878	.02475	.02879
%RSD	.39466	.70918	16.857	.40399	2.2217	10.234	7107.5
#1	63.370	6.7192	.01629	.50140	.40067	.21700	-.00034
#2	63.628	6.7288	.01638	.50140	.38225	.24588	-.04114
#3	63.844	6.8033	.01216	.50443	.39991	.27443	.01992
#4	63.934	6.8100	.01219	.50530	.39862	.22993	.01994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.21814	5.5458	.00489	.08993	.68321	.35634	.21394
SDev	.03115	.0502	.00823	.00023	.00363	.15563	.00231
%RSD	14.281	.90583	168.32	.25389	.53105	43.676	1.0780
#1	-.17231	5.5031	.00347	.08967	.67937	.21545	.21514
#2	-.23510	5.5030	.00733	.08981	.68097	.32343	.21048

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						667	927
#3	-.22526	5.5999	.01424	.09006	.68545	.30789	.21506
#4	-.23989	5.5771	-.00549	.09017	.68705	.57857	.21506
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	.93418						
SDev	.01057						
%RSD	1.1317						
#1	.92942						
#2	.92230						
#3	.93843						
#4	.94656						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DGLR3P5

Operator: MTW

Run Time: 08/16/00 17:31:57

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	.00139	28.102	.03372	.01410	.08901	.00144	3.5928
SDev	.00144	.155	.02837	.00209	.00070	.00006	.0297
%RSD	103.69	.55204	84.137	14.815	.78630	4.1196	.82671
#1	.00333	28.306	.02760	.01619	.08996	.00141	3.6365
#2	.00029	28.079	.04146	.01125	.08878	.00141	3.5761
#3	.00030	28.093	.06694	.01487	.08898	.00142	3.5859
#4	.00165	27.929	-.00112	.01410	.08829	.00153	3.5726
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00201	.04184	.04658	.07784	77.563	3.3327	.05386
SDev	.00152	.00166	.00192	.00115	.468	.2756	.00068
%RSD	75.463	3.9770	4.1165	1.4767	.60321	8.2702	1.2552
#1	-.00059	.04349	.04874	.07920	78.219	3.6459	.05451
#2	-.00128	.04217	.04721	.07826	77.373	3.4619	.05390
#3	-.00409	.03953	.04417	.07653	77.529	3.0240	.05410
#4	-.00207	.04218	.04620	.07737	77.129	3.1992	.05292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	13.640	1.4486	-.00392	.12275	.09145	.05033	-.00199
SDev	.100	.0115	.00459	.00868	.00620	.02285	.00009
%RSD	.73236	.79225	116.97	7.0690	6.7789	45.395	4.3191
#1	13.783	1.4643	-.00024	.12741	.08327	.06115	-.00208
#2	13.633	1.4440	-.00514	.11007	.09802	.01722	-.00190
#3	13.583	1.4488	-.00989	.12438	.09366	.06870	-.00195
#4	13.562	1.4373	-.00040	.12914	.09084	.05423	-.00205
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	-.04603	1.1702	.01025	.01861	.14369	.04408	.04546
SDev	.04714	.0305	.01291	.00051	.00109	.06535	.00241
%RSD	102.43	2.6063	125.92	2.7402	.75758	148.26	5.3035
#1	-.01879	1.2044	.00346	.01924	.14521	-.03077	.04670
#2	-.09282	1.1417	-.00262	.01800	.14329	.01193	.04660

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						667	929
#3	.00585	1.1872	.01321	.01860	.14361	.11260	.04184
#4	-.07835	1.1474	.02697	.01860	.14265	.08255	.04669
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	.20385						
SDev	.00274						
%RSD	1.3455						
#1	.20615						
#2	.20597						
#3	.20288						
#4	.20041						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DGLR3S

Operator: MTW

Run Time: 08/16/00 17:35:06

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	.04390	148.33	1.8524	.88784	2.3757	.05397	59.935
SDev	.00070	.39	.0546	.01794	.0041	.00020	.229
%RSD	1.5866	.26372	2.9479	2.0204	.17441	.36654	.38230
#1	.04428	147.75	1.8559	.86371	2.3711	.05371	59.639
#2	.04468	148.55	1.7741	.90313	2.3811	.05418	59.910
#3	.04341	148.58	1.8869	.88484	2.3760	.05406	60.190
#4	.04322	148.45	1.8926	.89968	2.3745	.05394	60.001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04027	.62097	.39420	.61538	332.59	60.145	1.2050
SDev	.00252	.00199	.00134	.00189	.91	.147	.0032
%RSD	6.2541	.32032	.33899	.30772	.27427	.24383	.26266
#1	.04118	.61933	.39509	.61528	331.30	59.939	1.2016
#2	.04078	.62196	.39559	.61714	332.82	60.246	1.2087
#3	.03665	.62330	.39305	.61633	333.46	60.254	1.2034
#4	.04247	.61931	.39306	.61278	332.75	60.141	1.2065
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	108.31	7.9345	.89491	46.892	.83091	.63490	.27905
SDev	.32	.0264	.01373	.106	.00826	.01852	.03419
%RSD	.29243	.33248	1.5341	.22705	.99418	2.9167	12.252
#1	107.84	7.8965	.89710	46.751	.81896	.64466	.22827
#2	108.49	7.9446	.89255	46.992	.83188	.60713	.29931
#3	108.49	7.9572	.87832	46.953	.83700	.64383	.28925
#4	108.43	7.9398	.91164	46.872	.83579	.64399	.29938
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	1.5376	15.044	1.7030	1.0138	1.6481	2.1366	.68108
SDev	.0268	.050	.0482	.0017	.0040	.0758	.00433
%RSD	1.7401	.33539	2.8290	.16992	.24103	3.5486	.63512
#1	1.5513	14.974	1.6616	1.0115	1.6425	2.1297	.67530
#2	1.5666	15.048	1.7274	1.0150	1.6492	2.0689	.68453

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#3	1.5267	15.094	1.7591	1.0152	1.6517	2.2440	.68426
#4	1.5059	15.059	1.6641	1.0135	1.6492	2.1037	.68024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.4907
SDev	.0054
%RSD	.36460

#1	1.4879
#2	1.4879
#3	1.4881
#4	1.4988

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLR3D

Operator: MTW

Run Time: 08/16/00 17:38:14

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	.04558	148.46	1.9936	.90064	2.4059	.05630	61.867
SDev	.00133	.38	.0801	.00077	.0100	.00016	.302
%RSD	2.9126	.25932	4.0163	.08551	.41471	.27630	.48840

#1	.04654	148.16	1.9708	.90079	2.4029	.05608	61.950
#2	.04652	148.10	1.8906	.90081	2.3951	.05634	61.870
#3	.04372	148.81	2.0463	.89957	2.4190	.05645	61.460
#4	.04553	148.78	2.0666	.90140	2.4065	.05633	62.186

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03875	.64713	.41185	.61606	346.12	59.635	1.2585
SDev	.00297	.00497	.00288	.00170	.86	.173	.0103
%RSD	7.6709	.76796	.69827	.27678	.24890	.28940	.81928

#1	.04089	.64846	.41592	.61558	345.66	59.738	1.2522
#2	.03977	.64714	.40982	.61384	345.67	59.379	1.2524
#3	.04000	.64049	.40981	.61732	345.73	59.685	1.2738
#4	.03435	.65244	.41185	.61747	347.41	59.738	1.2555

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	113.00	7.3480	.93035	48.364	.85326	.69136	.33974
SDev	.18	.0180	.01258	.283	.01442	.02768	.02979
%RSD	.15982	.24438	1.3523	.58549	1.6894	4.0034	8.7674

#1	112.81	7.3438	.94700	48.151	.85006	.69359	.38019
#2	112.88	7.3419	.93267	48.199	.86772	.67138	.30941
#3	113.12	7.3324	.91836	48.773	.83458	.67078	.32947
#4	113.19	7.3739	.92338	48.335	.86068	.72971	.33988

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	1.6564	14.944	1.7923	1.0560	1.6628	2.3282	.70278
SDev	.0479	.047	.0080	.0036	.0019	.0607	.00232
%RSD	2.8913	.31179	.44414	.33617	.11257	2.6064	.32960

#1	1.6117	14.889	1.7855	1.0550	1.6613	2.3300	.70427
#2	1.6874	14.986	1.7970	1.0519	1.6613	2.3526	.69932

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#3	1.6195	14.923	1.8010	1.0604	1.6636	2.3861	.70371
#4	1.7071	14.980	1.7856	1.0568	1.6652	2.2439	.70381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.3950
SDev .0015
%RSD .10454

#1 1.3933
#2 1.3943
#3 1.3955
#4 1.3967

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGLR4

Operator: MTW

Run Time: 08/16/00 17:41:23

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
Avge	.00053	83.318	.09297	.02089	.37637	.00443	9.7129
SDev	.00102	.461	.04649	.00117	.00279	.00006	.0514
%RSD	192.40	.55378	50.000	5.5805	.74229	1.3709	.52937

#1	.00171	82.627	.05568	.01928	.37249	.00452	9.6799
#2	.00055	83.572	.16058	.02143	.37913	.00440	9.6673
#3	-.00077	83.517	.08342	.02085	.37669	.00440	9.7811
#4	.00062	83.556	.07223	.02198	.37718	.00440	9.7232

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00058	.07785	.10202	.10792	167.60	4.1429	.11651
SDev	.00208	.00067	.00252	.00042	.70	.3232	.00129
%RSD	359.57	.85412	2.4730	.38664	.41567	7.8012	1.1089

#1	.00188	.07819	.10100	.10806	166.59	4.2590	.11554
#2	-.00316	.07819	.10456	.10815	167.71	3.6722	.11763
#3	-.00014	.07686	.10354	.10818	168.11	4.4079	.11525
#4	-.00090	.07818	.09897	.10730	167.99	4.2327	.11763

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	22.814	4.2153	.00954	.43401	.11014	.54545	.00482
SDev	.122	.0176	.00467	.00564	.00656	.02009	.02405
%RSD	.53526	.41764	48.951	1.3006	5.9557	3.6841	498.63

#1	22.637	4.1917	.00342	.44073	.11316	.55349	.00750
#2	22.882	4.2139	.00837	.43640	.10770	.55263	-.01301
#3	22.832	4.2331	.01320	.42816	.11740	.55996	.03785
#4	22.906	4.2226	.01318	.43076	.10231	.51571	-.01305

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	-.08754	9.6693	.01834	.05469	.73287	.05431	.16352
SDev	.06517	.0327	.02115	.00027	.00380	.05503	.00009
%RSD	74.453	.33812	115.30	.49284	.51810	101.33	.05508

#1	-.00895	9.6223	-.00553	.05435	.72735	.05896	.16340
#2	-.16851	9.6736	.03408	.05485	.73439	-.02062	.16350

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#3	-.08430	9.6964	.00674	.05460	.73375	.11157	.16359
#4	-.08839	9.6850	.03808	.05496	.73598	.06733	.16358

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	.35881
SDev	.00296
%RSD	.82577

#1	.35510
#2	.36084
#3	.36152
#4	.35777

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLR5

Operator: MTW

Run Time: 08/16/00 17:44:31

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	.00146	83.464	.06961	.00732	.38426	.00447	13.436
SDev	.00201	.233	.02339	.00618	.00123	.00006	.049
%RSD	137.77	.27882	33.604	84.344	.32000	1.4054	.36233
#1	-.00143	83.525	.09234	.01081	.38548	.00438	13.373
#2	.00292	83.445	.04111	.01166	.38451	.00451	13.465
#3	.00275	83.163	.08464	-.00173	.38255	.00450	13.424
#4	.00161	83.724	.06033	.00856	.38451	.00450	13.483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00136	.07016	.10582	.10119	176.03	3.7554	.11685
SDev	.00102	.00108	.00229	.00040	.52	.1447	.00145
%RSD	75.204	1.5389	2.1660	.40004	.29604	3.8537	1.2399
#1	-.00051	.07016	.10404	.10096	175.79	3.6108	.11899
#2	-.00283	.07017	.10912	.10099	176.23	3.8211	.11595
#3	-.00121	.06884	.10556	.10180	175.46	3.9262	.11653
#4	-.00088	.07148	.10455	.10103	176.66	3.6634	.11595
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	23.892	2.7211	.00126	.46890	.10701	.47496	.01487
SDev	.068	.0089	.00464	.00590	.00641	.01647	.01276
%RSD	.28515	.32831	370.04	1.2582	5.9881	3.4666	85.803
#1	23.868	2.7165	.00002	.46673	.11630	.45472	.01757
#2	23.921	2.7242	.00487	.47713	.10585	.48415	.01726
#3	23.810	2.7116	-.00480	.46326	.10188	.49185	.02754
#4	23.968	2.7320	.00493	.46846	.10398	.46914	-.00288
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.15885	9.5925	.02776	.06969	.77117	.06383	.17181
SDev	.02378	.0157	.02497	.00005	.00145	.10132	.00170
%RSD	14.971	.16373	89.938	.07303	.18856	158.75	.98868
#1	-.17367	9.5825	.00599	.06973	.77117	.08051	.17266
#2	-.12337	9.5768	.06140	.06965	.77149	-.07160	.16927

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#3	-.17076	9.6110	.03167	.06973	.76925	.07255	.17257
#4	-.16761	9.5996	.01198	.06965	.77277	.17385	.17276
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 .34237
SDev .00326
%RSD .95298

#1 .33773
#2 .34534
#3 .34289
#4 .34352

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGLR7

Operator: MTW

Run Time: 08/16/00 17:47:40

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	.00168	89.577	.05051	.01529	.42360	.00445	18.784
SDev	.00085	.143	.03875	.00912	.00124	.00007	.075
%RSD	50.712	.15998	76.718	59.644	.29170	1.5310	.39675

#1	.00234	89.426	.09787	.01298	.42282	.00451	18.725
#2	.00248	89.751	.06518	.00941	.42428	.00439	18.880
#3	.00092	89.631	.01171	.02876	.42497	.00440	18.725
#4	.00096	89.502	.02726	.00999	.42233	.00451	18.807

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00111	.07791	.12932	.12732	162.50	5.7458	.13529
SDev	.00178	.00226	.00247	.00183	.26	.3119	.00055
%RSD	160.35	2.9037	1.9083	1.4369	.15854	5.4287	.40341

#1	.00292	.08089	.12792	.12687	162.29	5.8706	.13554
#2	.00203	.07692	.13300	.12952	162.87	5.6867	.13525
#3	-.00118	.07560	.12792	.12513	162.37	5.3451	.13583
#4	.00068	.07825	.12843	.12775	162.46	6.0808	.13455

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.287	3.1547	.00639	.39598	.12286	.42312	.01251
SDev	.061	.0076	.00461	.00363	.00860	.01838	.02116
%RSD	.23061	.24197	72.083	.91727	7.0029	4.3443	169.04

#1	26.270	3.1482	.00278	.40086	.11693	.43252	-.01285
#2	26.362	3.1646	.01242	.39263	.12856	.43215	.03791
#3	26.301	3.1492	.00279	.39653	.11418	.43226	.00727
#4	26.217	3.1568	.00758	.39393	.13176	.39555	.01773

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	-.13404	8.2320	-.01005	.07831	.67793	-.01258	.16730
SDev	.05451	.0154	.03135	.00005	.00041	.12016	.00180
%RSD	40.664	.18733	311.82	.06566	.06091	955.09	1.0746

#1	-.17144	8.2092	-.01416	.07828	.67745	-.06161	.16810
#2	-.08677	8.2377	-.02765	.07828	.67809	-.10153	.16830

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#3	-.19013	8.2433	.03534	.07839	.67841	.16477	.16460
#4	-.08784	8.2377	-.03375	.07828	.67777	-.05195	.16819
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 .41044
SDev .00336
%RSD .81947

#1 .41342
#2 .41227
#3 .40579
#4 .41029

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGLRA

Operator: MTW

Run Time: 08/16/00 17:50:48

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	.00149	106.28	.09394	.01937	.52055	.00584	29.772
SDev	.00065	.53	.04976	.01502	.00307	.00012	.207
%RSD	43.579	.49594	52.974	77.502	.59017	1.9852	.69684
#1	.00238	105.74	.03672	.00506	.51781	.00568	29.769
#2	.00083	105.92	.15711	.04051	.51801	.00581	29.493
#3	.00137	106.80	.09953	.01683	.52367	.00592	29.836
#4	.00137	106.65	.08240	.01509	.52270	.00593	29.989
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
Avge	.00029	.13018	.15597	.23716	223.80	9.3851	.19427
SDev	.00663	.00249	.00232	.00222	1.17	.2611	.00215
%RSD	2288.8	1.9120	1.4892	.93615	.52380	2.7825	1.1083
#1	.00354	.12854	.15635	.23536	223.08	9.3917	.19206
#2	-.00047	.12852	.15280	.23532	222.53	9.0589	.19353
#3	.00671	.13379	.15635	.23985	224.74	9.3917	.19718
#4	L-.00862	.12985	.15839	.23811	224.85	9.6983	.19432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	40.140	4.8989	.00243	.44062	.23261	.27997	-.00176
SDev	.225	.0250	.00390	.00444	.01010	.03296	.00006
%RSD	.55999	.51089	160.40	1.0074	4.3403	11.772	3.6100
#1	39.908	4.8892	.00232	.44550	.22312	.29885	-.00182
#2	40.003	4.8681	.00224	.43510	.23120	.23253	-.00178
#3	40.398	4.9173	.00735	.44246	.24684	.28321	-.00167
#4	40.250	4.9212	-.00219	.43943	.22927	.30528	-.00175
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	-.14733	11.352	.01270	.12008	.72991	.23807	.18825
SDev	.05484	.060	.01666	.00069	.00373	.18934	.00227
%RSD	37.223	.52580	131.22	.57763	.51104	79.534	1.2075
#1	-.15489	11.309	.00121	.11949	.72671	.50094	.18796
#2	-.07699	11.292	.02679	.11949	.72671	.17725	.18678

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#3	-.14673	11.406	.02719	.12049	.73375	.05237	.19155
#4	-.21070	11.400	-.00440	.12084	.73247	.22171	.18671

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	.61072
SDev	.00523
%RSD	.85695

#1	.60441
#2	.60847
#3	.61561
#4	.61437

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-10

Operator: MTW

Run Time: 08/16/00 17:53:57

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	1.0319	51.458	5.1071	5.0570	4.9997	5.0488	53.164
SDev	.0035	.127	.1346	.0240	.0155	.0092	.284
%RSD	.33771	.24665	2.6348	.47479	.30901	.18318	.53449
#1	1.0355	51.368	5.0516	5.0451	4.9814	5.0498	53.422
#2	1.0341	51.643	5.3025	5.0451	5.0179	5.0615	53.325
#3	1.0297	51.382	4.9968	5.0448	4.9948	5.0416	53.131
#4	1.0282	51.439	5.0775	5.0930	5.0046	5.0423	52.778
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	5.2490	5.1079	5.1155	4.9851	52.694	50.620	4.9359
SDev	.0266	.0241	.0201	.0138	.151	.327	.0307
%RSD	.50668	.47137	.39271	.27741	.28586	.64573	.62238
#1	5.2858	5.1264	5.1323	4.9746	52.802	50.856	4.8972
#2	5.2404	5.1225	5.1323	4.9999	52.823	50.944	4.9574
#3	5.2473	5.1093	5.1054	4.9720	52.650	50.374	4.9254
#4	5.2227	5.0735	5.0922	4.9937	52.500	50.304	4.9634
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	51.445	5.0748	5.0980	50.608	5.1618	5.2313	5.1970
SDev	.106	.0180	.0185	.219	.0071	.0512	.0422
%RSD	.20584	.35452	.36303	.43277	.13733	.97910	.81202
#1	51.482	5.0908	5.0956	50.347	5.1543	5.2963	5.1866
#2	51.577	5.0880	5.1243	50.825	5.1640	5.2445	5.2476
#3	51.379	5.0679	5.0813	50.513	5.1706	5.1779	5.2073
#4	51.342	5.0526	5.0908	50.748	5.1583	5.2063	5.1463
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	5.1180	5.2006	5.1383	5.0454	5.0243	10.065	5.0929
SDev	.0343	.0116	.0447	.0144	.0119	.145	.0160
%RSD	.67111	.22214	.86946	.28556	.23724	1.4363	.31364
#1	5.1259	5.2064	5.1980	5.0316	5.0249	9.9419	5.0993
#2	5.0881	5.2066	5.1074	5.0654	5.0409	9.9757	5.1115

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#3	5.1633	5.2062	5.1468	5.0396	5.0156	10.080	5.0861
#4	5.0949	5.1833	5.1010	5.0450	5.0156	10.263	5.0746

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	5.0872
SDev	.0116
%RSD	.22737

#1	5.0911
#2	5.0992
#3	5.0868
#4	5.0717

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB10

Operator: MTW

Run Time: 08/16/00 17:57:06

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	-.00070	.00446	.00911	-.00014	.00024	.00018	.01164
SDev	.00317	.01337	.03280	.00149	.00012	.00001	.00547
%RSD	452.30	299.62	360.14	1044.2	47.547	4.5851	47.032
#1	-.00391	-.00937	-.02102	.00098	.00014	.00019	.00560
#2	.00322	.01917	.00068	.00039	.00034	.00017	.01875
#3	.00038	.01204	.05582	.00039	.00034	.00017	.01217
#4	-.00249	-.00399	.00095	-.00233	.00014	.00018	.01003
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	-.00001	.00000	.00127	.00044	.00212	.03941	-.00072
SDev	.00181	.00242	.00173	.00110	.00032	.39757	.00054
%RSD	28501.	842250.	136.80	251.57	15.347	1008.7	75.975
#1	.00247	-.00133	.00102	-.00109	.00196	-.48831	-.00025
#2	-.00078	.00265	.00305	.00066	.00196	.38758	-.00123
#3	-.00178	.00133	.00203	.00065	.00196	.29999	-.00114
#4	.00007	-.00265	-.00102	.00152	.00261	-.04160	-.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00395	-.00000	-.00239	.01213	.00673	.01843	.00514
SDev	.01149	.00048	.00390	.00657	.00360	.02731	.01520
%RSD	290.59	178660.	163.32	54.163	53.423	148.14	295.64
#1	-.01054	-.00024	-.00239	.00823	.00472	-.01479	-.01262
#2	.01318	-.00024	.00239	.01560	.01172	.03691	-.00242
#3	.01318	-.00024	-.00239	.01950	.00358	.04428	.01775
#4	.00000	.00071	-.00716	.00520	.00692	.00732	.01786
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	-.02645	.00288	.00151	.00046	-.00024	-.02843	.00200
SDev	.02554	.03558	.01738	.00010	.00071	.04283	.00311
%RSD	96.560	1237.5	1153.1	22.222	295.65	150.69	156.07
#1	-.03968	-.04988	-.00895	.00031	-.00096	-.03691	-.00121
#2	-.05479	.02428	-.01088	.00051	.00064	-.01427	.00471

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#3	.00189	.02428	.02676	.00051	-.00000	.01981	.00462
#4	-.01322	.01282	-.00090	.00051	-.00064	-.08233	-.00014

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

Elem	ZN
Units	ppm
Avge	-.00013
SDev	.00096
%RSD	750.59

#1	-.00151
#2	-.00002
#3	.00053
#4	.00049

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGLRC

Operator: MTW

Run Time: 08/16/00 18:00:15

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	.00090	86.219	.11261	.00298	.44979	.00467	16.349
SDev	.00175	.348	.04243	.00080	.00206	.00006	.123
%RSD	194.15	.40326	37.682	26.783	.45858	1.2618	.75397

#1	-.00065	85.842	.07957	.00332	.44823	.00463	16.307
#2	.00221	86.006	.16626	.00190	.44892	.00465	16.314
#3	-.00057	86.489	.07761	.00376	.45282	.00465	16.247
#4	.00259	86.539	.12700	.00292	.44920	.00476	16.528

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.07703	.11484	.12176	174.62	4.6072	.12637
SDev	.00246	.00295	.00247	.00097	.78	.2715	.00100
%RSD	466.43	3.8234	2.1479	.79736	.44770	5.8933	.79470

#1	.00011	.07803	.11725	.12258	174.03	4.9597	.12529
#2	-.00413	.07804	.11624	.12086	174.21	4.6531	.12694
#3	.00138	.07271	.11167	.12261	174.46	4.4955	.12746
#4	.00053	.07934	.11421	.12098	175.76	4.3203	.12579

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	25.506	3.6841	.00940	.41906	.12311	.17344	.00468
SDev	.098	.0205	.00398	.00507	.00674	.01838	.01521
%RSD	.38589	.55543	42.331	1.2089	5.4772	10.599	324.82

#1	25.402	3.6722	.00931	.42036	.12246	.18123	.01730
#2	25.466	3.6761	.00934	.42513	.12084	.19579	-.01306
#3	25.521	3.6733	.00460	.41776	.11662	.15844	-.00292
#4	25.634	3.7147	.01435	.41299	.13253	.15831	.01742

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	-.14841	8.7206	.03076	.07429	.80899	.11795	.16545
SDev	.03451	.0478	.02057	.00019	.00258	.11611	.00235
%RSD	23.250	.54776	66.857	.25857	.31856	98.438	1.4233

#1	-.11026	8.6821	.05690	.07408	.80635	.05857	.16820
#2	-.16272	8.7049	.01332	.07418	.80731	.23852	.16354

667 947

#3	-.13181	8.7049	.01538	.07448	.81051	-.01391	.16344
#4	-.18887	8.7904	.03745	.07443	.81179	.18863	.16662

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	.39579
SDev	.00085
%RSD	.21382

#1	.39470
#2	.39647
#3	.39645
#4	.39554

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLRD

Operator: MTW

Run Time: 08/16/00 18:03:23

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
Avge	.00195	120.16	.07228	.05161	.52587	.00606	21.571
SDev	.00137	.25	.05241	.01382	.00167	.00006	.071
%RSD	70.420	.20477	72.504	26.788	.31736	1.0016	.33028

#1	.00286	119.94	.09787	.05519	.52612	.00609	21.473
#2	.00011	119.98	.08970	.05929	.52416	.00609	21.569
#3	.00312	120.44	.10715	.03117	.52807	.00609	21.599
#4	.00171	120.30	-.00560	.06076	.52514	.00597	21.641

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
Avge	.00097	.10884	.15392	.20659	236.32	9.2778	.20920
SDev	.00468	.00333	.00173	.00085	.57	.2446	.00112
%RSD	484.09	3.0569	1.1230	.41224	.23921	2.6366	.53630

#1	-.00072	.11249	.15380	.20588	235.65	9.2165	.20850
#2	-.00024	.10984	.15329	.20679	236.05	9.6369	.20861
#3	-.00294	.10851	.15228	.20771	236.76	9.1640	.21087
#4	.00776	.10451	.15634	.20597	236.81	9.0939	.20881

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	41.240	4.1259	.00669	.56510	.18468	.17409	.07885
SDev	.111	.0106	.01000	.00432	.00860	.01645	.09031
%RSD	.26903	.25775	149.46	.76431	4.6537	9.4515	114.52

#1	41.152	4.1117	.00420	.56294	.17401	.16169	.15990
#2	41.136	4.1251	-.00529	.56597	.18350	.19834	.14988
#3	41.323	4.1301	.01869	.57074	.18637	.16814	-.02258
#4	41.347	4.1368	.00915	.56077	.19486	.16817	.02822

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	-.08034	6.4519	.03004	.10378	.79388	.14417	.21933
SDev	.03027	.0377	.03288	.00025	.00186	.14226	.00022
%RSD	37.682	.58365	109.46	.24064	.23493	98.679	.10175

#1	-.03864	6.4263	.05747	.10390	.79260	.32131	.21945
#2	-.08671	6.4262	.05948	.10340	.79196	.19232	.21926

667 949

#3	-.08484	6.4490	-.00049	.10390	.79548	.06014	.21904
#4	-.11117	6.5060	.00371	.10390	.79548	.00290	.21955

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	.60552
SDev	.00321
%RSD	.52968

#1	.60415
#2	.60385
#3	.60376
#4	.61032

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLRF

Operator: MTW

Run Time: 08/16/00 18:06:32

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	.00159	90.334	.11110	.03005	.39303	.00484	22.178
SDev	.00165	.443	.05641	.01171	.00268	.00007	.089
%RSD	103.47	.49025	50.780	38.949	.68150	1.3543	.39978
#1	.00008	90.161	.09000	.03544	.39301	.00488	22.098
#2	.00292	89.807	.04143	.03530	.38939	.00487	22.289
#3	.00310	90.815	.16459	.03694	.39574	.00488	22.117
#4	.00026	90.556	.14835	.01253	.39399	.00474	22.210
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	-.00142	.09641	.13249	.19663	207.19	8.1260	.16181
SDev	.00474	.00227	.00093	.00125	.45	.1835	.00237
%RSD	332.68	2.3549	.70039	.63521	.21634	2.2584	1.4650
#1	-.00219	.09409	.13198	.19747	206.84	8.3406	.16321
#2	.00390	.09541	.13350	.19485	206.76	8.1567	.15889
#3	.00004	.09673	.13300	.19754	207.62	8.1129	.16419
#4	L-.00745	.09941	.13147	.19666	207.52	7.8939	.16095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	35.327	3.6686	-.00006	.33943	.18025	.20240	.01304
SDev	.155	.0067	.00395	.00640	.00773	.04325	.03362
%RSD	.43903	.18360	7146.8	1.8862	4.2858	21.367	257.90
#1	35.342	3.6616	-.00488	.33369	.18134	.26707	.04860
#2	35.102	3.6644	-.00012	.33499	.17177	.17885	.01808
#3	35.427	3.6723	.00478	.34149	.17767	.17807	.01799
#4	35.435	3.6761	-.00001	.34756	.19021	.18562	-.03253
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	-.08622	7.9670	-.00918	.10328	.73399	.13338	.17038
SDev	.05537	.0402	.01850	.00066	.00271	.06150	.00269
%RSD	64.210	.50400	201.58	.63975	.36870	46.109	1.5799
#1	-.06919	7.9698	-.02142	.10315	.73343	.04898	.16796
#2	-.16387	7.9129	-.02750	.10240	.73055	.12920	.17272

Analysis Report

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#3	-.03311	7.9755	.01216	.10390	.73694	.16582	.16815
#4	-.07873	8.0098	.00006	.10365	.73502	.18954	.17271
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	.52356
SDev	.00344
%RSD	.65689

#1	.51920
#2	.52256
#3	.52549
#4	.52698

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLRJ

Operator: MTW

Run Time: 08/16/00 18:09:41

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	.00122	116.20	.07644	.02004	.45224	.00525	24.012
SDev	.00076	.35	.04364	.00710	.00206	.00006	.176
%RSD	62.337	.30296	57.092	35.417	.45560	1.0492	.73480
#1	.00159	115.80	.09701	.01071	.45087	.00517	23.757
#2	.00211	116.39	.07865	.02006	.45331	.00528	24.152
#3	.00055	116.04	.11517	.02150	.45018	.00528	24.100
#4	.00062	116.59	.01492	.02791	.45458	.00528	24.040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00148	.09644	.15101	.20303	213.74	10.233	.19285
SDev	.00252	.00295	.00399	.00051	.95	.176	.00150
%RSD	170.08	3.0547	2.6403	.24937	.44263	1.7162	.77903
#1	-.00294	.10076	.14822	.20227	212.37	10.381	.19267
#2	.00210	.09543	.15635	.20331	214.49	10.127	.19342
#3	-.00349	.09412	.15177	.20326	213.91	10.381	.19087
#4	-.00160	.09544	.14771	.20328	214.20	10.040	.19443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	37.450	3.4411	.00212	.45915	.17594	.16486	-.00233
SDev	.134	.0167	.00449	.00564	.00915	.01377	.00007
%RSD	.35683	.48613	211.74	1.2294	5.1984	8.3532	3.0627
#1	37.256	3.4167	.00549	.45243	.16618	.15449	-.00243
#2	37.543	3.4544	-.00374	.45676	.17234	.18297	-.00233
#3	37.470	3.4476	.00095	.46240	.18779	.15380	-.00226
#4	37.533	3.4458	.00577	.46500	.17747	.16817	-.00231
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	-.08690	6.8719	.04054	.09728	.69928	.22885	.19959
SDev	.04253	.0493	.01677	.00048	.00273	.04205	.00229
%RSD	48.939	.71773	41.370	.49154	.39058	18.374	1.1482
#1	-.14910	6.8704	.05066	.09691	.69568	.18328	.19616
#2	-.05282	6.9275	.01745	.09741	.70208	.20704	.20066

#3	-.07323	6.8819	.05490	.09691	.69888	.24701	.20074
#4	-.07246	6.8078	.03914	.09791	.70048	.27807	.20082

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	.54399
SDev	.00255
%RSD	.46835

#1	.54171
#2	.54329
#3	.54764
#4	.54330

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGLRK

Operator: MTW

Run Time: 08/16/00 18:12:50

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	.00039	89.900	.09983	.01893	.41622	.00436	26.755
SDev	.00172	.484	.08907	.01760	.00320	.00006	.105
%RSD	436.42	.53858	89.227	92.952	.76978	1.2953	.39357

#1	.00054	89.301	.02312	.01020	.41305	.00439	26.638
#2	.00077	90.006	.04195	.04532	.41695	.00439	26.698
#3	.00221	89.821	.21961	.00957	.41451	.00439	26.865
#4	-.00194	90.471	.11463	.01064	.42038	.00428	26.820

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00132	.07689	.11712	.13729	162.08	6.8954	.13896
SDev	.00080	.00391	.00127	.00074	.68	.2515	.00122
%RSD	60.508	5.0843	1.0853	.54044	.42185	3.6478	.88051

#1	-.00107	.08087	.11725	.13635	161.15	7.0005	.13730
#2	-.00115	.07423	.11573	.13817	162.15	7.0356	.13910
#3	-.00059	.07954	.11878	.13731	162.24	7.0268	.14026
#4	-.00245	.07290	.11674	.13735	162.79	6.5188	.13919

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	27.069	3.7271	.00156	.47063	.12729	.19630	-.01285
SDev	.151	.0155	.00815	.00534	.00528	.02421	.03205
%RSD	.55948	.41453	523.69	1.1353	4.1439	12.334	249.46

#1	26.886	3.7056	-.00216	.47237	.12393	.19701	-.00269
#2	27.097	3.7288	.00276	.46283	.13513	.16663	-.03310
#3	27.039	3.7317	.01232	.47237	.12452	.22592	.02768
#4	27.253	3.7423	-.00669	.47497	.12557	.19563	-.04328

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	-.04538	5.9569	.04301	.11102	.70288	.04036	.16706
SDev	.07257	.0142	.01117	.00092	.00324	.06629	.00178
%RSD	159.91	.23903	25.967	.83158	.46034	164.24	1.0656

#1	-.15177	5.9355	.04289	.10990	.69920	-.00127	.16798
#2	.00959	5.9640	.05676	.11114	.70368	.13625	.16808

667 955

#3	-.02796	5.9640	.02940	.11090	.70176	.03305	.16780
#4	-.01139	5.9640	.04299	.11214	.70688	-.00658	.16440
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 .55383
SDev .00447
%RSD .80725

#1 .54777
#2 .55324
#3 .55656
#4 .55776

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGNP2

Operator: MTW

Run Time: 08/16/00 18:15:58

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	.00121	130.34	.07957	.02666	.82131	.00680	33.405
SDev	.00251	.15	.08291	.00252	.00203	.00006	.120
%RSD	207.55	.11805	104.19	9.4585	.24695	.90063	.35796

#1	-.00142	130.15	.15803	.02449	.82009	.00677	33.244
#2	.00160	130.46	.13632	.02862	.82330	.00677	33.416
#3	.00449	130.28	-.02047	.02907	.81911	.00690	33.533
#4	.00017	130.47	.04440	.02448	.82273	.00677	33.426

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00250	.20308	.20510	.41396	270.47	11.509	.20897
SDev	.00259	.00126	.00212	.00085	.42	.147	.00094
%RSD	103.24	.62170	1.0313	.20548	.15370	1.2801	.45052

#1	.00022	.20144	.20560	.41326	269.87	11.494	.21026
#2	.00138	.20408	.20256	.41332	270.60	11.327	.20881
#3	.00224	.20275	.20764	.41421	270.84	11.687	.20879
#4	.00618	.20407	.20459	.41506	270.58	11.529	.20800

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	45.189	9.9211	.01180	.51126	.25189	.72065	.03148
SDev	.061	.0148	.00833	.00524	.01565	.01948	.02263
%RSD	.13507	.14892	70.639	1.0251	6.2130	2.7027	71.911

#1	45.116	9.9002	-.00023	.51353	.26776	.71719	.03936
#2	45.227	9.9233	.01420	.50833	.26290	.73165	.04933
#3	45.251	9.9348	.01901	.51743	.23896	.73897	-.00170
#4	45.164	9.9261	.01420	.50573	.23795	.69478	.03892

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	-.20860	4.6629	.02538	.18993	.67457	.33991	.23814
SDev	.03365	.0074	.01930	.00062	.00131	.07816	.00032
%RSD	16.133	.15777	76.063	.32872	.19357	22.996	.13520

#1	L-.25837	4.6657	-.00334	.18987	.67265	.30625	.23811
#2	-.19598	4.6543	.03240	.19062	.67521	.25342	.23838

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#3	-.18403	4.6714	.03419	.18912	.67489	.36465	.23770
#4	-.19603	4.6600	.03828	.19012	.67553	.43532	.23839

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

Elem	ZN
Units	ppm
Avge	1.1607
SDev	.0039
%RSD	.33784

#1	1.1590
#2	1.1567
#3	1.1659
#4	1.1613

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQ3

Operator: MTW

Run Time: 08/16/00 18:19:07

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	.96686	96.081	.16737	.01081	1.7561	.00539	62.392
SDev	.00395	.522	.10053	.01747	.0125	.00006	.427
%RSD	.40819	.54303	60.060	161.60	.71258	1.1137	.68470
#1	.96160	95.692	.15265	.01309	1.7531	.00537	61.922
#2	.96607	95.728	.20271	-.00674	1.7479	.00536	62.166
#3	.97010	96.816	.03741	.00286	1.7746	.00548	62.609
#4	.96968	96.087	.27673	.03402	1.7489	.00536	62.870
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01076	.21277	.67023	80.844	H604.79	10.261	.18723
SDev	.00395	.00726	.00328	.565	2.74	.222	.00100
%RSD	36.708	3.4135	.48908	.69913	.45387	2.1678	.53637
#1	.00707	.20483	.66730	80.788	H602.09	10.478	.18731
#2	.01630	.21409	.66934	80.525	H602.96	10.215	.18636
#3	.01049	.21010	.66934	81.657	H607.95	9.9698	.18861
#4	.00919	.22206	.67493	80.405	H606.19	10.381	.18665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	100.00	100.00	100.00	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	43.139	6.9622	.04030	1.3849	.35931	9.9513	.02904
SDev	.254	.0338	.01053	.0145	.01388	.0335	.01755
%RSD	.58898	.48600	26.129	1.0504	3.8644	.33641	60.415
#1	42.979	6.9264	.02557	1.3677	.33899	9.9833	.01379
#2	42.928	6.9410	.04480	1.3816	.36927	9.9760	.04427
#3	43.490	6.9967	.04077	1.4028	.36701	9.9150	.01391
#4	43.160	6.9848	.05006	1.3876	.36196	9.9310	.04419
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	L-.37654	9.3099	1.0618	.31639	.73630	.79067	.35604
SDev	.05571	.0459	.0273	.00201	.00290	.16754	.00078
%RSD	14.796	.49319	2.5666	.63493	.39337	21.189	.21911
#1	L-.44509	9.2828	1.0296	.31567	.73407	.62830	.35488
#2	L-.34454	9.2715	1.0912	.31503	.73407	.66474	.35642

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#3	L-.32005	9.3740	1.0505	.31938	.74014	.92015	.35634
#4	L-.39648	9.3113	1.0760	.31548	.73694	.94948	.35653

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

Elem ZN
Units ppm
Avge 3.3777
SDev .0143
%RSD .42376

#1 3.3618
#2 3.3695
#3 3.3884
#4 3.3911

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGNQ4

Operator: MTW

Run Time: 08/16/00 18:22:16

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	.02485	82.546	.15362	.10670	9.9854	.00544	121.88
SDev	.00157	.173	.04643	.01255	.0304	.00001	.30
%RSD	6.3359	.20956	30.224	11.758	.30400	.13914	.24245
#1	.02603	82.398	.21661	.09200	9.9707	.00545	121.61
#2	.02638	82.530	.12197	.10056	9.9777	.00543	122.23
#3	.02352	82.793	.16038	.11657	10.030	.00543	121.67
#4	.02346	82.464	.11552	.11769	9.9633	.00545	122.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10617	.17881	1.8985	3.8500	H552.21	16.408	.10754
SDev	.00420	.00254	.0035	.0100	.65	.278	.00142
%RSD	3.9588	1.4216	.18589	.25856	.11845	1.6954	1.3159
#1	.10242	.18082	1.8961	3.8436	H551.24	16.802	.10845
#2	.11046	.18079	1.9037	3.8437	H552.64	16.154	.10854
#3	.10270	.17813	1.8966	3.8646	H552.54	16.373	.10767
#4	.10910	.17550	1.8976	3.8480	H552.41	16.302	.10550
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	33.684	6.7622	.05870	4.9641	.38999	22.002	.27831
SDev	.082	.0089	.00923	.0274	.01582	.066	.03790
%RSD	.24483	.13164	15.730	.55174	4.0560	.29996	13.618
#1	33.566	6.7500	.04662	4.9412	.40347	21.967	.23801
#2	33.705	6.7714	.06593	4.9455	.39053	22.033	.26804
#3	33.758	6.7637	.06591	5.0010	.39831	21.930	.32910
#4	33.705	6.7637	.05634	4.9685	.36764	22.077	.27808
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	L-.36108	7.4260	.43275	.71565	1.3639	.79013	.41738
SDev	.02389	.0000	.02322	.00210	.0025	.14880	.00286
%RSD	6.6174	.00049	5.3664	.29335	.18601	18.832	.68447
#1	L-.37119	7.4259	.40225	.71455	1.3613	.98178	.41481
#2	L-.32592	7.4260	.45600	.71470	1.3648	.83108	.41986

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#3	L-.37910	7.4260	.42859	.71880	1.3671	.69586	.41985
#4	L-.36810	7.4259	.44415	.71455	1.3626	.65181	.41500
Errors	LC Low	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 16.283
SDev .043
%RSD .26297

#1 16.222
#2 16.319
#3 16.304
#4 16.288

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGNQ5

Operator: MTW

Run Time: 08/16/00 18:25:24

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	.00140	112.29	.07262	.01410	.72827	.00553	11.305
SDev	.00319	.26	.06968	.00177	.00279	.00001	.087
%RSD	227.85	.23285	95.956	12.538	.38309	.16189	.76533
#1	-.00188	112.34	.16164	.01306	.73076	.00553	11.214
#2	.00226	112.14	.04633	.01225	.72851	.00553	11.273
#3	.00545	112.03	.08590	.01614	.72432	.00551	11.419
#4	-.00023	112.63	-.00338	.01494	.72949	.00553	11.316
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00314	.10381	.15254	.18935	249.34	7.2852	.14950
SDev	.00325	.00453	.00225	.00041	.69	.2009	.00119
%RSD	103.31	4.3614	1.4758	.21485	.27595	2.7583	.79775
#1	L- .00704	.10581	.15483	.18954	248.98	6.9918	.14795
#2	-.00455	.09785	.14975	.18949	248.55	7.3421	.15079
#3	-.00099	.10845	.15381	.18874	249.87	7.4472	.14931
#4	-.00000	.10314	.15178	.18961	249.96	7.3596	.14992
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	30.689	7.6936	.00983	.37594	.17765	.16822	.06098
SDev	.056	.0248	.00234	.00595	.01563	.02051	.07321
%RSD	.18225	.32220	23.763	1.5820	8.7994	12.194	120.07
#1	30.682	7.6778	.01097	.37226	.18478	.17745	-.00239
#2	30.640	7.6681	.01090	.37963	.16162	.15551	.11921
#3	30.666	7.7209	.00633	.38223	.16823	.19242	.12935
#4	30.769	7.7076	.01112	.36966	.19600	.14749	-.00226
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	-.13862	6.0841	.03153	.06048	.77013	.07253	.20120
SDev	.09368	.0333	.02411	.00020	.00146	.04591	.00331
%RSD	67.582	.54655	76.471	.32407	.18995	63.303	1.6458
#1	-.21137	6.0556	.03167	.06064	.76925	.10168	.20094
#2	-.22763	6.0556	.00646	.06039	.76861	.00399	.19743

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#3	-.06162	6.1070	.06406	.06024	.77085	.09265	.20551
#4	-.05385	6.1183	.02394	.06064	.77181	.09181	.20093

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	.74512
SDev	.00467
%RSD	.62713

#1	.74474
#2	.73900
#3	.74653
#4	.75022

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQC

Operator: MTW

Run Time: 08/16/00 18:28:33

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	-.00026	127.18	.07445	.02404	.47450	.00682	17.038
SDev	.00028	.42	.03667	.00530	.00187	.00006	.094
%RSD	107.08	.33341	49.256	22.042	.39415	.80097	.55260
#1	-.00059	126.57	.08473	.01956	.47257	.00674	16.942
#2	-.00036	127.35	.11035	.02966	.47432	.00685	17.001
#3	-.00015	127.54	.02331	.02747	.47705	.00685	17.045
#4	.00006	127.27	.07943	.01947	.47404	.00685	17.164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00094	.16952	.20181	.36100	332.36	14.432	.27480
SDev	.00130	.00242	.00173	.00087	1.16	.242	.00189
%RSD	138.01	1.4298	.85950	.24208	.34885	1.6734	.68645
#1	-.00037	.17085	.19953	.35980	331.02	14.349	.27358
#2	.00062	.16686	.20155	.36161	331.90	14.411	.27656
#3	-.00214	.17217	.20257	.36169	332.80	14.770	.27624
#4	-.00187	.16819	.20359	.36089	333.72	14.200	.27280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	58.937	6.8934	.01747	.48244	.33726	.17605	-.01390
SDev	.194	.0269	.00610	.00667	.00759	.02402	.00977
%RSD	.32975	.39048	34.920	1.3826	2.2499	13.645	70.269
#1	58.704	6.8621	.01846	.47973	.33025	.14360	-.02150
#2	58.852	6.8833	.00904	.48450	.34770	.19443	-.00109
#3	59.068	6.9035	.01873	.49057	.33346	.17211	-.02156
#4	59.124	6.9248	.02364	.47497	.33763	.19407	-.01146
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	-.16933	7.6783	.01609	.08245	.83514	.28330	.20931
SDev	.05795	.0157	.02133	.00043	.00207	.08545	.00232
%RSD	34.221	.20464	132.58	.52464	.24821	30.163	1.1102
#1	-.09726	7.6626	-.01432	.08207	.83226	.28276	.20583
#2	-.20455	7.6684	.02150	.08282	.83514	.23973	.21031

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#3	-.14927	7.6969	.02157	.08282	.83610	.20779	.21050
#4	-.22622	7.6855	.03562	.08207	.83706	.40291	.21060
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 .96415
SDev .00557
%RSD .57765

#1 .95688
#2 .96409
#3 .97041
#4 .96522

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-11

Operator: MTW

Run Time: 08/16/00 18:31:42

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	1.0296	51.364	5.1469	5.0633	4.9958	5.0432	52.848
SDev	.0042	.396	.0477	.0531	.0566	.0356	.256
%RSD	.41250	.77127	.92587	1.0492	1.1329	.70552	.48501
#1	1.0357	51.939	5.2042	5.1418	5.0777	5.0956	53.102
#2	1.0295	51.252	5.1673	5.0245	4.9781	5.0299	52.913
#3	1.0266	51.229	5.1017	5.0457	4.9798	5.0313	52.491
#4	1.0267	51.034	5.1142	5.0412	4.9476	5.0161	52.884
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	5.2102	5.0971	5.0937	4.9846	52.533	50.773	4.9608
SDev	.0180	.0248	.0271	.0515	.284	.260	.0676
%RSD	.34477	.48577	.53183	1.0338	.54149	.51146	1.3634
#1	5.2323	5.1251	5.1303	5.0582	52.952	51.093	5.0538
#2	5.1993	5.1067	5.0962	4.9624	52.467	50.699	4.9253
#3	5.1924	5.0670	5.0673	4.9780	52.347	50.830	4.9647
#4	5.2170	5.0895	5.0810	4.9397	52.365	50.471	4.8992
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	51.424	5.0610	5.0610	50.714	5.1419	5.1794	5.1742
SDev	.374	.0273	.0274	.582	.0424	.0596	.0154
%RSD	.72675	.53962	.54211	.1.1469	.82486	1.1516	.29818
#1	51.970	5.0985	5.1004	51.513	5.1753	5.2664	5.1868
#2	51.182	5.0621	5.0478	50.450	5.1714	5.1411	5.1874
#3	51.363	5.0354	5.0383	50.733	5.0836	5.1400	5.1562
#4	51.182	5.0478	5.0574	50.161	5.1374	5.1702	5.1666
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	5.0515	5.1990	5.1466	5.0319	5.0193	10.314	5.0796
SDev	.0974	.0110	.0386	.0523	.0400	.144	.0336
%RSD	1.9274	.21110	.74927	1.0387	.79773	1.4008	.66161
#1	5.1603	5.2068	5.1939	5.1081	5.0783	10.519	5.1296
#2	5.1061	5.2003	5.1012	5.0140	5.0086	10.218	5.0680

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#3	4.9811	5.2059	5.1366	5.0165	5.0000	10.310	5.0584
#4	4.9584	5.1831	5.1545	4.9891	4.9904	10.208	5.0623

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	5.0951
SDev	.0241
%RSD	.47281

#1	5.1292
#2	5.0946
#3	5.0757
#4	5.0808

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB11

Operator: MTW

Run Time: 08/16/00 18:34:51

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
Avg	-.00034	.00265	.01736	.00133	.00037	.00030	.00182
SDev	.00185	.00931	.02641	.00131	.00032	.00010	.00317
%RSD	544.60	351.29	152.09	98.192	88.822	33.227	174.23
#1	-.00105	-.00581	.01192	.00235	.00034	.00017	.00229
#2	-.00249	-.00411	.03401	.00236	.00014	.00031	-.00263
#3	.00038	.00660	-.01759	-.00038	.00014	.00029	.00274
#4	.00180	.01392	.04111	.00099	.00083	.00042	.00488
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	.00066	-.00033	-.00064	.00044	.00685	.09197	-.00079
SDev	.00310	.00199	.00182	.00044	.00203	.28086	.00112
%RSD	472.24	595.54	286.31	100.27	29.623	305.39	142.52
#1	H.00514	.00131	.00101	.00065	.00522	.12481	-.00025
#2	-.00118	-.00265	-.00305	-.00022	.00653	-.30437	-.00172
#3	.00029	-.00133	.00051	.00065	.00587	.35254	-.00172
#4	-.00162	.00133	-.00102	.00065	.00979	.19488	.00054
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	.00198	.00024	-.00119	.01842	.00865	.01103	-.00749
SDev	.00395	.00055	.00815	.00392	.00532	.02517	.01013
%RSD	200.00	228.60	683.70	21.263	61.494	228.12	135.30
#1	.00527	.00072	-.00239	.01690	.00940	.00002	-.01254
#2	-.00264	-.00023	.00716	.01387	.01557	-.01481	.00771
#3	.00527	-.00024	.00239	.02297	.00671	.04417	-.01263
#4	.00000	.00071	-.01194	.01993	.00293	.01475	-.01250
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	.01325	.01143	-.00893	.00062	-.00008	.03114	.00289
SDev	.03192	.00720	.01419	.00027	.00031	.01610	.00267
%RSD	240.96	62.990	158.97	42.722	382.97	51.686	92.404
#1	.02836	.01287	-.01685	.00051	-.00000	.03114	.00345
#2	.05104	.00141	.00498	.00056	-.00032	.04254	-.00103

Analysis Report

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#3	-.01321	.01288	.00093	.00041	-.00032	.04250	.00471
#4	-.01320	.01858	-.02476	.00101	.00032	.00838	.00443
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 -.00021
SDev .00096
%RSD 470.65

#1 -.00002
#2 -.00155
#3 .00074
#4 .00001

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DGNQG

Operator: MTW

Run Time: 08/16/00 18:37:59

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	.00063	73.057	.07142	.02542	.35810	.00317	14.343
SDev	.00184	.183	.02561	.00154	.00076	.00010	.108
%RSD	293.34	.25007	35.855	6.0435	.21330	2.9956	.75429
#1	-.00031	72.943	.07075	.02523	.35714	.00317	14.206
#2	.00268	72.862	.04126	.02371	.35783	.00317	14.316
#3	-.00141	73.180	.10389	.02531	.35861	.00306	14.396
#4	.00155	73.241	.06978	.02744	.35881	.00329	14.456
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00039	.03679	.11169	.13315	186.90	5.7042	.08793
SDev	.00210	.00066	.00215	.00161	.84	.1024	.00119
%RSD	534.60	1.7898	1.9290	1.2104	.44772	1.7951	1.3556
#1	-.00209	.03581	.11016	.13220	185.91	5.6254	.08898
#2	-.00136	.03713	.11423	.13399	186.54	5.8531	.08759
#3	-.00077	.03713	.10966	.13145	187.37	5.6517	.08640
#4	.00265	.03711	.11271	.13496	187.77	5.6867	.08877
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	14.445	.80773	.00288	.48948	.08313	.19027	-.00587
SDev	.042	.00408	.00469	.00724	.00427	.01662	.00500
%RSD	.29159	.50488	163.01	1.4788	5.1415	8.7330	85.100
#1	14.403	.80220	-.00324	.48797	.08442	.19975	-.01337
#2	14.432	.80715	.00163	.49273	.08648	.20707	-.00337
#3	14.442	.81120	.00653	.49707	.07686	.18456	-.00338
#4	14.503	.81036	.00659	.48017	.08475	.16969	-.00337
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	-.09811	10.734	.01218	.18514	.70520	.12037	.12030
SDev	.02915	.048	.02116	.00031	.00224	.06846	.00229
%RSD	29.714	.44895	173.70	.16832	.31723	56.879	1.9016
#1	-.12056	10.693	-.00977	.18512	.70400	.04539	.12134
#2	-.05843	10.693	.03782	.18523	.70304	.20923	.12144

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#3	-.09402	10.784	.00042	.18473	.70560	.09847	.11687
#4	-.11942	10.767	.02025	.18548	.70816	.12837	.12153

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	.36059
SDev	.00415
%RSD	1.1512

#1	.35607
#2	.35824
#3	.36507
#4	.36299

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQH

Operator: MTW

Run Time: 08/16/00 18:41:08

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	.00092	93.127	.05894	.04682	.35246	.00456	64.826
SDev	.00118	.228	.05428	.00428	.00160	.00007	.241
%RSD	128.77	.24489	92.086	9.1487	.45276	1.4501	.37129
#1	-.00055	93.040	.00667	.04779	.35246	.00459	64.686
#2	.00093	93.412	.07313	.04844	.35441	.00460	64.588
#3	.00096	93.185	.02709	.05042	.35246	.00446	64.899
#4	.00235	92.874	.12887	.04062	.35050	.00460	65.130
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00088	.10442	.14975	.25723	235.60	12.070	.19448
SDev	.00243	.00167	.00110	.00100	.17	.241	.00152
%RSD	276.63	1.5954	.73238	.38721	.07216	1.9983	.78349
#1	-.00108	.10476	.15077	.25808	235.34	12.168	.19345
#2	-.00007	.10210	.14976	.25811	235.68	12.116	.19649
#3	.00172	.10475	.15026	.25637	235.70	11.722	.19316
#4	-.00408	.10607	.14823	.25637	235.67	12.273	.19484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.877	5.7257	.00419	.44398	.23121	.17937	-.00185
SDev	.168	.0081	.00553	.00826	.01368	.01920	.00012
%RSD	.30004	.14095	131.86	1.8597	5.9186	10.705	6.7367
#1	55.794	5.7158	-.00062	.43163	.25082	.16291	-.00168
#2	56.055	5.7235	.00898	.44723	.23011	.20676	-.00198
#3	55.974	5.7283	.00898	.44853	.22357	.17748	-.00189
#4	55.686	5.7350	-.00057	.44853	.22036	.17034	-.00184
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	-.11719	8.8561	.01445	.20938	.72927	.16941	.18419
SDev	.02660	.0539	.02823	.00084	.00197	.09793	.00242
%RSD	22.696	.60910	195.36	.40272	.27037	57.809	1.3143
#1	-.14904	8.7849	.03120	.20970	.72895	.02719	.18556
#2	-.11793	8.8590	.04508	.21026	.73215	.18281	.18225

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#3	-.11788	8.8647	-.00430	.20930	.72799	.22800	.18691
#4	-.08392	8.9160	-.01418	.20826	.72799	.23964	.18206

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	.78374
SDev	.00528
%RSD	.67435

#1	.78564
#2	.77781
#3	.78145
#4	.79004

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQJ

Operator: MTW

Run Time: 08/16/00 18:44:17

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	.00114	92.521	.08085	.03400	.35050	.00478	34.676
SDev	.00143	.163	.04745	.01934	.00063	.00001	.300
%RSD	124.83	.17655	58.694	56.882	.18077	.12775	.86374
#1	.00155	92.278	.03568	.04770	.35050	.00479	34.255
#2	.00199	92.600	.11168	.00542	.35050	.00478	34.831
#3	-.00097	92.579	.13080	.03962	.35128	.00478	34.683
#4	.00200	92.629	.04523	.04327	.34973	.00478	34.936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00167	.10499	.14174	.22168	226.46	10.134	.17362
SDev	.00184	.00170	.00157	.00076	.86	.207	.00101
%RSD	109.92	1.6228	1.1085	.34085	.37918	2.0458	.58323
#1	-.00089	.10303	.13958	.22071	225.23	9.8384	.17513
#2	.00347	.10430	.14314	.22172	227.00	10.233	.17325
#3	.00200	.10563	.14161	.22256	226.51	10.154	.17304
#4	.00210	.10698	.14263	.22173	227.09	10.311	.17304
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	42.920	4.8902	.00521	.41191	.20417	.15983	-.00123
SDev	.081	.0239	.00270	.00554	.01779	.02381	.00520
%RSD	.18885	.48970	51.781	1.3459	8.7158	14.897	423.63
#1	42.805	4.8567	.00742	.40866	.22389	.18049	.00657
#2	42.944	4.9001	.00768	.41126	.18074	.13567	-.00405
#3	42.936	4.8914	.00283	.40779	.20446	.18007	-.00369
#4	42.994	4.9126	.00292	.41993	.20760	.14308	-.00375
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	-.08836	8.9490	.01726	.13519	1.7917	.21916	.20430
SDev	.03320	.0194	.01932	.00013	.0042	.09326	.00231
%RSD	37.577	.21702	111.94	.09815	.23201	42.554	1.1284
#1	-.10388	8.9219	.00968	.13528	1.7857	.12667	.20084
#2	-.08031	8.9561	.03760	.13507	1.7928	.22211	.20551

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#3	-.12318	8.9504	-.00596	.13507	1.7931	.18170	.20541
#4	-.04606	8.9675	.02773	.13532	1.7953	.34615	.20542

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	.71086
SDev	.00273
%RSD	.38375

#1	.70758
#2	.71370
#3	.71239
#4	.70978

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQL

Operator: MTW

Run Time: 08/16/00 18:47:26

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	-.00029	87.520	.06219	.03493	.36408	.00437	119.67
SDev	.00146	.166	.07878	.01526	.00075	.00007	.61
%RSD	504.66	.18986	126.68	43.681	.20489	1.5437	.51173
#1	-.00081	87.345	.13145	.04534	.36467	.00440	118.98
#2	-.00212	87.490	.05628	.03379	.36419	.00427	119.34
#3	.00079	87.497	.10726	.04680	.36301	.00440	120.03
#4	.00098	87.746	-.04624	.01377	.36447	.00440	120.31
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00095	.09910	.17085	.27424	222.54	11.266	.19013
SDev	.00162	.00342	.00188	.00113	.66	.094	.00125
%RSD	171.45	3.4545	1.0992	.41113	.29758	.83493	.65638
#1	-.00160	.09776	.16856	.27266	221.86	11.126	.19090
#2	-.00083	.10309	.17110	.27444	222.25	11.327	.19148
#3	.00124	.10040	.17059	.27534	222.62	11.301	.18893
#4	-.00259	.09513	.17313	.27453	223.41	11.310	.18922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	75.945	4.5950	.00821	.51148	.22065	.31845	-.00259
SDev	.115	.0166	.00458	.00703	.01025	.02845	.00016
%RSD	.15162	.36192	55.777	1.3738	4.6443	8.9343	6.2362
#1	75.785	4.5746	.01169	.50400	.21087	.30209	-.00268
#2	75.993	4.5909	.00697	.50963	.23370	.30206	-.00238
#3	75.946	4.6005	.00225	.52090	.22370	.36086	-.00256
#4	76.054	4.6141	.01192	.51137	.21433	.30878	-.00275
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	-.14971	7.0552	.02061	.31338	.93317	.33781	.16509
SDev	.02367	.0057	.01986	.00025	.00200	.09465	.00217
%RSD	15.812	.08093	96.361	.07969	.21405	28.020	1.3147
#1	-.12410	7.0467	.01604	.31350	.93110	.20561	.16369
#2	-.16841	7.0581	-.00562	.31350	.93269	.37188	.16827

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#3	-.17122	7.0581	.03594	.31300	.93301	.34549	.16468
#4	-.13512	7.0581	.03608	.31350	.93589	.42827	.16370
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	.75065
SDev	.01238
%RSD	1.6488

#1	.73455
#2	.74971
#3	.75395
#4	.76438

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQM

Operator: MTW

Run Time: 08/16/00 18:50:35

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	100.73	.11532	.02698	.39589	.00495	46.628
SDev	.00181	.24	.07814	.00564	.00201	.00007	.269
%RSD	776.03	.23789	67.762	20.905	.50803	1.4256	.57671
#1	-.00217	100.94	.19893	.02507	.39770	.00501	46.812
#2	.00040	100.93	.03883	.03008	.39741	.00489	46.407
#3	-.00114	100.51	.16397	.02000	.39497	.00489	46.387
#4	.00198	100.53	.05955	.03277	.39350	.00501	46.904
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00233	.11120	.17057	.27345	250.56	13.324	.20496
SDev	.00317	.00390	.00231	.00134	.72	.207	.00172
%RSD	136.14	3.5030	1.3541	.48951	.28876	1.5509	.84171
#1	.00214	.11515	.17107	.27504	251.38	13.421	.20583
#2	-.00346	.10724	.16904	.27407	250.22	13.167	.20696
#3	-.00272	.10854	.16853	.27229	249.75	13.140	.20352
#4	L-.00527	.11388	.17361	.27239	250.91	13.570	.20352
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	56.463	5.1377	.00285	.49447	.22844	.25803	.02836
SDev	.177	.0162	.00464	.00735	.01513	.04782	.05043
%RSD	.31381	.31611	162.77	1.4856	6.6250	18.534	177.83
#1	56.675	5.1530	.00655	.50400	.24351	.30200	-.00199
#2	56.485	5.1279	.00638	.48623	.20813	.20629	.02810
#3	56.243	5.1201	-.00324	.49273	.22695	.29524	.09953
#4	56.448	5.1500	.00171	.49490	.23517	.22860	-.01219
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	-.14957	3.7721	.01709	.15104	.82306	.17028	.21013
SDev	.05325	.0117	.03409	.00059	.00164	.14049	.00009
%RSD	35.606	.31144	199.43	.39360	.19910	82.506	.04307
#1	-.15970	3.7821	.03390	.15166	.82458	.22154	.21021
#2	-.19678	3.7650	.04173	.15141	.82330	-.03906	.21020

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#3	-.07329	3.7593	-.03311	.15066	.82075	.26094	.21001
#4	-.16849	3.7821	.02586	.15041	.82362	.23771	.21012

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	.95296
SDev	.00392
%RSD	.41176

#1	.94799
#2	.95458
#3	.95204
#4	.95721

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQ3/2 FE

Operator: MTW

Run Time: 08/16/00 18:53:43

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	.52284	50.224	.05701	.02377	.90692	.00265	33.387
SDev	.00134	.207	.01370	.00451	.00496	.00006	.131
%RSD	.25677	.41134	24.030	18.990	.54694	2.3042	.39165

#1	.52286	50.227	.03850	.02737	.90795	.00262	33.405
#2	.52459	50.415	.05748	.02790	.91039	.00262	33.542
#3	.52133	50.317	.07139	.02062	.90970	.00262	33.223
#4	.52257	49.936	.06067	.01917	.89964	.00275	33.378

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00553	.11331	.35841	41.106	330.56	5.3385	.09635
SDev	.00303	.00167	.00283	.278	1.06	.2174	.00114
%RSD	54.722	1.4691	.78841	.67642	.31929	4.0729	1.1855

#1	.00453	.11563	.35701	41.145	330.66	5.1699	.09795
#2	.00788	.11296	.36260	41.240	331.95	5.1612	.09612
#3	.00804	.11297	.35651	41.334	330.19	5.4064	.09612
#4	.00170	.11166	.35752	40.705	329.43	5.6166	.09523

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	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	22.943	3.7183	.02197	.71277	.19760	5.3502	.02583
SDev	.119	.0123	.00466	.00277	.00739	.0376	.02202
%RSD	.51951	.32996	21.205	.38891	3.7385	.70270	85.228

#1	23.006	3.7199	.01841	.71505	.19185	5.3926	.03603
#2	23.022	3.7346	.02815	.70941	.19978	5.3700	-.00473
#3	22.977	3.7122	.01834	.71158	.20711	5.3115	.04624
#4	22.766	3.7063	.02300	.71505	.19165	5.3266	.02579

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	-.14195	4.9201	.57380	.16348	.38582	.32436	.18757
SDev	.08450	.0333	.02400	.00086	.00160	.05788	.00010
%RSD	59.528	.67780	4.1824	.52766	.41382	17.844	.05079

#1	-.13224	4.9386	.54670	.16340	.38670	.37158	.18750
#2	-.15152	4.9329	.60405	.16404	.38702	.34701	.18770

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#3	-.03898	4.9386	.57827	.16419	.38606	.24010	.18750
#4	-.24507	4.8702	.56619	.16230	.38351	.33877	.18759

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

Elem	ZN
Units	ppm
Avge	1.8242
SDev	.0058
%RSD	.31611

#1	1.8232
#2	1.8307
#3	1.8261
#4	1.8170

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGNQ4/2 FE

Operator: MTW

Run Time: 08/16/00 18:56:52

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	.01438	43.356	.04382	.07558	5.2236	.00279	64.728
SDev	.00208	.183	.03250	.00307	.0298	.00010	.199
%RSD	14.438	.42098	74.171	4.0632	.56998	3.5770	.30778
#1	.01361	43.592	.02390	.07207	5.2581	.00291	64.969
#2	.01180	43.320	.02808	.07805	5.2290	.00267	64.482
#3	.01616	43.361	.03092	.07826	5.2217	.00279	64.750
#4	.01596	43.149	.09239	.07393	5.1857	.00279	64.712
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05845	.09385	1.0141	2.0120	302.94	8.1852	.05541
SDev	.00348	.00252	.0032	.0108	.90	.2386	.00085
%RSD	5.9616	2.6865	.31279	.53694	.29666	2.9154	1.5401
#1	.05482	.09019	1.0179	2.0245	304.19	8.2092	.05616
#2	.06016	.09418	1.0133	2.0139	302.53	7.9290	.05555
#3	.05637	.09552	1.0148	2.0114	302.95	8.1041	.05575
#4	.06245	.09553	1.0103	1.9982	302.11	8.4983	.05419
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.962	3.6213	.03336	2.5793	.20477	11.862	.09178
SDev	.088	.0116	.00388	.0121	.00973	.047	.01836
%RSD	.48942	.32142	11.616	.47092	4.7513	.39645	20.001
#1	18.074	3.6381	.03355	2.5820	.19579	11.867	.10177
#2	17.929	3.6119	.02853	2.5811	.20796	11.824	.07161
#3	17.980	3.6196	.03336	2.5915	.21707	11.927	.08183
#4	17.866	3.6156	.03801	2.5625	.19829	11.831	.11191
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	-.15801	3.8890	.20061	.37324	.72047	.25403	.21705
SDev	.07211	.0427	.04019	.00204	.00288	.06750	.00007
%RSD	45.638	1.0989	20.032	.54630	.39956	26.573	.03356
#1	-.08481	3.9531	.20879	.37574	.72415	.19017	.21706
#2	-.19879	3.8677	.17475	.37324	.72031	.25260	.21696

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#3	-.11077	3.8677	.16500	.37324	.72031	.22561	.21705
#4	-.23768	3.8677	.25391	.37075	.71711	.34774	.21714
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	8.7236
SDev	.0217
%RSD	.24914

#1	8.7367
#2	8.7277
#3	8.7381
#4	8.6917

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-12

Operator: MTW

Run Time: 08/16/00 19:00:01

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	1.0208	51.162	5.0522	5.0457	4.9798	5.0192	52.071
SDev	.0032	.147	.0695	.0028	.0182	.0156	.313
%RSD	.31094	.28760	1.3751	.05610	.36601	.31137	.60022
#1	1.0209	51.339	4.9872	5.0496	5.0007	5.0366	52.023
#2	1.0192	50.981	5.0057	5.0430	4.9563	4.9992	51.802
#3	1.0180	51.148	5.0772	5.0454	4.9819	5.0242	51.941
#4	1.0252	51.180	5.1387	5.0445	4.9805	5.0168	52.520
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	5.1642	5.0532	5.0433	4.9800	52.215	50.539	4.9815
SDev	.0274	.0244	.0260	.0193	.209	.578	.0263
%RSD	.53054	.48249	.51467	.38665	.40069	1.1433	.52725
#1	5.1756	5.0538	5.0475	5.0015	52.256	50.865	5.0103
#2	5.1486	5.0247	5.0170	4.9597	51.948	49.858	4.9655
#3	5.1357	5.0499	5.0312	4.9902	52.199	51.145	4.9962
#4	5.1969	5.0842	5.0775	4.9685	52.456	50.287	4.9538
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	51.182	5.0206	5.0251	50.722	5.0529	5.1212	5.1054
SDev	.218	.0198	.0320	.234	.0143	.0603	.0628
%RSD	.42583	.39500	.63744	.46072	.28331	1.1767	1.2299
#1	51.385	5.0258	5.0287	50.995	5.0473	5.0658	5.0950
#2	50.889	4.9981	4.9905	50.519	5.0354	5.1094	5.0551
#3	51.150	5.0134	5.0144	50.838	5.0619	5.1026	5.0752
#4	51.303	5.0450	5.0669	50.536	5.0670	5.2069	5.1964
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	5.0780	5.1401	5.0880	5.0019	4.9916	10.071	5.0412
SDev	.0520	.0477	.0912	.0176	.0172	.109	.0176
%RSD	1.0246	.92829	1.7916	.35107	.34441	1.0854	.34964
#1	5.1093	5.1146	5.1640	5.0218	5.0035	9.9594	5.0489
#2	5.0178	5.1199	4.9643	4.9791	4.9673	10.054	5.0189

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#3	5.1319	5.1144	5.0750	5.0018	4.9913	10.221	5.0369
#4	5.0532	5.2116	5.1487	5.0050	5.0041	10.048	5.0601
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	5.0601						
SDev	.0230						
%RSD	.45358						
#1	5.0607						
#2	5.0453						
#3	5.0421						
#4	5.0923						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

Method: QUANMET Sample Name: CCB12

Operator: MTW

Run Time: 08/16/00 19:03:10

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	-.00034	.00759	.00539	.00118	.00037	.00027	.00034
SDev	.00143	.00797	.00915	.00157	.00020	.00006	.00208
%RSD	419.35	105.01	169.63	132.46	54.855	24.195	621.53

#1	.00180	.01744	.00803	.00235	.00034	.00017	.00278
#2	-.00106	.01034	.01552	-.00096	.00034	.00031	-.00142
#3	-.00104	-.00055	.00451	.00236	.00063	.00029	-.00137
#4	-.00106	.00313	-.00648	.00099	.00014	.00030	.00135

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00081	.00066	.00178	.00022	.00718	-.05255	.00025
SDev	.00164	.00229	.00158	.00112	.00076	.20270	.00000
%RSD	201.87	344.98	88.959	514.33	10.519	385.71	.00000

#1	.00002	.00398	.00050	.00153	.00784	.23868	.00025
#2	.00080	-.00000	.00101	-.00109	.00783	-.18175	.00025
#3	-.00299	-.00132	.00406	-.00022	.00653	-.06788	.00025
#4	-.00109	.00000	.00152	.00065	.00653	-.19926	.00025

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00329	.00024	-.00239	.00867	.00368	.03318	-.00500
SDev	.00787	.00055	.00390	.00674	.00444	.00418	.03455
%RSD	238.89	229.83	163.37	77.782	120.54	12.604	690.91

#1	.00000	.00072	-.00239	.01647	-.00148	.02962	.02795
#2	-.00527	-.00024	-.00716	.00303	.00255	.03684	-.00246
#3	-.01318	-.00024	.00239	.00303	.00445	.03675	-.05323
#4	.00527	.00072	-.00239	.01213	.00922	.02949	.00774

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	-.00754	-.01564	-.01237	.00053	.00008	.03397	.00258
SDev	.02236	.02673	.00415	.00019	.00066	.02985	.00246
%RSD	296.56	170.92	33.504	35.483	824.62	87.868	95.516

#1	.02459	.01288	-.00876	.00051	.00096	.06515	.00462
#2	-.02454	.00142	-.00890	.00031	-.00000	.00844	-.00014

Analysis Report

08/16/00 07:06:16 PM

page 2

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#3	-.00943	-.03840	-.01507	.00051	-.00000	.00842	.00472
#4	-.02077	-.03845	-.01676	.00076	-.00064	.05387	.00112

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	-.00101
SDev	.00044
%RSD	43.753

#1	-.00148
#2	-.00128
#3	-.00052
#4	-.00078

Errors	LC Pass
High	.02000
Low	-.02000

667 '988

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William G. Noyle

Date of Analysis: 8-16-00

File ID: 0876HGA

Matrix: WATER

Lot Number/SDG

Method

COH110155 TCLP

7470A

COH110157

COH120157

COH090213 TCLP

COH140112

COH150146

COH090142

09:35:17 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

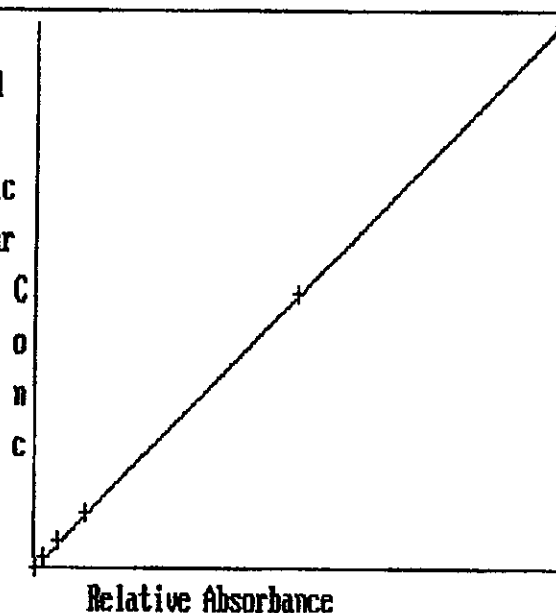
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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
				Seq: 0	09:35:17 16 Aug 2000 HG			
Hg	.000	ppb	5016					
*** Standard: 2 Rep: 1								
				Seq: 1	09:36:47 16 Aug 2000 HG			
Hg	.200	ppb	24706	0057-026-9				
*** Standard: 3 Rep: 1								
				Seq: 2	09:38:35 16 Aug 2000 HG			
Hg	.500	ppb	56433	0057-026-10				
*** Standard: 4 Rep: 1								
				Seq: 3	09:41:35 16 Aug 2000 HG			
Hg	1.00	ppb	114962	0057-026-11				
*** Standard: 5 Rep: 1								
				Seq: 4	09:43:04 16 Aug 2000 HG			
Hg	5.00	ppb	585798	0057-026-12				
*** Standard: 6 Rep: 1								
				Seq: 5	09:44:50 16 Aug 2000 HG			
Hg	10.0	ppb	1169770	0057-026-13				

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0016HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:45:07 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted
	Conc. Calc. Dev. ->linear	
S1	.000 .036 .036	Quadratic
S2	.200 .205 .005	Wtilinear
S3	.500 .476 -.024	
S4	1.00 .977 -.023	Accept
S5	5.00 5.00 .005	
S6	10.0 10.0 .001	
A	.0000000 r .999905	
B	8.55487e-6 C -6.53185e-3	



	Mean	SD	%RSD
S1	5016	5016	
S2	24706	24706	
S3	56433	56433	
S4	114962	114962	
S5	585798	585798	
S6	1169770	1169770	

New cal coefficients stored

09:47:17 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6		09:47:17 16 Aug 2000 HG		
Hg	2.57	ppb	301087		0057-026-14			
*** Sample ID: ICB1				Seq: 7		09:49:26 16 Aug 2000 HG		
Hg	.032	ppb	4506					
*** Sample ID: CCV5-1				Seq: 8		09:50:54 16 Aug 2000 HG		
Hg	5.07	ppb	593187		0057-026-15			
*** Sample ID: CCB1				Seq: 9		09:52:32 16 Aug 2000 HG		
Hg	.015	ppb	2505					
*** Sample ID: DHVJOBT				Seq: 10		09:54:28 16 Aug 2000 HG		
Hg	.032	ppb	4542					
*** Sample ID: DHVJOCT				Seq: 11		09:55:54 16 Aug 2000 HG		
Hg	2.54	ppb	298154		0057-026-16			
*** Sample ID: DHVFXBT				Seq: 12		09:57:19 16 Aug 2000 HG		
Hg	.028	ppb	4009					
*** Sample ID: DHPDWT				Seq: 13		09:59:10 16 Aug 2000 HG		
Hg	.118	ppb	14549					
*** Sample ID: DHPDWST				Seq: 14		10:00:57 16 Aug 2000 HG		
Hg	5.19	ppb	606970					SP. REC. 101%
*** Sample ID: DHPDWDT				Seq: 15		10:02:24 16 Aug 2000 HG		
Hg	5.19	ppb	607211					SP. REC. 101%
*** Sample ID: DHPE3T				Seq: 16		10:04:14 16 Aug 2000 HG		
Hg	.853	ppb	100442					
*** Sample ID: DHPE4T				Seq: 17		10:05:49 16 Aug 2000 HG		
Hg	.306	ppb	36577					

10:07:49 16 Aug 2000

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Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHPE6T				Seq: 18	10:07:49 16 Aug 2000	HG		
Hg	.045	ppb	6022					
*** Sample ID: DHPE7T				Seq: 19	10:09:13 16 Aug 2000	HG		
Hg	.085	ppb	10702					
*** Sample ID: CCV5-2				Seq: 20	10:10:59 16 Aug 2000	HG		
Hg	5.12	ppb	599708					
*** Sample ID: CCB2				Seq: 21	10:12:36 16 Aug 2000	HG		
Hg	.028	ppb	4018					
*** Sample ID: DHPE8T				Seq: 22	10:14:02 16 Aug 2000	HG		
Hg	.035	ppb	4845					
*** Sample ID: DHPE9T				Seq: 23	10:15:53 16 Aug 2000	HG		
Hg	.036	ppb	4980					
*** Sample ID: DHPEAT				Seq: 24	10:18:24 16 Aug 2000	HG		
Hg	.076	ppb	9599					
*** Sample ID: DHPEDT				Seq: 25	10:20:03 16 Aug 2000	HG		
Hg	.058	ppb	7490					
*** Sample ID: DHPEET				Seq: 26	10:22:01 16 Aug 2000	HG		
Hg	.058	ppb	7509					
*** Sample ID: DHPF2T				Seq: 27	10:23:41 16 Aug 2000	HG		
Hg	.049	ppb	6513					
*** Sample ID: DHQXNT				Seq: 28	10:25:10 16 Aug 2000	HG		
Hg	.069	ppb	8781					
*** Sample ID: DHQXQT				Seq: 29	10:26:37 16 Aug 2000	HG		
Hg	.057	ppb	7390					

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10:28:37 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHQXRT				Seq: 30		10:28:37 16 Aug 2000	HG	
Hg	.034	ppb	4764					
*** Sample ID: DHVGQBT				Seq: 31		10:30:02 16 Aug 2000	HG	
Hg	.033	ppb	4669					
*** Sample ID: CCV5-3				Seq: 32		10:31:41 16 Aug 2000	HG	
Hg	5.02	ppb	587629					
*** Sample ID: CCB3				Seq: 33		10:33:26 16 Aug 2000	HG	
Hg	.030	ppb	4318					
*** Sample ID: DHVGQCT				Seq: 34		10:35:01 16 Aug 2000	HG	
Hg	2.64	ppb	308939		0057-027-1			
*** Sample ID: DHVOKBT				Seq: 35		10:36:49 16 Aug 2000	HG	
Hg	.057	ppb	7398					
*** Sample ID: DHKQ4T				Seq: 36		10:38:46 16 Aug 2000	HG	
Hg	.019	ppb	2991					
*** Sample ID: DHKQ4ST				Seq: 37		10:40:14 16 Aug 2000	HG	
Hg	1.59	ppb	186352					SP. REC. 32%
*** Sample ID: DHKQ4DT				Seq: 38		10:41:40 16 Aug 2000	HG	
Hg	1.72	ppb	202014					SP. REC. 34%
*** Sample ID: DHVGVB				Seq: 39		10:43:07 16 Aug 2000	HG	
Hg	.030	ppb	4258					
*** Sample ID: DHVGVC				Seq: 40		10:44:52 16 Aug 2000	HG	
Hg	2.49	ppb	292079		0057-027-2			
*** Sample ID: DHRQD				Seq: 41		10:46:33 16 Aug 2000	HG	
Hg	.080	ppb	10091					

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10:49:02 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHRQN				Seq: 42	10:49:02 16 Aug 2000	HG		
Hg	.056	ppb	7270					
*** Sample ID: DHRQQ				Seq: 43	10:50:59 16 Aug 2000	HG		
Hg	.053	ppb	6926					
*** Sample ID: CCV5-4				Seq: 44	10:52:35 16 Aug 2000	HG		
Hg	4.97	ppb	581845					
*** Sample ID: CCB4				Seq: 45	10:54:03 16 Aug 2000	HG		
Hg	.029	ppb	4171					
*** Sample ID: DHRQT				Seq: 46	10:56:09 16 Aug 2000	HG		
Hg	.435	ppb	51622					
*** Sample ID: DHRQTS				Seq: 47	10:57:39 16 Aug 2000	HG		
Hg	1.52	ppb	178192					SP.REC. 100%
*** Sample ID: DHRQTD				Seq: 48	10:59:06 16 Aug 2000	HG		
Hg	1.47	ppb	172364					SP.REC. 104% 10
*** Sample ID: DHRQX				Seq: 49	11:00:35 16 Aug 2000	HG		
Hg	.230	ppb	27629					
*** Sample ID: DHWJ2B				Seq: 50	11:02:16 16 Aug 2000	HG		
Hg	.063	ppb	8140					
*** Sample ID: DHWJ2C				Seq: 51	11:03:43 16 Aug 2000	HG		
Hg	2.41	ppb	283013					
*** Sample ID: DHV7M				Seq: 52	11:05:12 16 Aug 2000	HG		
Hg	.458	ppb	54346					
*** Sample ID: DHV7MS				Seq: 53	11:07:22 16 Aug 2000	HG		
Hg	1.48	ppb	173580					SP.REC. 102%

0057-027-3

667 995

11:09:27 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
------	-------	-------	--------	---	---	---	---	---

*** Sample ID: DHV7MD Seq: 54 11:09:27 16 Aug 2000 HG

Hg 1.50 ppb 175941

SP. REC.
104%

*** Sample ID: DHWJDB Seq: 55 11:11:03 16 Aug 2000 HG

Hg .027 ppb 3864

*** Sample ID: CCV5-5 Seq: 56 11:13:11 16 Aug 2000 HG

Hg 4.93 ppb 577066

*** Sample ID: CCB5 Seq: 57 11:14:39 16 Aug 2000 HG

Hg .045 ppb 6023

*** Sample ID: DHWJDC Seq: 58 11:16:07 16 Aug 2000 HG

Hg 2.44 ppb 286246

0057-027-4

*** Sample ID: DHK36 Seq: 59 11:19:30 16 Aug 2000 HG

Hg 14.2 H ppb 1664204

*** Sample ID: DHK36S Seq: 60 11:21:29 16 Aug 2000 HG

Hg 14.2 H ppb 1660186

*** Sample ID: DHK36D Seq: 61 11:23:17 16 Aug 2000 HG

Hg 13.5 H ppb 1573745

*** Sample ID: CCV5-6 Seq: 62 11:24:42 16 Aug 2000 HG

Hg 4.83 ppb 565056

*** Sample ID: CCB6 Seq: 63 11:26:19 16 Aug 2000 HG

Hg .013 ppb 2327

VOID
OVERRANGE
WILL RERUN
FURTHER IN
WAH
8-16-00

667 996

11:31:07 16 Aug 2000 Folder: 0816HGA Page 201
Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHK36/2				Seq: 64		11:31:07 16 Aug 2000 HG		
Hg	7.46	ppb	872226					
*** Sample ID: DHK36S/2				Seq: 65		11:32:45 16 Aug 2000 HG		
Hg	7.19	ppb	840652			NC: SAMPLE CONC. WAS 74X SPIKE ADDED	WAH 8-16-00	
*** Sample ID: DHK36D/2				Seq: 66		11:34:14 16 Aug 2000 HG		
Hg	6.76	ppb	791314			NC: SAMPLE CONC. WAS 74X SPIKE ADDED	WAH 8-16-00	
*** Sample ID: CCV5-6				Seq: 67		11:36:35 16 Aug 2000 HG		
Hg	4.92	ppb	576161					
*** Sample ID: CCB6				Seq: 68		11:39:07 16 Aug 2000 HG		
Hg	.056	ppb	7257					

END OF ANALYSIS
WAH
8-16-00

667 997

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 0 Batch:
Print: R/T On Pump: Off
Rev: 4.2 08:43:58 16 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1	ICV5-1	1.0000	1.0000		
2	ICB1	1.0000	1.0000		
3	CCV5-1	1.0000	1.0000		
4	CCB1	1.0000	1.0000		
5	DHVJOBT	1.0000	1.0000		
6	DHVJOCT	1.0000	1.0000		
7	DHVFXBT	1.0000	1.0000		
8	DHPDWT	1.0000	1.0000		
9	DHPDWST	1.0000	1.0000		
10	DHPDWDT	1.0000	1.0000		
11	DHPE3T	1.0000	1.0000		
12	DHPE4T	1.0000	1.0000		
13	DHPE6T	1.0000	1.0000		
14	DHPE7T	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

667 998

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:44:00 16 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro checkK macros
16 CCB2 1.0000 1.0000
17 DHPEBT 1.0000 1.0000
18 DHPE9T 1.0000 1.0000
19 DHPEAT 1.0000 1.0000
20 DHPEDT 1.0000 1.0000
21 DHPEET 1.0000 1.0000
22 DHPF2T 1.0000 1.0000
23 DHQXNT 1.0000 1.0000
24 DHQXQT 1.0000 1.0000
25 DHQXRT 1.0000 1.0000
26 DHVGQBT 1.0000 1.0000
27 CCV5-3 1.0000 1.0000
28 CCB3 1.0000 1.0000
29 DHVGQCT 1.0000 1.0000
30 DHVOKBT 1.0000 1.0000

PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

667 999

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0816HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:44:01 15 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1				PgUp
cup ID	Extended id	Weight	Volume Macro	check macros
31 DHKQ4T		1.0000	1.0000	
32 DHKQ4ST		1.0000	1.0000	
33 DHKQ4DT		1.0000	1.0000	
34 DHVGV B		1.0000	1.0000	
35 DHVGV C		1.0000	1.0000	
36 DHRQD		1.0000	1.0000	
37 DHRQN		1.0000	1.0000	
38 DHRQQ		1.0000	1.0000	
39 CCV5-4		1.0000	1.0000	
40 CCB4		1.0000	1.0000	
41 DHRQT		1.0000	1.0000	
42 DHRQTS		1.0000	1.0000	
43 DHRQTD		1.0000	1.0000	
44 DHRQX		1.0000	1.0000	

PgDn

Cup 31 ID: DHKQ4T	Cell down mode Ins to switch
-------------------	------------------------------

667 1000

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 69 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 11:41:10 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 Range 1-44 Clear seq Undo exit
cup ID Extended id Weight Volume Macro check macros
1 DHWJ2B 1.0000 1.0000
2 DHWJ2C 1.0000 1.0000
3 DHV7M 1.0000 1.0000
4 DHV7MS 1.0000 1.0000
5 DHV7MD 1.0000 1.0000
6 DHWJDB 1.0000 1.0000
7 CCV5-5 1.0000 1.0000
8 CCB5 1.0000 1.0000
9 DHWJDC 1.0000 1.0000
10 DHK36 1.0000 1.0000
11 DHK36S 1.0000 1.0000
12 DHK36D 1.0000 1.0000
13 CCV5-6 1.0000 1.0000
14 CCB6 1.0000 1.0000
15 DHK36/2 1.0000 1.0000

PgDn

Cup 1 ID: DHWJ2B

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 69 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 11:41:12 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 PgUp
cup ID Extended id Weight Volume Macro check macros
16 DHK36S/2 1.0000 1.0000
17 DHK36D/2 1.0000 1.0000
18 CCV5-6 1.0000 1.0000
19 CCB6 1.0000 1.0000
20 1.0000 1.0000
21 1.0000 1.0000
22 1.0000 1.0000
23 1.0000 1.0000
24 1.0000 1.0000
25 1.0000 1.0000
26 1.0000 1.0000
27 1.0000 1.0000
28 1.0000 1.0000
29 1.0000 1.0000
30 1.0000 1.0000

PgDn

Cup 16 ID: DHK36S/2

Cell down mode Ins to switch

Metals Preparation

Log



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

Matrix:		Start Time:	SDG:	Balance#		Reagents:			
Water		0525							
Date:		Lot Number:	Lab Lot No. (book, page, line)		Reagents:				
8-16-00		COM110155	0014-162-6		3 ml COMAC HNO ₃				
Date:		COM110157	0014-154-2		5 ml 1:1 HCl				
Date:		COM120157	TAPS RVE		6673335058 Mollrock 40				
Date:		COM120157	TAPS RVE		0057-025-4				
Sample ID	Init Wt/g	Final Vol mL	Comments		Color	Clarity	Texture	Artifacts	Artifact Codes
1. DHPDW	50 ml	50 ml	TAPS RVE						S=Stones
2. DHPDWS	50 ml	50 ml	TAPS RVE						O=Organic (plant mat)
3. DHPDWD	50 ml	50 ml	TAPS RVE						W=free H ₂ O
4. DHPES	50 ml	50 ml	TAPS RVE						G=Glass
5. DHPEN	50 ml	50 ml	TAPS RVE						M=Metal Fragments
6. DHPEN	50 ml	50 ml	TAPS RVE						R=Rubber/Plastic
7. DHPET	50 ml	50 ml	TAPS RVE						C=Cloth
8. DHPER	50 ml	50 ml	TAPS RVE						P=Paper
9. DHPER	50 ml	50 ml	TAPS RVE						I=Insects
10. DHPER	50 ml	50 ml	TAPS RVE						
11. DHPER	50 ml	50 ml	TAPS RVE						
12. DHPER	50 ml	50 ml	TAPS RVE						
13. DHPER	50 ml	50 ml	TAPS RVE						
14. DHPER	50 ml	50 ml	TAPS RVE						
15. DHPER	50 ml	50 ml	TAPS RVE						
16. DHPER	50 ml	50 ml	TAPS RVE						
17. DHPER	50 ml	50 ml	TAPS RVE						
18. DHPER	50 ml	50 ml	TAPS RVE						
19. DHPER	50 ml	50 ml	TAPS RVE						
20. DHPER	50 ml	50 ml	TAPS RVE						
21. DHPER	50 ml	50 ml	TAPS RVE						
22. DHPER	50 ml	50 ml	TAPS RVE						
23. DHPER	50 ml	50 ml	TAPS RVE						
24. DHPER	50 ml	50 ml	TAPS RVE						
25. DHPER	50 ml	50 ml	TAPS RVE						
26. DHPER	50 ml	50 ml	TAPS RVE						
27. DHPER	50 ml	50 ml	TAPS RVE						
28. DHPER	50 ml	50 ml	TAPS RVE						
29. DHPER	50 ml	50 ml	TAPS RVE						
30. DHPER	50 ml	50 ml	TAPS RVE						
31. DHPER	50 ml	50 ml	TAPS RVE						
32. DHPER	50 ml	50 ml	TAPS RVE						
33. DHPER	50 ml	50 ml	TAPS RVE						
34. DHPER	50 ml	50 ml	TAPS RVE						
35. DHPER	50 ml	50 ml	TAPS RVE						
36. DHPER	50 ml	50 ml	TAPS RVE						
37. DHPER	50 ml	50 ml	TAPS RVE						
38. DHPER	50 ml	50 ml	TAPS RVE						
39. DHPER	50 ml	50 ml	TAPS RVE						
40. DHPER	50 ml	50 ml	TAPS RVE						
41. DHPER	50 ml	50 ml	TAPS RVE						
42. DHPER	50 ml	50 ml	TAPS RVE						
43. DHPER	50 ml	50 ml	TAPS RVE						
44. DHPER	50 ml	50 ml	TAPS RVE						
45. DHPER	50 ml	50 ml	TAPS RVE						
46. DHPER	50 ml	50 ml	TAPS RVE						
47. DHPER	50 ml	50 ml	TAPS RVE						
48. DHPER	50 ml	50 ml	TAPS RVE						
49. DHPER	50 ml	50 ml	TAPS RVE						
50. DHPER	50 ml	50 ml	TAPS RVE						

Digestate(s)	Date	Time	Analyst	Location	Date	Time	Analyst	Location	Hot plate /Block Temp	Correction Factor	Color
1. DHPER	8-16-00	11:20	Jeffrey O. Sauer	Lab 1 C7	8-16-00	11:25	Jeffrey O. Sauer	Lab 1 C7	950	-0.80	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange
2. DHPER	8-16-00	13:50	Jeffrey O. Sauer	Lab 1 C7	8-16-00	16:00	Jeffrey O. Sauer	Lab 1 C7			V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless
3. DHPER											
4. DHPER											
5. DHPER											
6. DHPER											
7. DHPER											
8. DHPER											
9. DHPER											
10. DHPER											
11. DHPER											
12. DHPER											
13. DHPER											
14. DHPER											
15. DHPER											
16. DHPER											
17. DHPER											
18. DHPER											
19. DHPER											
20. DHPER											
21. DHPER											
22. DHPER											
23. DHPER											
24. DHPER											
25. DHPER											
26. DHPER											
27. DHPER											
28. DHPER											
29. DHPER											
30. DHPER											
31. DHPER											
32. DHPER											
33. DHPER											
34. DHPER											
35. DHPER											
36. DHPER											
37. DHPER											
38. DHPER											
39. DHPER											
40. DHPER											
41. DHPER											
42. DHPER											
43. DHPER											
44. DHPER											
45. DHPER											
46. DHPER											
47. DHPER											
48. DHPER											
49. DHPER											
50. DHPER											

6671003

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



Serial Number	Log Book Number	Start Time
043	96-MT-580	08:05-208:20

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	8-16-00	WAH	100ml	WATER	8-16-00	N/A
2. STD1							0057-026-9
3. STD2							0057-026-10
4. STD3							0057-026-11
5. STD4							0057-026-12
6. STD5							0057-026-13
7. TCV							0057-026-14
8. TCB							N/A
9. CCV							0057-026-15
10. CCB							N/A
11. DNVJ0BT							0057-026-16
12. DNVJ0CT							N/A
13. DNVJ0BT							0057-026-17
14. DHPDWT	8-11-00						45ml 0057-026-7
15. DHPDWST							45ml 0057-026-7
16. DHPDWDT							N/A
17. DHPD3T							
18. DHPD4T							
19. DHPD6T							
20. DHPD7T							
21. DHPD8T							
22. DHPD9T							
23. DHPD0T							
24. DHPD1T							
25. DHPD2T							
Reagents							
HNO3	4.5ml						7470A ANALOGUE 15PST 120°C
H2SO4	5.0ml						SACLS = 0057-025-3
KMNO4	15.0ml						NOL-NH3OH = 0057-020-5
K2S2O4	8.0ml						WAH 8-16-00
Extract(s)	Extract(s) Received			Extract(s) Relinquished			
(Record line number from above)		Date	Time	Analyst	Date	Time	Location
				WAH	8-16-00		



BUA-4169

Serial Number	Log Book Number	Start Time
044	96-MI-580	08:05 → 08:20

Hg Digestion Log

[illegible]

6671005

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



Serial Number **045** Log Book Number **96-MT-580** Start Time **08:05 → 08:30**

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DHWJ2C	N/A	8-16-00	WAH	100ml	WATER	8-16-00	0057-027-4
2. DHK36	8-2-00						N/A
3. DHK36S							41ml 0057-026-7
4. DHK36D							41ml 0057-026-7
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							

Reagents	Vol (mL)	Ref. Number	Method
HNO3	2.5ml	MAILINCKRODT 6623	7470A A-90CLAVE 15PST 120°C
H2SO4	5.0ml	MAILINCKRODT 5557	54512 = 0057-025-3
KMNO4	15.0ml	0057-021-3	MAILINCKRODT = 0057-020-5
K2S2O4	8.0ml	0057-019-8	

Extract(s) (Record line number from above)	Extract(s) Received			Extract(s) Relinquished		
	Date	Time	Analyst	Date	Time	Analyst
01						
02						
03						
04						
05						

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
20B CLP1	DHKQ4	___	259290	051465	A-34-QO	COH090213	002		SOLID	0	2 1
21B,C CLP1	DHPDW	___	259276	054156	A-34-QO	COH110155	001		SOLID	0	4 1
21B,C CLP1	DHPE3	___	259277	054156	A-34-QO	COH110155	002		SOLID	0	4 1
21B,C CLP1	DHPE4	___	259278	054156	A-34-QO	COH110155	003		SOLID	0	4 1
21B,C CLP1	DHPE6	___	259279	054156	A-34-QO	COH110155	004		SOLID	0	4 1
21B,C CLP1	DHPE7	___	259280	054156	A-34-QO	COH110155	005		SOLID	0	4 1
21B,C CLP1	DHPE8	___	259281	054156	A-34-QO	COH110155	006		SOLID	0	4 1
21B,C CLP1	DHPE9	___	259282	054156	A-34-QO	COH110155	007		SOLID	0	4 1
21B,C CLP1	DHPEA	___	259283	054156	A-34-QO	COH110155	008		SOLID	0	4 1
21B,C CLP1	DHPED	___	259284	054156	A-34-QO	COH110155	009		SOLID	0	4 1
21B,C CLP1	DHPEE	___	259285	054156	A-34-QO	COH110155	010		SOLID	0	4 1
21B CLP	DHPF2	___	259289	357464	A-34-QO	COH110157	001		SOLID	0	4 1
21E CLP1	DHQXN	___	259286	399411	A-34-QO	COH120157	001		SOLID	0	3 1
21E CLP1	DHQXQ	___	259287	399411	A-34-QO	COH120157	002		SOLID	0	3 1
21E CLP1	DHQXR	___	259288	399411	A-34-QO	COH120157	003		SOLID	0	3 1
22C	DHT3F	___	259259	378644	I-05-QO	COH140128	001		WATER	0	1 1
22C	DHT3M	___	259260	378644	I-05-QO	COH140128	002		WATER	0	1 1
22C	DHT3N	___	259261	378644	I-05-QO	COH140128	003		WATER	0	1 1
22C	DHT3V	___	259262	378644	I-05-QO	COH140128	004		WATER	0	1 1
22C	DHT3W	___	259263	378644	I-05-QO	COH140128	005		WATER	0	1 1
22C	DHT4M	___	259264	378644	I-05-QO	COH140128	006		WATER	0	1 1
22C	DHT4Q	___	259265	378644	I-05-QO	COH140128	007		WATER	0	1 1
22C	DHT4T	___	259266	378644	I-05-QO	COH140128	008		WATER	0	1 1
22C	DHT4X	___	259267	378644	I-05-QO	COH140128	009		WATER	0	1 1
22C	DHT50	___	259268	378644	I-05-QO	COH140128	010		WATER	0	1 1
22C	DHT51	___	259269	378644	I-05-QO	COH140128	011		WATER	0	1 1

REQUESTED BY: FAUSTG

667 1007

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
22C	DHT52	___	259270	378644	I-05-QO	COH140128	012		WATER	0	1 1
22C	DHT59	___	259271	378644	I-05-QO	COH140128	013		WATER	0	1 1
22C	DHT5A	___	259272	378644	I-05-QO	COH140128	014		WATER	0	1 1
22C	DHTQC	___	259273	378644	I-05-QO	COH140128	015		WATER	0	1 1
22C	DHTQD	___	259274	378644	I-05-QO	COH140128	016		WATER	0	1 1
22C	DHTQE	___	259275	378644	I-05-QO	COH140128	017		WATER	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Geoffrey O. Braust
Geoffrey O. Braust

Geoffrey O. Braust
Geoffrey O. Braust

8-16-00 0445

8-16-00 0535

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

REQUESTED BY: MURPHYJ

667 1008

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
21B,C CLP1	DHPDW	___	259227	054156	A-34-QO	COH110155	001		SOLID	0	4 1
21B,C CLP1	DHPE3	___	259228	054156	A-34-QO	COH110155	002		SOLID	0	4 1
21B,C CLP1	DHPE4	___	259229	054156	A-34-QO	COH110155	003		SOLID	0	4 1
21B,C CLP1	DHPE6	___	259230	054156	A-34-QO	COH110155	004		SOLID	0	4 1
21B,C CLP1	DHPE7	___	259231	054156	A-34-QO	COH110155	005		SOLID	0	4 1
21B,C CLP1	DHPE8	___	259232	054156	A-34-QO	COH110155	006		SOLID	0	4 1
21B,C CLP1	DHPE9	___	259233	054156	A-34-QO	COH110155	007		SOLID	0	4 1
21B,C CLP1	DHPEA	___	259234	054156	A-34-QO	COH110155	008		SOLID	0	4 1
21B,C CLP1	DHPED	___	259235	054156	A-34-QO	COH110155	009		SOLID	0	4 1
21B,C CLP1	DHPEE	___	259236	054156	A-34-QO	COH110155	010		SOLID	0	4 1
21B CLP	DHPF2	___	259223	357464	A-34-QO	COH110157	001		SOLID	0	4 1
21E CLP1	DHQXN	___	259224	399411	A-34-QO	COH120157	001		SOLID	0	3 1
21E CLP1	DHQXQ	___	259225	399411	A-34-QO	COH120157	002		SOLID	0	3 1
21E CLP1	DHQXR	___	259226	399411	A-34-QO	COH120157	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

James Murphy

James Murphy

8-14-00 9:00

8-14-00 10:00

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

667 1009

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
21B,C CLP1	DHPDW	___	259203	054156	A-0M-08	COH110155	001		SOLID	0	4 1
21B,C CLP1	DHPE3	___	259204	054156	A-0M-08	COH110155	002		SOLID	0	4 1
21B,C CLP1	DHPE4	___	259205	054156	A-0M-08	COH110155	003		SOLID	0	4 1
21B,C CLP1	DHPE6	___	259206	054156	A-0M-08	COH110155	004		SOLID	0	4 1
21B,C CLP1	DHPE7	___	259207	054156	A-0M-08	COH110155	005		SOLID	0	4 1
21B,C CLP1	DHPE8	___	259208	054156	A-0M-08	COH110155	006		SOLID	0	4 1
21B,C CLP1	DHPE9	___	259209	054156	A-0M-08	COH110155	007		SOLID	0	4 1
21B,C CLP1	DHPEA	___	259210	054156	A-0M-08	COH110155	008		SOLID	0	4 1
21B,C CLP1	DHPED	___	259211	054156	A-0M-08	COH110155	009		SOLID	0	4 1
21B,C CLP1	DHP EE	___	259212	054156	A-0M-08	COH110155	010		SOLID	0	4 1
21B CLP	DHPF2	___	259216	357464	A-0M-08	COH110157	001		SOLID	0	4 1
21E CLP1	DHQXN	___	259213	399411	A-0M-08	COH120157	001		SOLID	0	3 1
21E CLP1	DHQXQ	___	259214	399411	A-0M-08	COH120157	002		SOLID	0	3 1
21E CLP1	DHQXR	___	259215	399411	A-0M-08	COH120157	003		SOLID	0	3 1

DHVFXB

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<u>William A Hoyle</u>	<u>William A Hoyle</u>	<u>8-16-00</u>	<u>06:00</u>
<u>William A Hoyle</u>	<u>William A Hoyle</u>	<u>8-16-00</u>	<u>07:00</u>

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

667 1010

GENERAL CHEMISTRY DATA

667 1011

UXB INTERNATIONAL

Client Sample ID: DF/S1/0224/GRAB/005

General Chemistry

Lot-Sample #...: C0H120157-001

Work Order #...: DHQXN

Matrix.....: SOLID

Date Sampled...: 08/11/00

Date Received...: 08/12/00

% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.8		No Units	SW846 9045C	08/12/00	0225154
			Dilution Factor: 1	MS Run #.....: 0225048		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/14/00	0227199
			Dilution Factor: 1	MS Run #.....: 0227060		
Percent Solids	89.3		%	MCAWW 160.3 MOD	08/14-08/15/00	0227275
			Dilution Factor: 1	MS Run #.....: 0233011		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/17/00	0230409
			Dilution Factor: 1	MS Run #.....: 0230212		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/17/00	0230406
			Dilution Factor: 1	MS Run #.....: 0230210		

UXB INTERNATIONAL

Client Sample ID: DF/S1/0224/SDC/024

General Chemistry

Lot-Sample #...: C0H120157-002 Work Order #...: DHQXQ Matrix.....: SOLID
 Date Sampled...: 08/11/00 Date Received...: 08/12/00
 % Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.6		No Units	SW846 9045C	08/12/00	0225154
				Dilution Factor: 1	MS Run #.....: 0225048	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/14/00	0227199
				Dilution Factor: 1	MS Run #.....: 0227060	
Percent Solids	88.9		%	MCAWW 160.3 MOD	08/14-08/15/00	0227275
				Dilution Factor: 1	MS Run #.....: 0233011	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/17/00	0230409
				Dilution Factor: 1	MS Run #.....: 0230212	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/17/00	0230406
				Dilution Factor: 1	MS Run #..... : 0230210	

667 1013

UXB INTERNATIONAL

Client Sample ID: DF/S1/0224/SDC/025

General Chemistry

Lot-Sample #...: C0H120157-003 Work Order #...: DHQXR Matrix.....: SOLID
 Date Sampled...: 08/11/00 Date Received...: 08/12/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.7		No Units	SW846 9045C	08/12/00	0225154
			Dilution Factor: 1	MS Run #.....: 0225048		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/14/00	0227199
			Dilution Factor: 1	MS Run #.....: 0227060		
Percent Solids	86.0		%	MCAWW 160.3 MOD	08/14-08/15/00	0227275
			Dilution Factor: 1	MS Run #.....: 0233011		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/17/00	0230409
			Dilution Factor: 1	MS Run #.....: 0230212		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/17/00	0230406
			Dilution Factor: 1	MS Run #.....: 0230210		

667 10¹⁴

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COH120157

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DJ2J4101 200	mg/kg	MB Lot-Sample #: A0H170000-409 SW846 7.3.3	08/17/00	0230409
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJ2H1101 200	mg/kg	MB Lot-Sample #: A0H170000-406 SW846 7.3.4	08/17/00	0230406
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: C0H120157

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 #: DHRDA101 (85 - 115)	LCS Lot-Sample#: C0H120000-154 SW846 9045C	08/12/00	0225154
		Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

667 1016

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COH120157

Work Order #...: DHM03-SMP
DHM03-DUP

Matrix.....: SOLID

Date Sampled...: 08/09/00

Date Received...: 08/10/00

% Moisture.....: 69

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: COH100137-005 SW846 7.3.3	08/17/00	0230409
Dilution Factor: 1								
Prep Date.....: 0230212 Analysis Date...: Prep Batch #....:								
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: COH100137-005 SW846 7.3.4	08/17/00	0230406
Dilution Factor: 1								
Prep Date.....: 0230210 Analysis Date...: Prep Batch #....:								

667 1017

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COH120157

Work Order #...: DHPDW-SMP

Matrix.....: SOLID

DHPDW-DUP

Date Sampled...: 08/10/00

Date Received...: 08/11/00

% Moisture.....: 100

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>		<u>RPD</u>	<u>LIMIT</u>		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Ignitability								
			No Units 0		(0-0.0)	SD Lot-Sample #: COH110155-001		
						SW846 SECTION 7.1 08/14/00		0227199
			Dilution Factor: 1					
			Prep Date.....: 0227060		Analysis Date...:		Prep Batch #....:	

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H120157

Work Order #...: DHQR0-SMP

Matrix.....: SOLID

DHORO-DUP

Date Sampled...: 08/11/00

Date Received..: 08/12/00

% Moisture.....: 37

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	63.1	51.9	%	19	(0-20)	SD Lot-Sample #: MCAWW 160.3 MOD	COH120140-001 08/14-08/15/00	0227275

Dilution Factor: 1

Prep Date.....: 0233011

Analysis Date...:

Prep Batch #...:

pH

6.3

6.2

No Units 1.4

(0-20)

SD Lot-Sample #: C0H120140-001

SW846 9045C

08/12/00

0225154

Dilution Factor: 1

Prep Date.....: 0225048

Analysis Date...:

Prep Batch #...:

667 1019

Analyst: CM BRETCH / ERM Faust
Date: 8-12-00
Start Time: 2100

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	Lab Chem 9167-08	5-19-00	6-25-01
7.03	7.0	0062-04	5-19-00	3-1-02
10.03	10.0	0047-14	5-19-00	3-8-02

Relative Percent Difference = $\frac{COH110155 - 001}{COH120140 - 001} = 15.6\%$
 $\frac{COH120140 - 001}{COH120140 - 001} = 1.4\%$

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 =Original Result
 X_2 = Duplicate

[illegible]

667 1020

PSR024 8/12/00 17:48:58 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY BRITSCNC

ME : OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
21B,C CLP1	DHPDW-1-OH	___	258677	054156	A-88-OZ	COH110155	001		SOLID	0	4 1
21B,C CLP1	DHPE3-1-OH	___	258678	054156	A-88-OZ	COH110155	002		SOLID	0	4 1
21B,C CLP1	DHPE4-1-OH	___	258679	054156	A-88-OZ	COH110155	003		SOLID	0	4 1
21B,C CLP1	DHPE6-1-OH	___	258680	054156	A-88-OZ	COH110155	004		SOLID	0	4 1
21B,C CLP1	DHPE7-1-OH	___	258681	054156	A-88-OZ	COH110155	005		SOLID	0	4 1
21B,C CLP1	DHPE8-1-OH	___	258682	054156	A-88-OZ	COH110155	006		SOLID	0	4 1
21B,C CLP1	DHPE9-1-OH	___	258683	054156	A-88-OZ	COH110155	007		SOLID	0	4 1
21B,C CLP1	DHPEA-1-OH	___	258684	054156	A-88-OZ	COH110155	008		SOLID	0	4 1
21B,C CLP1	DHPED-1-OH	___	258685	054156	A-88-OZ	COH110155	009		SOLID	0	4 1
21B,C CLP1	DHPPE-1-OH	___	258686	054156	A-88-OZ	COH110155	010		SOLID	0	4 1
21 P	DHPF2-1-OG	___	258687	357464	A-88-OZ	COH110157	001		SOLID	0	4 1
21E CLP1	DHQRO-1-04	___	258688	406166	A-88-OZ	COH120140	001		SOLID	0	3 1
21E CLP1	DHQRT-1-04	___	258689	406166	A-88-OZ	COH120140	002		SOLID	0	3 1
21E CLP1	DHQT2-1-04	___	258690	406166	A-88-OZ	COH120140	003		SOLID	0	3 1
21E CLP1	DHQT6-1-03	___	258691	406166	A-88-OZ	COH120140	004		SOLID	0	3 1
21E CLP1	DHQTW-1-04	___	258692	406166	A-88-OZ	COH120140	005		SOLID	0	4 1
21E CLP1	DHQV7-1-04	___	258693	406166	A-88-OZ	COH120140	007		SOLID	0	3 1
21E CLP1	DHQVF-1-04	___	258694	406166	A-88-OZ	COH120140	008		SOLID	0	3 1
21E CLP1	DHQXN-1-0F	___	258695	399411	A-88-OZ	COH120157	001		SOLID	0	3 1
21E CLP1	DHQXQ-1-0F	___	258696	399411	A-88-OZ	COH120157	002		SOLID	0	3 1
21E CLP1	DHQXR-1-0F	___	258697	399411	A-88-OZ	COH120157	003		SOLID	0	3 1

PSR024 8/12/00 17:48:58 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

667 1021

PAGE 002

REQUESTED BY: BRITSCHC

ME J: OZ pH (9045C) - Non-Aqueous

PICKED

STORAGE LOCATION WORK ORDER #

CNTR#

CONTROL # CLIENT # ANALYSIS LOTID SMP# SFX

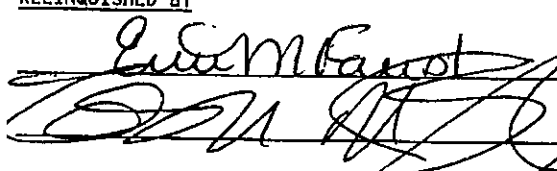
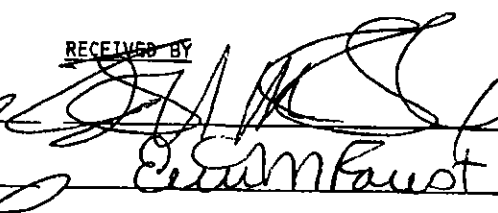
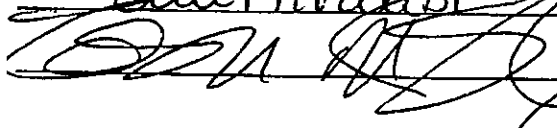
MATRIX
DESCRIPTION

QTY QTY
RCVD REQD

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		8-12-00 1900
	E. M. Faust	8-12-00 2030

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

STL Pittsburgh

7012

667 1022
Ignitability
Method: Ignitability (SW 7.1.2) STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: <u>PETER GROVES</u>	DATE: <u>8-14-00</u>
BATCH: <u>022 7199</u>	TIME: <u>10:00</u>

SAMPLE ID	RESULT
C04110155-001	NO
↓ -001 DUP	NO
-002	NO
-003	NO
-004	NO
-005	NO
-006	NO
-007	NO
-008	NO
-009	NO
↓ -010	NO
C04120157-001	NO
↓ -002	NO
↓ -003	NO
C04110157-001	NO

Reviewed by E. J. Wurd Date 8-14-00

WC-00-0060

Page 5 of 100

REQUESTED BY: MESOLOSE

METHOD: IQ Ignitability (SW7.1.2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
21B CLP	DHPF2-1-0H	— — —	258845	357464	A-88-IQ COH110157	001			SOLID	4	1
21B,C CLP1	DHPDW-1-0J	— — —	258835	054156	A-88-IQ COH110155	001			SOLID	4	1
21B,C CLP1	DHPEA-1-0J	— — —	258836	054156	A-88-IQ COH110155	008			SOLID	4	1
21B,C CLP1	DHPED-1-0J	— — —	258837	054156	A-88-IQ COH110155	009			SOLID	4	1
21B,C CLP1	DHPPE-1-0J	— — —	258838	054156	A-88-IQ COH110155	010			SOLID	4	1
21B,C CLP1	DHPE3-1-0J	— — —	258839	054156	A-88-IQ COH110155	002			SOLID	4	1
21B,C CLP1	DHPE4-1-0J	— — —	258840	054156	A-88-IQ COH110155	003			SOLID	4	1
21B,C CLP1	DHPE6-1-0J	— — —	258841	054156	A-88-IQ COH110155	004			SOLID	4	1
21B,C CLP1	DHPE7-1-0J	— — —	258842	054156	A-88-IQ COH110155	005			SOLID	4	1
21B,C CLP1	DHPE8-1-0J	— — —	258843	054156	A-88-IQ COH110155	006			SOLID	4	1
21B,C CLP1	DHPE9-1-0J	— — —	258844	054156	A-88-IQ COH110155	007			SOLID	4	1
21E CLP1	DHQXN-1-0G	— — —	258846	399411	A-88-IQ COH120157	001			SOLID	3	1
21E CLP1	DHQXQ-1-0G	— — —	258847	399411	A-88-IQ COH120157	002			SOLID	3	1
21E CLP1	DHQXR-1-0G	— — —	258848	399411	A-88-IQ COH120157	003			SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8-14-00 9:45

8-14-00 10:30

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

667 1024

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0008012
 TESTED: WWM 8/14/00
 CHECKED: *12* 8:50

CREATED: 8/14/00 12:47:11 PM

REVISED: 8/14/00 12:59:55 PM

COMMENTS

COH120140/COH120130/COH120157/COH140106/COH140107/COH120125/COH110134

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
COH120140	01	SMP 129	1.08	6.06	4.22	12:30	4:30	1.84	36.948	63.052 ✓
COH120140	01DUP	SMP 116	1.05	6.64	3.95	12:30	4:30	2.69	48.122	51.878 ✓
COH120140	02	SMP 235	1.04	6.66	5.97	12:30	4:30	0.69	12.278	87.722 ✓
COH120140	03	SMP 226	1.02	6.27	3.51	12:30	4:30	2.76	52.571	47.429 ✓
COH120140	04	SMP 232	1.03	6.43	4.68	12:30	4:30	1.75	32.407	67.593 ✓
COH120140	05	SMP 421	1	6.05	3.68	12:30	4:30	2.37	46.931	53.069 ✓
COH120140	06	SMP 175	1.58	6.9	3.03	12:30	4:30	3.87	72.744	27.256 ✓
COH120140	07	SMP 208	1	6.91	5.7	12:30	4:30	1.21	20.474	79.526 ✓
COH120140	08	SMP 88	1	6.67	5.73	12:30	4:30	0.94	16.578	83.422 ✓
COH120130	04	SMP 125	1.04	6.27	5.73	12:30	4:30	0.54	10.325	89.675 ✓
COH120157	01	SMP 181	1.11	6.82	6.21	12:30	4:30	0.61	10.683	89.317 ✓
COH120157	02	SMP 174	1.11	6.69	6.07	12:30	4:30	0.62	11.111	88.889 ✓
COH120157	03	SMP 105	1.14	6.51	5.76	12:30	4:30	0.75	13.966	86.034 ✓
COH140106	01	SMP 145	1.12	6.55	4.15	12:30	4:30	2.4	44.199	55.801 ✓
COH140107	01	SMP 81	1.11	6.53	4.38	12:30	4:30	2.15	39.668	60.332 ✓
COH120125	01	SMP 74	1.06	6.17	4.48	12:30	4:30	1.69	33.072	66.928 ✓
COH120125	01DUP	SMP 205	1.01	7.39	5.29	12:30	4:30	2.1	32.915	67.085 ✓
COH110134	01	SMP 19	1.61	7.22	6.76	12:30	4:30	0.46	8.2	91.8 ✓

667 1025

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM. 0008012
 TESTED: WWM 8/14/00
 CHECKED: *8.15.00*
 COMMENTS:
 COH120140/COH120150/COH120157/COH140106/COH140107/COH120125/COH110134

CREATED: 8/14/00 12:47:11 PM
 REVISED: 8/14/00 12:59:55 PM

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.
COH140112	01	SMP	118	1.11	6.6	6.19	12:30	4:30	0.41	7.468	92.532
COH140112	01DUP	SMP	1291	1.12	6.28	5.89	12:30	4:30	0.39	7.558	92.442
COH140112	02	SMP	66	1.12	6.48	6.08	12:30	4:30	0.4	7.463	92.537
COH140112	04	SMP	157	1.15	6.2	4.87	12:30	4:30	1.33	26.337	73.663
COH140112	04DUP	SMP	119	1.12	6.43	4.95	12:30	4:30	1.48	27.872	72.128
COH140112	06	SMP	101	1.1	6.67	5.36	12:30	4:30	1.31	23.519	76.481

*0.001
R/D
2.11
R/D*

667 1026

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEETOven Temperature: 103°C±2°CDate 8-14-00 Time in 1230Analyst: Wesley W. MORAANDate 8-15-00 Time out 0430Balance ID #: C94817

	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
0227275	COH120140-01	129	1.08	6.06	4.22					
	↓ Dup -01	116	1.05	6.64	3.95					
	-02	235	1.04	6.66	5.97					
	-03	226	1.02	6.27	3.51					
	-04	232	1.03	6.43	4.68					
	-05	421	1.00	6.05	3.68					
	-06	175	1.58	6.90	3.03					
	-07	208	1.00	6.91	5.70					
0227276	-08	88	1.00	6.67	5.73					
	COH120130-04	125	1.04	6.27	5.73					
	COH120157-01	181	1.11	6.82	6.21					
	↓ -02	174	1.11	6.69	6.07					
	-03	105	1.14	6.51	5.76					
	COH140106-01	145	1.12	6.55	4.15					
	COH140107-01	81	1.11	6.53	4.38					
	COH120125-01	18174	1.06	6.17	4.48					
0228241	↓ Dup -01	205	1.01	7.39	5.29					
	COH120134-01	19	1.61	7.22	6.76					
	COH140112-01	118	1.11	6.60	6.19					
	↓ Dup 01	1291	1.12	6.28	5.89					
	02	66	1.12	6.48	6.08					
	04	157	1.15	6.20	4.87					
	↓ Dup 04	119	1.12	6.43	4.95					
	-06	101	1.10	6.67	5.36					

Wesley W. MORAAN 8-15-00

STL PT/May-00/96-003/TSLOG DOC

REQUESTED BY: MORGANW

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
21D CLP1	DHQPR-1-01	— — —	258907	414853	A-88-SM COH120130	004			SOLID	6	1
21E CLP1	DHQRT-1-01	— — —	258908	406166	A-88-SM COH120140	002			SOLID	3	1
21E CLP1	DHQRO-1-01	— — —	258909	406166	A-88-SM COH120140	001			SOLID	3	1
21E CLP1	DHQTW-1-01	— — —	258910	406166	A-88-SM COH120140	005			SOLID	4	1
21E CLP1	DHQT2-1-01	— — —	258911	406166	A-88-SM COH120140	003			SOLID	3	1
21E CLP1	DHQT6-1-01	— — —	258912	406166	A-88-SM COH120140	004			SOLID	3	1
21E CLP1	DHQVF-1-01	— — —	258913	406166	A-88-SM COH120140	008			SOLID	3	1
21E CLP1	DHQV4-1-01	— — —	258914	406166	A-88-SM COH120140	006			SOLID	3	1
21E CLP1	DHQV7-1-01	— — —	258915	406166	A-88-SM COH120140	007			SOLID	3	1
21E CLP1	DHQXN-1-01	— — —	258916	399411	A-88-SM COH120157	001			SOLID	3	1
21E CLP1	DHQXQ-1-01	— — —	258917	399411	A-88-SM COH120157	002			SOLID	3	1
21E CLP1	DHQXR-1-01	— — —	258918	399411	A-88-SM COH120157	003			SOLID	3	1
22B CLP1	DHRLN-1-05	— — —	258919	027262	A-88-SM COH140106	001			SOLID	2	1
22B CLP1	DHRM3-1-05	— — —	258920	027262	A-88-SM COH140107	001			SOLID	2	1
22B CLP1	DHRPW-1-01	— — —	258921	378644	A-88-SM COH140112	001			SOLID	16	1
22B CLP1	DHRQA-1-01	— — —	258922	378644	A-88-SM COH140112	004			SOLID	16	1
22B CLP1	DHRQ4-1-01	— — —	258923	378644	A-88-SM COH140112	002			SOLID	5	1

REQUESTED BY: MORGANW

667 1028

MOD: WM Solids, Percent (as TS - 160.3 MOD) - Solids

<u>STORAGE LOCATION</u> <u>WORK ORDER #</u>	<u>PICKED</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u>	<u>QTY</u>	<u>QTY</u>
	<u>CNTR#</u>							<u>DESCRIPTION</u>	<u>RCVD</u>	<u>REQD</u>

RELINQUISHED BYRECEIVED BYDATE/TIME

C. L. Whorl
N. Morgan

N. Morgan
C. L. Whorl

8-14-00 11:45
8-14-00 1700

667 1029

REQUESTED BY: **MORGAN**

MOD: WM Moisture, Percent (160.3)

<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>
21B	DHP6R-1-01	— — —	258924	413462	A-88-WM	COH110134	001		SOLID	1	1
21D	DHQNN-1-01	— — —	258925	413462	A-88-WM	COH120125	001		SOLID	1	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. L. Murrell
W. Morgan

W. Morgan
E. L. Murrell

8-14-00 1145
8-14-00 1700

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

REQUESTED BY: **MORGAN****667 1030**

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
22B CLP1	DHRPW-1-01	___	258997	378644	A-88-SM	COH140112	001		SOLID	0	16 1
22B CLP1	DHRQ4-1-01	___	258998	378644	A-88-SM	COH140112	002		SOLID	0	5 1
22B CLP1	DHRQA-1-01	___	258999	378644	A-88-SM	COH140112	004		SOLID	0	16 1
22B CLP1	DHRQE-1-01	___	259000	378644	A-88-SM	COH140112	006		SOLID	0	5 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

W. Morgan
W. Morgan

W. Morgan
W. Morgan

8-14-00 1630

8-14-00 1645

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

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

6671031

Analysis Reactive CN
Prep/ Anal. Date 8/17/00
Analyst DC

Batch Number 0230409
LCS Number
LCS Prep Date
RL 200mg/kg

Titrant Name Silver Nitrate
Titrant Normality 0.0192
Titrant Standardization Date/ Initials

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		0.05	6.25	mg/kg	
DHMO6			0.05	6.25		
DHMO3			0.2	25		
DHMO3 Dup			0.2	25		
DHMO7			0.15	18.8		
DHMOA			0.05	6.25		
DHMOE			0.05	6.25		
DHMOF			0.05	6.25		
DHMOK			0.05	6.25		
DHMO M			0.05	6.25		
DHMON			0.1	12.5		
DHMO R			0.05	6.25		
DHPF2			0.05	6.25		
DHTCK			0.05	6.25		
DHTCN			0.05	6.25		
DHQXN			0.05	6.25		
DHQXQ			0.05	6.25		
DHQXR			0.05	6.25		
DHT89			0.05	6.25		

8/18/00 DC

667 1032

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEETAnalysis Reactive Sulfide
Prep/ Anal. Date 8/17/00
Analyst DCBatch Number 0230406
LCS Number _____
LCS Prep Date _____
RL 200 mg/kgTitrant Name 0.025 N Sodium Thiosulfate
Titrant Normality _____
Titrant Standardization Date/ Initials 7/18/00, CCK

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		22.5	ND	mg/kg	
DHMO6	1		22.3	ND		
DHMO3			22.2	ND		
DHMO3 dup			22.4	ND		
DHMO7			21.2	ND		
DHMOA			22.5	ND		
DHMOE			22.5	ND		
DHMOF			22.5	ND		
DHMO K			22.3	ND		
DHMONM			22.6	ND		
DHMON		22.1	22.6	ND		
DHMO R			22.6	ND		
DHPF2			22.2	ND		
DHTCK			22.1	ND		
DHTCN			22.6	ND		
DHQXN			23.0	ND		
DHQXQ			17.2	ND		140 mg/Kg
DHQXR			22.6	ND		
DHT89		22.3		ND		
8/18/00 DC						

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE