

678

6938

File: 541.460.000n
C.H.



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 6710

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	220.35	10000	1/11/01
Arsenic	189.04	10000	1/11/01
Cadmium	226.50	5000	1/11/01
Chromium	267.72	20000	1/11/01
Lead	220.35	5000	1/11/01
Selenium	220.35	10000	1/11/01
Silver	328.07	2000	1/11/01
Thallium	190.86	10000	1/11/01

678 700

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 1075092 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DXG2XB	3/16/01	NA	100	NA
DXG2XC	3/16/01	NA	100	NA
DXGMH	3/16/01	NA	100	NA
DXGMHD	3/16/01	NA	100	NA
DXGMHS	3/16/01	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

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Preparation Log

Preparation Batch: 1075131 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DXG4QB	3/16/01	NA	50	NA
DXG4QC	3/16/01	NA	50	NA
DXGMH	3/16/01	NA	50	NA
DXGMHD	3/16/01	NA	50	NA
DXGMHS	3/16/01	NA	50	NA

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0316HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		3/16/01	9:01
Std2Rep1		3/16/01	9:02
Std3Rep1		3/16/01	9:04
Std4Rep1		3/16/01	9:06
Std5Rep1		3/16/01	9:07
Std6Rep1		3/16/01	9:09
ICV5-1		3/16/01	9:11
ICB1		3/16/01	9:13
CCV5-1		3/16/01	9:15
CCB1		3/16/01	9:16
ZZZZZZ		3/16/01	9:18
ZZZZZZ		3/16/01	9:19
ZZZZZZ		3/16/01	9:21
ZZZZZZ		3/16/01	9:22
ZZZZZZ		3/16/01	9:23
ZZZZZZ		3/16/01	9:25
ZZZZZZ		3/16/01	9:27
ZZZZZZ		3/16/01	9:28
ZZZZZZ		3/16/01	9:29
ZZZZZZ		3/16/01	9:31
CCV5-2		3/16/01	9:33
CCB2		3/16/01	9:34
ZZZZZZ		3/16/01	9:36
ZZZZZZ		3/16/01	9:38
ZZZZZZ		3/16/01	9:39
ZZZZZZ		3/16/01	9:41
ZZZZZZ		3/16/01	9:42
ZZZZZZ		3/16/01	9:44
ZZZZZZ		3/16/01	9:45
ZZZZZZ		3/16/01	9:47
ZZZZZZ		3/16/01	9:48
ZZZZZZ		3/16/01	9:50
CCV5-3		3/16/01	9:52
CCB3		3/16/01	9:54
ZZZZZZ		3/16/01	9:55
ZZZZZZ		3/16/01	9:57
ZZZZZZ		3/16/01	9:59
ZZZZZZ		3/16/01	10:00
ZZZZZZ		3/16/01	10:02

STL-Pittsburgh
Metals Data Reporting Form

678 703

Instrument Runlog

Instrument: CVAA

Chart Number: 0316HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/16/01	10:04
ZZZZZZ		3/16/01	10:05
ZZZZZZ		3/16/01	10:07
ZZZZZZ		3/16/01	10:09
ZZZZZZ		3/16/01	10:10
CCV5-4		3/16/01	10:12
CCB4		3/16/01	10:14
ZZZZZZ		3/16/01	10:15
ZZZZZZ		3/16/01	10:17
ZZZZZZ		3/16/01	10:18
ZZZZZZ		3/16/01	10:20
ZZZZZZ		3/16/01	10:21
ZZZZZZ		3/16/01	10:23
ZZZZZZ		3/16/01	10:24
ZZZZZZ		3/16/01	10:26
ZZZZZZ		3/16/01	10:27
ZZZZZZ		3/16/01	10:29
CCV5-5		3/16/01	10:30
CCB5		3/16/01	10:32
ZZZZZZ		3/16/01	10:33
DXG2XB		3/16/01	10:35
DXG2XC		3/16/01	10:37
DXGMH	DF/24-B/1073/IDW/003	3/16/01	10:39
DXGMHS	DF/24-B/1073/IDW/003S	3/16/01	10:41
DXGMHD	DF/24-B/1073/IDW/003SD	3/16/01	10:42
CCV5-6		3/16/01	10:44
CCB6		3/16/01	10:46

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Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J10319A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		3/19/01	11:11
STD5A		3/19/01	11:15
STD5B		3/19/01	11:18
ICV2-1		3/19/01	11:21
ICB1		3/19/01	11:24
ICSA		3/19/01	11:27
ICSAB		3/19/01	11:30
ZZZZZZ		3/19/01	11:35
ZZZZZZ		3/19/01	11:38
ZZZZZZ		3/19/01	11:41
ZZZZZZ		3/19/01	11:44
ZZZZZZ		3/19/01	11:47
ZZZZZZ		3/19/01	11:50
ZZZZZZ		3/19/01	11:54
ZZZZZZ		3/19/01	11:57
CCV2-1		3/19/01	12:00
CCB1		3/19/01	12:03
ZZZZZZ		3/19/01	12:06
ZZZZZZ		3/19/01	12:09
ZZZZZZ		3/19/01	12:13
ZZZZZZ		3/19/01	12:16
ZZZZZZ		3/19/01	12:19
ZZZZZZ		3/19/01	12:22
ZZZZZZ		3/19/01	12:25
ZZZZZZ		3/19/01	12:28
ZZZZZZ		3/19/01	12:31
ZZZZZZ		3/19/01	12:35
CCV2-2		3/19/01	12:38
CCB2		3/19/01	12:41
ZZZZZZ		3/19/01	12:44
ZZZZZZ		3/19/01	12:47
ZZZZZZ		3/19/01	12:50
ZZZZZZ		3/19/01	12:54
ZZZZZZ		3/19/01	12:57
ZZZZZZ		3/19/01	13:00
ZZZZZZ		3/19/01	13:03
ZZZZZZ		3/19/01	13:06
ZZZZZZ		3/19/01	13:09
ZZZZZZ		3/19/01	13:13

STL-Pittsburgh
Metals Data Reporting Form

678 705

Instrument Runlog

Instrument: ICP

Chart Number: J10319A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CCV2-3		3/19/01	13:16
CCB3		3/19/01	13:19
ZZZZZZ		3/19/01	13:22
ZZZZZZ		3/19/01	13:25
ZZZZZZ		3/19/01	13:28
ZZZZZZ		3/19/01	13:31
ZZZZZZ		3/19/01	13:35
ZZZZZZ		3/19/01	13:38
ZZZZZZ		3/19/01	13:41
ZZZZZZ		3/19/01	13:44
ZZZZZZ		3/19/01	13:47
ZZZZZZ		3/19/01	13:50
CCV2-4		3/19/01	13:54
CCB4		3/19/01	13:57
ZZZZZZ		3/19/01	14:00
ZZZZZZ		3/19/01	14:03
ZZZZZZ		3/19/01	14:06
ZZZZZZ		3/19/01	14:09
ZZZZZZ		3/19/01	14:13
ZZZZZZ		3/19/01	14:16
ZZZZZZ		3/19/01	14:19
ZZZZZZ		3/19/01	14:22
ZZZZZZ		3/19/01	14:25
ZZZZZZ		3/19/01	14:28
CCV2-5		3/19/01	14:32
CCB5		3/19/01	14:35
ZZZZZZ		3/19/01	14:38
ZZZZZZ		3/19/01	14:41
ZZZZZZ		3/19/01	14:44
ZZZZZZ		3/19/01	14:47
DXG4QB		3/19/01	14:51
DXG4QC		3/19/01	14:54
DXGMH	DF/24-B/1073/IDW/003	3/19/01	14:57
DXGMHP	DF/24-B/1073/IDW/003	3/19/01	15:00
DXGMHS	DF/24-B/1073/IDW/003S	3/19/01	15:03
DXGMHD	DF/24-B/1073/IDW/003SD	3/19/01	15:06
CCV2-6		3/19/01	15:09
CCB6		3/19/01	15:13
ZZZZZZ		3/19/01	15:22

STL-Pittsburgh

Metals Data Reporting Form

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Instrument Runlog

Instrument: ICPChart Number: J10319A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/19/01	15:26
ZZZZZZ		3/19/01	15:29
ZZZZZZ		3/19/01	15:32
ZZZZZZ		3/19/01	15:35
ZZZZZZ		3/19/01	15:38
ZZZZZZ		3/19/01	15:41
ZZZZZZ		3/19/01	15:45
ZZZZZZ		3/19/01	15:48
ZZZZZZ		3/19/01	15:52
ZZZZZZ		3/19/01	15:56
ZZZZZZ		3/19/01	15:59
ZZZZZZ		3/19/01	16:02
ZZZZZZ		3/19/01	16:05
ZZZZZZ		3/19/01	16:08
ZZZZZZ		3/19/01	16:11
ZZZZZZ		3/19/01	16:15
ZZZZZZ		3/19/01	16:18
ZZZZZZ		3/19/01	16:21
ZZZZZZ		3/19/01	16:24
ZZZZZZ		3/19/01	16:27
ZZZZZZ		3/19/01	16:30
ZZZZZZ		3/19/01	16:34
ZZZZZZ		3/19/01	16:37
ZZZZZZ		3/19/01	16:40
ZZZZZZ		3/19/01	16:43
ZZZZZZ		3/19/01	16:47
ZZZZZZ		3/19/01	16:50
ZZZZZZ		3/19/01	16:53
ZZZZZZ		3/19/01	16:56
ZZZZZZ		3/19/01	16:59
ZZZZZZ		3/19/01	17:02
ZZZZZZ		3/19/01	17:06

STL-Pittsburgh
Metals Data Reporting Form

678 707

Instrument Runlog

Instrument: ICP

Chart Number: J10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		3/20/01	11:55
STD5A		3/20/01	11:59
STD5B		3/20/01	12:02
ICV2-1		3/20/01	12:06
ICB1		3/20/01	12:09
ICSA		3/20/01	12:12
ICSAB		3/20/01	12:16
ZZZZZZ		3/20/01	12:26
ZZZZZZ		3/20/01	12:29
ZZZZZZ		3/20/01	12:32
ZZZZZZ		3/20/01	12:35
ZZZZZZ		3/20/01	12:38
ZZZZZZ		3/20/01	12:41
ZZZZZZ		3/20/01	12:45
ZZZZZZ		3/20/01	12:48
CCV2-1		3/20/01	12:51
CCB1		3/20/01	12:54
ZZZZZZ		3/20/01	12:57
ZZZZZZ		3/20/01	13:00
ZZZZZZ		3/20/01	13:03
ZZZZZZ		3/20/01	13:07
DXGMH	DF/24-B/1073/IDW/003	3/20/01	13:10
DXGMHP	DF/24-B/1073/IDW/003	3/20/01	13:13
DXGMHS	DF/24-B/1073/IDW/003S	3/20/01	13:16
DXGMHD	DF/24-B/1073/IDW/003SD	3/20/01	13:19
ZZZZZZ		3/20/01	13:22
ZZZZZZ		3/20/01	13:26
CCV2-2		3/20/01	13:29
CCB2		3/20/01	13:32
ZZZZZZ		3/20/01	13:35
ZZZZZZ		3/20/01	13:38
ZZZZZZ		3/20/01	13:41
ZZZZZZ		3/20/01	13:44
ZZZZZZ		3/20/01	13:48
ZZZZZZ		3/20/01	13:51
ZZZZZZ		3/20/01	13:54
ZZZZZZ		3/20/01	13:57
ZZZZZZ		3/20/01	14:00
ZZZZZZ		3/20/01	14:03

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Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/20/01	14:07
ZZZZZZ		3/20/01	14:10
ZZZZZZ		3/20/01	14:13
ZZZZZZ		3/20/01	14:16
ZZZZZZ		3/20/01	14:19
ZZZZZZ		3/20/01	14:22
ZZZZZZ		3/20/01	14:26
ZZZZZZ		3/20/01	14:29
ZZZZZZ		3/20/01	14:32
ZZZZZZ		3/20/01	14:35
ZZZZZZ		3/20/01	14:38
ZZZZZZ		3/20/01	14:41
ZZZZZZ		3/20/01	14:44
ZZZZZZ		3/20/01	14:48
ZZZZZZ		3/20/01	14:51
ZZZZZZ		3/20/01	14:54
ZZZZZZ		3/20/01	14:57
ZZZZZZ		3/20/01	15:00
ZZZZZZ		3/20/01	15:03
ZZZZZZ		3/20/01	15:07
ZZZZZZ		3/20/01	15:10
ZZZZZZ		3/20/01	15:13
ZZZZZZ		3/20/01	15:16
ZZZZZZ		3/20/01	15:19
ZZZZZZ		3/20/01	15:22
ZZZZZZ		3/20/01	15:26
ZZZZZZ		3/20/01	15:29
ZZZZZZ		3/20/01	15:32
ZZZZZZ		3/20/01	15:35
ZZZZZZ		3/20/01	15:38
ZZZZZZ		3/20/01	15:41
ZZZZZZ		3/20/01	15:45
ZZZZZZ		3/20/01	15:48
ZZZZZZ		3/20/01	15:51
ZZZZZZ		3/20/01	15:54
ZZZZZZ		3/20/01	15:57
ZZZZZZ		3/20/01	16:00
ZZZZZZ		3/20/01	16:04
ZZZZZZ		3/20/01	16:07

STL-Pittsburgh
Metals Data Reporting Form

678 709

Instrument Runlog

Instrument: ICP

Chart Number: J10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/20/01	16:10
ZZZZZZ		3/20/01	16:13
ZZZZZZ		3/20/01	16:16
ZZZZZZ		3/20/01	16:19
ZZZZZZ		3/20/01	16:23
ZZZZZZ		3/20/01	16:26
ZZZZZZ		3/20/01	16:29
ZZZZZZ		3/20/01	16:32
ZZZZZZ		3/20/01	16:35
ZZZZZZ		3/20/01	16:38
ZZZZZZ		3/20/01	16:42
ZZZZZZ		3/20/01	16:45
ZZZZZZ		3/20/01	16:48
ZZZZZZ		3/20/01	16:51
ZZZZZZ		3/20/01	16:54
ZZZZZZ		3/20/01	16:57
ZZZZZZ		3/20/01	17:01
ZZZZZZ		3/20/01	17:04
ZZZZZZ		3/20/01	17:07
ZZZZZZ		3/20/01	17:10
ZZZZZZ		3/20/01	17:13
ZZZZZZ		3/20/01	17:16
ZZZZZZ		3/20/01	17:20
ZZZZZZ		3/20/01	17:23
ZZZZZZ		3/20/01	17:26
ZZZZZZ		3/20/01	17:29
ZZZZZZ		3/20/01	17:32
ZZZZZZ		3/20/01	17:36

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: T10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/20/01	9:20
ZZZZZZ		3/20/01	9:25
ZZZZZZ		3/20/01	9:32
ZZZZZZ		3/20/01	9:38
ZZZZZZ		3/20/01	9:43
ZZZZZZ		3/20/01	9:47
ZZZZZZ		3/20/01	9:50
STD1		3/20/01	9:54
STD6		3/20/01	9:58
STD7		3/20/01	10:03
ICV3-1		3/20/01	10:06
ICB1		3/20/01	10:11
ICSA		3/20/01	10:15
ICSAB		3/20/01	10:20
ZZZZZZ		3/20/01	10:24
ZZZZZZ		3/20/01	10:29
ZZZZZZ		3/20/01	10:33
ZZZZZZ		3/20/01	10:37
ZZZZZZ		3/20/01	10:42
ZZZZZZ		3/20/01	10:46
ZZZZZZ		3/20/01	10:51
ZZZZZZ		3/20/01	10:55
CCV3-1		3/20/01	10:59
CCB1		3/20/01	11:04
ZZZZZZ		3/20/01	11:08
ZZZZZZ		3/20/01	11:13
ZZZZZZ		3/20/01	11:17
ZZZZZZ		3/20/01	11:21
ZZZZZZ		3/20/01	11:26
ZZZZZZ		3/20/01	11:30
DXG4QB		3/20/01	11:35
DXG4QC		3/20/01	11:39
DXGMH	DF/24-B/1073/IDW/003	3/20/01	11:43
DXGMHP	DF/24-B/1073/IDW/003	3/20/01	11:48
CCV3-2		3/20/01	11:52
CCB2		3/20/01	11:57
DXGMHS	DF/24-B/1073/IDW/003S	3/20/01	12:01
DXGMHD	DF/24-B/1073/IDW/003SD	3/20/01	12:05
ZZZZZZ		3/20/01	12:10

STL-Pittsburgh
Metals Data Reporting Form

678 711

Instrument Runlog

Instrument: ICPST

Chart Number: T10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/20/01	12:14
ZZZZZZ		3/20/01	12:19
ZZZZZZ		3/20/01	12:23
ZZZZZZ		3/20/01	12:28
ZZZZZZ		3/20/01	12:32
ZZZZZZ		3/20/01	12:36
ZZZZZZ		3/20/01	12:41
CCV3-3		3/20/01	12:45
CCB3		3/20/01	12:50
ZZZZZZ		3/20/01	12:54
ZZZZZZ		3/20/01	12:58
ZZZZZZ		3/20/01	13:03
ZZZZZZ		3/20/01	13:07
ZZZZZZ		3/20/01	13:12
ZZZZZZ		3/20/01	13:17
ZZZZZZ		3/20/01	13:21
ZZZZZZ		3/20/01	13:26
ZZZZZZ		3/20/01	13:30
ZZZZZZ		3/20/01	13:34
ZZZZZZ		3/20/01	13:39
ZZZZZZ		3/20/01	13:43
ZZZZZZ		3/20/01	13:48
ZZZZZZ		3/20/01	13:52
ZZZZZZ		3/20/01	13:56
ZZZZZZ		3/20/01	14:01
ZZZZZZ		3/20/01	14:05
ZZZZZZ		3/20/01	14:10
ZZZZZZ		3/20/01	14:14
ZZZZZZ		3/20/01	14:18
ZZZZZZ		3/20/01	14:23
ZZZZZZ		3/20/01	14:27
ZZZZZZ		3/20/01	14:32
ZZZZZZ		3/20/01	14:36
ZZZZZZ		3/20/01	14:41
ZZZZZZ		3/20/01	14:45
ZZZZZZ		3/20/01	14:49
ZZZZZZ		3/20/01	14:54
ZZZZZZ		3/20/01	14:58
ZZZZZZ		3/20/01	15:03

678 712**STL-Pittsburgh****Metals Data Reporting Form****Instrument Runlog****Instrument:** ICPST**Chart Number:** T10320A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/20/01	15:07

678 713

METALS
RAW DATA

CIC150304

Analysis Report 60103 Averages

03/21/01 08:07:52 AM

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Sample Name NA 3-21-01

678 714

1	STD1	.0645
2	STD5A	
3	STD5B	52.499
4	ICV2-1 0087-119-4	24.601
5	ICB1	.01363
6	ICSA 0087-133-5	.00228
7	ICSAB 0087-133-6	9.7729
8	DW8L5/10 NA	170.22
9	DW8L6/2 CA	S3037.1
10	DW8L6/10 NA	147.98
11	DW8L8/10 NA	190.18
12	DW7DJ/5 NA	183.73
13	DW7DJP25	36.411
14	DW7DJS/5 NA	112.68
15	DW7DJD/5 NA	108.00
16	CCV2-1 0087-121-12	48.871
17	CCB1	.03661
18	DW7D5/2 NA	254.71
19	DW7EF/10 NA	130.51
20	DW7EV/5 NA	133.58
21	DW7E5/5 NA	128.04
22	DXGMH/5 NA	153.16
23	DXGMHP25	31.399
24	DXGMHS/5 NA	158.62
25	DXGMHD/5 NA	159.36
26	DXEVAS/2 SI	S-.12301
27	DXK17B	.73281
28	CCV2-2	45.606
29	CCB2	.05339
30	DXK17C	46.441
31	DXHQW	112.16
32	DXHQWP5	22.552
33	DXHQWS	160.56
34	DXHQWD	159.55
35	DXHRF	289.41
36	DXHTD	108.75
37	DXHTK	21.848
38	DXHTP	69.337
39	DXHT3	177.00
40	CCV2-3	46.576
41	CCB3	.09135
42	DXHT7	147.89
43	DXHVC	114.17
44	DXHWL	44.666
45	DXHWW	26.771
46	DXHWX	34.648
47	DXHW0	33.154
48	DXHW1	21.458
49	DXHW5	23.136
50	DXHW9	90.856
51	DXHXC	394.26
52	CCV2-4	45.818
53	CCB4	.04004

Refer to file J10319A for diction
verification. WPC 3-21-01

#	Sample Name	NA	678	715
54	DXHXF	25.859		
55	DXHXXH	22.119		
56	DXHXXK	11.356		
57	DXHXM	149.63		
58	DXK1WB	.04310		
59	DXK1WC	48.364		
60	DXHXV	13.837		
61	DXHXVP5	2.7870		
62	DXHXVS	61.683		
63	DXHXVD	63.286		
64	CCV2-5	48.077		
65	CCB5	.02145		
66	DXHXX	130.36		
67	DXHX1	95.918		
68	DXHXVF	14.285		
69	DXHXVP5F	2.8393		
70	DXHXVSF	63.022		
71	DXHXVDF	61.236		
72	DXHXXF	127.45		
73	DXHX1F	94.980		
74	DXK1KB	.03671		
75	DXK1KC	46.838		
76	CCV2-6	46.736		
77	CCB6	.03537		
78	DXHQWF	107.61		
79	DXHQWP5F	22.001		
80	DXHQWSF	159.67		
81	DXHQWDF	162.61		
82	DXHRFF	264.18		
83	DXHTDF	115.13		
84	DXHTKF	21.210		
85	DXHTPF	70.056		
86	DXHT3F	188.39		
87	DXHT7F	165.64		
88	CCV2-7	46.914		
89	CCB7	.05015		
90	DXHVCF	109.97		
91	DXHWLF	32.219		
92	DXHWWF	29.322		
93	DXHWXF	34.893		
94	DXHW0F	36.226		
95	DXHW1F	20.570		
96	DXHW5F	23.316		
97	DXHW9F	87.689		
98	DXHXCf	375.42		
99	DXHXFF	25.034		
100	DXHXHF	45.770		
101	CCV2-8	L.02774		
102	CCB8	H22.656		
103	DXHXXF	11.306		
104	DXHXMf	139.50		
105	CCV2-9	49.135		
106	CCB9	.07800		

WR 3-21-01

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J10320A	QUANMET	03/20/01	11:55		X	IR
2	STD5A	J10320A	QUANMET	03/20/01	11:59		X	IR
3	STD5B	J10320A	QUANMET	03/20/01	12:02		X	IR
4	ICV2-1 0087-119-4	J10320A	QUANMET	03/20/01	12:06	WTR	S	CONC
5	ICB1	J10320A	QUANMET	03/20/01	12:09	WTR	S	CONC
6	ICSA 0087-133-5	J10320A	QUANMET	03/20/01	12:12	WTR	Q	CONC
7	ICSAB 0087-133-6	J10320A	QUANMET	03/20/01	12:16	WTR	Q	CONC
8	DW8L5/10 NA	J10320A	QUANMET	03/20/01	12:26	WTR	S	CONC
9	DW8L6/2 CA	J10320A	QUANMET	03/20/01	12:29	WTR	S	CONC
10	DW8L6/10 NA	J10320A	QUANMET	03/20/01	12:32	WTR	S	CONC
11	DW8L8/10 NA	J10320A	QUANMET	03/20/01	12:35	WTR	S	CONC
12	DW7DJ/5 NA	J10320A	QUANMET	03/20/01	12:38	WTR	S	CONC
13	DW7DJP25	J10320A	QUANMET	03/20/01	12:41	WTR	S	CONC
14	DW7DJS/5 NA	J10320A	QUANMET	03/20/01	12:45	WTR	S	CONC
15	DW7DJD/5 NA	J10320A	QUANMET	03/20/01	12:48	WTR	S	CONC
16	CCV2-1 0087-121-12	J10320A	QUANMET	03/20/01	12:51	WTR	S	CONC
17	CCB1	J10320A	QUANMET	03/20/01	12:54	WTR	S	CONC
18	DW7D5/2 NA	J10320A	QUANMET	03/20/01	12:57	WTR	S	CONC
19	DW7EF/10 NA	J10320A	QUANMET	03/20/01	13:00	WTR	S	CONC
20	DW7EV/5 NA	J10320A	QUANMET	03/20/01	13:03	WTR	S	CONC
21	DW7E5/5 NA	J10320A	QUANMET	03/20/01	13:07	WTR	S	CONC
22	DXGMH/5 NA	J10320A	QUANMET	03/20/01	13:10	WTR	S	CONC
23	DXGMHP25	J10320A	QUANMET	03/20/01	13:13	WTR	S	CONC
24	DXGMHS/5 NA	J10320A	QUANMET	03/20/01	13:16	WTR	S	CONC
25	DXGMHD/5 NA	J10320A	QUANMET	03/20/01	13:19	WTR	S	CONC
26	DXEVAS/2 SI	J10320A	QUANMET	03/20/01	13:22	WTR	S	CONC
27	DXK17B	J10320A	QUANMET	03/20/01	13:26	WTR	S	CONC
28	CCV2-2	J10320A	QUANMET	03/20/01	13:29	WTR	S	CONC
29	CCB2	J10320A	QUANMET	03/20/01	13:32	WTR	S	CONC
30	DXK17C	J10320A	QUANMET	03/20/01	13:35	WTR	S	CONC
31	DXHQW	J10320A	QUANMET	03/20/01	13:38	WTR	S	CONC
32	DXHQWP5	J10320A	QUANMET	03/20/01	13:41	WTR	S	CONC
33	DXHQWS	J10320A	QUANMET	03/20/01	13:44	WTR	S	CONC
34	DXHQWD	J10320A	QUANMET	03/20/01	13:48	WTR	S	CONC
35	DXHRF	J10320A	QUANMET	03/20/01	13:51	WTR	S	CONC
36	DXHTD	J10320A	QUANMET	03/20/01	13:54	WTR	S	CONC
37	DXHTK	J10320A	QUANMET	03/20/01	13:57	WTR	S	CONC
38	DXHTP	J10320A	QUANMET	03/20/01	14:00	WTR	S	CONC
39	DXHT3	J10320A	QUANMET	03/20/01	14:03	WTR	S	CONC
40	CCV2-3	J10320A	QUANMET	03/20/01	14:07	WTR	S	CONC
41	CCB3	J10320A	QUANMET	03/20/01	14:10	WTR	S	CONC
42	DXHT7	J10320A	QUANMET	03/20/01	14:13	WTR	S	CONC
43	DXHVC	J10320A	QUANMET	03/20/01	14:16	WTR	S	CONC
44	DXHWL	J10320A	QUANMET	03/20/01	14:19	WTR	S	CONC
45	DXHWW	J10320A	QUANMET	03/20/01	14:22	WTR	S	CONC
46	DXHWX	J10320A	QUANMET	03/20/01	14:26	WTR	S	CONC
47	DXHW0	J10320A	QUANMET	03/20/01	14:29	WTR	S	CONC
48	DXHW1	J10320A	QUANMET	03/20/01	14:32	WTR	S	CONC
49	DXHW5	J10320A	QUANMET	03/20/01	14:35	WTR	S	CONC
50	DXHW9	J10320A	QUANMET	03/20/01	14:38	WTR	S	CONC
51	DXHXC	J10320A	QUANMET	03/20/01	14:41	WTR	S	CONC
52	CCV2-4	J10320A	QUANMET	03/20/01	14:44	WTR	S	CONC
53	CCB4	J10320A	QUANMET	03/20/01	14:48	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DXHXF	J10320A	QUANMET	03/20/01	14:51	WTR	S	CONC
55	DXHXH	J10320A	QUANMET	03/20/01	14:54	WTR	S	CONC
56	DXHXX	J10320A	QUANMET	03/20/01	14:57	WTR	S	CONC
57	DXHXM	J10320A	QUANMET	03/20/01	15:00	WTR	S	CONC
58	DXK1WB	J10320A	QUANMET	03/20/01	15:03	WTR	S	CONC
59	DXK1WC	J10320A	QUANMET	03/20/01	15:07	WTR	S	CONC
60	DXHXV	J10320A	QUANMET	03/20/01	15:10	WTR	S	CONC
61	DXHXVP5	J10320A	QUANMET	03/20/01	15:13	WTR	S	CONC
62	DXHXVS	J10320A	QUANMET	03/20/01	15:16	WTR	S	CONC
63	DXHXVD	J10320A	QUANMET	03/20/01	15:19	WTR	S	CONC
64	CCV2-5	J10320A	QUANMET	03/20/01	15:22	WTR	S	CONC
65	CCB5	J10320A	QUANMET	03/20/01	15:26	WTR	S	CONC
66	DXHXX	J10320A	QUANMET	03/20/01	15:29	WTR	S	CONC
67	DXHX1	J10320A	QUANMET	03/20/01	15:32	WTR	S	CONC
68	DXHXVF	J10320A	QUANMET	03/20/01	15:35	WTR	S	CONC
69	DXHXVP5F	J10320A	QUANMET	03/20/01	15:38	WTR	S	CONC
70	DXHXVSF	J10320A	QUANMET	03/20/01	15:41	WTR	S	CONC
71	DXHXVDF	J10320A	QUANMET	03/20/01	15:45	WTR	S	CONC
72	DXHXXF	J10320A	QUANMET	03/20/01	15:48	WTR	S	CONC
73	DXHX1F	J10320A	QUANMET	03/20/01	15:51	WTR	S	CONC
74	DXK1KB	J10320A	QUANMET	03/20/01	15:54	WTR	S	CONC
75	DXK1KC	J10320A	QUANMET	03/20/01	15:57	WTR	S	CONC
76	CCV2-6	J10320A	QUANMET	03/20/01	16:00	WTR	S	CONC
77	CCB6	J10320A	QUANMET	03/20/01	16:04	WTR	S	CONC
78	DXHQWF	J10320A	QUANMET	03/20/01	16:07	WTR	S	CONC
79	DXHQWP5F	J10320A	QUANMET	03/20/01	16:10	WTR	S	CONC
80	DXHQWSF	J10320A	QUANMET	03/20/01	16:13	WTR	S	CONC
81	DXHQWDF	J10320A	QUANMET	03/20/01	16:16	WTR	S	CONC
82	DXHRFF	J10320A	QUANMET	03/20/01	16:19	WTR	S	CONC
83	DXHTDF	J10320A	QUANMET	03/20/01	16:23	WTR	S	CONC
84	DXHTKF	J10320A	QUANMET	03/20/01	16:26	WTR	S	CONC
85	DXHTPF	J10320A	QUANMET	03/20/01	16:29	WTR	S	CONC
86	DXHT3F	J10320A	QUANMET	03/20/01	16:32	WTR	S	CONC
87	DXHT7F	J10320A	QUANMET	03/20/01	16:35	WTR	S	CONC
88	CCV2-7	J10320A	QUANMET	03/20/01	16:38	WTR	S	CONC
89	CCB7	J10320A	QUANMET	03/20/01	16:42	WTR	S	CONC
90	DXHVCF	J10320A	QUANMET	03/20/01	16:45	WTR	S	CONC
91	DXHWLF	J10320A	QUANMET	03/20/01	16:48	WTR	S	CONC
92	DXHWWF	J10320A	QUANMET	03/20/01	16:51	WTR	S	CONC
93	DXHWXF	J10320A	QUANMET	03/20/01	16:54	WTR	S	CONC
94	DXHW0F	J10320A	QUANMET	03/20/01	16:57	WTR	S	CONC
95	DXHW1F	J10320A	QUANMET	03/20/01	17:01	WTR	S	CONC
96	DXHW5F	J10320A	QUANMET	03/20/01	17:04	WTR	S	CONC
97	DXHW9F	J10320A	QUANMET	03/20/01	17:07	WTR	S	CONC
98	DXHXCf	J10320A	QUANMET	03/20/01	17:10	WTR	S	CONC
99	DXHXFF	J10320A	QUANMET	03/20/01	17:13	WTR	S	CONC
100	DXHXHF	J10320A	QUANMET	03/20/01	17:16	WTR	S	CONC
101	CCV2-8	J10320A	QUANMET	03/20/01	17:20	WTR	S	CONC
102	CCB8	J10320A	QUANMET	03/20/01	17:23	WTR	S	CONC
103	DXHXKF	J10320A	QUANMET	03/20/01	17:26	WTR	S	CONC
104	DXHXMf	J10320A	QUANMET	03/20/01	17:29	WTR	S	CONC
105	CCV2-9	J10320A	QUANMET	03/20/01	17:32	WTR	S	CONC
106	CCB9	J10320A	QUANMET	03/20/01	17:36	WTR	S	CONC

Method: QUANMET Standard: STD1
Run Time: 03/20/01 11:55:54

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00075	.00915	-.00080	.00000	-.00004	.00260	.00028
SDev	.00010	.00116	.00312	.00000	.00014	.00016	.00129
%RSD	13.333	12.667	389.98	.00000	374.64	6.2807	468.12

#1	-.00080	.00920	-.00540	.00000	-.00012	.00240	-.00021
#2	-.00060	.01040	.00140	.00000	.00008	.00280	.00186
#3	-.00080	.00940	.00080	.00000	.00008	.00260	.00065
#4	-.00080	.00760	.00000	.00000	-.00020	.00260	-.00119

Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00004	.00005	.00000	.00010	.00045	-.02435	-.00074
SDev	.00003	.00055	.00082	.00012	.00050	.01086	.00040
%RSD	76.594	1101.5	.00000	115.47	111.11	44.603	53.531

#1	.00005	-.00060	-.00060	.00000	-.00020	-.03420	-.00104
#2	.00008	.00040	.00060	.00020	.00040	-.01220	-.00080
#3	.00005	.00060	.00080	.00020	.00100	-.01820	-.00016
#4	.00000	-.00020	-.00080	.00000	.00060	-.03280	-.00096

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00025	.00010	.00005	.06450	-.00100	.00025	.00000
SDev	.00195	.00020	.00025	.00401	.00078	.00030	.00000
%RSD	779.40	200.00	503.32	6.2145	77.487	120.00	.00000

#1	-.00240	.00020	-.00020	.06780	-.00064	.00040	.00000
#2	.00140	.00020	.00000	.06360	-.00216	.00060	.00000
#3	.00140	.00020	.00040	.06740	-.00053	.00000	.00000
#4	-.00140	-.00020	.00000	.05920	-.00068	.00000	.00000

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00025	.00050	-.00005	.00000	.00185	.00030	.00000
SDev	.00030	.00042	.00224	.00000	.00050	.00111	.00000
%RSD	120.00	83.267	4470.6	.00000	27.027	371.18	.00000

#1	.00000	.00060	-.00120	.00000	.00180	.00020	.00000
#2	.00060	.00100	.00220	.00000	.00240	-.00120	.00000
#3	.00040	.00000	.00140	.00000	.00200	.00140	.00000
#4	.00000	.00040	-.00260	.00000	.00120	.00080	.00000

Elem	ZN
Avge	.00036
SDev	.00017
%RSD	47.399

#1	.00032
#2	.00020
#3	.00060
#4	.00032

Method: QUANMET Standard: STD5A
Run Time: 03/20/01 11:59:06

0087-031-4

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27770	.42390	.55359	4.5650	16.307	.79505	1.2932
SDev	.00114	.00164	.00436	.0219	.068	.00584	.0092
%RSD	.40953	.38811	.78853	.47912	.41998	.73486	.71376
#1	.27600	.42340	.55113	4.5636	16.248	.78666	1.2818
#2	.27840	.42500	.54876	4.5347	16.248	.79941	1.3026
#3	.27820	.42540	.55805	4.5835	16.361	.79549	1.2900
#4	.27820	.42180	.55641	4.5782	16.371	.79862	1.2984
Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.7294	2.3994	4.1821	1.9227	.32520	1.5982	.21585
SDev	.0194	.0142	.0451	.0096	.00198	.0086	.00315
%RSD	.51896	.59285	1.0785	.50155	.60882	.53724	1.4579
#1	3.7060	2.4006	4.2122	1.9104	.32260	1.5858	.21220
#2	3.7466	2.3790	4.1167	1.9310	.32560	1.6052	.21760
#3	3.7212	2.4106	4.2120	1.9198	.32520	1.5995	.21440
#4	3.7440	2.4074	4.1875	1.9298	.32740	1.6023	.21920
Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.15600	.40310	.34195	.75955	8.9164	6.5598	.26865
SDev	.00170	.00523	.00211	.00768	.0332	.0191	.00180
%RSD	1.0879	1.2967	.61598	1.0106	.37190	.29139	.66967
#1	.15440	.39760	.33880	.75300	8.9103	6.5408	.26600
#2	.15800	.40220	.34300	.75640	8.8719	6.5470	.26940
#3	.15680	.40240	.34280	.75820	8.9438	6.5696	.26920
#4	.15480	.41020	.34320	.77060	8.9395	6.5816	.27000
Elem	V	ZN					
Avge	1.6407	1.2364					
SDev	.0058	.0058					
%RSD	.35627	.47248					
#1	1.6334	1.2289					
#2	1.6434	1.2411					
#3	1.6392	1.2345					
#4	1.6470	1.2410					

Method: QUANMET Standard: STD5B

Run Time: 03/20/01 12:02:17

0087-03Z-1

Elem	AL	CA	FE	K	MG	NA
Avge	11.746	26.845	29.367	2.3520	7.5088	52.499
SDev	.022	.119	.052	.0081	.0206	.287
%RSD	.18503	.44202	.17756	.34646	.27424	.54756
#1	11.745	26.754	29.296	2.3542	7.4880	52.579
#2	11.734	26.914	29.391	2.3458	7.5022	52.371
#3	11.777	26.736	29.362	2.3626	7.5370	52.858
#4	11.728	26.976	29.418	2.3454	7.5080	52.188

Method: QUANMET

Slope = Conc(SIR)/IR

678 721

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	6.98620	.005240	03/20/01 12:02:17
AL	308.215	STD5B	STD1	8.52014	-.077959	03/20/01 12:02:17
AS	193.696	STD5A	STD1	23.9448	.019156	03/20/01 12:02:17
B_	249.600	STD5A	STD1	18.1059	.000000	03/20/01 12:02:17
BA	493.409	STD5A	STD1	2.19056	.000084	03/20/01 12:02:17
BE	313.042	STD5A	STD1	.615222	-.001600	03/20/01 12:02:17
CA	317.933	STD5B	STD1	3.72512	-.001030	03/20/01 12:02:17
CD	228.802	STD5A	STD1	12.7123	-.000561	03/20/01 12:02:17
CO	228.616	STD5A	STD1	7.77121	-.000389	03/20/01 12:02:17
CR	267.716	STD5A	STD1	2.68199	.000000	03/20/01 12:02:17
CU	324.754	STD5A	STD1	4.16389	-.000416	03/20/01 12:02:17
FE	259.940	STD5B	STD1	3.40526	-.001532	03/20/01 12:02:17
K_	766.491	STD5B	STD1	42.0813	1.02468	03/20/01 12:02:17
LI	670.789	STD5A	STD1	2.39071	.001772	03/20/01 12:02:17
MG	279.079	STD5B	STD1	13.3173	.003329	03/20/01 12:02:17
MN	257.610	STD5A	STD1	5.19953	-.000520	03/20/01 12:02:17
MO	202.030	STD5A	STD1	30.7550	-.001538	03/20/01 12:02:17
NA	588.995	STD5B	STD1	1.90714	-.123011	03/20/01 12:02:17
NI	231.604	STD5A	STD1	6.25099	.006269	03/20/01 12:02:17
PB	220.353	STD5A	STD1	44.9170	-.011229	03/20/01 12:02:17
SB	206.838	STD5A	STD1	64.1760	.000000	03/20/01 12:02:17
SE	196.026	STD5A	STD1	24.8231	-.006206	03/20/01 12:02:17
SI	288.158	STD5A	STD1	28.9677	-.014484	03/20/01 12:02:17
SN	189.989	STD5A	STD1	13.1588	.000658	03/20/01 12:02:17
SR	409.552	STD5A	STD1	1.12153	.000000	03/20/01 12:02:17
TI	334.941	STD5A	STD1	1.52488	-.002821	03/20/01 12:02:17
TL	190.864	STD5A	STD1	74.9342	-.022480	03/20/01 12:02:17
V_	292.402	STD5A	STD1	5.92816	.000000	03/20/01 12:02:17
ZN	213.856	STD5A	STD1	8.11571	-.002912	03/20/01 12:02:17

Method: QUANMET Sample Name: ICV2-1 0087-119-4 Operator: WTR
 Run Time: 03/20/01 12:06:37
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50977	24.798	.99314	1.0143	.99629	.98135	24.772
SDev	.00196	.104	.04832	.0026	.00636	.00361	.099
%RSD	.38481	.42094	4.8650	.25549	.63877	.36789	.39991
#1	.50973	24.745	.98171	1.0118	.99607	.98041	24.691
#2	.51116	24.721	.99136	1.0176	.98949	.97867	24.894
#3	.50700	24.951	.94151	1.0150	1.0048	.98666	24.691
#4	.51117	24.774	1.0580	1.0127	.99475	.97965	24.810
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	.99988	1.0007	1.0062	.99705	25.656	24.422	1.0065
SDev	.00191	.0048	.0033	.00708	.033	.194	.0116
%RSD	.19114	.48150	.32401	.70972	.12925	.79238	1.1493
#1	.99722	1.0003	1.0034	.99683	25.617	24.363	1.0050
#2	1.0002	1.0050	1.0050	.99018	25.654	24.220	.99262
#3	1.0004	.99409	1.0055	1.0068	25.699	24.683	1.0208
#4	1.0018	1.0034	1.0109	.99434	25.656	24.422	1.0075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.875	1.0020	.97983	24.601	1.0049	1.0043	1.0291
SDev	.096	.0023	.00711	.212	.0164	.0046	.0124
%RSD	.38629	.23071	.72521	.86191	1.6332	.45878	1.2076
#1	24.816	.99911	.97368	24.608	1.0292	1.0021	1.0390
#2	24.811	1.0043	.97368	24.357	.99819	1.0112	1.0258
#3	25.016	1.0033	.98599	24.873	.99326	1.0018	1.0129
#4	24.859	1.0012	.98598	24.566	.99893	1.0022	1.0387
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	.96435	1.0827	.98862	.98588	.97775	4.9239	1.0035
SDev	.06356	.0075	.02998	.00513	.00267	.0963	.0035
%RSD	6.5911	.69003	3.0326	.52061	.27356	1.9554	.35240
#1	.99277	1.0798	.99393	.98526	.97585	5.0557	.99890
#2	.93331	1.0856	1.0176	.98055	.97615	4.8452	1.0036

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#3	L.89373	1.0741	.99644	.99289	.98164	4.8596	1.0075
#4	1.0376	1.0914	.94656	.98481	.97737	4.9351	1.0040
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	1.0006
SDev	.0040
%RSD	.40104

#1	.99568
#2	1.0030
#3	.99903
#4	1.0046

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Run Time: 03/20/01 12:09:47

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00106	.01529	.01421	.02809	.00077	.00043	.01642
SDev	.00113	.00601	.05081	.01879	.00013	.00012	.00426
%RSD	106.68	39.314	357.61	66.909	16.807	27.014	25.906
#1	.00245	.02431	.08600	.00001	.00070	.00037	.01619
#2	.00105	.01236	-.02406	.03624	.00070	.00037	.01199
#3	-.00032	.01219	-.01936	.03622	.00096	.00060	.02220
#4	.00105	.01230	.01425	.03986	.00070	.00037	.01532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00092	.00156	.00255	.00042	.01311	.32403	.00101
SDev	.00156	.00409	.00301	.00167	.00297	.44046	.00099
%RSD	169.52	262.72	118.29	398.13	22.635	135.93	97.763
#1	.00031	.00116	.00590	-.00041	.00869	.51970	.00082
#2	-.00039	-.00194	-.00000	-.00042	.01413	.20830	.00177
#3	-.00039	.00738	.00429	.00292	.01481	.79744	.00177
#4	-.00321	-.00038	.00000	-.00042	.01481	-.22934	-.00031
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	.01798	.00052	.00308	.01364	.00511	.01351	-.00000
SDev	.01349	.00000	.00589	.00412	.00438	.02357	.00006
%RSD	75.055	.47791	191.39	30.246	85.660	174.52	3130.1
#1	.01398	.00052	-.00154	.01697	.00230	.03371	-.00004
#2	.00866	.00052	-.00154	.01087	.00347	.03362	-.00001
#3	.03795	.00053	.01077	.00934	.00303	-.00204	-.00004
#4	.01132	.00053	.00462	.01735	.01164	-.01125	.00009
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	.00128	.05650	.00987	.00011	.00046	.02226	.00127
SDev	.01923	.02850	.01316	.00022	.00029	.11670	.00250
%RSD	1499.6	50.447	133.34	200.00	63.828	524.34	197.38
#1	-.00618	.06663	.01381	.00000	.00084	-.06758	-.00003
#2	.00873	.07821	.02434	.00000	.00023	-.05265	-.00004

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#3	.02363	.01454	.00855	.00045	.00023	.02215	.00502
#4	-.02105	.06663	-.00724	.00000	.00053	.18711	.00012

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

Elem	ZN
Units	ppm
Avge	-.00001
SDev	.00199
%RSD	14694.

#1	.00033
#2	-.00292
#3	.00129
#4	.00125

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0087-133-5 Operator: WTR
 Run Time: 03/20/01 12:12:57
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00205	481.74	.28814	-.03164	.00221	.00008	460.79
SDev	.00201	2.21	.02678	.00118	.00038	.00006	1.96
%RSD	97.993	.45978	9.2954	3.7193	17.205	66.714	.42435
#1	-.00363	479.55	.31019	-.03272	.00202	.00011	458.27
#2	.00075	480.25	.28454	-.03107	.00184	.00011	462.25
#3	-.00337	484.28	.25168	-.03025	.00271	.00000	460.23
#4	-.00196	482.87	.30613	-.03250	.00227	.00011	462.42
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	-.00220	.01247	.00254	-.00150	177.48	-.07364	.00187
SDev	.00572	.00345	.00314	.00051	.57	.34308	.00100
%RSD	260.26	27.669	123.35	33.874	.31853	465.87	53.653
#1	-.00299	.01364	-.00001	-.00200	176.68	-.46500	.00082
#2	.00529	.00895	.00643	-.00109	177.49	.10731	.00121
#3	-.00864	.01054	.00000	-.00187	177.90	-.23776	.00273
#4	-.00244	.01675	.00375	-.00104	177.85	.30088	.00273
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	469.60	.00105	-.00906	.00229	.00154	.04832	.03562
SDev	1.80	.00055	.01335	.00438	.01241	.00937	.01923
%RSD	.38325	51.809	147.38	191.24	806.49	19.387	53.985
#1	467.44	.00141	-.02146	-.00286	-.00894	.04775	.02602
#2	468.89	.00057	-.01520	.00629	-.00710	.05592	.05163
#3	471.50	.00163	.00945	.00019	.01798	.03531	.05165
#4	470.59	.00060	-.00901	.00553	.00421	.05431	.01318
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	-.16947	.10721	-.09200	.01325	-.01975	.45102	.00304
SDev	.07055	.02501	.02219	.00007	.00018	.08534	.00198
%RSD	41.629	23.329	24.120	.49776	.89166	18.922	65.363
#1	-.13103	.09563	-.10200	.01322	-.01990	.40723	.00302
#2	-.26748	.08405	-.11759	.01322	-.01959	.45459	.00437

#3	-.17187	.14194	-.06754	.01322	-.01959	.37337	.00024
#4	-.10749	.10722	-.08087	.01335	-.01990	.56888	.00452

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00196
SDev	.00132
%RSD	67.343

#1	.00053
#2	.00371
#3	.00196
#4	.00164

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0087-133-6 Operator: WTR
 Run Time: 03/20/01 12:16:07
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94842	478.56	1.1251	.93523	.46314	.45225	461.24
SDev	.00182	1.83	.1685	.01350	.00241	.00100	1.67
%RSD	.19229	.38170	14.972	1.4436	.52060	.22196	.36292
#1	.94630	476.27	Q1.2191	.94996	.46075	.45175	461.79
#2	.94901	478.66	1.0375	.91984	.46312	.45151	458.95
#3	.95060	480.75	Q1.3071	.94237	.46644	.45372	461.31
#4	.94780	478.57	.93673	.92875	.46224	.45200	462.92
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	.94907	.45504	.43720	.48878	177.26	9.7271	.99473
SDev	.00902	.00559	.00442	.00230	.40	.3919	.00787
%RSD	.95045	1.2289	1.0120	.47066	.22715	4.0293	.79131
#1	.93798	.45391	.43773	.48647	177.11	10.190	.98579
#2	.95602	.45075	.43130	.48976	176.75	9.2390	1.0001
#3	.94547	.46320	.43774	.49153	177.58	9.8028	1.0024
#4	.95681	.45229	.44203	.48736	177.58	9.6766	.99057
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	465.69	.44512	.86743	9.7729	.87879	.93653	.96539
SDev	1.20	.00163	.01069	.0688	.02220	.05363	.09687
%RSD	.25665	.36714	1.2325	.70361	2.5262	5.7265	10.035
#1	464.75	.44384	.86434	9.7071	.86853	.99870	1.0134
#2	464.90	.44368	.85814	9.8036	.85456	.95201	.82094
#3	467.35	.44594	.88285	9.8548	.90582	.87024	1.0265
#4	465.76	.44703	.86440	9.7258	.88625	.92516	1.0007
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	.82027	1.0869	.81651	.92154	.86811	9.0858	.45912
SDev	.05593	.0073	.03004	.00388	.00277	.4038	.00027
%RSD	6.8187	.67096	3.6795	.42080	.31861	4.4446	.05945
#1	Q.74908	1.0855	.84368	.91652	.86544	8.9980	.45904
#2	.80254	1.0797	Q.77440	.92171	.86636	9.1686	.45887

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QC Standard

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#3	.86970	1.0971	.81745	.92598	.87154	8.6011	.45951
#4	.85975	1.0855	.83051	.92194	.86910	9.5754	.45905
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	.93465						
SDev	.00724						
%RSD	.77434						
#1	.93318						
#2	.92512						
#3	.93882						
#4	.94148						
Errors	QC Pass						
Value	1.0000						
Range	20.000						

Analysis Report

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Method: QUANMET Sample Name: DW8L5/10 NA

Operator: WTR

Run Time: 03/20/01 12:26:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00132	.20155	.00411	.11739	1.3677	.00002	41.247
SDev	.00115	.01083	.04155	.00628	.0057	.00006	.135
%RSD	87.352	5.3725	1010.5	5.3541	.41374	277.35	.32728
#1	.00132	.21007	.01122	.11846	1.3632	-.00001	41.306
#2	.00273	.21171	-.05107	.11418	1.3626	-.00001	41.346
#3	-.00010	.19308	.00662	.11122	1.3709	.00000	41.290
#4	.00132	.19135	.04968	.12570	1.3740	.00011	41.048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00101	.00263	.00147	-.00027	1.2843	2.4218	.00191
SDev	.00200	.00269	.00202	.00000	.0023	.2875	.00063
%RSD	198.94	102.51	137.61	.94665	.17835	11.870	32.796
#1	.00196	.00029	-.00000	-.00028	1.2836	2.2450	.00177
#2	-.00160	.00496	.00429	-.00027	1.2816	2.6827	.00273
#3	-.00204	.00030	-.00000	-.00028	1.2850	2.1104	.00121
#4	-.00234	.00496	.00160	-.00027	1.2870	2.6490	.00194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.888	.20988	-.00598	170.22	.00620	-.01176	-.02879
SDev	.019	.00085	.00308	.79	.00369	.00738	.05873
%RSD	.08747	.40430	51.401	.46433	59.513	62.759	204.00
#1	21.860	.21092	-.00752	169.55	.00598	-.01177	.01299
#2	21.902	.20988	-.00137	169.66	.01020	-.01183	L-.11546
#3	21.897	.20988	-.00752	170.44	.00730	-.02077	.00011
#4	21.892	.20884	-.00752	171.25	.00134	-.00268	-.01280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02575	1.2833	.00396	.40843	.00511	-.01878	.00282
SDev	.06427	.0000	.01981	.00136	.00066	.04975	.00210
%RSD	249.58	.00174	500.28	.33369	12.897	264.95	74.651
#1	-.12132	1.2833	-.02284	.40725	.00511	.03371	.00337
#2	.01768	1.2833	.01873	.40725	.00602	-.01128	.00472

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#3	-.00217	1.2833	.00079	.40949	.00480	-.01125	-.00019
#4	.00280	1.2833	.01916	.40972	.00450	-.08629	.00337

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

Elem	ZN
Units	ppm
Avge	.00054
SDev	.00096
%RSD	177.66

#1	.00186
#2	.00023
#3	.00050
#4	-.00042

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DW8L6/2 CA Operator: WTR
 Run Time: 03/20/01 12:29:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA ✓
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00104	11.659	.00401	.52938	1.5727	.00118	311.09
SDev	.00163	.028	.05407	.00014	.0043	.00008	.62
%RSD	155.65	.23945	1349.2	.02596	.27030	6.7234	.19802
#1	-.00247	11.637	.05340	.52923	1.5710	.00125	310.19
#2	.00036	11.700	.00483	.52955	1.5782	.00125	311.55
#3	-.00243	11.647	.02924	.52932	1.5682	.00111	311.38
#4	.00037	11.654	-.07144	.52943	1.5736	.00111	311.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00315	.01232	.01929	.02205	22.700	15.109	.02420
SDev	.00316	.00148	.00175	.00118	.069	.277	.00039
%RSD	100.25	12.006	9.0877	5.3568	.30373	1.8331	1.6256
#1	L-.00663	.01039	.01929	.02204	22.621	15.046	.02377
#2	-.00372	.01193	.02144	.02373	22.781	15.517	.02472
#3	-.00329	.01349	.01929	.02122	22.672	14.937	.02416
#4	.00104	.01348	.01714	.02122	22.726	14.937	.02416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	113.78	2.6076	-.00164	S3037.1	.02996	.02346	.03813
SDev	.34	.0060	.00354	.1	.00962	.03071	.06877
%RSD	.30262	.23202	215.90	.00232	32.119	130.91	180.38
#1	113.48	2.5998	.00142	S3037.2	.03399	-.01704	-.00042
#2	114.23	2.6144	-.00471	S3037.0	.01708	.05480	.01235
#3	113.54	2.6071	.00143	S3037.1	.02907	.01896	-.00032
#4	113.87	2.6092	-.00471	S3037.1	.03971	.03712	.14090
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	-.01677	H23.642	-.00923	2.3600	.41423	.07847	.03553
SDev	.10339	.047	.03286	.0066	.00146	.11230	.00274
%RSD	616.42	.19746	356.05	.27949	.35309	143.12	7.6999
#1	.01028	H23.589	.01495	2.3560	.41225	-.08892	.03320
#2	-.16794	H23.681	-.02446	2.3685	.41561	.13347	.03312

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#3	.06506	H23.618	-.04821	2.3537	.41500	.15005	.03794
#4	.02551	H23.682	.02081	2.3616	.41408	.11926	.03786

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	.06412
SDev	.00044
%RSD	.67765

#1	.06442
#2	.06349
#3	.06417
#4	.06441

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L6/10 NA

Operator: WTR

Run Time: 03/20/01 12:32:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00074	2.4593	-.00751	.12425	.34203	.00025	67.354
SDev	.00197	.0069	.03936	.00208	.00156	.00007	.267
%RSD	265.91	.27948	524.33	1.6700	.45744	26.472	.39630
#1	-.00066	2.4629	.03677	.12609	.34341	.00023	67.668
#2	-.00064	2.4490	-.04937	.12246	.34297	.00022	67.273
#3	.00075	2.4627	-.03028	.12600	.33990	.00022	67.036
#4	.00352	2.4628	.01286	.12245	.34184	.00036	67.441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	.00313	.00375	.01055	5.0661	3.0256	.00503
SDev	.00281	.00156	.00205	.00048	.0210	.0447	.00032
%RSD	96395.	49.849	54.806	4.5410	.41502	1.4785	6.3860
#1	.00195	.00235	.00214	.01096	5.0815	2.9604	.00543
#2	.00004	.00235	.00429	.01013	5.0760	3.0362	.00464
#3	.00199	.00235	.00643	.01096	5.0352	3.0446	.00503
#4	-.00399	.00547	.00214	.01013	5.0719	3.0614	.00503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.496	.57740	-.00549	147.98	.01109	.01253	.00324
SDev	.086	.00262	.00589	.61	.00404	.02651	.02195
%RSD	.35209	.45395	107.29	.41368	36.438	211.58	676.76
#1	24.547	.58000	-.01317	148.03	.01060	.00347	-.02561
#2	24.550	.57792	-.00087	148.66	.00634	-.01445	-.00010
#3	24.369	.57375	-.00088	147.17	.01120	.01253	.01286
#4	24.520	.57792	-.00702	148.07	.01621	.04856	.02582
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00021	4.9666	-.02209	.51421	.09035	-.00414	.00728
SDev	.01669	.0322	.02620	.00198	.00039	.05518	.00257
%RSD	7897.9	.64822	118.58	.38451	.43578	1332.7	35.287
#1	-.02499	4.9970	-.00971	.51524	.09081	.06684	.00560
#2	.00975	4.9681	.00882	.51528	.09020	-.00805	.00947

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#3	.00466	4.9217	-.04114	.51125	.08989	-.00744	.00948
#4	.00974	4.9796	-.04634	.51506	.09050	-.06792	.00457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.01197						
SDev	.00218						
%RSD	18.215						
#1	.01125						
#2	.01482						
#3	.01222						
#4	.00961						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: DW8L8/10 NA

Run Time: 03/20/01 12:35:33

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00052	.18446	.01181	.02371	.14121	.00006	44.133
SDev	.00180	.00507	.02028	.02019	.00066	.00007	.307
%RSD	347.18	2.7476	171.82	85.136	.46768	115.47	.69571
#1	-.00018	.17929	.00227	.00560	.14090	.00000	44.422
#2	-.00158	.18958	.02614	.03819	.14046	.00012	44.354
#3	.00122	.18101	-.01211	.04394	.14195	.00000	43.981
#4	.00262	.18795	.03093	.00711	.14152	.00012	43.776
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00116	-.00009	.00107	.01052	.98601	.68382	.00297
SDev	.00198	.00233	.00124	.00096	.00310	.35565	.00048
%RSD	170.38	2486.7	115.52	9.1374	.31412	52.009	16.114
#1	-.00411	.00108	.00215	.01135	.98669	1.0752	.00368
#2	-.00026	-.00204	.00215	.01135	.98192	.86477	.00273
#3	.00004	.00262	.00000	.00969	.98601	.51970	.00273
#4	-.00030	-.00204	-.00000	.00968	.98942	.27563	.00273
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.912	.30781	.00013	190.18	.01212	.02659	.06428
SDev	.049	.00178	.00589	1.16	.00271	.02673	.07414
%RSD	.18274	.57729	4561.6	.60900	22.369	100.53	115.35
#1	26.941	.30963	.00474	189.62	.01127	.03327	.00003
#2	26.840	.30859	-.00141	188.86	.01399	.03317	.00010
#3	26.947	.30755	.00474	190.79	.01455	-.01141	.12848
#4	26.918	.30547	-.00756	191.44	.00867	.05134	.12849
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00435	1.0704	-.00226	.27512	.00473	.00889	.00001
SDev	.02543	.0319	.01232	.00086	.00046	.05868	.00015
%RSD	584.88	2.9770	543.96	.31224	9.6774	660.31	2706.9
#1	-.01800	1.0457	.01392	.27489	.00450	-.05107	.00012
#2	.01177	1.0399	.00076	.27400	.00450	.02396	-.00003

#3	.02172	1.0979	-.01187	.27579	.00450	-.02111	.00012
#4	-.03288	1.0979	-.01187	.27579	.00541	.08377	-.00019

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

Elem	ZN
Units	ppm
Avge	.00650
SDev	.00101
%RSD	15.538

#1	.00667
#2	.00732
#3	.00504
#4	.00697

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7DJ/5 NA

Operator: WTR

Run Time: 03/20/01 12:38:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00076	.00731	-.02731	.05550	.20415	-.00000	50.530
SDev	.00292	.00335	.02295	.00548	.00152	.00009	.377
%RSD	384.59	45.790	84.061	9.8762	.74501	2553.7	.74696
#1	.00425	.00573	-.03566	.05456	.20435	.00000	50.940
#2	.00008	.00551	-.00222	.05967	.20548	-.00001	50.737
#3	-.00277	.00567	-.01641	.05966	.20478	-.00011	50.107
#4	.00148	.01233	-.05493	.04811	.20198	.00011	50.336
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.00221	-.00000	-.00021	1.9146	15.248	.01944
SDev	.00043	.00388	.00248	.00000	.0134	.600	.00045
%RSD	92029.	176.01	94446.	2.1032	.70217	3.9317	2.3275
#1	-.00019	.00415	-.00215	-.00020	1.9252	15.290	.01977
#2	.00062	.00415	.00214	-.00020	1.9258	15.804	.01938
#3	-.00037	-.00362	-.00215	-.00021	1.9095	14.407	.01882
#4	-.00005	.00415	.00214	-.00021	1.8979	15.492	.01977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.864	.17209	-.00590	183.73	.01279	.00843	.02905
SDev	.076	.00135	.00589	1.45	.00595	.01362	.05771
%RSD	.48213	.78139	99.798	.78806	46.519	161.52	198.66
#1	15.830	.17365	-.01359	183.28	.00928	.01518	.00022
#2	15.963	.17262	-.00129	184.85	.02164	.01518	.00026
#3	15.880	.17157	-.00744	184.91	.01090	-.01200	.00011
#4	15.784	.17053	-.00129	181.88	.00933	.01536	.11561
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00478	2.3985	.00365	.50312	-.00282	-.03995	.00104
SDev	.10394	.0058	.01485	.00369	.00035	.07659	.00464
%RSD	2176.0	.24263	407.04	.73382	12.483	191.70	447.68
#1	-.07959	2.3956	-.00174	.50362	-.00252	-.00639	-.00035
#2	-.08952	2.4073	-.01489	.50609	-.00313	.03851	.00471

#3	.10902	2.3956	.01669	.50497	-.00313	-.05102	-.00493
#4	.07919	2.3957	.01453	.49779	-.00252	-.14091	.00471

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

Elem	ZN
Units	ppm
Avge	.00380
SDev	.00092
%RSD	24.097

#1	.00245
#2	.00434
#3	.00405
#4	.00438

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DW7DJP25

Run Time: 03/20/01 12:41:51

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00113	-.00082	.00197	.03882	.04138	.00000	10.210
SDev	.00114	.00163	.02427	.00209	.00026	.00000	.038
%RSD	100.83	197.90	1231.7	5.3896	.63611	.00000	.37105
#1	.00113	.00052	-.02917	.03701	.04145	.00000	10.154
#2	-.00027	.00044	.02351	.04063	.04101	.00000	10.225
#3	.00253	-.00289	.01875	.03702	.04163	.00000	10.224
#4	.00113	-.00137	-.00521	.04065	.04145	.00000	10.238
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00108	-.00197	.00201	-.00038	.39654	3.1182	.00426
SDev	.00215	.00310	.00027	.00000	.00171	.2291	.00109
%RSD	198.95	157.49	13.389	.80141	.43255	7.3468	25.561
#1	.00221	-.00042	.00161	-.00037	.39620	3.0698	.00312
#2	.00333	-.00042	.00215	-.00037	.39484	3.2129	.00464
#3	.00036	-.00042	.00214	-.00037	.39893	2.8258	.00560
#4	-.00158	-.00663	.00215	-.00038	.39620	3.3644	.00368
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	3.2035	.03494	-.00302	36.411	.00564	-.00917	.00005
SDev	.0200	.00085	.00589	.184	.00642	.03688	.00008
%RSD	.62403	2.4291	194.77	.50516	113.72	401.98	146.38
#1	3.2181	.03494	-.00764	36.665	.00620	-.00239	.00016
#2	3.1968	.03390	-.00149	36.352	.00951	-.01138	.00007
#3	3.2208	.03598	-.00764	36.399	-.00359	-.05629	-.00001
#4	3.1782	.03494	.00467	36.228	.01046	.03336	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00744	.46348	-.00258	.10153	-.00061	.00157	-.00007
SDev	.02381	.01379	.02164	.00045	.00038	.02446	.00015
%RSD	319.93	2.9756	837.77	.44185	62.915	1561.4	206.64
#1	-.01985	.47217	-.03351	.10176	-.00069	.00156	-.00019
#2	.02482	.45479	.00597	.10176	-.00099	.03155	-.00003

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#3	-.00495	.47797	.00071	.10176	-.00008	.00152	-.00019
#4	-.02978	.44900	.01650	.10086	-.00069	-.02836	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00060						
SDev	.00089						
%RSD	148.47						
#1	.00028						
#2	-.00011						
#3	.00032						
#4	.00190						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DW7DJS/5 NA

Operator: WTR

Run Time: 03/20/01 12:45:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00826	.23846	.24360	.13582	.34341	.00543	35.250
SDev	.00176	.00376	.06465	.00313	.00172	.00007	.055
%RSD	21.310	1.5766	26.541	2.3069	.49956	1.3679	.15616
#1	.00581	.23384	.22090	.13275	.34516	.00537	35.176
#2	.00862	.23712	.16335	.13635	.34122	.00536	35.305
#3	.01000	.24061	.30705	.13996	.34428	.00549	35.273
#4	.00860	.24228	.28310	.13422	.34297	.00549	35.246
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00521	.05981	.02307	.02643	1.2462	14.682	.12474
SDev	.00430	.00422	.00322	.00000	.0051	.230	.00084
%RSD	82.471	7.0486	13.951	.01604	.41022	1.5680	.67593
#1	.00470	.05826	.01932	.02642	1.2527	14.415	.12502
#2	.01124	.05669	.02575	.02642	1.2424	14.895	.12406
#3	.00111	.06604	.02575	.02643	1.2479	14.853	.12581
#4	.00379	.05826	.02146	.02642	1.2418	14.566	.12406
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.070	.15843	.11396	112.68	.05644	.07554	.15346
SDev	.063	.00060	.00308	.80	.00605	.00895	.00009
%RSD	.41908	.37944	2.6983	.71215	10.728	11.852	.05715
#1	15.121	.15895	.10934	113.36	.05802	.07100	.15352
#2	14.980	.15791	.11549	111.53	.04751	.07096	.15336
#3	15.105	.15895	.11549	113.07	.05957	.07123	.15355
#4	15.073	.15791	.11549	112.75	.06067	.08896	.15343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29311	2.5932	.22671	.40540	.11063	.26164	.05598
SDev	.02516	.0125	.02934	.00214	.00061	.03098	.00181
%RSD	8.5821	.48217	12.941	.52757	.55135	11.840	3.2328
#1	.28568	2.5932	.23263	.40725	.11032	.24283	.05497
#2	.31047	2.5817	.22210	.40254	.11032	.28793	.05869

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#3	.31545	2.6106	.19052	.40680	.11154	.22785	.05514
#4	.26082	2.5874	.26158	.40500	.11032	.28795	.05513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.05901						
SDev	.00127						
%RSD	2.1482						
#1	.05957						
#2	.05895						
#3	.05727						
#4	.06023						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DW7DJD/5 NA

Operator: WTR

Run Time: 03/20/01 12:48:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00650	.23380	.24128	.13469	.33557	.00536	34.110
SDev	.00180	.00536	.01533	.00107	.00140	.00001	.047
%RSD	27.719	2.2940	6.3522	.79139	.41855	.10703	.13663
#1	.00440	.22880	.23057	.13415	.33508	.00537	34.165
#2	.00720	.24058	.22567	.13416	.33395	.00537	34.069
#3	.00582	.23029	.25443	.13629	.33596	.00536	34.134
#4	.00859	.23553	.25445	.13417	.33728	.00537	34.074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00585	.05749	.02213	.02642	1.2132	14.167	.12255
SDev	.00245	.00201	.00101	.00000	.0031	.207	.00115
%RSD	41.862	3.4944	4.5816	.00747	.25535	1.4621	.93699
#1	.00313	.05827	.02360	.02642	1.2104	13.952	.12119
#2	.00572	.05982	.02146	.02642	1.2138	14.449	.12294
#3	.00549	.05516	.02146	.02642	1.2111	14.154	.12215
#4	.00909	.05670	.02200	.02642	1.2172	14.112	.12390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.650	.15374	.11088	108.00	.06367	.06202	.16318
SDev	.045	.00000	.00589	.35	.00462	.00732	.01933
%RSD	.30459	.00132	5.3115	.32738	7.2503	11.808	11.847
#1	14.666	.15374	.10319	108.16	.05810	.06204	.15347
#2	14.583	.15374	.11549	107.49	.06472	.05309	.15353
#3	14.674	.15374	.11549	108.05	.06266	.06194	.15355
#4	14.676	.15374	.10934	108.29	.06922	.07102	.19218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26446	2.5078	.22477	.39238	.10956	.23967	.05590
SDev	.07500	.0152	.02995	.00101	.00058	.08944	.00186
%RSD	28.359	.60716	13.323	.25770	.53301	37.317	3.3260
#1	.31533	2.4947	.26158	.39235	.10880	.28842	.05482
#2	.27066	2.5179	.23263	.39101	.11002	.25837	.05513

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#3	.31534	2.4948	.21421	.39280	.10941	.30339	.05868
#4	.15649	2.5237	.19068	.39338	.11002	.10848	.05497
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.05794						
SDev	.00186						
%RSD	3.2010						
#1	.05929						
#2	.05726						
#3	.05957						
#4	.05562						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: CCV2-1 0087-121-12 Operator: WTR
 Run Time: 03/20/01 12:51:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97831	48.594	4.9129	4.9178	4.8936	4.8542	48.021
SDev	.00274	.214	.0929	.0424	.0320	.0223	.269
%RSD	.27974	.44092	1.8917	.86266	.65462	.46018	.56031
#1	.97755	48.283	4.9635	4.8637	4.8500	4.8211	48.223
#2	.97477	48.738	5.0173	4.9202	4.9261	4.8670	47.700
#3	.98045	48.734	4.8206	4.9674	4.9048	4.8683	47.898
#4	.98049	48.621	4.8501	4.9199	4.8937	4.8605	48.262
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	4.9110	4.8065	4.7809	4.9115	49.564	48.798	5.0248
SDev	.0322	.0154	.0132	.0358	.106	.255	.0568
%RSD	.65639	.31991	.27588	.72979	.21377	.52339	1.1308
#1	4.9138	4.7999	4.7873	4.8672	49.473	48.551	4.9501
#2	4.8697	4.7891	4.7621	4.9471	49.495	49.090	5.0842
#3	4.9119	4.8123	4.7819	4.9330	49.585	48.930	5.0476
#4	4.9485	4.8247	4.7921	4.8989	49.706	48.619	5.0174
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.703	4.8015	4.8166	48.871	4.8020	4.8565	4.9233
SDev	.182	.0120	.0215	.437	.0125	.0350	.0002
%RSD	.37291	.24967	.44724	.89394	.26112	.72122	.00421
#1	48.449	4.7996	4.7904	48.286	4.8167	4.8902	4.9236
#2	48.859	4.7903	4.8089	49.318	4.7944	4.8177	4.9233
#3	48.803	4.7976	4.8273	49.043	4.7891	4.8364	4.9232
#4	48.702	4.8184	4.8397	48.839	4.8076	4.8817	4.9232
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	4.8486	5.0119	4.8232	4.8622	4.8358	9.5745	4.8255
SDev	.0551	.0408	.0346	.0258	.0134	.0958	.0088
%RSD	1.1355	.81461	.71818	.53089	.27646	1.0009	.18223
#1	4.7813	5.0378	4.7832	4.8265	4.8158	9.6360	4.8178
#2	4.8509	4.9799	4.8594	4.8869	4.8435	9.5457	4.8182

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#3	4.8462	5.0554	4.8068	4.8727	4.8429	9.6640	4.8317
#4	4.9161	4.9743	4.8436	4.8628	4.8408	9.4523	4.8344
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	4.8521						
SDev	.0149						
%RSD	.30720						
#1	4.8477						
#2	4.8331						
#3	4.8615						
#4	4.8661						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

Method: QUANMET Sample Name: CCB1

Operator: WTR

Run Time: 03/20/01 12:54:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.02415	.02008	.03717	.00331	.00276	.03057
SDev	.00115	.00721	.03984	.00182	.00144	.00118	.01637
%RSD	107.28	29.853	198.36	4.8943	43.665	42.887	53.548
#1	-.00035	.01401	.06215	.03625	.00114	.00099	.00603
#2	.00109	.02575	-.03386	.03627	.00403	.00331	.03907
#3	.00109	.02576	.02361	.03627	.00403	.00331	.03911
#4	.00245	.03107	.02844	.03990	.00403	.00345	.03806
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	.00259	.00504	.00322	.00105	.03270	-.00421	.00316
SDev	.00098	.00483	.00372	.00105	.01201	.73302	.00144
%RSD	38.039	95.834	115.39	100.36	36.737	17419.	45.519
#1	.00151	-.00195	-.00214	-.00042	.01482	-1.0289	.00104
#2	.00269	.00737	.00644	.00209	.03662	.67961	.00425
#3	.00228	.00892	.00429	.00126	.03934	.30088	.00368
#4	.00387	.00581	.00429	.00126	.04002	.03156	.00368
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	.03263	.00261	.01077	.03662	.00675	-.00886	-.00001
SDev	.03204	.00147	.00710	.01477	.00723	.00454	.00006
%RSD	98.186	56.468	65.964	40.348	107.20	51.229	1003.3
#1	-.01531	.00052	.00462	.01468	.00009	-.01130	.00001
#2	.05127	.00261	.01692	.04100	.00311	-.00205	-.00009
#3	.04594	.00365	.01692	.04596	.01671	-.01100	.00005
#4	.04861	.00365	.00462	.04482	.00708	-.01109	.00000
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	.01748	.05941	-.00132	.00286	.00252	-.04926	.00235
SDev	.00747	.00873	.01313	.00131	.00115	.03316	.00330
%RSD	42.767	14.688	993.94	45.901	45.890	67.324	140.28
#1	.00873	.04923	-.02040	.00090	.00084	-.06764	-.00107
#2	.02370	.06668	.00065	.00336	.00267	-.00815	.00518

#3	.01378	.06668	.00591	.00359	.00328	-.08313	.00518
#4	.02371	.05504	.00855	.00359	.00328	-.03812	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00232						
SDev	.00093						
%RSD	40.135						
#1	.00128						
#2	.00224						
#3	.00220						
#4	.00355						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Method: QUANMET Sample Name: DW7D5/2 NA

Operator: WTR

Run Time: 03/20/01 12:57:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00039	.02935	.01807	.04283	.00565	.00080	85.472
SDev	.00081	.00571	.03718	.01839	.00015	.00026	.321
%RSD	205.84	19.451	205.75	42.945	2.6333	32.026	.37543
#1	.00031	.03282	.07312	.05816	.00578	.00049	85.752
#2	-.00109	.02089	.00139	.01619	.00552	.00074	85.128
#3	.00031	.03275	.00607	.05029	.00578	.00111	85.738
#4	-.00109	.03096	-.00829	.04667	.00552	.00086	85.268
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	.00071	.00039	.00845	-.00009	2.9723	43.518	.02095
SDev	.00110	.00090	.00154	.00000	.0042	.323	.00024
%RSD	155.33	229.62	18.214	1.1271	.14066	.74149	1.1390
#1	.00158	.00117	.01019	-.00009	2.9706	43.577	.02090
#2	-.00044	-.00038	.00858	-.00009	2.9672	43.754	.02090
#3	-.00002	.00117	.00858	-.00009	2.9753	43.695	.02073
#4	.00172	-.00039	.00644	-.00009	2.9760	43.047	.02129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.322	.10322	.00346	254.71	.00879	-.00767	.05773
SDev	.023	.00000	.00589	1.22	.00583	.00521	.06667
%RSD	.14037	.00270	169.99	.47830	66.284	67.982	115.48
#1	16.320	.10322	-.00115	253.82	.00043	-.00306	.11545
#2	16.352	.10322	-.00115	255.32	.00933	-.01208	.11548
#3	16.296	.10322	.00500	253.59	.01340	-.00325	.00003
#4	16.322	.10323	.01115	256.13	.01201	-.01228	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03286	6.8972	.01377	.44807	-.00450	-.04167	.00011
SDev	.02790	.0272	.01565	.00136	.00030	.03741	.00015
%RSD	84.923	.39399	113.67	.30313	6.7797	89.772	138.51
#1	-.02666	6.9378	.00151	.44740	-.00435	-.05289	-.00001
#2	-.04653	6.8856	.03572	.44762	-.00496	-.08280	-.00001

#3	.00315	6.8798	.00366	.44717	-.00435	.00698	.00014
#4	-.06139	6.8856	.01418	.45009	-.00435	-.03798	.00029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00194						
SDev	.00106						
%RSD	54.644						
#1	.00173						
#2	.00199						
#3	.00331						
#4	.00074						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DW7EF/10 NA

Operator: WTR

Run Time: 03/20/01 13:00:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61E1CP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	.01791	-.01496	.02562	.02513	.00040	22.476
SDev	.00134	.00724	.05767	.01112	.00013	.00006	.066
%RSD	1541.0	40.410	385.62	43.406	.51877	13.771	.29214
#1	.00185	.01576	.03888	.02124	.02506	.00048	22.558
#2	-.00094	.01739	-.09523	.01190	.02524	.00036	22.497
#3	-.00097	.01062	.01027	.03465	.02524	.00037	22.441
#4	.00040	.02786	-.01374	.03468	.02498	.00038	22.409
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00216	.00737	.00054	-.00001	3.6896	21.150	.01086
SDev	.00358	.00126	.00107	.00000	.0095	.222	.00101
%RSD	165.66	17.137	200.38	17.472	.25636	1.0515	9.2928
#1	-.00213	.00893	-.00000	-.00001	3.6864	21.342	.01229
#2	.00183	.00736	-.00000	-.00001	3.7013	21.156	.01077
#3	-.00149	.00737	.00215	-.00001	3.6789	21.266	.00998
#4	L-.00685	.00583	.00000	-.00001	3.6918	20.837	.01038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9708	.32049	.00048	130.51	.01423	.00118	.00016
SDev	.0248	.00052	.00589	1.07	.00646	.02142	.00007
%RSD	.41608	.16250	1219.1	.82200	45.412	1808.9	41.561
#1	5.9828	.32075	-.00106	129.28	.01877	.03267	.00024
#2	5.9908	.32076	.00510	131.04	.02061	-.01230	.00018
#3	5.9348	.31971	.00509	130.01	.01024	-.00330	.00008
#4	5.9748	.32075	-.00721	131.69	.00730	-.01234	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00539	1.3760	-.00022	.19375	-.00099	-.04042	.00090
SDev	.00003	.0000	.00973	.00093	.00025	.12134	.00435
%RSD	.55146	.00337	4459.2	.47733	25.123	300.17	482.24
#1	.00538	1.3760	.00110	.19275	-.00069	-.13783	.00472
#2	.00543	1.3760	.01163	.19454	-.00130	.07178	.00369

#3	.00536	1.3760	-.00154	.19319	-.00099	-.15266	.00013
#4	.00540	1.3759	-.01206	.19454	-.00099	.05702	-.00492

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

Elem ZN
Units ppm
Avge -.00009
SDev .00077
%RSD 888.60

#1 .00097
#2 -.00067
#3 .00002
#4 -.00066

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW7EV/5 NA

Operator: WTR

Run Time: 03/20/01 13:03:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00077	.01190	.02433	.02497	.01634	.00006	50.915
SDev	.00114	.00566	.00822	.00402	.00029	.00007	.122
%RSD	148.57	47.560	33.788	16.086	1.7676	115.47	.23945
#1	.00216	.01577	.01352	.02125	.01604	.00000	51.042
#2	.00077	.00549	.02795	.02914	.01673	.00000	50.955
#3	.00076	.00888	.03276	.02182	.01629	.00012	50.751
#4	-.00063	.01746	.02308	.02766	.01629	.00012	50.911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00178	-.00000	.00215	.00013	5.0514	12.559	.02661
SDev	.00142	.00321	.00175	.00000	.0197	.127	.00057
%RSD	79.935	861330.	81.623	3.0687	.38990	1.0126	2.1595
#1	-.00297	-.00039	.00215	.00013	5.0553	12.403	.02647
#2	-.00306	.00428	.00000	.00014	5.0662	12.555	.02647
#3	-.00058	-.00039	.00429	.00013	5.0226	12.563	.02742
#4	-.00052	-.00350	.00215	.00013	5.0614	12.715	.02607
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.9400	.16123	.00220	133.58	.00728	-.02420	.00002
SDev	.0465	.00100	.00355	.76	.00692	.03615	.00012
%RSD	.46790	.61827	161.44	.57142	94.994	149.40	543.16
#1	9.8981	.16201	-.00088	133.19	.01031	-.00400	.00011
#2	9.9966	.16202	.00528	134.46	.01554	-.07573	.00012
#3	9.9060	.16096	.00527	132.74	.00053	.00500	-.00013
#4	9.9593	.15993	-.00088	133.93	.00274	-.02206	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01515	3.5949	.01048	.26049	-.00313	-.08475	.00006
SDev	.04150	.0047	.01854	.00116	.00043	.09936	.00009
%RSD	273.86	.13159	177.01	.44467	13.797	117.24	149.39
#1	-.01017	3.5891	-.00926	.26004	-.00343	-.18971	-.00002
#2	-.07468	3.5949	.00916	.26183	-.00313	-.10000	.00013

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#3	.01951	3.5949	.03548	.25914	-.00343	-.09929	.00014
#4	.00474	3.6007	.00653	.26093	-.00252	.05000	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge -.00017
SDev .00075
%RSD 428.57

#1 -.00009
#2 .00085
#3 -.00072
#4 -.00073

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW7E5/5 NA

Operator: WTR

Run Time: 03/20/01 13:07:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00169	.47579	.03160	.02246	.03134	.00008	48.275
SDev	.00081	.00504	.01375	.00278	.00021	.00006	.121
%RSD	47.803	1.0587	43.527	12.359	.66117	75.949	.24971
#1	.00238	.47912	.01362	.02137	.03137	.00011	48.220
#2	.00099	.48101	.04232	.02354	.03163	.00011	48.299
#3	.00099	.47071	.02804	.02568	.03119	-.00001	48.149
#4	.00239	.47233	.04240	.01924	.03119	.00011	48.430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.00074	.00214	.00022	5.8695	11.871	.01699
SDev	.00263	.00233	.00175	.00000	.0143	.243	.00072
%RSD	1723.8	317.66	81.762	1.3805	.24421	2.0494	4.2275
#1	-.00086	-.00198	.00214	.00022	5.8535	11.781	.01690
#2	-.00269	.00269	.00214	.00023	5.8787	12.100	.01651
#3	.00353	-.00044	-.00000	.00022	5.8842	11.570	.01651
#4	-.00059	.00268	.00429	.00022	5.8617	12.033	.01803
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.796	.10112	.00077	128.04	.00371	.01343	.00000
SDev	.045	.00052	.00589	.96	.00882	.03202	.00005
%RSD	.38208	.51226	766.12	.74771	237.37	238.43	10328.
#1	11.739	.10190	.00538	127.26	.00428	-.00461	-.00005
#2	11.834	.10086	-.00692	128.74	.00009	.05840	.00002
#3	11.829	.10087	-.00077	128.98	-.00513	-.01356	-.00003
#4	11.781	.10086	.00538	127.17	.01561	.01349	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	3.8919	.00459	.22832	.01372	-.02283	.00447
SDev	.05840	.0087	.01278	.00130	.00052	.04748	.00064
%RSD	5444.4	.22324	278.47	.56889	3.7952	207.96	14.293
#1	.00723	3.8962	.01182	.22716	.01426	.00742	.00488
#2	.02717	3.8962	.00920	.22908	.01304	.02197	.00457

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#3	.05201	3.8962	-.01449	.22976	.01395	-.08299	.00354
#4	-.08211	3.8788	.01183	.22729	.01365	-.03772	.00489

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

Elem	ZN
Units	ppm
Avge	.00483
SDev	.00101
%RSD	20.946

#1	.00409
#2	.00572
#3	.00383
#4	.00568

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMH/5 NA

Run Time: 03/20/01 13:10:16

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.51638	.04429	.03740	.01743	.00003	7.8602
SDev	.00239	.00659	.03741	.00296	.00021	.00006	.0620
%RSD	289.57	1.2756	84.464	7.9051	1.2271	200.00	.78926
#1	-.00022	.52535	.01428	.03741	.01761	.00000	7.9514
#2	.00397	.51677	.07661	.04101	.01735	.00012	7.8420
#3	.00117	.51002	.07667	.03739	.01717	.00000	7.8131
#4	-.00162	.51336	.00959	.03377	.01761	.00000	7.8341
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00244	-.00003	.00483	.00069	.58829	.95104	.00120
SDev	.00417	.00150	.00107	.00042	.00365	.23368	.00115
%RSD	171.10	4376.0	22.242	60.562	.61975	24.571	96.471
#1	.00744	-.00199	.00429	.00048	.59374	1.1341	.00177
#2	-.00258	.00114	.00429	.00131	.58625	1.1341	.00177
#3	.00145	-.00042	.00429	.00048	.58625	.89002	.00177
#4	.00344	.00113	.00644	.00048	.58693	.64595	-.00053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2532	.04226	-.00454	153.16	.01024	-.00052	.00007
SDev	.0076	.00085	.00355	1.98	.00398	.02245	.00003
%RSD	.61048	2.0108	78.281	1.2949	38.837	4280.1	39.070
#1	1.2525	.04330	-.00761	155.10	.01612	-.01182	.00011
#2	1.2445	.04226	-.00146	150.66	.00781	-.01172	.00004
#3	1.2631	.04122	-.00761	152.54	.00781	.03316	.00008
#4	1.2525	.04226	-.00146	154.34	.00921	-.01172	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02918	1.9698	-.00392	.04691	.01014	-.05758	-.00010
SDev	.04094	.0294	.01463	.00056	.00077	.04304	.00009
%RSD	140.29	1.4901	373.71	1.2033	7.5688	74.759	87.192
#1	-.05399	2.0133	.01648	.04747	.00999	-.06138	-.00018
#2	.00557	1.9611	-.00458	.04613	.01121	-.10626	-.00003

#3	-.07387	1.9553	-.00984	.04703	.00999	-.06129	-.00018
#4	.00557	1.9495	-.01773	.04703	.00938	-.00137	-.00002

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

Elem	ZN
Units	ppm
Avge	.01963
SDev	.00113
%RSD	5.7718

#1	.02133
#2	.01907
#3	.01907
#4	.01907

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHP25

Operator: WTR

Run Time: 03/20/01 13:13:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00108	.11077	.02051	.00025	.00385	-.00000	1.6361
SDev	.00114	.00514	.04218	.00000	.00042	.00000	.0053
%RSD	106.07	4.6396	205.65	1.7814	10.818	116.03	.32452
#1	-.00032	.10951	-.02975	.00025	.00359	.00000	1.6377
#2	.00248	.10948	.00375	.00026	.00446	-.00000	1.6407
#3	.00108	.10602	.04211	.00025	.00359	.00000	1.6284
#4	.00108	.11808	.06594	.00025	.00377	-.00000	1.6377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00235	.00039	.00268	.00043	.12583	.34507	-.00004
SDev	.00217	.00201	.00205	.00000	.00111	.27154	.00020
%RSD	92.237	516.79	76.562	.45746	.88384	78.691	466.68
#1	-.00182	.00272	.00429	.00043	.12583	-.00210	-.00014
#2	.00046	-.00195	.00214	.00043	.12583	.60387	-.00014
#3	-.00445	.00117	.00000	.00043	.12719	.26722	.00025
#4	-.00358	-.00038	.00429	.00043	.12447	.51129	-.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.26168	.00809	-.00152	31.399	.00121	-.01133	.00002
SDev	.01020	.00052	.00502	.073	.00294	.00006	.00006
%RSD	3.8979	6.4277	330.15	.23291	242.49	.52653	246.51
#1	.26435	.00887	-.00152	31.413	.00061	-.01126	.00007
#2	.27500	.00783	-.00152	31.484	.00245	-.01140	.00003
#3	.25369	.00783	.00463	31.395	-.00256	-.01131	-.00006
#4	.25369	.00783	-.00767	31.306	.00436	-.01135	.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01326	.42294	-.01381	.00987	.00206	-.03938	.00056
SDev	.03355	.03011	.01998	.00000	.00050	.09074	.00060
%RSD	253.07	7.1197	144.71	.00000	24.192	230.43	107.55
#1	.03391	.39686	-.04144	.00987	.00145	.02056	-.00003
#2	-.04553	.44901	-.01250	.00987	.00267	-.17424	.00115

#3	-.02070	.39686	.00593	.00987	.00206	.00556	.00012
#4	-.02071	.44901	-.00723	.00987	.00206	-.00938	.00100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00462						
SDev	.00077						
%RSD	16.754						
#1	.00452						
#2	.00519						
#3	.00520						
#4	.00356						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXGMHS/5 NA Operator: WTR
 Run Time: 03/20/01 13:16:35
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01154	1.0422	.37697	.19221	.40205	.00944	17.496
SDev	.00115	.0097	.06186	.00123	.00322	.00012	.065
%RSD	9.9873	.92598	16.410	.63860	.80023	1.2223	.37325
#1	.01295	1.0434	.32425	.19115	.40054	.00953	17.537
#2	.01155	1.0486	.33380	.19327	.40212	.00953	17.550
#3	.01013	1.0488	.45838	.19115	.40650	.00942	17.406
#4	.01155	1.0283	.39144	.19328	.39905	.00929	17.491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01211	.09730	.04507	.05306	.78645	10.870	.19618
SDev	.00220	.00294	.00175	.00000	.00201	.315	.00183
%RSD	18.145	3.0242	3.8890	.00571	.25525	2.8974	.93385
#1	.01020	.09536	.04507	.05306	.78576	10.922	.19528
#2	.01120	.10157	.04721	.05306	.78917	11.225	.19624
#3	.01178	.09690	.04292	.05306	.78645	10.459	.19871
#4	.01525	.09535	.04506	.05306	.78440	10.872	.19449
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.123	.13777	.19694	158.62	.10740	.07620	.08893
SDev	.072	.00100	.00923	1.57	.01141	.01162	.02775
%RSD	.65034	.72217	4.6851	.99047	10.622	15.249	31.205
#1	11.083	.13804	.20770	157.85	.09515	.06270	.11442
#2	11.134	.13699	.20155	158.69	.10182	.08075	.05030
#3	11.219	.13907	.18925	160.79	.11132	.08967	.10188
#4	11.054	.13699	.18925	157.17	.12132	.07166	.08910
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.36117	4.2304	.37671	.23531	.20327	.42160	.09932
SDev	.02823	.0333	.01539	.00189	.00088	.09192	.00223
%RSD	7.8153	.78674	4.0859	.80275	.43095	21.804	2.2418
#1	.37358	4.2507	.37155	.23469	.20304	.45908	.10137
#2	.34876	4.2507	.39760	.23581	.20395	.53391	.10003

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#3	.32890	4.2390	.36097	.23761	.20395	.33921	.09616
#4	.39343	4.1811	.37671	.23312	.20212	.35420	.09972

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

Elem	ZN
Units	ppm
Avge	.11326
SDev	.00238
%RSD	2.0981

#1	.11572
#2	.11216
#3	.11049
#4	.11467

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHD/5 NA Operator: WTR
 Run Time: 03/20/01 13:19:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01259	1.0747	.37430	.19494	.39509	.00935	17.625
SDev	.00176	.0162	.02499	.00126	.00383	.00007	.054
%RSD	13.984	1.5059	6.6756	.64666	.96951	.77114	.30368
#1	.01014	1.0641	.38159	.19328	.39397	.00942	17.588
#2	.01434	1.0607	.38160	.19626	.39054	.00929	17.574
#3	.01295	1.0777	.39582	.19479	.39616	.00941	17.689
#4	.01295	1.0964	.33820	.19544	.39967	.00929	17.648
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01023	.09848	.04560	.05306	.79359	10.800	.19074
SDev	.00122	.00128	.00107	.00000	.00535	.166	.00200
%RSD	11.906	1.2949	2.3494	.00176	.67465	1.5383	1.0472
#1	.00876	.10004	.04506	.05306	.79052	10.863	.19202
#2	.01129	.09848	.04721	.05306	.78779	10.897	.18858
#3	.00970	.09848	.04506	.05306	.79665	10.552	.18954
#4	.01115	.09691	.04507	.05306	.79938	10.889	.19280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.005	.13751	.18925	159.36	.10478	.10545	.12103
SDev	.070	.00104	.00502	1.70	.00468	.02965	.04257
%RSD	.63376	.75766	2.6541	1.0664	4.4681	28.119	35.175
#1	11.011	.13699	.18925	159.07	.10001	.07187	.15305
#2	10.918	.13699	.18310	157.36	.10565	.12559	.06329
#3	11.001	.13699	.18925	159.53	.11090	.13470	.15321
#4	11.089	.13907	.19540	161.49	.10258	.08966	.11456
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35126	4.1971	.38607	.23262	.20029	.33156	.09942
SDev	.06351	.0385	.01444	.00189	.00174	.16805	.00061
%RSD	18.080	.91833	3.7415	.81204	.87027	50.685	.61009
#1	.29912	4.1753	.40068	.23200	.19938	.20421	.09853
#2	.43812	4.1637	.39504	.23043	.19846	.57893	.09957

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#3	.30907	4.1985	.36910	.23312	.20090	.26406	.09972
#4	.35872	4.2507	.37945	.23491	.20243	.27903	.09988

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

Elem	ZN
Units	ppm
Avge	.11360
SDev	.00320
%RSD	2.8185

#1	.11216
#2	.11052
#3	.11375
#4	.11798

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXEVAS/2 SI

Operator: WTR

Run Time: 03/20/01 13:22:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00184	1.6636	-.03972	2.3204	.01167	.00006	219.95
SDev	.00134	.0133	.06577	.0052	.00018	.00007	1.89
%RSD	72.927	.79777	165.59	.22378	1.5439	115.47	.85774
#1	-.00148	1.6789	-.04344	2.3237	.01147	.00012	221.23
#2	-.00288	1.6533	-.00971	2.3237	.01166	.00000	221.17
#3	-.00289	1.6517	-.12940	2.3128	.01191	.00000	217.21
#4	-.00009	1.6704	.02368	2.3215	.01166	.00012	220.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00929	-.00221	.00120	.00197	.91143	239.13	.09909
SDev	.00400	.00265	.00124	.00080	.00742	1.35	.00217
%RSD	43.028	119.85	102.71	40.365	.81412	.56259	2.1953
#1	L-.01307	-.00104	.00013	.00135	.91927	240.72	.10033
#2	L-.00930	-.00571	.00013	.00301	.91108	239.22	.09937
#3	-.00376	.00050	.00228	.00218	.90154	237.43	.09594
#4	L-.01103	-.00260	.00228	.00135	.91382	239.15	.10072
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H646.28	.02789	.41070	S-.12301	.00018	.07083	.24864
SDev	2.98	.00000	.00502	.00000	.01129	.00456	.03220
%RSD	.46139	.01047	1.2230	.00000	6277.4	6.4320	12.949
#1	H649.14	.02789	.41070	S-.12301	.00113	.06859	.23902
#2	H647.40	.02789	.41685	S-.12301	.00505	.06855	.29051
#3	H642.13	.02788	.40455	S-.12301	.01033	.07766	.25179
#4	H646.43	.02789	.41070	S-.12301	-.01579	.06851	.21323
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI✓	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04058	10.327	.79573	3.7162	.40943	.21829	.01036
SDev	.07479	.130	.07840	.0257	.00351	.21436	.00013
%RSD	184.33	1.2578	9.8528	.69043	.85661	98.199	1.2050
#1	-.00828	10.414	.80028	3.7449	.41347	.17320	.01036
#2	.00659	10.240	.71367	3.7181	.40829	.09843	.01052

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#3	-.00834	10.194	.90037	3.6825	.40524	.06855	.01021
#4	-.15227	10.460	.76861	3.7194	.41073	.53298	.01037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00288
SDev	.00112
%RSD	38.877

#1	.00355
#2	.00286
#3	.00380
#4	.00131

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXK17B

Operator: WTR

Run Time: 03/20/01 13:26:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00175	.00511	.01911	.01631	.00028	-.00003	.03326
SDev	.00180	.01082	.04574	.01882	.00029	.00006	.01036
%RSD	103.18	211.60	239.38	115.37	102.95	200.00	31.137
#1	-.00035	-.00808	-.00473	.03260	.00008	-.00012	.02246
#2	.00105	.00208	.05744	.00001	.00008	.00000	.02781
#3	.00384	.01748	.05732	.00002	.00070	.00000	.04604
#4	.00245	.00896	-.03360	.03260	.00026	.00000	.03675
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00092	.00000	.00107	-.00042	.00698	.09468	.00077
SDev	.00203	.00078	.00215	.00000	.00088	.37099	.00141
%RSD	220.33	41316.	199.91	.19769	12.613	391.82	182.10
#1	-.00052	-.00039	.00215	-.00042	.00596	-.20409	-.00014
#2	-.00142	.00117	-.00214	-.00041	.00800	.04839	.00177
#3	.00157	-.00040	.00215	-.00042	.00733	.62912	.00217
#4	-.00331	-.00038	.00215	-.00042	.00664	-.09468	-.00070
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	.09988	-.00052	.00000	.73282	.01028	.01571	-.00632
SDev	.02847	.00000	.00308	.15256	.00532	.02935	.01280
%RSD	28.503	.23065	336470.	20.819	51.759	186.87	202.64
#1	.07258	-.00052	-.00154	.59522	.01141	-.02026	-.02552
#2	.08057	-.00052	.00461	.62383	.00943	.01575	.00006
#3	.13384	-.00052	-.00154	.92172	.01657	.01570	.00015
#4	.11253	-.00052	-.00154	.79051	.00370	.05164	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02480	.01159	-.00661	.00050	.00023	-.00386	.00000
SDev	.04751	.00579	.01544	.00038	.00066	.03322	.00007
%RSD	191.58	50.000	233.80	75.903	288.03	861.20	3198.4
#1	-.08562	.00869	-.02576	.00000	-.00038	-.05255	-.00003
#2	.02857	.00869	.01119	.00045	.00023	.00736	.00011

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#3	-.01115	.00869	-.00198	.00090	.00114	.00738	-.00003
#4	-.03101	.02028	-.00987	.00067	-.00008	.02238	-.00003

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

Elem	ZN
Units	ppm
Avge	.00054
SDev	.00097
%RSD	178.27

#1	-.00037
#2	.00031
#3	.00191
#4	.00032

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: WTR

Run Time: 03/20/01 13:29:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96650	47.086	4.8375	4.7489	4.6907	4.7178	48.426
SDev	.00085	.130	.0385	.0163	.0159	.0123	.096
%RSD	.08743	.27607	.79511	.34361	.33863	.26144	.19763
#1	.96577	47.049	4.8415	4.7305	4.6919	4.7077	48.332
#2	.96578	47.005	4.8418	4.7464	4.6840	4.7168	48.399
#3	.96728	47.279	4.7866	4.7702	4.7121	4.7355	48.413
#4	.96719	47.011	4.8800	4.7486	4.6748	4.7114	48.559
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	4.9545	4.7717	4.7554	4.6838	48.821	46.531	4.7109
SDev	.0319	.0142	.0110	.0187	.093	.305	.0257
%RSD	.64359	.29847	.23107	.40021	.18964	.65631	.54478
#1	4.9280	4.7520	4.7519	4.6822	48.769	46.203	4.7071
#2	4.9622	4.7752	4.7433	4.6847	48.754	46.902	4.7138
#3	4.9964	4.7860	4.7567	4.7072	48.956	46.380	4.7427
#4	4.9314	4.7738	4.7696	4.6614	48.803	46.641	4.6802
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	47.283	4.7522	4.7703	45.606	4.7869	4.8701	4.8689
SDev	.127	.0064	.0281	.187	.0183	.0223	.0426
%RSD	.26946	.13488	.58985	.40954	.38255	.45778	.87475
#1	47.133	4.7475	4.7534	45.564	4.7832	4.8808	4.8722
#2	47.245	4.7464	4.7411	45.550	4.7994	4.8366	4.9238
#3	47.437	4.7600	4.7842	45.873	4.8026	4.8815	4.8208
#4	47.317	4.7548	4.8026	45.438	4.7626	4.8814	4.8587
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	4.7010	4.9284	4.8234	4.6862	4.7126	9.4967	4.7419
SDev	.0957	.0087	.0246	.0151	.0083	.2543	.0056
%RSD	2.0356	.17595	.51017	.32141	.17702	2.6782	.11760
#1	4.7989	4.9211	4.7885	4.6871	4.7094	9.3029	4.7373
#2	4.5705	4.9327	4.8282	4.6803	4.7121	9.4378	4.7394

#3	4.7300	4.9212	4.8304	4.7066	4.7243	9.8692	4.7500
#4	4.7047	4.9385	4.8464	4.6711	4.7048	9.3771	4.7410
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 4.8032
SDev .0074
%RSD .15448

#1	4.8045
#2	4.8122
#3	4.8020
#4	4.7942

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: WTR

Run Time: 03/20/01 13:32:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00177	.01901	-.00981	.03715	.00107	.00076	.01385
SDev	.00082	.01023	.05791	.00181	.00050	.00040	.00855
%RSD	46.068	53.811	590.29	4.8829	46.782	52.985	61.745

#1	.00105	.01230	-.09589	.03623	.00052	.00037	.00427
#2	.00108	.00884	.01899	.03623	.00078	.00048	.00905
#3	.00248	.02410	.00928	.03987	.00158	.00121	.02023
#4	.00248	.03082	.02838	.03625	.00140	.00097	.02185

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	.00041	-.00000	.00268	-.00041	.01448	.18095	.00120
SDev	.00238	.00149	.00107	.00000	.00363	.17872	.00076
%RSD	586.86	45679.	40.031	.34794	25.061	98.767	63.297

#1	.00373	-.00040	.00215	-.00042	.01073	.30088	.00082
#2	-.00174	.00117	.00214	-.00041	.01209	.17464	.00042
#3	.00042	.00116	.00215	-.00041	.01822	-.06943	.00138
#4	-.00078	-.00194	.00429	-.00042	.01686	.31771	.00217

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	.01665	.00079	.00923	.05340	.00767	-.00450	.00321
SDev	.00784	.00100	.00589	.02154	.00251	.05206	.01614
%RSD	47.103	126.92	63.820	40.341	32.753	1156.6	501.91

#1	.01398	-.00052	.00461	.03070	.00450	-.00229	-.01284
#2	.00866	.00052	.00461	.04024	.00811	-.07409	.00009
#3	.01665	.00157	.01077	.07686	.00746	.05171	.02564
#4	.02730	.00157	.01692	.06580	.01061	.00666	-.00002

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02859	.00873	-.00130	.00095	.00091	-.01898	.00380
SDev	.03511	.00475	.01559	.00046	.00080	.09026	.00245
%RSD	122.81	54.433	1195.7	48.507	87.665	475.53	64.631

#1	-.01114	.00290	.00060	.00045	.00023	.02231	.00012
#2	.01866	.00874	-.01776	.00090	.00023	.06721	.00486

#3	.03357	.01454	.01918	.00157	.00145	-.02280	.00502
#4	.07328	.00875	-.00724	.00090	.00175	-.14265	.00518
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	.00006						
SDev	.00113						
%RSD	1744.4						
#1	-.00130						
#2	-.00034						
#3	.00129						
#4	.00061						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Method: QUANMET Sample Name: DXK17C

Operator: WTR

Run Time: 03/20/01 13:35:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04966	1.8637	1.9141	.94168	1.8642	.04697	48.969
SDev	.00068	.0085	.0258	.00194	.0088	.00028	.117
%RSD	1.3768	.45834	1.3485	.20595	.47065	.58832	.23864
#1	.05001	1.8730	1.8817	.94242	1.8667	.04687	48.937
#2	.05001	1.8525	1.9441	.94242	1.8514	.04663	49.012
#3	.04863	1.8628	1.9200	.93881	1.8678	.04711	49.101
#4	.04998	1.8664	1.9106	.94307	1.8711	.04726	48.825
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	.05252	.47779	.19315	.23999	1.0085	47.224	.93750
SDev	.00173	.00200	.00175	.00000	.0038	.102	.00741
%RSD	3.2978	.41865	.90673	.00086	.37232	.21602	.79043
#1	.05227	.47856	.19101	.23999	1.0048	47.331	.94065
#2	.05181	.47703	.19315	.23999	1.0061	47.289	.92670
#3	.05499	.48011	.19315	.23999	1.0130	47.121	.93921
#4	.05100	.47546	.19530	.23999	1.0102	47.154	.94343
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	48.474	.47732	.95969	46.441	.49575	.50743	.49918
SDev	.187	.00085	.00589	.231	.00909	.00857	.00631
%RSD	.38519	.17781	.61361	.49703	1.8344	1.6893	1.2645
#1	48.523	.47836	.96430	46.521	.48976	.49621	.49588
#2	48.201	.47628	.96430	46.103	.48689	.51416	.50864
#3	48.545	.47732	.95815	46.518	.50660	.50524	.49614
#4	48.625	.47732	.95200	46.623	.49976	.51409	.49604
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	1.8711	9.8658	1.9271	.91869	.93666	1.9612	.47961
SDev	.0414	.0599	.0238	.00398	.00276	.0759	.00348
%RSD	2.2151	.60717	1.2356	.43379	.29425	3.8684	.72605
#1	1.8637	9.8977	1.9390	.92037	.93803	2.0549	.48001
#2	1.8289	9.8977	1.9548	.91274	.93254	1.9350	.48002

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#3	1.9282	9.7761	1.9048	.92037	.93833	1.8749	.48342
#4	1.8637	9.8919	1.9100	.92127	.93772	1.9800	.47497
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	.48711						
SDev	.00385						
%RSD	.78949						
#1	.49092						
#2	.48836						
#3	.48735						
#4	.48180						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DXHQW

Operator: WTR

Run Time: 03/20/01 13:38:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.01315	.01184	.13916	.04918	.00015	101.80
SDev	.00265	.01311	.03128	.01310	.00034	.00011	.29
%RSD	374.99	99.662	264.26	9.4145	.69916	76.018	.28922
#1	.00245	.01229	.01905	.11951	.04889	.00000	101.99
#2	-.00314	-.00466	-.01912	.14592	.04959	.00012	101.83
#3	.00105	.01911	-.00495	.14529	.04933	.00025	101.37
#4	.00247	.02588	.05238	.14592	.04889	.00023	102.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00164	.00036	.00013	-.00042	.00628	4.1113	.01565
SDev	.00106	.00201	.00027	.00000	.00162	.2042	.00050
%RSD	64.664	553.30	199.14	.48339	25.845	4.9678	3.1926
#1	.00184	-.00197	.00000	-.00042	.00526	3.8273	.01499
#2	.00257	.00114	.00054	-.00041	.00458	4.1050	.01555
#3	.00203	-.00042	.00000	-.00042	.00730	4.2229	.01595
#4	.00012	.00270	-.00000	-.00041	.00798	4.2902	.01612
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.5456	.00052	.00308	112.16	.00837	.00675	.00649
SDev	.0348	.00000	.00308	1.26	.01218	.03597	.05302
%RSD	.46057	.18842	99.978	1.1238	145.59	533.00	816.62
#1	7.5302	.00052	.00461	111.67	.00215	-.01130	.00000
#2	7.5862	.00052	-.00154	113.78	-.00434	-.01127	-.05134
#3	7.5595	.00052	.00461	112.38	.02358	-.01114	.07725
#4	7.5063	.00052	.00461	110.80	.01208	.06070	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00619	8.6903	-.00061	.61613	-.00587	.04860	.00126
SDev	.01767	.0488	.02450	.00508	.00056	.05386	.00240
%RSD	285.67	.56145	4026.8	.82504	9.4844	110.82	189.79
#1	-.00619	8.7048	-.00458	.61439	-.00618	-.02254	.00012
#2	-.01612	8.7222	-.01269	.62291	-.00648	.09734	-.00004

#3	-.02108	8.7164	-.02005	.61641	-.00557	.08232	.00012
#4	.01864	8.6180	.03489	.61080	-.00526	.03729	.00486

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

Elem	ZN
Units	ppm
Avge	.00046
SDev	.00101
%RSD	220.45

#1	.00100
#2	-.00099
#3	.00055
#4	.00127

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DXHQWP5

Operator: WTR

Run Time: 03/20/01 13:41:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B ppm	BA ppm	BE ppm	CA ppm
Avg	-.00033	-.00731	.02394	.05613	.01005	.00011	20.915
SDev	.00115	.00578	.02065	.00209	.00022	.00001	.077
%RSD	350.65	79.177	86.233	3.7293	2.1795	6.6419	.37010
#1	-.00032	-.00821	.02393	.05432	.01016	.00011	20.921
#2	-.00032	-.00132	.01429	.05795	.01016	.00011	20.853
#3	-.00175	-.01489	.00491	.05432	.01016	.00012	20.863
#4	.00108	-.00480	.05263	.05794	.00972	.00011	21.022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K ppm	LI ppm
Avg	.00117	-.00001	.00201	-.00021	.00187	1.1783	.00332
SDev	.00329	.00077	.00027	.00042	.00147	.1533	.00037
%RSD	280.17	11780.	13.333	200.55	78.861	13.007	11.264
#1	-.00073	-.00039	.00214	-.00042	.00050	1.3024	.00281
#2	.00442	-.00040	.00214	-.00042	.00391	1.2772	.00349
#3	.00344	.00115	.00215	.00042	.00187	.96577	.00368
#4	-.00244	-.00039	.00161	-.00042	.00119	1.1678	.00329
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avg	1.5521	.00000	.00154	22.552	.00474	-.00450	-.00960
SDev	.0153	.00060	.00355	.250	.00791	.04830	.01230
%RSD	.98577	51901.	230.89	1.1107	166.82	1073.0	128.18
#1	1.5481	.00052	.00461	22.552	.01575	.05163	-.01274
#2	1.5428	-.00052	-.00154	22.507	.00406	-.06514	.00006
#3	1.5748	.00052	-.00154	22.878	-.00292	-.01118	-.00001
#4	1.5428	-.00052	.00461	22.269	.00207	.00669	-.02569
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V ppm
Avg	-.03102	1.7468	.00260	.12691	-.00175	-.01879	.00360
SDev	.03737	.0000	.01013	.00125	.00039	.06164	.00242
%RSD	120.47	.00148	389.64	.98443	22.452	328.07	67.332
#1	-.07571	1.7468	.01377	.12661	-.00221	-.09745	.00486
#2	-.01116	1.7468	-.00460	.12665	-.00130	-.02258	.00471

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#3	-.04592	1.7468	-.00723	.12867	-.00191	.05242	-.00003
#4	.00869	1.7468	.00845	.12572	-.00160	-.00755	.00486

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

Elem ZN
Units ppm
Avge -.00074
SDev .00156
%RSD 211.74

#1 -.00198
#2 -.00195
#3 .00130
#4 -.00032

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHQWS Operator: WTR
 Run Time: 03/20/01 13:44:58
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04716	1.8747	1.8723	1.0742	1.8876	.04610	152.64
SDev	.00255	.0093	.0352	.0155	.0149	.00031	.49
%RSD	5.4079	.49749	1.8796	1.4445	.78702	.67223	.32363
#1	.04577	1.8767	1.9153	1.0837	1.8937	.04604	152.20
#2	.04856	1.8684	1.8867	1.0511	1.8777	.04604	153.14
#3	.04995	1.8666	1.8436	1.0822	1.8733	.04580	152.99
#4	.04436	1.8870	1.8434	1.0800	1.9055	.04654	152.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05442	.46848	.18738	.22624	.99928	51.918	.96236
SDev	.00213	.00448	.00220	.00048	.00147	.400	.00996
%RSD	3.9139	.95664	1.1765	.21094	.14722	.77111	1.0352
#1	.05346	.46304	.18457	.22665	.99928	52.061	.96543
#2	.05368	.46771	.18939	.22666	.99724	51.792	.95758
#3	.05759	.46926	.18886	.22583	1.0006	51.438	.95173
#4	.05297	.47390	.18671	.22583	.99998	52.381	.97471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.930	.46665	.93508	160.56	.47845	.50041	.49916
SDev	.345	.00100	.00589	1.60	.00806	.04889	.01934
%RSD	.61642	.21335	.62981	.99926	1.6839	9.7706	3.8754
#1	55.907	.46587	.93970	161.18	.48792	.54967	.50885
#2	55.781	.46691	.92739	159.53	.47476	.51388	.50885
#3	55.616	.46587	.93355	159.02	.46945	.43302	.47014
#4	56.415	.46795	.93970	162.53	.48167	.50506	.50880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8847	18.560	1.9377	1.5242	.91676	1.8678	.47038
SDev	.0148	.065	.0270	.0100	.00331	.1450	.00065
%RSD	.78645	.35258	1.3932	.65716	.36073	7.7642	.13889
#1	1.9034	18.588	1.9391	1.5273	.91729	1.6805	.47108
#2	1.8885	18.507	1.9023	1.5186	.91577	1.9203	.47078

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#3	1.8686	18.507	1.9679	1.5141	.91302	1.8453	.46975
#4	1.8785	18.640	1.9417	1.5367	.92095	2.0251	.46990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.48215						
SDev	.00309						
%RSD	.64153						
#1	.48608						
#2	.48125						
#3	.48260						
#4	.47865						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: DXHQWD Operator: WTR
 Run Time: 03/20/01 13:48:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04961	1.8692	1.8651	1.0470	1.8701	.04595	153.54
SDev	.00135	.0189	.0577	.0017	.0121	.00018	.66
%RSD	2.7204	1.0108	3.0938	.16364	.64517	.39417	.43129
#1	.04855	1.8426	1.8342	1.0480	1.8523	.04567	154.10
#2	.04855	1.8752	1.9010	1.0459	1.8740	.04604	154.12
#3	.04997	1.8718	1.8004	1.0453	1.8755	.04603	153.06
#4	.05137	1.8872	1.9248	1.0489	1.8787	.04603	152.88
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04938	.46734	.18711	.22665	.98190	51.888	.94693
SDev	.00374	.00588	.00212	.00068	.00515	.468	.01124
%RSD	7.5670	1.2573	1.1322	.29933	.52464	.90099	1.1872
#1	.04643	.46776	.18618	.22582	.97610	51.278	.93097
#2	.04598	.47550	.18886	.22666	.98838	51.817	.94723
#3	.05174	.46306	.18885	.22748	.98293	52.381	.95375
#4	.05339	.46305	.18456	.22665	.98021	52.078	.95575
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.718	.46508	.93201	159.55	.47344	.51608	.48321
SDev	.294	.00052	.01051	1.62	.01387	.03458	.03773
%RSD	.52679	.11162	1.1271	1.0130	2.9298	6.6997	7.8079
#1	55.286	.46483	.94585	157.20	.45748	.50494	.52150
#2	55.941	.46483	.93354	159.77	.47886	.49606	.45759
#3	55.816	.46586	.92739	160.45	.46782	.56755	.44472
#4	55.829	.46482	.92124	160.76	.48961	.49577	.50902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8847	18.508	1.8824	1.5143	.91325	1.9205	.47178
SDev	.0402	.054	.0354	.0090	.00333	.1562	.00221
%RSD	2.1334	.29407	1.8788	.59287	.36416	8.1339	.46930
#1	1.8536	18.437	1.8734	1.5008	.90845	1.8756	.47005
#2	1.8934	18.559	1.8784	1.5183	.91607	1.9203	.46975

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#3	1.8537	18.542	1.8467	1.5190	.91394	2.1303	.47315
#4	1.9380	18.495	1.9312	1.5190	.91455	1.7557	.47417
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.48226						
SDev	.00384						
%RSD	.79533						
#1	.47940						
#2	.48744						
#3	.48291						
#4	.47931						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHRF

Run Time: 03/20/01 13:51:18

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00252	.07315	.02505	1.4970	.48718	.00008	144.25
SDev	.00198	.00341	.03182	.0243	.00145	.00006	.99
%RSD	78.496	4.6663	127.06	1.6263	.29713	80.664	.68582
#1	-.00390	.07024	.05730	1.5222	.48904	.00011	145.13
#2	-.00252	.07683	-.01450	1.5133	.48685	-.00002	144.24
#3	.00028	.07527	.04297	1.4735	.48554	.00011	144.76
#4	-.00394	.07024	.01442	1.4790	.48729	.00011	142.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00378	.00513	.00054	.07874	21.438	54.847	1.2824
SDev	.00276	.00078	.00116	.00625	.083	.051	.0068
%RSD	73.017	15.160	215.81	7.9314	.38618	.09292	.52891
#1	.00001	.00553	.00214	.08188	21.530	54.897	1.2880
#2	.00665	.00551	-.00053	.08187	21.441	54.872	1.2805
#3	.00413	.00397	.00054	.06938	21.453	54.779	1.2736
#4	.00434	.00552	-.00000	.08186	21.329	54.838	1.2875
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.677	.40217	.00742	289.41	.00004	.02422	.01607
SDev	.208	.00217	.00870	1.16	.01304	.03550	.00647
%RSD	.30215	.53861	117.24	.40158	30698.	146.59	40.244
#1	68.976	.40454	.00128	290.06	.01833	-.01848	.01302
#2	68.646	.40244	.01972	289.12	-.01042	.05341	.01276
#3	68.505	.40244	.00742	287.91	-.00807	.00845	.01273
#4	68.582	.39928	.00125	290.55	.00032	.05348	.02577
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.08528	10.586	-.01317	4.7659	-.00618	-.00351	.00493
SDev	.04353	.036	.02813	.0129	.00066	.08597	.00022
%RSD	51.044	.34140	213.55	.27039	10.668	2450.9	4.4190
#1	-.08747	10.634	.00591	4.7849	-.00679	.06627	.00478
#2	-.03810	10.576	-.04674	4.7622	-.00648	.00768	.00524

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#3	-.07282	10.588	.01379	4.7562	-.00526	-.12736	.00493
#4	-.14271	10.547	-.02564	4.7604	-.00618	.03938	.00477
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.03884						
SDev	.00230						
%RSD	5.9114						
#1	.04210						
#2	.03829						
#3	.03671						
#4	.03826						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHTD

Run Time: 03/20/01 13:54:27

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00085	-.00041	-.00279	.12944	.07737	-.00000	112.09
SDev	.00115	.00408	.02051	.00121	.00036	.00010	.42
%RSD	135.98	984.16	734.47	.93331	.46233	2750.8	.37073
#1	-.00226	.00392	.00321	.12938	.07737	.00012	112.00
#2	.00057	.00209	-.02562	.13092	.07693	-.00001	112.60
#3	-.00085	-.00299	-.01115	.12948	.07781	.00000	111.59
#4	-.00085	-.00468	.02239	.12796	.07737	-.00012	112.17
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	.00113	.00080	.00070	10.236	3.6674	.01062
SDev	.00199	.00254	.00198	.00000	.021	.4232	.00132
%RSD	584.94	224.87	246.67	.38028	.20847	11.540	12.416
#1	-.00013	.00113	.00214	.00069	10.206	3.7516	.01058
#2	-.00244	.00424	.00268	.00070	10.236	4.1639	.01201
#3	-.00108	-.00198	-.00000	.00070	10.256	3.1372	.01105
#4	.00228	.00112	-.00161	.00070	10.245	3.6169	.00886
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.5506	.17691	-.00174	108.75	.00503	-.00119	.02571
SDev	.0257	.00084	.00308	.76	.01027	.04553	.02354
%RSD	.46254	.47641	177.38	.69763	204.16	3819.7	91.541
#1	5.5167	.17794	-.00635	108.31	.00156	-.05962	.00002
#2	5.5486	.17691	-.00020	107.97	.01548	.03934	.03866
#3	5.5779	.17588	-.00019	109.65	-.00770	.03013	.01267
#4	5.5593	.17691	-.00020	109.09	.01077	-.01463	.05149
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01251	10.725	.01516	.62592	-.00701	.01873	.00114
SDev	.03659	.039	.02527	.00297	.00015	.07648	.00240
%RSD	292.54	.36480	166.70	.47395	2.1739	408.38	209.94
#1	-.02874	10.692	.01505	.62407	-.00709	-.08945	-.00016
#2	.00114	10.750	.00732	.62295	-.00679	.02991	.00474

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#3	.03099	10.692	.04932	.62946	-.00709	.04468	-.00000
#4	-.05344	10.767	-.01105	.62721	-.00709	.08978	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00438						
SDev	.00127						
%RSD	29.081						
#1	.00374						
#2	.00372						
#3	.00377						
#4	.00629						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHTK

Run Time: 03/20/01 13:57:37

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00088	.00291	.02495	.13145	.03268	.00002	77.928
SDev	.00211	.00627	.01598	.00194	.00036	.00011	.375
%RSD	239.12	215.67	64.050	1.4717	1.0945	473.48	.48124
#1	-.00333	.00039	.02259	.13317	.03268	-.00012	78.260
#2	.00088	.00885	.00808	.13016	.03268	.00011	78.231
#3	-.00195	-.00474	.04664	.13305	.03225	.00000	77.516
#4	.00087	.00714	.02251	.12944	.03312	.00011	77.704
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00504	-.00054	.00020	5.6039	4.5532	.00333
SDev	.00433	.00155	.00107	.00000	.0302	.3005	.00038
%RSD	293.20	30.844	200.31	2.2247	.53881	6.6000	11.416
#1	.00359	.00581	.00000	.00020	5.6362	4.6521	.00329
#2	L-.00693	.00583	-.00215	.00020	5.6226	4.5932	.00304
#3	-.00064	.00271	.00000	.00019	5.5742	4.1303	.00312
#4	-.00194	.00582	-.00000	.00020	5.5824	4.8373	.00388
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.726	.40420	.00535	21.848	.00842	.00947	.00972
SDev	.062	.00178	.00000	.137	.00690	.02590	.01927
%RSD	.39527	.44125	.07394	.62891	81.926	273.62	198.31
#1	15.806	.40655	.00535	22.018	.01173	-.01293	.03862
#2	15.734	.40446	.00535	21.900	.00017	-.01300	.00003
#3	15.656	.40237	.00534	21.747	.00583	.03186	.00004
#4	15.707	.40341	.00534	21.726	.01598	.03194	.00018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00969	3.0083	-.00125	.64802	-.00511	-.02461	.00251
SDev	.04213	.0386	.00566	.00397	.00053	.11854	.00274
%RSD	434.74	1.2817	451.93	.61231	10.341	481.70	109.25
#1	-.03814	3.0213	-.00376	.65256	-.00557	.13228	.00014
#2	-.03818	3.0388	.00660	.65009	-.00526	-.00244	.00487

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#3	-.01351	2.9518	-.00130	.64426	-.00526	-.09156	.00013
#4	.05106	3.0214	-.00656	.64516	-.00435	-.13671	.00488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00669						
SDev	.00166						
%RSD	24.861						
#1	.00502						
#2	.00899						
#3	.00638						
#4	.00637						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: DXHTP

Run Time: 03/20/01 14:00:47

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00027	.00809	-.00549	.03604	.04401	.00002	123.20
SDev	.00256	.01321	.02484	.00402	.00038	.00006	1.21
%RSD	953.89	163.25	452.00	11.152	.86391	313.89	.97927
#1	-.00254	-.00808	-.03647	.03640	.04408	-.00000	124.64
#2	.00307	.02247	-.01282	.03637	.04382	-.00002	123.76
#3	.00167	.01418	.00643	.04060	.04364	-.00001	122.31
#4	-.00113	.00381	.02087	.03080	.04451	.00011	122.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00089	.00309	.00201	-.00012	2.7254	2.3460	.00763
SDev	.00356	.00078	.00027	.00000	.0131	.2360	.00049
%RSD	400.61	25.249	13.486	1.0600	.48066	10.058	6.3525
#1	.00388	.00270	.00214	-.00012	2.7417	2.1525	.00788
#2	.00371	.00269	.00214	-.00012	2.7301	2.4470	.00818
#3	-.00346	.00271	.00160	-.00012	2.7138	2.1525	.00714
#4	-.00057	.00426	.00214	-.00012	2.7158	2.6322	.00731
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	3.9672	.12369	-.00272	69.337	.00739	-.00310	-.00633
SDev	.0246	.00100	.00774	.365	.00700	.00729	.03855
%RSD	.62109	.80826	284.73	.52585	94.813	234.97	608.94
#1	3.9985	.12396	-.00118	69.461	-.00058	-.00316	-.03856
#2	3.9719	.12500	.00497	69.096	.01650	.00589	.01303
#3	3.9399	.12291	-.01348	68.996	.00662	-.00317	-.03837
#4	3.9586	.12291	-.00118	69.794	.00702	-.01198	.03858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	.02222	9.3697	.01217	.62693	-.00755	-.05653	.00379
SDev	.03538	.0265	.02813	.00286	.00091	.05265	.00176
%RSD	159.23	.28260	231.22	.45574	12.121	93.149	46.532
#1	.07192	9.4058	.03770	.62991	-.00831	-.09422	.00116
#2	.02223	9.3653	-.02789	.62654	-.00648	-.01913	.00487

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#3	-.00761	9.3422	.02190	.62318	-.00709	-.10881	.00441
#4	.00233	9.3653	.01696	.62811	-.00831	-.00395	.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	.00026						
SDev	.00108						
%RSD	412.79						
#1	.00109						
#2	.00105						
#3	-.00121						
#4	.00012						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: DXHT3

Run Time: 03/20/01 14:03:56

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00061	.07278	.02013	.71588	.27160	-.00001	122.03
SDev	.00081	.00991	.01956	.00006	.00150	.00000	.54
%RSD	133.84	13.623	97.205	.00889	.55097	1.6451	.44303
#1	-.00010	.05995	.03464	.71580	.27006	-.00002	121.57
#2	.00131	.07535	.02489	.71590	.27182	-.00001	122.37
#3	.00131	.08387	.02958	.71595	.27094	-.00001	122.61
#4	-.00009	.07193	-.00860	.71590	.27357	-.00001	121.57
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	-.00016	.00147	.04306	7.2847	26.019	.42174
SDev	.00352	.00195	.00102	.00080	.0299	.118	.00196
%RSD	59672.	1213.1	68.977	1.8556	.41012	.45469	.46407
#1	.00461	.00255	.00214	.04285	7.2435	26.105	.42015
#2	-.00250	-.00054	.00161	.04368	7.2912	25.979	.42234
#3	-.00300	-.00054	-.00000	.04368	7.3150	25.870	.42023
#4	.00087	-.00211	.00214	.04201	7.2891	26.122	.42425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.656	.13323	.00095	177.00	.01029	.01766	-.00310
SDev	.242	.00100	.00307	1.28	.01069	.02256	.02845
%RSD	.47801	.74987	322.08	.72232	103.82	127.74	918.78
#1	50.367	.13244	.00556	175.99	.00508	-.00475	-.03843
#2	50.670	.13453	-.00058	176.78	.02275	.01318	.01304
#3	50.628	.13349	-.00058	176.38	-.00152	.01318	.02566
#4	50.958	.13245	-.00058	178.86	.01487	.04903	-.01266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00304	10.498	-.00242	2.6347	-.00640	-.04454	.00477
SDev	.03590	.036	.01697	.0132	.00046	.12744	.00008
%RSD	1181.7	.34169	701.35	.50170	7.1429	286.15	1.6451
#1	-.01819	10.466	-.01968	2.6194	-.00618	-.11886	.00489
#2	-.01804	10.478	.01213	2.6358	-.00679	-.14953	.00473

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#3	-.00804	10.547	.01218	2.6320	-.00587	.13484	.00473
#4	.05642	10.501	-.01430	2.6515	-.00679	-.04459	.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	.00640						
SDev	.00139						
%RSD	21.779						
#1	.00513						
#2	.00602						
#3	.00839						
#4	.00605						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: CCV2-3

Operator: WTR

Run Time: 03/20/01 14:07:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95852	47.096	4.8086	4.7993	4.7156	4.7424	47.534
SDev	.00172	.227	.1019	.0334	.0314	.0265	.079
%RSD	.17968	.48291	2.1196	.69584	.66673	.55890	.16543
#1	.95700	46.852	4.6816	4.7510	4.6785	4.7122	47.604
#2	.95994	47.053	4.8232	4.8127	4.7168	4.7443	47.471
#3	.96007	47.402	4.9300	4.8063	4.7553	4.7764	47.600
#4	.95705	47.075	4.7994	4.8272	4.7119	4.7366	47.462
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	4.8998	4.7183	4.6924	4.7298	48.443	47.285	4.7938
SDev	.0123	.0247	.0069	.0324	.150	.407	.0453
%RSD	.25124	.52251	.14668	.68507	.30928	.85996	.94565
#1	4.8978	4.7055	4.6876	4.6862	48.303	46.733	4.7310
#2	4.8906	4.7086	4.6902	4.7354	48.399	47.238	4.8009
#3	4.8932	4.7551	4.7026	4.7646	48.655	47.508	4.8392
#4	4.9177	4.7039	4.6892	4.7329	48.415	47.659	4.8041
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	47.435	4.7024	4.7165	46.576	4.7574	4.8078	4.7889
SDev	.250	.0134	.0306	.405	.0395	.0605	.0371
%RSD	.52666	.28599	.64807	.86995	.83030	1.2579	.77560
#1	47.128	4.6943	4.6980	46.004	4.7720	4.7627	4.7570
#2	47.402	4.6974	4.6857	46.686	4.7030	4.7536	4.7565
#3	47.735	4.7225	4.7534	46.960	4.7586	4.8805	4.8208
#4	47.477	4.6954	4.7288	46.655	4.7962	4.8344	4.8214
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	4.6204	4.9207	4.8059	4.6997	4.7011	9.2708	4.7016
SDev	.0728	.0406	.0418	.0285	.0189	.2733	.0166
%RSD	1.5751	.82491	.87004	.60644	.40099	2.9475	.35221
#1	4.5790	4.8858	4.8223	4.6664	4.6828	9.5354	4.6860
#2	4.5942	4.9497	4.8249	4.6993	4.6996	L8.9792	4.7082

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#3	4.7291	4.9615	4.8330	4.7360	4.7274	9.4694	4.7218
#4	4.5794	4.8858	4.7436	4.6970	4.6947	9.0990	4.6903
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	4.7590						
SDev	.0133						
%RSD	.27959						
#1	4.7695						
#2	4.7437						
#3	4.7707						
#4	4.7521						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

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Method: QUANMET Sample Name: CCB3

Run Time: 03/20/01 14:10:15

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

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Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00143	.03268	.03195	.03991	.00341	.00316	.08120
SDev	.00211	.02890	.02686	.00514	.00222	.00204	.04793
%RSD	147.70	88.452	84.064	12.878	65.024	64.592	59.027
#1	-.00035	-.00135	.03831	.03263	.00070	.00074	.02185
#2	-.00031	.01900	.00452	.04350	.00253	.00220	.06274
#3	.00249	.05308	.06647	.04356	.00490	.00478	.11953
#4	.00388	.05997	.01852	.03995	.00552	.00491	.12067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00399	.00309	.00429	.00001	.04070	.16201	.00332
SDev	.00295	.00445	.00303	.00084	.02368	.35211	.00239
%RSD	74.013	144.08	70.684	11352.	58.174	217.33	72.132
#1	-.00040	-.00350	.00000	-.00125	.01345	-.29667	.00014
#2	.00495	.00581	.00429	.00043	.02844	.56179	.00281
#3	H.00553	.00580	.00644	.00043	.05842	.19147	.00501
#4	H.00587	.00425	.00644	.00043	.06250	.19147	.00532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	.04395	.00287	.00769	.09135	.01067	-.01115	.00964
SDev	.02780	.00231	.00355	.05146	.00718	.00011	.00645
%RSD	63.250	80.462	46.161	56.336	67.307	.98418	66.911
#1	.00866	.00053	.00462	.03261	.02039	-.01131	.01295
#2	.03529	.00157	.01077	.06427	.00333	-.01108	-.00003
#3	.06992	.00366	.01077	.14056	.00819	-.01109	.01277
#4	.06193	.00574	.00462	.12797	.01076	-.01114	.01289
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.02221	.04060	.01122	.00387	.00297	.05553	.00376
SDev	.05063	.02778	.01595	.00251	.00232	.04763	.00243
%RSD	227.94	68.418	142.15	64.792	78.111	85.774	64.631
#1	.03852	.05504	.01913	.00090	.00053	.02230	.00012
#2	-.02101	.01454	.00066	.00269	.00145	.00697	.00502

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#3	-.08546	.02033	.02965	.00583	.00480	.09644	.00503
#4	-.02090	.07247	-.00456	.00606	.00511	.09640	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00258						
SDev	.00170						
%RSD	65.897						
#1	.00094						
#2	.00130						
#3	.00386						
#4	.00423						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: DXHT7

Run Time: 03/20/01 14:13:24

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avg	.00161	.02120	.00358	.16654	.03621	.00175	62.688
SDev	.00386	.01528	.02354	.00420	.00029	.00022	.222
%RSD	238.95	72.090	657.03	2.5195	.80603	12.870	.35402
#1	-.00084	.02079	.03353	.17020	.03619	.00160	62.770
#2	.00335	.02260	.00481	.16288	.03663	.00160	62.413
#3	.00618	.03938	-.00022	.17016	.03601	.00208	62.938
#4	-.00223	.00202	-.02379	.16294	.03601	.00172	62.632
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avg	.00402	.00308	.00443	.00005	4.2235	6.5878	.03304
SDev	.00280	.00481	.00292	.00001	.0140	.2910	.00082
%RSD	69.652	156.18	65.915	10.364	.33212	4.4169	2.4695
#1	.00085	-.00352	.00429	.00004	4.2319	6.1923	.03220
#2	.00767	.00268	.00215	.00004	4.2033	6.8067	.03384
#3	.00369	.00735	.00859	.00005	4.2251	6.8067	.03364
#4	.00385	.00580	.00269	.00005	4.2339	6.5458	.03249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avg	17.059	.28502	.00824	147.89	.01140	.01211	.00325
SDev	.116	.00135	.00794	1.67	.00693	.02882	.01231
%RSD	.67908	.47238	96.364	1.1264	60.807	237.94	378.53
#1	17.140	.28658	.00517	148.83	.00597	-.01281	-.01283
#2	17.023	.28345	-.00099	147.74	.00899	.03231	.00006
#3	16.911	.28450	.01747	145.62	.02157	-.01246	.01294
#4	17.161	.28555	.01132	149.39	.00907	.04141	.01283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avg	.00955	2.9489	-.00211	.67332	-.00213	-.09005	.00140
SDev	.01430	.0033	.01752	.00483	.00088	.01434	.00253
%RSD	149.75	.11292	829.70	.71675	41.033	15.925	180.73
#1	.01206	2.9518	-.01731	.67652	-.00221	-.10134	.00014
#2	.02686	2.9460	.01432	.67159	-.00221	-.08598	-.00002

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#3	-.00782	2.9461	-.01721	.66732	-.00099	-.10138	.00520
#4	.00710	2.9518	.01175	.67787	-.00313	-.07149	.00029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.03032						
SDev	.00148						
%RSD	4.8838						
#1	.03245						
#2	.03015						
#3	.02918						
#4	.02948						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: DXHVC

Run Time: 03/20/01 14:16:33

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00176	.02934	.01534	.12320	.06160	.00015	105.09
SDev	.00180	.01314	.02017	.00387	.00091	.00019	.33
%RSD	102.30	44.779	131.49	3.1435	1.4831	127.32	.31072
#1	.00107	.04125	.00327	.12644	.06072	-.00001	105.44
#2	-.00033	.01057	.02743	.11789	.06230	.00000	104.82
#3	.00386	.03267	.03688	.12277	.06090	.00023	105.29
#4	.00245	.03287	-.00622	.12569	.06248	.00037	104.80
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00182	.00114	.00067	.01972	18.623	4.0230	.01496
SDev	.00108	.00127	.00242	.00041	.052	.3768	.00085
%RSD	59.220	111.38	360.42	2.0876	.28138	9.3674	5.6821
#1	-.00065	-.00042	-.00215	.01993	18.590	3.7936	.01451
#2	-.00291	.00115	.00054	.01911	18.687	3.6253	.01460
#3	-.00253	.00270	.00375	.01993	18.572	4.2397	.01623
#4	-.00118	.00114	.00053	.01993	18.644	4.4333	.01448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.7533	.14665	.00244	114.17	.01081	.02732	.00333
SDev	.0551	.00051	.00589	1.39	.00695	.02208	.02188
%RSD	.71034	.34597	241.51	1.2169	64.316	80.828	656.62
#1	7.7247	.14690	.00090	112.92	.01810	.00028	-.02547
#2	7.7939	.14589	.00706	115.60	.01061	.02732	.01292
#3	7.6901	.14690	.00704	113.04	.01304	.05437	.02579
#4	7.8046	.14691	-.00525	115.12	.00149	.02730	.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00104	9.5101	-.01027	.63630	-.00579	-.03248	.00243
SDev	.05354	.0291	.01129	.00513	.00072	.08688	.00279
%RSD	5149.3	.30641	109.93	.80670	12.436	267.51	114.49
#1	.04726	9.5044	.00540	.63192	-.00526	-.14437	.00476
#2	.03764	9.5507	-.01022	.64179	-.00679	-.05594	.00018

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#3	-.02230	9.4812	-.02071	.63192	-.00526	.02073	.00493
#4	-.06676	9.5043	-.01554	.63955	-.00587	.04965	-.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	.03798						
SDev	.00186						
%RSD	4.9067						
#1	.03773						
#2	.03544						
#3	.03938						
#4	.03938						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHWL

Run Time: 03/20/01 14:19:42

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61E1CP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B ppm	BA ppm	BE ppm	CA ppm
Avge	k-1.1626	k5.1090	k63.331	k-8.7771	45.446	k.00229	313.49
SDev	.0081	.0373	.465	.0538	.358	.00010	3.40
%RSD	.69768	.73067	.73412	.61293	.78746	4.4404	1.0857
#1	k-1.1647	k5.0910	k62.959	k-8.7713	45.153	k.00217	316.31
#2	k-1.1577	k5.0670	k62.988	k-8.7095	45.170	k.00229	312.44
#3	k-1.1549	k5.1266	k63.428	k-8.7874	45.904	k.00229	309.14
#4	k-1.1731	k5.1512	k63.950	k-8.8401	45.556	k.00242	316.09
Errors	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K ppm	LI ppm
Avge	k.15541	k.30762	k.09540	k8.7466	S-.00118	78.048	.22590
SDev	.01770	.00970	.00641	.1354	.00001	1.049	.00372
%RSD	11.388	3.1546	6.7138	1.5481	.47833	1.3446	1.6474
#1	k.15416	k.30625	k.09446	k8.6325	S-.00117	77.226	.22180
#2	k.17858	k.30307	k.09017	k8.6641	S-.00118	77.057	.22492
#3	k.15340	k.29956	k.09232	k8.9339	S-.00118	78.942	.23077
#4	k.13548	k.32158	k.10464	k8.7557	S-.00117	78.968	.22611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	45.807	k2.6985	k-.59357	44.666	k.64591	k2.1391	k1.2907
SDev	.227	.0126	.02376	.520	.03138	.0119	.0855
%RSD	.49539	.46703	4.0023	1.1651	4.8579	.55574	6.6207
#1	45.743	k2.7154	k-.58588	44.235	k.66820	k2.1255	k1.2205
#2	45.618	k2.6894	k-.57973	44.363	k.59953	k2.1434	k1.2452
#3	45.732	k2.6884	k-.57973	45.397	k.65521	k2.1344	k1.2845
#4	46.137	k2.7008	k-.62894	44.668	k.66070	k2.1532	k1.4127
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V ppm
Avge	k-19.819	H104.81	k-.77467	5.1119	.10659	k79.828	k.49268
SDev	.309	.52	.13180	.0358	.00168	.896	.00059
%RSD	1.5613	.49660	17.013	.70036	1.5737	1.1225	.11896
#1	k-19.755	H104.72	k-.89735	5.0836	.10697	k79.011	k.49287
#2	k-19.507	H104.11	k-.73407	5.0801	.10514	k79.101	k.49302

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#3	k-19.765	H105.24	k-.86023	5.1525	.10545	k80.704	k.49302
#4	k-20.247	H105.16	k-.60706	5.1316	.10880	k80.494	k.49180
Errors	LC Low	LC High	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	k35.989						
SDev	.138						
%RSD	.38211						
#1	k36.093						
#2	k35.845						
#3	k35.898						
#4	k36.119						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHWW

Run Time: 03/20/01 14:22:52

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	.18317	.03969	.24747	.05708	.00023	50.595
SDev	.00118	.00575	.01930	.00035	.00181	.00000	.178
%RSD	117.65	3.1395	48.623	.14163	3.1739	.17051	.35142
#1	.00102	.18785	.03835	.24766	.05923	.00023	50.732
#2	-.00045	.18111	.02441	.24698	.05485	.00023	50.758
#3	.00100	.17595	.06729	.24747	.05748	.00023	50.396
#4	.00243	.18775	.02871	.24777	.05678	.00023	50.495
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00108	.01202	.00630	.37537	24.767	3.3939	.02896
SDev	.00285	.00219	.00027	.00002	.173	.2027	.00063
%RSD	264.80	18.244	4.2779	.00469	.69722	5.9740	2.1619
#1	-.00222	.01357	.00643	.37539	24.862	3.3644	.02950
#2	.00296	.01356	.00590	.37535	24.525	3.5748	.02950
#3	-.00139	.01202	.00643	.37537	24.767	3.5159	.02846
#4	-.00366	.00892	.00644	.37539	24.915	3.1203	.02838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.386	.55098	.00171	26.771	.01382	-.00602	-.00308
SDev	.058	.00146	.00504	.168	.01076	.01155	.01240
%RSD	.40365	.26527	295.78	.62844	77.806	192.01	402.51
#1	14.341	.55205	.00172	26.582	.00237	.00745	-.01279
#2	14.413	.55196	-.00448	26.788	.02797	-.01035	.01312
#3	14.335	.54890	.00170	26.727	.01495	-.01948	.00014
#4	14.455	.55102	.00788	26.987	.01002	-.00168	-.01279
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03013	3.0243	.00489	.31707	-.00282	-.06174	.00480
SDev	.04310	.0180	.00976	.00104	.00056	.14514	.00013
%RSD	143.02	.59561	199.39	.32866	19.738	235.07	2.6610
#1	-.03232	3.0330	-.00698	.31611	-.00252	-.02949	.00480
#2	-.01848	3.0040	.01677	.31746	-.00221	.09561	.00464

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#3	.01703	3.0156	.00623	.31634	-.00343	-.05800	.00480
#4	-.08676	3.0446	.00356	.31836	-.00313	-.25509	.00495
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.18235						
SDev	.00282						
%RSD	1.5470						
#1	.18278						
#2	.17852						
#3	.18275						
#4	.18533						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHWX

Run Time: 03/20/01 14:26:01

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.42995	.06915	.07276	.03233	.00030	53.049
SDev	.00254	.00504	.04664	.00969	.00031	.00006	.351
%RSD	47317.	1.1722	67.450	13.315	.97057	21.277	.66112
#1	-.00279	.42486	.08716	.07747	.03207	.00036	53.008
#2	.00140	.42645	.01056	.05822	.03250	.00035	53.259
#3	.00279	.43342	.12063	.07759	.03268	.00025	52.571
#4	-.00138	.43505	.05826	.07774	.03207	.00024	53.356
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00337	.01243	.00281	.48968	26.704	8.0438	.00409
SDev	.00240	.00232	.00203	.00456	.073	.3699	.00051
%RSD	71.013	18.711	72.013	.93231	.27446	4.5982	12.537
#1	-.00249	.01359	.00268	.48884	26.667	7.9008	.00349
#2	-.00298	.01359	.00429	.48384	26.630	8.5320	.00473
#3	L-.00679	.00894	-.00000	.49467	26.721	7.6567	.00416
#4	-.00123	.01359	.00429	.49135	26.799	8.0859	.00397
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.308	.69240	-.00573	34.648	.01338	.10098	.00017
SDev	.124	.00249	.00589	.495	.00583	.05004	.01050
%RSD	.71444	.35987	102.73	1.4294	43.586	49.552	6012.0
#1	17.300	.69187	-.01035	34.736	.00877	.07859	.01301
#2	17.137	.69082	.00195	33.969	.02193	.10553	.00021
#3	17.412	.69084	-.01034	35.159	.01142	.05146	.00018
#4	17.385	.69606	-.00418	34.728	.01141	.16833	-.01270
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02653	6.2542	.01501	.38361	-.00290	-.09842	.00253
SDev	.01476	.0412	.00331	.00368	.00038	.09248	.00251
%RSD	55.635	.65898	22.094	.95888	13.245	93.967	99.119
#1	-.01671	6.2310	.01440	.38377	-.00343	-.11661	.00449
#2	-.04166	6.2078	.01171	.37839	-.00252	-.22094	.00480

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#3	-.03640	6.2889	.01961	.38669	-.00282	-.04243	-.00026
#4	-.01134	6.2889	.01430	.38557	-.00282	-.01368	.00109
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.05704						
SDev	.00118						
%RSD	2.0647						
#1	.05686						
#2	.05875						
#3	.05613						
#4	.05643						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: DXHW0

Run Time: 03/20/01 14:29:10

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00163	.04137	.04338	.13346	.03123	.00015	71.875
SDev	.00476	.01864	.03787	.01521	.00051	.00011	.484
%RSD	291.99	45.059	87.317	11.398	1.6188	70.575	.67364
#1	.00547	.05510	.07080	.12513	.03093	.00012	72.162
#2	-.00434	.01923	.01851	.12726	.03075	.00001	71.269
#3	-.00008	.03275	.00382	.12521	.03189	.00023	71.715
#4	.00547	.05838	.08037	.15623	.03137	.00025	72.353
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00074	.00271	.00080	.00108	13.718	8.1154	.00103
SDev	.00225	.00126	.00093	.00000	.022	.4586	.00116
%RSD	304.70	46.665	115.42	.25321	.15991	5.6515	111.85
#1	-.00345	.00272	.00053	.00108	13.707	8.3216	.00121
#2	-.00112	.00116	.00000	.00108	13.706	7.4715	-.00062
#3	-.00041	.00271	.00214	.00108	13.751	8.1364	.00205
#4	.00203	.00425	.00054	.00108	13.709	8.5320	.00149
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.801	.46381	-.00282	33.154	.00701	.03129	.00650
SDev	.127	.00147	.00615	.699	.00571	.03233	.02224
%RSD	.99029	.31604	218.38	2.1084	81.437	103.31	342.18
#1	12.799	.46588	-.01205	33.202	-.00123	.03801	.00008
#2	12.948	.46381	.00026	33.933	.00884	-.01593	-.01276
#3	12.820	.46278	.00026	33.246	.00849	.04706	.03859
#4	12.639	.46277	.00026	32.233	.01193	.05602	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05866	3.1358	.00758	.55453	-.00404	-.04483	.00023
SDev	.02664	.0029	.01074	.00762	.00109	.08721	.00390
%RSD	45.417	.09355	141.62	1.3738	26.861	194.52	1717.3
#1	-.06738	3.1372	-.00034	.55637	-.00313	-.06713	.00088
#2	-.04256	3.1314	.00224	.56265	-.00526	-.03710	-.00474

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#3	-.09206	3.1373	.00509	.55480	-.00465	-.14279	.00475
#4	-.03262	3.1372	.02334	.54430	-.00313	.06770	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.01224						
SDev	.00189						
%RSD	15.466						
#1	.01227						
#2	.01030						
#3	.01158						
#4	.01480						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: DXHW1

Run Time: 03/20/01 14:32:20

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.00855	.04347	.02931	.02760	.00003	49.842
SDev	.00080	.00422	.03444	.00761	.00042	.00006	.113
%RSD	286.32	49.332	79.229	25.959	1.5101	200.00	.22657
#1	.00097	.00391	.09502	.02499	.02699	.00000	49.939
#2	-.00041	.00730	.02787	.04068	.02787	.00000	49.791
#3	-.00041	.01404	.02782	.02512	.02787	.00000	49.932
#4	.00097	.00895	.02315	.02645	.02768	.00012	49.707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00038	.00067	.10817	18.275	1.4834	.00462
SDev	.00237	.00269	.00134	.00000	.040	.3391	.00050
%RSD	293.71	711.63	200.31	.00165	.21637	22.858	10.907
#1	-.00147	.00271	-.00000	.10817	18.248	1.1930	.00464
#2	-.00295	-.00195	-.00000	.10817	18.312	1.2351	.00416
#3	.00259	-.00196	.00268	.10817	18.307	1.5886	.00436
#4	-.00140	.00271	.00000	.10817	18.235	1.9168	.00532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.7093	.10444	-.00222	21.458	.00796	.00945	-.00313
SDev	.0034	.00101	.00355	.066	.00229	.03116	.03208
%RSD	.20116	.96259	159.90	.30973	28.771	329.65	1025.0
#1	1.7106	.10417	-.00530	21.513	.00803	.03649	.00012
#2	1.7133	.10523	-.00529	21.487	.00516	-.01759	-.01274
#3	1.7079	.10523	.00086	21.362	.01077	.03639	.03854
#4	1.7053	.10313	.00085	21.472	.00787	-.01747	-.03845
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02820	7.6113	.00545	.26856	-.00320	-.03105	-.00005
SDev	.02616	.0029	.01200	.00052	.00029	.06059	.00009
%RSD	92.765	.03805	220.37	.19289	9.1184	195.15	167.09
#1	-.01339	7.6098	.00282	.26901	-.00343	.04054	-.00013
#2	-.06283	7.6156	-.01038	.26901	-.00282	-.09528	-.00013

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#3	-.03306	7.6098	.01615	.26811	-.00313	-.00528	.00003
#4	-.00350	7.6098	.01319	.26811	-.00343	-.06417	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.18117						
SDev	.00319						
%RSD	1.7637						
#1	.18509						
#2	.18118						
#3	.18116						
#4	.17726						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHW5

Run Time: 03/20/01 14:35:29

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00083	.03371	-.00703	.02724	.03868	.00012	24.651
SDev	.00134	.00450	.03734	.00757	.00009	.00010	.134
%RSD	161.22	13.354	531.14	27.777	.23318	81.650	.54340
#1	-.00022	.02951	-.01539	.02317	.03864	.00012	24.742
#2	.00118	.03968	.04679	.02102	.03864	.00025	24.693
#3	.00258	.03109	-.02018	.02674	.03864	.00012	24.716
#4	-.00022	.03454	-.03934	.03802	.03882	.00000	24.452
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00097	.00736	.00268	-.00033	.70965	2.0788	.00277
SDev	.00093	.00284	.00270	.00000	.01424	.4845	.00062
%RSD	95.698	38.514	100.68	1.0362	2.0060	23.308	22.281
#1	-.00039	.00581	.00214	-.00033	.72514	2.2282	.00301
#2	-.00082	.00892	.00644	-.00033	.71561	2.6069	.00349
#3	-.00034	.01047	.00215	-.00033	.70608	2.0346	.00253
#4	-.00232	.00426	-.00000	-.00034	.69177	1.4455	.00205
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.215	.16917	-.00144	23.136	.00894	-.00004	.00651
SDev	.063	.00000	.00502	.300	.00793	.01120	.02216
%RSD	.61297	.00191	347.53	1.2967	88.767	29634.	340.43
#1	10.180	.16917	-.00759	23.003	.00671	-.00234	.00009
#2	10.207	.16917	-.00144	22.969	.02002	-.00225	.00014
#3	10.167	.16917	.00471	22.985	.00121	-.01112	.03849
#4	10.306	.16917	-.00145	23.585	.00781	.01557	-.01269
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03078	3.1865	.00538	.17791	-.00168	.00860	-.00003
SDev	.02778	.0294	.01919	.00129	.00029	.12670	.00013
%RSD	90.260	.92113	356.63	.72427	17.408	1472.6	411.75
#1	-.00393	3.1662	.01391	.17757	-.00191	.05709	-.00019
#2	.05562	3.1778	.01917	.17712	-.00130	-.06269	-.00002

#3	.05062	3.1720	.01144	.17712	-.00191	.16225	.00012
#4	.02079	3.2299	-.02299	.17981	-.00160	-.12223	-.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	.03529						
SDev	.00185						
%RSD	5.2403						
#1	.03625						
#2	.03526						
#3	.03694						
#4	.03272						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: DXHW9
 Run Time: 03/20/01 14:38:39 Operator: WTR
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00326	.02934	.06427	1.5828	.16971	.00013	165.27
SDev	.00238	.01201	.03489	.0192	.00057	.00011	.63
%RSD	73.065	40.936	54.281	1.2140	.33408	83.248	.38335
#1	.00219	.02612	.04164	1.5625	.16999	-.00001	164.64
#2	.00085	.01568	.07499	1.5728	.16999	.00022	165.88
#3	.00641	.04462	.03180	1.5900	.16886	.00022	165.76
#4	.00358	.03095	.10865	1.6061	.16999	.00011	164.81

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.00457	.02145	.02789	36.268	47.623	.03558
SDev	.00135	.00446	.00201	.00143	.077	.184	.00107
%RSD	558.95	97.668	9.3621	5.1215	.21136	.38675	2.9991

#1	.00181	.00107	.01877	.02601	36.228	47.525	.03488
#2	-.00052	.00108	.02199	.02853	36.381	47.861	.03451
#3	.00088	.01040	.02360	.02935	36.252	47.440	.03614
#4	-.00120	.00574	.02145	.02768	36.213	47.668	.03679

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	66.961	.62216	-.00140	90.856	.03343	.04384	.00345
SDev	.185	.00136	.01050	.670	.01030	.00531	.00644
%RSD	.27620	.21859	748.99	.73748	30.826	12.106	186.77

#1	67.013	.62163	-.01525	91.583	.01818	.03926	.00019
#2	67.170	.62375	-.00293	90.981	.04091	.03923	.01311
#3	66.725	.62268	.00321	89.961	.03745	.04850	.00026
#4	66.936	.62059	.00935	90.901	.03716	.04838	.00023

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05356	17.378	-.02002	.99142	-.00907	-.01438	.00712
SDev	.04520	.074	.01437	.00418	.00081	.04375	.00280
%RSD	84.391	.42442	71.789	.42181	8.8933	304.26	39.289
#1	-.04127	17.343	-.02398	.99574	-.00953	-.02494	.00440
#2	-.07555	17.488	-.00022	.99349	-.00984	.04759	.00946

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#3	.00348	17.332	-.02135	.98609	-.00801	-.05540	.00962
#4	-.10090	17.349	-.03451	.99035	-.00892	-.02477	.00502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.07411						
SDev	.00103						
%RSD	1.3909						
#1	.07463						
#2	.07294						
#3	.07525						
#4	.07361						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET

Sample Name: DXHXC

Run Time: 03/20/01 14:41:49

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.43367	.11548	.42991	.08646	.00003	123.93
SDev	.00166	.00743	.05891	.00118	.00046	.00011	.66
%RSD	459.89	1.7133	51.010	.27449	.53229	422.47	.53623
#1	.00263	.44350	.13301	.43051	.08588	.00000	123.14
#2	.00005	.43491	.08416	.43028	.08683	.00012	123.85
#3	.00012	.42640	.05520	.43069	.08683	.00011	124.77
#4	-.00135	.42985	.18956	.42816	.08631	-.00012	123.95

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00146	.00850	.05082	.03080	112.70	19.326	.01519
SDev	.00235	.00195	.00221	.00083	.51	.437	.00048
%RSD	160.88	22.982	4.3434	2.6913	.45659	2.2608	3.1536
#1	-.00143	.00889	.04934	.03009	111.94	19.355	.01555
#2	.00136	.01044	.05364	.03186	112.89	19.843	.01468
#3	-.00440	.00890	.05149	.03105	113.09	19.330	.01564
#4	-.00137	.00578	.04881	.03019	112.89	18.775	.01488

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.817	.14232	.00245	394.26	.03946	.00631	.02247
SDev	.166	.00070	.00309	2.14	.00785	.04834	.01916
%RSD	.37008	.48915	126.01	.54310	19.903	766.54	85.289
#1	44.576	.14159	.00082	392.37	.04357	.02232	.03853
#2	44.936	.14185	.00709	396.19	.02967	-.02287	.03832
#3	44.837	.14294	.00097	392.44	.04760	.06681	.01298
#4	44.917	.14288	.00094	396.03	.03701	-.04103	.00005

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.13850	16.035	-.02476	.88576	-.00198	.01490	.00135
SDev	.09058	.047	.02866	.00387	.00046	.09043	.00235
%RSD	65.404	.29561	115.77	.43734	23.077	606.78	173.36
#1	-.02670	15.964	-.00439	.88034	-.00130	-.11949	.00012
#2	-.20742	16.063	.00362	.88860	-.00221	.07571	.00029

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#3	-.21671	16.057	-.04383	.88559	-.00221	.05759	.00488
#4	-.10316	16.057	-.05444	.88850	-.00221	.04580	.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	5.4318						
SDev	.0185						
%RSD	.34093						
#1	5.4056						
#2	5.4319						
#3	5.4461						
#4	5.4435						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

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Method: QUANMET Sample Name: CCV2-4

Run Time: 03/20/01 14:44:58

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95470	46.567	4.7565	4.7382	4.6537	4.6942	47.508
SDev	.00429	.149	.0481	.0190	.0180	.0193	.108
%RSD	.44888	.31990	1.0108	.40174	.38734	.41208	.22798
#1	.95680	46.652	4.7942	4.7103	4.6674	4.6976	47.378
#2	.95687	46.529	4.7806	4.7502	4.6490	4.6959	47.571
#3	.95687	46.713	4.7647	4.7505	4.6681	4.7150	47.620
#4	.94828	46.375	4.6867	4.7417	4.6301	4.6682	47.465
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	4.9260	4.6907	4.6658	4.6514	47.925	46.576	4.6888
SDev	.0285	.0154	.0086	.0192	.114	.215	.0204
%RSD	.57831	.32841	.18400	.41250	.23781	.46102	.43420
#1	4.9012	4.6931	4.6565	4.6612	47.881	46.607	4.7069
#2	4.9669	4.7007	4.6720	4.6479	47.940	46.851	4.6805
#3	4.9211	4.7008	4.6742	4.6704	48.075	46.506	4.7040
#4	4.9149	4.6683	4.6608	4.6262	47.805	46.338	4.6640
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	46.889	4.6763	4.6980	45.818	4.7447	4.7896	4.8115
SDev	.160	.0108	.0133	.191	.0256	.0358	.0223
%RSD	.34181	.23124	.28286	.41600	.54055	.74788	.46266
#1	46.947	4.6734	4.6795	45.886	4.7167	4.8075	4.8082
#2	46.896	4.6776	4.6980	45.718	4.7615	4.8079	4.8343
#3	47.045	4.6901	4.7041	46.050	4.7709	4.7358	4.8213
#4	46.667	4.6640	4.7102	45.617	4.7299	4.8070	4.7821
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	4.5592	4.8682	4.7936	4.6506	4.6577	9.3241	4.6652
SDev	.0708	.0151	.0587	.0173	.0130	.1587	.0144
%RSD	1.5527	.30932	1.2245	.37176	.27981	1.7018	.30815
#1	4.6174	4.8740	4.8041	4.6625	4.6621	9.1074	4.6665
#2	L4.4637	4.8625	4.7148	4.6461	4.6569	9.4361	4.6776

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#3	4.6081	4.8856	4.7989	4.6657	4.6715	9.4491	4.6719
#4	4.5477	4.8506	4.8567	4.6281	4.6404	9.3038	4.6447
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	4.7176						
SDev	.0213						
%RSD	.45234						
#1	4.6997						
#2	4.7236						
#3	4.7452						
#4	4.7019						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

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Method: QUANMET Sample Name: CCB4

Run Time: 03/20/01 14:48:08

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00212	.02674	.06795	.03718	.00238	.00218	.03156
SDev	.00071	.00348	.03533	.00346	.00022	.00012	.00267
%RSD	33.432	13.007	51.988	9.3079	9.1892	5.6647	8.4624
#1	.00248	.03092	.04273	.03989	.00227	.00208	.03421
#2	.00247	.02581	.06195	.03989	.00227	.00208	.02982
#3	.00106	.02260	.11950	.03628	.00227	.00221	.02877
#4	.00246	.02764	.04760	.03266	.00271	.00233	.03346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00328	.00193	.00362	.00313	.03287	.23355	.00299
SDev	.00235	.00201	.00357	.00142	.00436	.58854	.00114
%RSD	71.574	104.00	98.550	45.475	13.271	251.99	38.040
#1	H.00526	.00270	.00590	.00375	.02912	.56179	.00340
#2	.00003	.00116	.00429	.00458	.02912	.59545	.00433
#3	.00468	-.00041	-.00161	.00125	.03593	-.64174	.00169
#4	.00314	.00426	.00590	.00292	.03730	.41871	.00253
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	.02930	.00209	.00616	.04005	.01063	-.00446	.00326
SDev	.01218	.00060	.00589	.00830	.00799	.02683	.00641
%RSD	41.577	28.757	95.668	20.713	75.179	602.16	196.58
#1	.03263	.00261	.01077	.05206	.01583	-.01115	.01288
#2	.03795	.00157	.01077	.03910	.00355	.03370	-.00005
#3	.01132	.00157	-.00153	.03452	.00406	-.02924	.00008
#4	.03529	.00261	.00462	.03452	.01907	-.01113	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.01107	.01886	-.00525	.00213	.00213	-.02301	.00253
SDev	.04075	.00289	.00817	.00043	.00029	.07134	.00231
%RSD	368.19	15.313	155.53	20.156	13.678	310.01	91.232
#1	-.00611	.02033	.00597	.00179	.00206	-.09791	.00503
#2	-.06073	.01453	-.00461	.00179	.00175	.05197	.00384

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#3	-.01602	.02028	-.01251	.00269	.00236	-.06798	-.00004
#4	.03859	.02029	-.00987	.00224	.00236	.02187	.00131
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	.00127						
SDev	.00097						
%RSD	75.869						
#1	.00124						
#2	.00032						
#3	.00260						
#4	.00093						
Errors	LC Pass						
High	.02000						
Low	-.02000						

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Method: QUANMET Sample Name: DXHXP
 Run Time: 03/20/01 14:51:18 Operator: WTR
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	-.00232	-.00388	-.02872	.03736	.03314	.00022	99.343
SDev	.00176	.01219	.02779	.01247	.00029	.00021	.572
%RSD	75.944	314.05	96.753	33.381	.88062	97.590	.57622
#1	-.00266	-.00135	-.02156	.03599	.03294	.00012	99.983
#2	-.00267	.00386	.00235	.02659	.03312	.00000	99.613
#3	-.00406	-.02180	-.03097	.03171	.03294	.00025	99.097
#4	.00013	.00376	-.06470	.05516	.03356	.00049	98.679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00000	-.00118	.00014	.00066	2.2114	1.4329	.00582
SDev	.00233	.00270	.00154	.00068	.0043	.2908	.00075
%RSD	61568.	229.26	1140.2	103.44	.19385	20.293	12.854
#1	.00073	-.00196	.00215	.00149	2.2153	1.8242	.00512
#2	-.00196	.00271	-.00161	-.00017	2.2091	1.2772	.00532
#3	-.00174	-.00195	.00000	.00065	2.2064	1.1593	.00608
#4	.00298	-.00352	.00000	.00065	2.2146	1.4707	.00675
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	2.8093	.13370	.00337	25.859	.00441	-.00528	.00002
SDev	.0138	.00060	.00308	.148	.00708	.01532	.00008
%RSD	.49265	.44953	91.402	.57134	160.45	289.96	323.12
#1	2.8133	.13422	.00490	25.847	.00377	.01491	.00001
#2	2.7893	.13318	-.00125	25.679	.01377	-.01191	.00014
#3	2.8213	.13422	.00490	25.869	-.00344	-.02101	-.00003
#4	2.8133	.13318	.00490	26.040	.00355	-.00311	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.01167	8.5324	.00028	.52933	-.00625	-.04096	.00009
SDev	.01645	.0055	.01642	.00206	.00063	.10015	.00008
%RSD	141.02	.06500	5774.6	.38896	10.056	244.48	94.008
#1	-.02407	8.5310	-.00958	.52927	-.00618	.03392	.00013
#2	-.00919	8.5252	.01673	.52658	-.00618	.04895	-.00003

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#3	.01066	8.5368	-.01748	.52994	-.00709	-.08584	.00012
#4	-.02407	8.5368	.01147	.53151	-.00557	-.16089	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00468						
SDev	.00216						
%RSD	46.059						
#1	.00664						
#2	.00432						
#3	.00180						
#4	.00597						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHXXH

Run Time: 03/20/01 14:54:27

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .00150	.02859	- .01361	.11559	.02081	.00017	124.01
SDev	.00179	.00982	.02658	.00345	.00029	.00007	1.10
%RSD	119.23	34.333	195.22	2.9814	1.3878	39.283	.89079
#1	- .00220	.03111	.01390	.11194	.02086	.00011	124.34
#2	.00057	.03464	- .03874	.11768	.02042	.00012	125.10
#3	- .00080	.03453	.00427	.11347	.02086	.00023	124.12
#4	- .00359	.01407	- .03389	.11926	.02111	.00023	122.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	- .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	.00321	.01398	.00053	.13209	4.5317	3.6064	.00234
SDev	.00469	.00077	.00191	.00198	.0193	.3994	.00055
%RSD	146.16	5.4861	357.91	1.5022	.42512	11.075	23.259
#1	.00259	.01359	.00214	.13083	4.5179	3.5580	.00253
#2	.00402	.01359	.00214	.13083	4.5138	4.1808	.00301
#3	.00880	.01513	- .00054	.13167	4.5404	3.2802	.00177
#4	- .00259	.01361	- .00161	.13500	4.5547	3.4065	.00205
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	- .00500	- .05000	- .01000	- .02500	- .10000	- 5.0000	- .05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.650	.61813	- .00248	22.119	.01364	.01007	.00665
SDev	.330	.00100	.00308	.572	.00372	.01866	.02221
%RSD	1.4582	.16119	123.97	2.5871	27.296	185.26	334.19
#1	22.462	.61839	- .00095	21.861	.01253	- .01236	.02592
#2	22.374	.61734	- .00710	21.577	.01458	.01457	.01301
#3	22.651	.61943	- .00094	22.132	.00929	.00562	.01306
#4	23.114	.61736	- .00094	22.908	.01817	.03247	- .02540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	- 5.0000	- .01500	- .04000	- 5.0000	- .04000	- .10000	- .06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00307	3.7890	- .00270	1.0460	- .00770	- .06317	.00379
SDev	.04008	.0058	.02632	.0168	.00056	.08409	.00185
%RSD	1304.2	.15308	975.49	1.6084	7.2307	133.12	48.890
#1	.05764	3.7861	- .02762	1.0386	- .00801	- .01425	.00472
#2	.00798	3.7861	.03022	1.0305	- .00709	- .13406	.00101

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#3	-.03165	3.7861	-.01978	1.0455	-.00740	-.13450	.00472
#4	-.02168	3.7977	.00638	1.0695	-.00831	.03014	.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	.13116						
SDev	.00118						
%RSD	.90226						
#1	.13182						
#2	.13247						
#3	.12992						
#4	.13045						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DXHXX

Run Time: 03/20/01 14:57:37

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00252	.05584	.05132	.14757	.03319	.00015	68.033
SDev	.00343	.01261	.00449	.00159	.00038	.00012	.447
%RSD	136.11	22.581	8.7445	1.0742	1.1457	78.237	.65771
#1	.00254	.05828	.05721	.14783	.03312	.00011	68.282
#2	-.00169	.03973	.04792	.14770	.03356	.00000	67.365
#3	.00671	.07035	.05243	.14546	.03268	.00023	68.189
#4	.00252	.05500	.04773	.14931	.03338	.00025	68.295
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00931	.00094	.02473	12.882	5.4601	.00091
SDev	.00396	.00148	.00229	.00160	.055	.4759	.00088
%RSD	848.23	15.870	244.51	6.4538	.42467	8.7169	96.339
#1	.00218	.00892	.00054	.02432	12.928	5.2833	.00034
#2	L-.00539	.00738	-.00215	.02264	12.861	4.8709	.00014
#3	.00177	.01047	.00268	.02597	12.814	5.9061	.00208
#4	.00330	.01047	.00268	.02598	12.925	5.7799	.00110
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.5131	.35154	-.00139	11.356	.01122	-.00643	.00015
SDev	.0745	.00053	.00590	.160	.00648	.02430	.04806
%RSD	.87565	.15023	424.46	1.4133	57.803	378.03	31506.
#1	8.5264	.35129	.00631	11.377	.00921	.02946	-.01265
#2	8.5397	.35127	-.00600	11.534	.00458	-.02444	.00009
#3	8.4065	.35126	-.00601	11.144	.02004	-.01526	.06438
#4	8.5796	.35233	.00015	11.368	.01103	-.01547	-.05121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00543	2.1451	.00285	.78364	-.00374	.01613	.00204
SDev	.02842	.0056	.03497	.00764	.00114	.11924	.00247
%RSD	523.07	.25916	1226.8	.97471	30.544	739.15	120.94
#1	.02946	2.1408	-.04523	.78572	-.00404	.04914	.00372
#2	.00443	2.1465	.02588	.78976	-.00496	.14012	-.00016

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#3	-.02054	2.1524	.03140	.77248	-.00221	.02090	.00460
#4	-.03509	2.1407	-.00065	.78662	-.00374	-.14563	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000
Elem	ZN						
Units	ppm						
Avge	.06234						
SDev	.00162						
%RSD	2.6071						
#1	.06252						
#2	.06415						
#3	.06020						
#4	.06249						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Method: QUANMET Sample Name: DXHXM

Run Time: 03/20/01 15:00:46

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	.06259	-.01168	.02430	.07034	.00018	209.55
SDev	.00280	.01537	.03423	.00171	.00197	.00015	1.17
%RSD	1447.7	24.555	293.00	7.0281	2.8008	86.072	.55890
#1	-.00158	.06177	-.01293	.02663	.07237	.00012	209.12
#2	-.00159	.04465	.03514	.02446	.07168	.00000	208.12
#3	.00400	.08222	-.02261	.02276	.06861	.00035	210.79
#4	-.00160	.06173	-.04634	.02334	.06869	.00023	210.14
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00201	.00191	.00134	.02074	6.9186	3.2234	.01250
SDev	.00318	.00531	.00198	.00159	.0716	.6559	.00121
%RSD	157.99	278.01	147.87	7.6828	1.0343	20.347	9.7208
#1	.00493	-.00043	-.00000	.01950	6.9901	2.6743	.01229
#2	-.00202	-.00352	-.00053	.01949	6.9670	2.6490	.01114
#3	.00100	.00890	.00214	.02283	6.8778	3.9030	.01409
#4	.00414	.00268	.00375	.02115	6.8396	3.6674	.01249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.9370	.16771	.00091	149.63	.00951	.02011	.00332
SDev	.1282	.00087	.00308	5.20	.01159	.03923	.01243
%RSD	1.8484	.51609	339.98	3.4734	121.95	195.11	373.86
#1	7.0695	.16877	-.00062	154.86	.00480	-.01368	.00007
#2	7.0242	.16772	.00553	153.34	-.00455	-.01377	-.01290
#3	6.8244	.16769	-.00064	145.22	.02084	.04952	.01310
#4	6.8298	.16665	-.00064	145.10	.01694	.05835	.01302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	12.145	-.00440	1.0431	-.00953	.04748	.00269
SDev	.06547	.116	.00329	.0259	.00083	.05022	.00239
%RSD	11013.	.95258	74.902	2.4835	8.6656	105.78	88.815
#1	.01577	12.239	-.00111	1.0705	-.00984	.05016	.00117
#2	.08520	12.250	-.00380	1.0600	-.01014	-.00940	.00014

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#3	-.04913	12.054	-.00897	1.0218	-.00831	.03680	.00473
#4	-.05421	12.036	-.00371	1.0203	-.00984	.11237	.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 .06922
SDev .00134
%RSD 1.9408

#1 .06787
#2 .06885
#3 .07108
#4 .06909

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXK1WB

Run Time: 03/20/01 15:03:56

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00175	.00681	.02865	.00004	.00024	.00012	.07433
SDev	.00242	.01369	.04023	.00000	.00011	.00010	.01383
%RSD	138.15	201.05	140.40	6.4665	45.866	81.170	18.605
#1	-.00032	-.00649	.07181	.00003	.00034	.00011	.07825
#2	.00105	.00214	-.02398	.00003	.00008	.00000	.05997
#3	.00525	.02584	.04284	.00004	.00026	.00024	.09175
#4	.00103	.00575	.02394	.00004	.00026	.00014	.06734
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	-.00129	-.00077	.00094	.00146	.01720	.34086	.00027
SDev	.00321	.00149	.00225	.00080	.00264	.38796	.00082
%RSD	248.17	192.23	239.65	54.759	15.347	113.82	308.28
#1	-.00467	-.00038	.00429	.00208	.01685	.73853	.00146
#2	.00215	-.00195	-.00000	.00125	.01481	.06523	-.00042
#3	.00063	.00116	.00000	.00209	.02094	.60387	.00006
#4	-.00329	-.00194	-.00054	.00042	.01618	-.04419	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	-.00052	.00000	.04310	.00562	.02467	-.00318
SDev	.00923	.00000	.01051	.00908	.00383	.02430	.01617
%RSD	1385.6	.70489	466610.	21.072	68.159	98.497	508.79
#1	.01398	-.00051	.00462	.04596	.00964	.04262	-.02566
#2	-.00200	-.00052	-.00154	.03147	.00745	.03362	.00011
#3	-.00200	-.00051	.01077	.05321	.00465	-.01122	-.00006
#4	-.00732	-.00052	-.01384	.04177	.00076	.03364	.01290
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	.00626	.06953	.00657	.00008	-.00008	-.06770	.00030
SDev	.02482	.00333	.01749	.00006	.00070	.07244	.00319
%RSD	396.51	4.7835	266.19	70.711	923.76	106.99	1070.0
#1	-.00615	.06667	.01635	.00013	-.00069	-.00778	.00368
#2	-.00616	.06663	-.01776	.00000	-.00069	-.03768	-.00004

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#3	-.00614	.07244	.02171	.00009	.00053	-.17270	.00146
#4	.04349	.07238	.00598	.00009	.00053	-.05266	-.00391

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 -.00189
SDev .00262
%RSD 139.09

#1 .00193
#2 -.00361
#3 -.00226
#4 -.00360

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXK1WC
 Run Time: 03/20/01 15:07:05 Operator: WTR
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.04789	1.8910	1.9235	.95116	1.9067	.04821	48.319
SDev	.00182	.0142	.0738	.01739	.0133	.00035	.260
%RSD	3.7983	.75008	3.8349	1.8280	.69563	.72086	.53883
#1	.04860	1.9041	2.0108	.94397	1.9218	.04849	48.426
#2	.05001	1.9009	1.8862	.94248	1.9062	.04848	48.636
#3	.04716	1.8856	1.8434	.94100	1.9091	.04814	48.130
#4	.04579	1.8735	1.9536	.97718	1.8896	.04775	48.083
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 Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.05404	.47701	.18939	.24249	1.0332	48.213	.97102
SDev	.00357	.00311	.00573	.00180	.0063	.694	.00634
%RSD	6.6023	.65210	3.0227	.74214	.60672	1.4385	.65318
#1	.04878	.47856	.18885	.24416	1.0361	48.686	.97800
#2	.05566	.47855	.19689	.24333	1.0368	48.896	.96942
#3	.05505	.47234	.18295	.24249	1.0361	47.432	.97358
#4	.05666	.47858	.18885	.23999	1.0238	47.836	.96309
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 Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	49.380	.47367	.92279	48.364	.48738	.48265	.48348
SDev	.299	.00248	.00923	.326	.01679	.03712	.02951
%RSD	.60572	.52277	.99982	.67461	3.4443	7.6920	6.1028
#1	49.679	.47524	.93355	48.733	.50828	.52307	.45798
#2	49.538	.47627	.91510	48.337	.48645	.48722	.50908
#3	49.307	.47211	.91510	48.441	.48761	.43306	.45787
#4	48.995	.47107	.92740	47.944	.46718	.48724	.50899
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 Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	1.8836	9.6485	1.8469	.93821	.92103	1.9459	.47452
SDev	.0583	.0690	.0250	.00581	.00571	.1865	.00396
%RSD	3.0962	.71563	1.3544	.61942	.62029	9.5844	.83519
#1	1.9630	9.7297	1.8257	.94467	.92644	1.7547	.47568
#2	1.8538	9.6602	1.8812	.93880	.92400	2.1893	.47878

#3	1.8290	9.6427	1.8494	.93884	.92034	1.9796	.46927
#4	1.8885	9.5616	1.8312	.93054	.91333	1.8598	.47434
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	.47834						
SDev	.00624						
%RSD	1.3035						
#1	.48109						
#2	.48576						
#3	.47435						
#4	.47216						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DXHXV

Operator: WTR

Run Time: 03/20/01 15:10:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	.06088	.05395	.12293	.03702	.00009	81.293
SDev	.00179	.00802	.01938	.00211	.00029	.00006	.222
%RSD	177.83	13.171	35.925	1.7176	.78012	67.174	.27315
#1	-.00106	.05312	.05150	.12484	.03707	.00011	81.138
#2	.00309	.06860	.02760	.12468	.03663	.00012	81.623
#3	.00170	.05486	.07079	.12112	.03707	.00000	81.209
#4	.00029	.06694	.06592	.12109	.03732	.00012	81.202
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00192	.00891	.00469	.21506	40.101	6.2112	.00091
SDev	.00182	.00381	.00080	.00198	.035	.1965	.00104
%RSD	95.113	42.705	17.131	.92251	.08610	3.1631	113.93
#1	.00449	.01046	.00590	.21715	40.151	6.2091	.00138
#2	.00108	.01358	.00429	.21298	40.075	6.4195	.00217
#3	.00029	.00581	.00429	.21381	40.095	5.9482	.00006
#4	.00182	.00580	.00429	.21631	40.083	6.2680	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.237	.29821	.00525	13.837	.01110	.04935	.00008
SDev	.059	.00085	.00589	.130	.00388	.01356	.00006
%RSD	.32183	.28678	112.22	.94161	34.969	27.476	86.027
#1	18.285	.29927	.00987	13.941	.01377	.06511	.00009
#2	18.152	.29821	.00371	13.647	.00539	.05623	-.00001
#3	18.264	.29717	.00986	13.888	.01326	.03804	.00008
#4	18.245	.29821	-.00244	13.872	.01201	.03803	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.08495	2.3927	-.00052	.61598	-.00221	-.01170	.00133
SDev	.03481	.0058	.02195	.00326	.00066	.05897	.00245
%RSD	40.975	.24105	4197.5	.52885	29.797	504.21	184.79
#1	-.03887	2.3841	-.00512	.61940	-.00313	-.04248	.00500
#2	-.07883	2.3956	.03171	.61155	-.00160	.06361	.00010

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#3	-.10359	2.3956	-.01566	.61649	-.00221	-.07153	.00026
#4	-.11852	2.3956	-.01303	.61649	-.00191	.00362	-.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	.15467
SDev	.00278
%RSD	1.7972

#1	.15075
#2	.15470
#3	.15696
#4	.15628

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVP5

Operator: WTR

Run Time: 03/20/01 15:13:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00190	.01708	.03021	.03045	.00769	.00012	16.748
SDev	.00239	.00959	.04501	.00611	.00034	.00001	.020
%RSD	126.05	56.116	148.99	20.073	4.4733	6.1309	.11805
#1	.00155	.01917	-.02371	.03933	.00753	.00012	16.775
#2	.00293	.02949	.06727	.02577	.00797	.00012	16.737
#3	.00435	.01235	.00987	.02722	.00797	.00011	16.750
#4	-.00125	.00733	.06740	.02948	.00727	.00012	16.730
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00051	.00272	.00174	.04422	8.3892	1.3634	.00060
SDev	.00196	.00458	.00193	.00144	.0365	.4329	.00147
%RSD	386.31	168.37	110.66	3.2644	.43498	31.750	242.89
#1	.00103	-.00195	.00054	.04297	8.4285	1.3108	.00025
#2	-.00066	.00272	.00214	.04380	8.3666	1.1593	.00101
#3	.00083	.00893	.00429	.04630	8.3509	1.9841	.00233
#4	-.00322	.00117	-.00000	.04380	8.4108	.99943	-.00118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7428	.06229	-.00351	2.7870	.00623	-.00281	.00007
SDev	.0127	.00053	.00355	.0257	.00440	.00872	.00005
%RSD	.33880	.84701	101.04	.92150	70.603	310.65	60.224
#1	3.7508	.06308	-.00043	2.7968	.00803	-.01419	.00005
#2	3.7348	.06202	-.00659	2.7755	.00884	.00393	.00014
#3	3.7295	.06202	-.00044	2.7583	.00840	.00413	.00007
#4	3.7561	.06203	-.00659	2.8174	-.00035	-.00510	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00714	.47364	.00428	.12637	-.00038	-.00954	.00110
SDev	.03738	.02649	.01235	.00107	.00043	.14304	.00243
%RSD	523.30	5.5925	288.35	.84969	113.14	1498.6	220.56
#1	-.05915	.51273	.00955	.12755	-.00038	.05734	-.00001
#2	.02009	.46638	-.01151	.12598	.00023	-.06164	-.00016

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#3	.02004	.46064	.01744	.12508	-.00069	-.18138	.00474
#4	-.00956	.45479	.00165	.12688	-.00069	.14750	-.00017

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

Elem	ZN
Units	ppm
Avge	.03080
SDev	.00144
%RSD	4.6712

#1	.02964
#2	.03031
#3	.03290
#4	.03033

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVS

Operator: WTR

Run Time: 03/20/01 15:16:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04933	1.9556	1.9756	1.0340	1.9107	.04739	129.58
SDev	.00079	.0042	.0414	.0230	.0038	.00014	.38
%RSD	1.5933	.21553	2.0942	2.2202	.20031	.29020	.29423
#1	.04866	1.9549	2.0365	1.0141	1.9091	.04750	130.02
#2	.05002	1.9502	1.9553	1.0148	1.9062	.04727	129.70
#3	.04864	1.9569	1.9647	1.0482	1.9150	.04752	129.49
#4	.05000	1.9603	1.9457	1.0589	1.9124	.04727	129.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05340	.47854	.19101	.44040	38.514	54.104	.95958
SDev	.00379	.00284	.00248	.00172	.057	.475	.00486
%RSD	7.0914	.59282	1.2970	.38982	.14794	.87734	.50611
#1	.04877	.48011	.19315	.43895	38.566	54.619	.95685
#2	.05190	.47700	.19315	.43894	38.487	53.795	.95437
#3	.05588	.48164	.18886	.44228	38.557	54.384	.96509
#4	.05704	.47543	.18886	.44143	38.447	53.618	.96199
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.045	.75872	.94307	61.683	.49279	.56190	.49928
SDev	.150	.00190	.01051	.265	.01064	.00458	.02847
%RSD	.22399	.25003	1.1142	.43035	2.1596	.81573	5.7030
#1	67.080	.75665	.95692	61.553	.49594	.56419	.50891
#2	66.880	.75975	.93230	61.406	.50624	.56415	.52180
#3	67.234	.76081	.93846	62.020	.48211	.56423	.50884
#4	66.987	.75766	.94460	61.751	.48688	.55502	.45755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9021	12.185	1.9151	1.5274	.93178	1.9110	.47177
SDev	.0666	.039	.0426	.0027	.00162	.1743	.00226
%RSD	3.5026	.31881	2.2237	.17471	.17422	9.1211	.47869
#1	1.9420	12.221	1.8803	1.5269	.93284	2.0451	.47509
#2	1.9368	12.157	1.9725	1.5243	.93010	1.7916	.47091

#3	1.9271	12.215	1.9224	1.5308	.93345	2.0752	.47106
#4	1.8026	12.146	1.8854	1.5277	.93071	1.7323	.47003

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

Elem ZN
Units ppm
Avge .62315
SDev .00355
%RSD .56900

#1 .62671
#2 .62313
#3 .62443
#4 .61831

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVD

Operator: WTR

Run Time: 03/20/01 15:19:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04658	1.9513	1.9399	1.0479	1.9417	.04810	127.59
SDev	.00371	.0146	.0609	.0299	.0135	.00027	.96
%RSD	7.9583	.74649	3.1400	2.8528	.69434	.55811	.75265
#1	.04979	1.9636	1.8510	1.0738	1.9507	.04837	128.54
#2	.04271	1.9435	1.9713	1.0127	1.9535	.04826	126.61
#3	.04971	1.9636	1.9519	1.0335	1.9240	.04777	128.26
#4	.04411	1.9347	1.9857	1.0717	1.9385	.04801	126.93
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05025	.46842	.18658	.44295	37.179	54.472	.99180
SDev	.00271	.00270	.00198	.00280	.137	.382	.01417
%RSD	5.3983	.57582	1.0608	.63312	.36864	.70075	1.4286
#1	.05255	.46918	.18886	.44464	37.378	54.527	.99605
#2	.05015	.46453	.18403	.44460	37.092	54.779	1.0070
#3	.05182	.47076	.18672	.43879	37.161	53.921	.97299
#4	.04646	.46921	.18671	.44377	37.086	54.662	.99119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.716	.75290	.93828	63.286	.46887	.52613	.50236
SDev	.324	.00290	.01330	.669	.01386	.03900	.00729
%RSD	.47856	.38515	1.4171	1.0570	2.9566	7.4121	1.4506
#1	68.055	.75633	.94446	63.529	.46807	.56427	.50863
#2	67.852	.75001	.91982	63.928	.48682	.55524	.49629
#3	67.293	.75420	.95058	62.354	.46763	.49252	.50869
#4	67.663	.75106	.93827	63.334	.45299	.49250	.49581
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8508	12.174	1.8742	1.5510	.93673	1.8830	.47105
SDev	.0210	.059	.0310	.0088	.00375	.0802	.00250
%RSD	1.1335	.48240	1.6565	.56915	.39996	4.2573	.53054
#1	1.8588	12.261	1.9170	1.5580	.94230	1.9286	.47477
#2	1.8728	12.145	1.8432	1.5577	.93559	1.9631	.46939

#3	1.8482	12.157	1.8722	1.5394	.93437	1.7821	.47017
#4	1.8232	12.134	1.8643	1.5490	.93467	1.8582	.46986
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .61333
SDev .00482
%RSD .78655

#1 .61712
#2 .61773
#3 .61037
#4 .60811

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-5

Operator: WTR

Run Time: 03/20/01 15:22:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96256	47.855	4.8329	4.8726	4.8475	4.8504	47.135
SDev	.00316	.123	.0706	.0089	.0182	.0168	.159
%RSD	.32829	.25765	1.4602	.18362	.37446	.34647	.33692
#1	.96581	47.920	4.8296	4.8821	4.8592	4.8627	47.276
#2	.95868	47.961	4.8920	4.8783	4.8612	4.8609	46.927
#3	.96143	47.681	4.8753	4.8637	4.8217	4.8262	47.240
#4	.96430	47.856	4.7347	4.8664	4.8480	4.8516	47.096
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	4.9063	4.7301	4.6747	4.8524	48.640	48.101	4.9604
SDev	.0239	.0184	.0158	.0164	.089	.135	.0240
%RSD	.48761	.38851	.33765	.33783	.18337	.28086	.48448
#1	4.8812	4.7566	4.6961	4.8562	48.763	47.937	4.9585
#2	4.8969	4.7286	4.6586	4.8662	48.602	48.046	4.9903
#3	4.9095	4.7177	4.6747	4.8287	48.554	48.189	4.9316
#4	4.9377	4.7176	4.6693	4.8587	48.642	48.232	4.9612
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.220	4.7129	4.7473	48.077	4.8318	4.7786	4.9051
SDev	.176	.0115	.0112	.155	.0052	.0314	.0540
%RSD	.36442	.24305	.23642	.32181	.10745	.65634	1.1019
#1	48.369	4.7298	4.7350	48.128	4.8351	4.7636	4.9246
#2	48.292	4.7058	4.7411	48.202	4.8242	4.8256	4.8989
#3	47.967	4.7058	4.7534	47.851	4.8352	4.7625	4.8342
#4	48.254	4.7100	4.7596	48.126	4.8326	4.7626	4.9627
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	4.7303	4.9717	4.8437	4.8197	4.7636	9.5822	4.7290
SDev	.1763	.0609	.0994	.0138	.0113	.1497	.0112
%RSD	3.7261	1.2255	2.0530	.28580	.23788	1.5622	.23756
#1	4.7046	5.0371	4.7543	4.8298	4.7752	9.7074	4.7450
#2	4.9771	4.8978	4.7726	4.8274	4.7664	9.6203	4.7238

#3	4.5600	4.9499	4.9672	4.7996	4.7481	9.6361	4.7194
#4	4.6794	5.0021	4.8808	4.8220	4.7649	9.3650	4.7278

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 4.7523
SDev .0047
%RSD .09813

#1 4.7587
#2 4.7521
#3 4.7510
#4 4.7475

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB5

Operator: WTR

Run Time: 03/20/01 15:26:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.01521	.01418	.03353	.00151	.00125	.02249
SDev	.00379	.01251	.06904	.00181	.00052	.00048	.00900
%RSD	355.97	82.212	486.70	5.3958	34.651	37.956	40.015
#1	.00247	.01736	-.08164	.03260	.00122	.00072	.01435
#2	.00245	.02244	.03811	.03624	.00114	.00098	.01786
#3	.00388	.02410	.01885	.03263	.00227	.00171	.03495
#4	-.00454	-.00305	.08142	.03263	.00140	.00160	.02281
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	.00389	.00038	.00322	.00229	.01533	.38084	.00235
SDev	.00078	.00269	.00277	.00125	.00668	.41039	.00134
%RSD	20.079	715.96	85.977	54.618	43.600	107.76	56.854
#1	.00408	.00271	.00644	.00292	.00869	.79744	.00377
#2	.00274	-.00195	.00000	.00125	.01141	.35138	.00121
#3	.00439	.00270	.00429	.00375	.02367	.54495	.00321
#4	.00436	-.00196	.00215	.00125	.01754	-.17043	.00121
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	.02797	.00079	.00769	.02146	.00661	-.00002	-.01286
SDev	.01974	.00052	.00355	.00713	.00614	.02241	.02775
%RSD	70.577	66.401	46.180	33.239	92.833	106740.	215.85
#1	.03263	.00052	.00461	.01392	.00605	-.01116	-.00002
#2	.01132	.00053	.01077	.02613	.00847	.03359	-.01280
#3	.05393	.00157	.01077	.02880	.01333	-.01115	.01281
#4	.01398	.00053	.00462	.01697	-.00140	-.01137	-.05143
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	.02239	.06086	.00981	.00126	.00091	-.02274	.00257
SDev	.03449	.00822	.02383	.00047	.00084	.05597	.00275
%RSD	154.03	13.505	242.83	37.418	91.793	246.17	106.71
#1	-.00618	.06668	.01382	.00090	.00053	-.02267	.00487
#2	.03851	.06083	-.02045	.00090	.00145	-.08259	.00027

#3	-.00613	.06668	.03755	.00189	.00175	.05203	.00502
#4	.06335	.04925	.00834	.00135	-.00008	-.03772	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge -.00002
SDev .00137
%RSD 6532.4

#1 .00032
#2 .00030
#3 .00125
#4 -.00196

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXHXX

Operator: WTR

Run Time: 03/20/01 15:29:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00156	.01915	-.00484	.18515	.06101	.00039	101.70
SDev	.00181	.01206	.02750	.00882	.00061	.00007	.63
%RSD	116.22	62.964	568.00	4.7647	1.0026	16.787	.62231
#1	.00085	.00723	-.02029	.18848	.06160	.00049	101.57
#2	-.00055	.01235	.03235	.18336	.06142	.00037	100.88
#3	.00366	.02248	-.03003	.17394	.06072	.00036	101.99
#4	.00227	.03453	-.00140	.19481	.06029	.00036	102.35
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	-.00158	.00107	.01536	5.3663	4.3007	.01208
SDev	.00128	.00344	.00124	.00105	.0121	.3660	.00086
%RSD	439.93	217.53	115.75	6.8327	.22612	8.5097	7.1346
#1	-.00169	-.00507	.00215	.01515	5.3788	4.1808	.01133
#2	-.00058	-.00352	-.00000	.01432	5.3747	4.0798	.01133
#3	.00141	.00269	.00215	.01682	5.3570	4.8457	.01277
#4	-.00031	-.00042	-.00000	.01516	5.3549	4.0966	.01288
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.0380	.09502	-.00084	130.36	.01204	-.00414	.00015
SDev	.0502	.00060	.00502	2.15	.00907	.00732	.00008
%RSD	.83180	.63082	601.39	1.6487	75.281	176.61	54.052
#1	6.0733	.09554	-.00083	131.41	.00943	.00474	.00013
#2	6.0733	.09450	-.00083	132.71	.00053	-.01318	.00006
#3	6.0387	.09450	.00531	129.51	.02105	-.00402	.00015
#4	5.9668	.09553	-.00699	127.81	.01715	-.00412	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02657	11.583	-.01382	.58804	-.00579	.01493	.00206
SDev	.04319	.022	.02174	.00596	.00080	.08218	.00242
%RSD	162.51	.19303	157.30	1.0144	13.842	550.41	117.80
#1	.01070	11.590	-.03553	.59136	-.00648	-.04516	-.00002
#2	-.06875	11.596	-.02500	.59406	-.00648	-.00015	-.00002

#3	-.05887	11.596	.01447	.58617	-.00526	-.02994	.00370
#4	.01063	11.549	-.00922	.58056	-.00496	.13498	.00457

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

Elem	ZN
Units	ppm
Avge	.03260
SDev	.00080
%RSD	2.4679

#1	.03162
#2	.03327
#3	.03226
#4	.03324

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHX1

Operator: WTR

Run Time: 03/20/01 15:32:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00021	.00422	.03109	.07513	.06160	.00015	117.54
SDev	.00135	.01210	.04492	.00930	.00000	.00006	.25
%RSD	639.95	287.08	144.48	12.379	.00000	39.940	.21330
#1	-.00127	-.00467	.07908	.06167	.06160	.00012	117.83
#2	.00154	.01916	.05968	.08295	.06160	.00024	117.63
#3	-.00127	-.00653	-.00710	.07721	.06160	.00012	117.25
#4	.00015	.00890	-.00730	.07869	.06160	.00011	117.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00133	.00114	.00027	.00211	2.1681	3.9578	.01036
SDev	.00167	.00220	.00292	.00080	.0037	.3086	.00059
%RSD	125.46	193.83	1092.0	37.844	.16887	7.7970	5.6588
#1	.00301	.00113	-.00215	.00149	2.1724	3.7095	.01105
#2	-.00088	.00425	.00375	.00315	2.1690	4.4080	.01038
#3	.00213	-.00042	.00161	.00148	2.1676	3.8357	.01038
#4	.00108	-.00042	-.00215	.00232	2.1635	3.8778	.00962
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3096	.08767	.00182	95.918	.00528	-.01416	.01930
SDev	.0385	.00099	.00615	.922	.00773	.00863	.02219
%RSD	.72505	1.1342	337.66	.96120	146.38	60.937	114.95
#1	5.3382	.08845	-.00125	96.812	.01098	-.02092	.00012
#2	5.3196	.08845	-.00125	95.545	.00569	-.01184	.01291
#3	5.3276	.08637	.01105	96.516	.01025	-.02094	.01283
#4	5.2530	.08741	-.00125	94.798	-.00577	-.00293	.05134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00684	8.8786	.00629	.66915	-.00740	-.07430	.00212
SDev	.05505	.0428	.00770	.00409	.00056	.07576	.00236
%RSD	805.13	.48223	122.54	.61119	7.5288	101.97	111.26
#1	-.07881	8.9076	.01147	.67338	-.00770	-.05561	-.00004
#2	.05522	8.8960	-.00164	.66714	-.00709	.01932	.00353

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#3	-.00436	8.8960	.01416	.67163	-.00801	-.16044	.00028
#4	.00059	8.8149	.00115	.66445	-.00679	-.10046	.00471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00371
SDev	.00099
%RSD	26.767

#1	.00270
#2	.00340
#3	.00366
#4	.00507

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVF

Operator: WTR

Run Time: 03/20/01 15:35:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00082	.00382	.02528	.07192	.03647	.00021	74.167
SDev	.00196	.00629	.02747	.00210	.00059	.00011	.306
%RSD	238.50	164.68	108.64	2.9130	1.6061	52.926	.41214

#1	-.00220	-.00311	.00970	.07156	.03732	.00035	74.282
#2	-.00083	.00734	.02888	.06938	.03637	.00012	73.972
#3	-.00221	.00040	.06239	.07446	.03601	.00023	74.544
#4	.00195	.01066	.00017	.07228	.03619	.00012	73.872

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00134	.00115	-.00000	.00254	4.1987	6.1544	.00122
SDev	.00383	.00220	.00266	.00215	.0283	.5894	.00084
%RSD	286.39	190.37	159470.	84.726	.67444	9.5775	69.245

#1	L-.00658	-.00039	-.00000	.00337	4.2305	6.2428	.00098
#2	-.00058	.00115	-.00215	.00004	4.2067	5.7883	.00045
#3	-.00080	.00426	.00375	.00504	4.1951	6.9497	.00242
#4	.00261	-.00041	-.00161	.00170	4.1624	5.6368	.00101

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.296	.22470	-.00099	14.285	.00940	.00758	.00330
SDev	.190	.00135	.00502	.199	.00576	.03476	.06143
%RSD	.98674	.60094	508.45	1.3957	61.339	458.59	1860.9

#1	19.553	.22627	.00517	14.539	.00627	-.00371	.00002
#2	19.287	.22418	-.00714	14.344	.00699	-.01273	-.05121
#3	19.249	.22522	-.00099	14.157	.01803	-.01258	-.02554
#4	19.095	.22313	-.00099	14.099	.00630	.05933	.08993

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01163	2.0741	.01303	.56398	-.00480	-.00006	.00235
SDev	.07168	.0333	.01354	.00579	.00053	.08558	.00283
%RSD	616.53	1.6056	103.91	1.0271	10.997	143500.	120.77

#1	.01702	2.0944	.01697	.57122	-.00526	.07813	.00487
#2	-.06745	2.0828	.00622	.56561	-.00435	.06353	-.00018

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#3	.07648	2.0944	.03002	.56135	-.00526	-.04126	.00473
#4	-.07256	2.0248	-.00109	.55776	-.00435	-.10064	-.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	.00759
SDev	.00139
%RSD	18.252

#1	.00840
#2	.00552
#3	.00835
#4	.00810

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVP5F

Operator: WTR

Run Time: 03/20/01 15:38:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00124	.00129	.03616	.04673	.00749	.00006	15.310
SDev	.00198	.00861	.04142	.01392	.00009	.00007	.075
%RSD	159.98	670.13	114.55	29.794	1.2048	115.47	.49099
#1	-.00016	.00726	.05168	.05243	.00753	.00012	15.264
#2	.00403	.00548	.08521	.05607	.00753	.00012	15.422
#3	-.00016	-.01147	.01831	.02601	.00735	.00000	15.272
#4	.00124	.00386	-.01055	.05244	.00753	.00000	15.280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00194	.00080	.00155	.86544	1.3129	.00068
SDev	.00068	.00200	.00128	.00042	.00441	.0982	.00082
%RSD	292.83	103.40	158.81	26.796	.51014	7.4824	121.67
#1	.00014	-.00039	.00054	.00134	.86136	1.2940	.00034
#2	-.00069	.00116	.00268	.00218	.87021	1.3613	.00188
#3	.00086	.00427	-.00000	.00135	.86204	1.4118	.00042
#4	.00061	.00272	-.00000	.00135	.86817	1.1846	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9213	.04677	.00011	2.8393	.00355	-.00024	.00006
SDev	.0087	.00052	.00308	.0166	.00820	.02240	.01056
%RSD	.22184	1.1155	2714.5	.58469	231.01	9314.7	16843.
#1	3.9213	.04650	-.00142	2.8449	-.00786	.03336	-.01295
#2	3.9213	.04755	.00473	2.8163	.00870	-.01147	.01290
#3	3.9106	.04651	-.00142	2.8403	.01024	-.01139	.00014
#4	3.9319	.04651	-.00142	2.8556	.00311	-.01145	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05934	.42727	-.01437	.11465	-.00114	.01682	.00000
SDev	.04081	.00989	.03452	.00043	.00039	.05124	.00008
%RSD	68.769	2.3157	240.24	.37462	34.427	304.55	1761.7
#1	.00147	.41424	.02703	.11477	-.00160	.06936	-.00003
#2	-.07298	.43162	-.01761	.11432	-.00069	-.05068	.00012

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#3	-.08293	.42583	-.00976	.11432	-.00130	.00936	-.00004
#4	-.08291	.43741	-.05713	.11521	-.00099	.03925	-.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	.00161
SDev	.00156
%RSD	96.899

#1	.00286
#2	.00281
#3	.00118
#4	-.00042

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVSF

Operator: WTR

Run Time: 03/20/01 15:41:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04911	1.9007	1.9070	1.0766	1.9242	.04774	125.76
SDev	.00310	.0050	.0799	.0163	.0188	.00034	.54
%RSD	6.3043	.26410	4.1871	1.5151	.97524	.70908	.42708
#1	.05086	1.9075	1.9967	1.0848	1.9241	.04789	126.30
#2	.04806	1.8956	1.8724	1.0848	1.9174	.04752	125.50
#3	.04527	1.8989	1.8148	1.0848	1.9499	.04814	125.13
#4	.05225	1.9007	1.9442	1.0522	1.9054	.04740	126.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.05119	.46533	.18698	.24064	5.1614	54.413	.96787
SDev	.00185	.00447	.00198	.00240	.0225	.470	.01343
%RSD	3.6122	.96012	1.0601	.99624	.43635	.86438	1.3876
#1	.04901	.46455	.18832	.24127	5.1851	53.980	.96475
#2	.05350	.46611	.18457	.23876	5.1422	54.308	.96430
#3	.05139	.47074	.18618	.24377	5.1763	55.082	.98697
#4	.05087	.45991	.18886	.23876	5.1422	54.283	.95547
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	69.037	.69784	.93409	63.022	.48757	.49440	.50891
SDev	.499	.00255	.00502	.781	.01087	.01268	.03140
%RSD	.72220	.36567	.53786	1.2393	2.2304	2.5647	6.1701
#1	69.133	.70096	.93409	62.946	.49970	.47646	.54740
#2	68.787	.69471	.93409	62.771	.48101	.49443	.50882
#3	69.690	.69784	.94024	64.110	.47616	.50353	.50892
#4	68.539	.69783	.92794	62.262	.49343	.50317	.47049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8755	11.970	1.9027	1.5049	.93345	1.8646	.46976
SDev	.0787	.068	.0561	.0123	.00474	.0867	.00012
%RSD	4.1954	.57047	2.9508	.81740	.50825	4.6524	.02650
#1	1.9165	11.966	1.9581	1.5056	.93589	1.9617	.46976
#2	1.9114	11.949	1.9316	1.5006	.93132	1.7525	.46975

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#3	1.9165	12.064	1.8290	1.5214	.93864	1.8569	.46991
#4	1.7575	11.902	1.8920	1.4922	.92796	1.8875	.46961
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.48400
SDev	.00533
%RSD	1.1012

#1	.48956
#2	.48085
#3	.48734
#4	.47824

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXVDF

Operator: WTR

Run Time: 03/20/01 15:45:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04944	1.8662	1.8727	1.0521	1.8820	.04673	125.58
SDev	.00197	.0118	.0405	.0000	.0133	.00023	.40
%RSD	3.9846	.63364	2.1620	.00382	.70750	.48783	.31820
#1	.04946	1.8803	1.8821	1.0522	1.8971	.04703	125.82
#2	.05222	1.8717	1.8487	1.0521	1.8822	.04655	125.06
#3	.04802	1.8565	1.9255	1.0521	1.8647	.04655	125.49
#4	.04806	1.8563	1.8344	1.0521	1.8840	.04678	125.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05172	.46810	.18457	.23627	5.1183	53.260	.93514
SDev	.00519	.00367	.00044	.00289	.0237	.076	.01090
%RSD	10.026	.78317	.23670	1.2233	.46294	.14280	1.1658
#1	.05346	.47079	.18457	.23877	5.1469	53.222	.94925
#2	.05369	.46771	.18404	.23377	5.1060	53.231	.93761
#3	.05565	.46306	.18457	.23376	5.0931	53.214	.92422
#4	.04408	.47084	.18511	.23877	5.1271	53.374	.92948
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.839	.69211	.93562	61.236	.48318	.48330	.51860
SDev	.392	.00248	.00589	.472	.00533	.03055	.02199
%RSD	.57845	.35865	.62954	.77108	1.1039	6.3202	4.2403
#1	68.292	.69471	.93409	61.778	.48446	.44065	.49603
#2	67.730	.69054	.94023	61.331	.49020	.48552	.50895
#3	67.362	.68950	.92793	60.632	.47896	.51241	.54754
#4	67.972	.69367	.94024	61.205	.47910	.49461	.52188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8592	11.805	1.8673	1.4711	.91676	1.8540	.46742
SDev	.0364	.087	.0636	.0091	.00517	.0074	.00279
%RSD	1.9582	.73735	3.4047	.62003	.56415	.39745	.59629
#1	1.8568	11.885	1.9421	1.4816	.92309	1.8573	.46975
#2	1.8319	11.769	1.8949	1.4710	.91485	1.8430	.46516

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#3	1.8368	11.699	1.8319	1.4594	.91089	1.8582	.46485
#4	1.9114	11.867	1.8002	1.4726	.91821	1.8576	.46991

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

Elem	ZN
Units	ppm
Avge	.48135
SDev	.00251
%RSD	.52139

#1	.48285
#2	.47921
#3	.47924
#4	.48411

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXXF

Operator: WTR

Run Time: 03/20/01 15:48:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.00807	-.00250	.18070	.05599	.00005	100.53
SDev	.00255	.01540	.03864	.00212	.00050	.00006	.26
%RSD	2464.2	190.91	1548.3	1.1747	.89994	115.47	.25420
#1	-.00151	.00044	.01317	.18029	.05565	.00000	100.81
#2	-.00289	.00209	-.05397	.18325	.05642	.00011	100.62
#3	.00270	.03108	-.00631	.17813	.05547	.00011	100.20
#4	.00128	-.00134	.03712	.18114	.05642	.00000	100.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00114	-.00000	.00179	1.0946	4.0461	.01100
SDev	.00363	.00220	.00331	.00083	.0051	.4981	.00063
%RSD	884.52	193.07	252910.	46.676	.46691	12.309	5.6975
#1	-.00315	-.00041	-.00429	.00054	1.0983	3.3476	.01125
#2	-.00116	.00114	.00053	.00220	1.0929	4.5090	.01114
#3	.00060	.00425	.00375	.00220	1.0881	4.0798	.01010
#4	.00535	-.00043	.00000	.00220	1.0990	4.2481	.01153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9801	.09024	.00014	127.45	.00631	-.01157	.00328
SDev	.0488	.00085	.00308	1.48	.00283	.00006	.00642
%RSD	.81559	.94246	2146.2	1.1591	44.863	.47587	195.82
#1	5.9854	.09128	-.00139	128.27	.00539	-.01162	.00007
#2	5.9908	.09024	-.00139	127.38	.00325	-.01157	.00005
#3	5.9135	.08920	-.00140	125.41	.01002	-.01150	.00008
#4	6.0307	.09025	.00476	128.76	.00657	-.01160	.01291
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00096	11.011	.00674	.57355	-.00564	-.03895	.00237
SDev	.00743	.069	.01639	.00505	.00063	.10594	.00270
%RSD	775.76	.62676	243.09	.88063	11.144	271.98	113.66
#1	-.00275	11.040	.01660	.57647	-.00618	-.06895	-.00004
#2	-.00277	10.976	.01134	.57351	-.00618	-.02396	.00471

#3	.01211	10.935	.01660	.56647	-.00496	-.15880	.00472
#4	-.00275	11.092	-.01756	.57777	-.00526	.09589	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00914
SDev .00100
%RSD 10.954

#1 .00863
#2 .00865
#3 .01064
#4 .00862

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHX1F

Operator: WTR

Run Time: 03/20/01 15:51:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.00039	-.00364	.06631	.05947	.00006	115.97
SDev	.00161	.00938	.02827	.00489	.00026	.00007	.42
%RSD	1539.1	2418.9	775.61	7.3811	.44261	115.47	.36121
#1	-.00150	-.00993	-.04427	.06386	.05941	.00000	116.13
#2	.00129	.00549	.01786	.07365	.05923	.00012	116.49
#3	-.00150	-.00468	-.00121	.06386	.05985	.00000	115.72
#4	.00129	.01067	.01304	.06386	.05941	.00012	115.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00255	.00036	-.00054	.00158	1.1430	3.7852	.01023
SDev	.00147	.00200	.00206	.00042	.0009	.2869	.00039
%RSD	57.764	561.70	383.94	26.409	.07681	7.5793	3.7985
#1	.00281	.00113	.00000	.00137	1.1440	3.6169	.01046
#2	.00445	.00268	.00215	.00221	1.1419	4.2144	.01058
#3	.00099	-.00197	-.00215	.00137	1.1433	3.6674	.01018
#4	.00194	-.00042	-.00215	.00137	1.1426	3.6421	.00970
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2184	.08610	.00323	94.980	.00633	.00862	.01289
SDev	.0233	.00085	.00589	.722	.00664	.01342	.02569
%RSD	.44690	.98680	182.60	.76020	104.95	155.62	199.33
#1	5.2157	.08610	.01091	95.059	.01305	-.01150	.05141
#2	5.1944	.08714	.00476	94.160	-.00241	.01541	-.00009
#3	5.2503	.08506	-.00139	95.903	.00943	.01527	.00011
#4	5.2130	.08610	-.00139	94.798	.00524	.01531	.00011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00359	8.6816	.00351	.66148	-.00740	-.01722	.00008
SDev	.05695	.0369	.01439	.00322	.00043	.05806	.00015
%RSD	1585.2	.42556	410.40	.48699	5.8318	337.20	188.66
#1	-.06219	8.6816	-.00160	.66265	-.00770	-.06969	.00028
#2	.00235	8.7048	.02187	.65794	-.00679	-.03970	.00012

#3	.07682	8.7106	.00609	.66535	-.00770	.06522	-.00004
#4	-.00261	8.6295	-.01234	.65996	-.00740	-.02470	-.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	.00323
SDev	.00143
%RSD	44.167

#1	.00182
#2	.00511
#3	.00346
#4	.00251

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXK1KB

Operator: WTR

Run Time: 03/20/01 15:54:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	-.00554	-.02387	.00003	.00006	.00001	.03156
SDev	.00177	.01198	.04533	.00000	.00018	.00001	.02954
%RSD	17499.	216.11	189.86	10.574	279.76	115.50	93.598
#1	-.00035	.00206	-.01919	.00003	.00008	.00000	.00484
#2	-.00037	-.01655	.03851	.00003	.00008	.00001	.00734
#3	.00245	.00725	-.05754	.00004	.00026	.00000	.05388
#4	-.00177	-.01492	-.05728	.00004	-.00017	.00001	.06019
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	-.00025	-.00350	-.00107	-.00000	.01294	-.14728	-.00028
SDev	.00192	.00001	.00124	.00083	.00179	.21062	.00083
%RSD	765.95	.15732	115.67	42853.	13.849	143.00	295.07
#1	-.00298	-.00349	.00000	-.00042	.01141	-.19568	.00053
#2	.00124	-.00350	.00000	-.00042	.01141	.04839	.00014
#3	.00089	-.00350	-.00215	.00125	.01481	-.01894	-.00042
#4	-.00016	-.00349	-.00214	-.00042	.01413	-.42292	-.00138
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	-.00866	-.00078	.00154	.03671	.00352	-.03607	-.02246
SDev	.00634	.00099	.00355	.03182	.00878	.03392	.01920
%RSD	73.245	128.21	230.68	86.679	249.18	94.029	85.509
#1	-.00466	-.00156	.00461	.00706	-.00507	-.06530	-.03858
#2	-.01798	-.00052	-.00154	.01240	.01574	-.01138	-.03833
#3	-.00732	.00052	-.00154	.05626	.00252	-.00236	-.00003
#4	-.00466	-.00155	.00462	.07114	.00090	-.06525	-.01289
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	-.05829	.01301	.00254	.00000	-.00061	-.04137	-.00233
SDev	.03568	.00554	.02779	.00000	.00063	.09429	.00274
%RSD	61.210	42.573	1093.3	.00000	103.08	227.92	117.34
#1	-.06575	.00869	-.00739	.00000	-.00069	.00734	.00012
#2	-.00617	.00864	-.02845	.00000	-.00069	-.11251	-.00478

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#3	-.08559	.01448	.03750	.00000	.00023	-.12758	-.00004
#4	-.07567	.02023	.00851	.00000	-.00130	.06728	-.00463

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

Elem	ZN
Units	ppm
Avge	.00014
SDev	.00031
%RSD	213.46

#1	-.00032
#2	.00026
#3	.00032
#4	.00031

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXK1KC

Operator: WTR

Run Time: 03/20/01 15:57:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61E1CP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04927	1.8572	1.8927	.93932	1.8625	.04745	48.416
SDev	.00181	.0159	.0455	.00424	.0094	.00023	.226
%RSD	3.6682	.85366	2.4037	.45193	.50378	.47849	.46589
#1	.05138	1.8733	1.9201	.94092	1.8678	.04762	48.545
#2	.04718	1.8683	1.9393	.94241	1.8660	.04763	48.614
#3	.04995	1.8444	1.8725	.94090	1.8485	.04715	48.399
#4	.04856	1.8427	1.8390	.93304	1.8678	.04740	48.106
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	.05243	.47430	.18832	.23832	.99558	47.268	.92946
SDev	.00237	.00195	.00228	.00068	.00518	.444	.00679
%RSD	4.5267	.41126	1.2087	.28605	.52042	.93909	.73025
#1	.05451	.47701	.19154	.23916	1.0007	47.861	.93044
#2	.05183	.47391	.18671	.23832	.99729	47.264	.93108
#3	.04933	.47394	.18832	.23749	.98842	46.792	.92006
#4	.05404	.47235	.18671	.23832	.99592	47.154	.93626
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.445	.47029	.93970	46.838	.49967	.50283	.49290
SDev	.170	.00214	.00502	.321	.01580	.01131	.02654
%RSD	.35042	.45595	.53447	.68616	3.1617	2.2493	5.3843
#1	48.603	.47211	.94585	46.923	.48136	.51407	.45743
#2	48.534	.47211	.93355	46.870	.50351	.50506	.49611
#3	48.214	.46899	.93970	46.396	.51903	.50508	.49629
#4	48.428	.46795	.93970	47.163	.49477	.48710	.52176
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	1.9083	9.8136	1.9443	.91849	.93025	1.8191	.47257
SDev	.0427	.0584	.0325	.00410	.00284	.1225	.00314
%RSD	2.2381	.59559	1.6734	.44604	.30579	6.7350	.66510
#1	1.9083	9.8803	1.9204	.92112	.93284	1.8752	.47599
#2	1.9629	9.8397	1.9916	.92022	.93193	1.8753	.47449

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#3	1.9033	9.7470	1.9390	.91237	.92644	1.6356	.46990
#4	1.8587	9.7875	1.9260	.92022	.92979	1.8903	.46990
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	.47943
SDev	.00316
%RSD	.65895

#1	.47862
#2	.48208
#3	.48173
#4	.47531

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET

Sample Name: CCV2-6

Operator: WTR

Run Time: 03/20/01 16:00:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96610	47.295	4.8336	4.8078	4.7679	4.8094	48.010
SDev	.00414	.253	.0538	.0174	.0332	.0257	.163
%RSD	.42840	.53563	1.1140	.36246	.69715	.53343	.34037
#1	.96144	47.128	4.8030	4.8131	4.7581	4.8010	47.767
#2	.97152	47.672	4.8742	4.8283	4.8172	4.8470	48.061
#3	.96573	47.182	4.8836	4.7869	4.7466	4.8000	48.115
#4	.96569	47.199	4.7735	4.8028	4.7497	4.7894	48.097
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	4.9920	4.7715	4.7130	4.7482	48.800	47.386	4.7750
SDev	.0109	.0091	.0094	.0310	.161	.180	.0408
%RSD	.21921	.18988	.19843	.65282	.33006	.37941	.85350
#1	4.9882	4.7611	4.6999	4.7471	48.675	47.213	4.7743
#2	4.9782	4.7828	4.7213	4.7921	49.035	47.491	4.8329
#3	5.0008	4.7735	4.7176	4.7305	48.772	47.583	4.7455
#4	5.0007	4.7688	4.7133	4.7230	48.720	47.255	4.7474
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	47.750	4.7392	4.7703	46.736	4.8555	4.8676	4.8601
SDev	.237	.0129	.0136	.314	.0269	.0633	.0277
%RSD	.49571	.27127	.28589	.67209	.55481	1.3012	.57063
#1	47.610	4.7246	4.7534	46.684	4.8352	4.8899	4.8602
#2	48.103	4.7559	4.7658	47.195	4.8787	4.7733	4.8347
#3	47.618	4.7371	4.7780	46.546	4.8294	4.8992	4.8469
#4	47.668	4.7392	4.7842	46.520	4.8789	4.9081	4.8987
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	4.7047	4.9442	4.8482	4.7583	4.7410	9.5345	4.7317
SDev	.0702	.0397	.0425	.0289	.0229	.2925	.0169
%RSD	1.4931	.80359	.87588	.60839	.48345	3.0683	.35702
#1	4.7837	4.8919	4.7858	4.7477	4.7295	9.3792	4.7159
#2	4.7253	4.9850	4.8645	4.8016	4.7752	9.9728	4.7553

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#3	4.6947	4.9384	4.8620	4.7421	4.7322	9.3776	4.7307
#4	4.6151	4.9615	4.8807	4.7419	4.7270	9.4084	4.7250

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	4.7693
SDev	.0129
%RSD	.27003

#1	4.7714
#2	4.7848
#3	4.7676
#4	4.7535

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB6

Operator: WTR

Run Time: 03/20/01 16:04:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B ppm	BA ppm	BE ppm	CA ppm
Avge	.00072	.01437	.01418	.03716	.00195	.00162	.03337
SDev	.00238	.01471	.05187	.00347	.00158	.00122	.01951
%RSD	331.22	102.34	365.76	9.3492	80.924	74.951	58.449
#1	.00385	.02075	.03813	.03986	.00052	.00062	.01768
#2	-.00035	-.00303	-.04788	.03262	.00096	.00086	.02185
#3	-.00171	.00883	-.00497	.03626	.00227	.00171	.03298
#4	.00109	.03094	.07146	.03990	.00403	.00331	.06098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K ppm	LI ppm
Avge	.00165	.00232	.00362	.00334	.02299	.41450	.00277
SDev	.00097	.00344	.00141	.00084	.01240	.36444	.00180
%RSD	58.669	148.20	38.989	25.100	53.945	87.921	64.956
#1	.00126	.00116	.00429	.00292	.01345	.54495	.00129
#2	.00083	.00116	.00376	.00292	.01549	.74694	.00174
#3	.00305	-.00040	.00161	.00292	.02231	-.10310	.00273
#4	.00147	.00737	.00483	.00459	.04070	.46921	.00532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	.03130	.00157	.00769	.03538	.00487	.02474	-.01283
SDev	.01530	.00085	.00355	.01870	.00511	.03675	.00007
%RSD	48.890	54.353	46.178	52.873	104.94	148.54	.55405
#1	.02197	.00157	.01077	.02346	.00840	-.00225	-.01285
#2	.02197	.00053	.00462	.02498	-.00190	.05167	-.01290
#3	.02730	.00157	.00462	.02994	.00921	-.01127	-.01273
#4	.05393	.00261	.01077	.06313	.00376	.06080	-.01284
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V ppm
Avge	.01124	.01161	-.01124	.00168	.00099	.01085	.00257
SDev	.05505	.00578	.00873	.00139	.00142	.06539	.00274
%RSD	489.67	49.730	77.669	82.552	143.22	602.51	106.44
#1	.06334	.02028	-.00466	.00045	.00053	.02227	.00028
#2	-.05580	.00869	-.00466	.00090	-.00038	.06719	.00012

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#3	.04848	.00874	-.02308	.00179	.00084	.03710	.00486
#4	-.01104	.00875	-.01256	.00359	.00297	-.08315	.00502
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	-.00019
SDev	.00162
%RSD	863.58

#1	-.00200
#2	-.00034
#3	-.00036
#4	.00194

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXHQWF

Operator: WTR

Run Time: 03/20/01 16:07:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.02038	-.00746	.12500	.04826	.00199	97.919
SDev	.00210	.01284	.04661	.00209	.00201	.00161	.445
%RSD	6287.8	63.011	624.52	1.6704	4.1713	80.831	.45409
#1	.00248	.01395	.01415	.12678	.04565	.00011	98.469
#2	-.00172	.00552	-.05281	.12318	.04802	.00122	97.568
#3	-.00171	.02937	-.03869	.12684	.05047	.00355	97.548
#4	.00109	.03271	.04749	.12321	.04889	.00306	98.092
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00282	.00230	.00322	.00209	.03693	3.9998	.01640
SDev	.00323	.00149	.00219	.00118	.01606	.2522	.00170
%RSD	114.64	64.605	68.089	56.527	43.479	6.3043	10.400
#1	.00294	.00114	.00375	.00125	.01820	4.0040	.01451
#2	.00087	.00114	-.00000	.00125	.02910	3.7095	.01547
#3	.00734	.00267	.00482	.00209	.05226	4.3239	.01823
#4	.00014	.00425	.00429	.00376	.04818	3.9620	.01738
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.2286	.00209	.00154	107.61	.01026	.00004	.00010
SDev	.0578	.00135	.00355	1.68	.00464	.02244	.00009
%RSD	.79958	64.411	230.18	1.5638	45.274	50398.	86.206
#1	7.1600	.00053	.00462	105.72	.01164	.03371	.00002
#2	7.2666	.00157	-.00153	109.33	.00598	-.01121	.00009
#3	7.2852	.00365	-.00153	108.67	.00723	-.01118	.00007
#4	7.2026	.00261	.00462	106.70	.01620	-.01114	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01354	8.3138	-.00459	.59443	-.00412	-.03808	.00449
SDev	.05342	.0192	.03492	.00595	.00133	.05046	.00065
%RSD	394.67	.23109	761.45	1.0010	32.217	132.50	14.540
#1	-.02601	8.2877	.03226	.58688	-.00526	-.05278	.00487
#2	-.07562	8.3283	.00068	.59966	-.00526	-.02296	.00352

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#3	-.00604	8.3283	.00068	.59867	-.00313	-.09826	.00471
#4	.05352	8.3109	-.05196	.59249	-.00282	.02168	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00136
SDev	.00180
%RSD	132.33

#1	-.00131
#2	.00195
#3	.00223
#4	.00258

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHQWP5F

Operator: WTR

Run Time: 03/20/01 16:10:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00246	.01404	.01300	.05254	.01047	.00061	20.082
SDev	.00113	.00773	.03459	.00362	.00027	.00022	.115
%RSD	45.920	55.110	266.02	6.8900	2.6128	36.823	.57305
#1	.00247	.01227	.05729	.05434	.01060	.00048	20.251
#2	.00245	.00562	-.01442	.04711	.01034	.00037	20.022
#3	.00108	.01393	-.01458	.05436	.01016	.00072	20.058
#4	.00385	.02431	.02373	.05435	.01078	.00086	19.998
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
Avge	-.00114	.00077	.00107	.00167	.01702	1.0373	.00390
SDev	.00125	.00320	.00277	.00145	.00232	.5817	.00050
%RSD	109.67	413.29	258.55	86.604	13.621	56.082	12.884
#1	.00053	.00427	.00429	.00292	.01617	1.8579	.00453
#2	-.00091	-.00195	-.00215	-.00042	.01481	.48604	.00332
#3	-.00196	-.00194	.00214	.00208	.01685	.93210	.00377
#4	-.00222	.00272	-.00000	.00209	.02026	.87319	.00399
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.4895	.00078	.00000	22.001	.00623	.01348	-.00318
SDev	.0297	.00100	.00589	.208	.00532	.02886	.00642
%RSD	1.9965	127.17	264230.	.94493	85.456	214.09	201.89
#1	1.5322	.00053	.00462	22.149	.00002	.04279	-.00005
#2	1.4869	-.00052	-.00769	22.202	.00752	-.01130	.00012
#3	1.4656	.00157	.00462	21.882	.01274	-.01132	-.01281
#4	1.4736	.00156	-.00154	21.770	.00465	.03374	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	1.6917	.01710	.12391	-.00076	.05217	.00208
SDev	.05695	.0336	.00944	.00076	.00029	.02119	.00258
%RSD	106430.	1.9868	55.182	.61612	38.297	40.623	124.29
#1	-.00119	1.7236	.01119	.12486	-.00069	.05214	.00368
#2	-.00616	1.7178	.00856	.12419	-.00099	.03725	-.00020

#3	.07328	1.6599	.02956	.12329	-.00099	.08216	.00486
#4	-.06572	1.6656	.01908	.12329	-.00038	.03714	-.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 -.00019
SDev .00121
%RSD 650.77

#1 .00129
#2 -.00131
#3 -.00103
#4 .00031

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHQWSF

Operator: WTR

Run Time: 03/20/01 16:13:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04886	1.8617	1.8845	1.0488	1.8840	.04739	149.97
SDev	.00132	.0205	.0547	.0024	.0213	.00030	.47
%RSD	2.7086	1.1007	2.9035	.22485	1.1281	.63763	.31649
#1	.04853	1.8718	1.9538	1.0474	1.9041	.04753	149.26
#2	.04989	1.8856	1.8820	1.0480	1.8954	.04755	150.19
#3	.04989	1.8430	1.8823	1.0474	1.8555	.04694	150.25
#4	.04712	1.8463	1.8199	1.0523	1.8811	.04754	150.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04837	.46540	.18350	.23435	.97151	52.179	.94830
SDev	.00482	.00198	.00342	.00105	.00271	.563	.01577
%RSD	9.9739	.42616	1.8643	.44727	.27849	1.0798	1.6625
#1	.05062	.46459	.18296	.23581	.97272	53.004	.96498
#2	.04862	.46771	.18028	.23415	.97476	51.867	.95395
#3	.04157	.46312	.18832	.23331	.96927	52.069	.92748
#4	.05266	.46617	.18242	.23415	.96929	51.775	.94678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.434	.46092	.92893	159.67	.48048	.51606	.50568
SDev	.450	.00178	.00308	2.16	.00842	.01345	.00638
%RSD	.81138	.38541	.33109	1.3546	1.7520	2.6068	1.2611
#1	55.813	.46170	.93354	162.03	.48226	.50481	.50893
#2	55.691	.46274	.92739	160.54	.48116	.50489	.50892
#3	54.804	.45858	.92739	156.94	.46910	.53174	.50876
#4	55.430	.46066	.92739	159.16	.48939	.52282	.49612
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8834	18.272	1.9135	1.5181	.91089	1.8158	.46280
SDev	.0397	.119	.0218	.0149	.00620	.0533	.00317
%RSD	2.1084	.65217	1.1408	.98124	.68070	2.9352	.68515
#1	1.9033	18.368	1.8891	1.5324	.91516	1.8757	.46618
#2	1.8238	18.373	1.9154	1.5259	.91577	1.8457	.46009

#3	1.9033	18.130	1.9076	1.4981	.90235	1.7709	.46011
#4	1.9033	18.217	1.9417	1.5162	.91028	1.7709	.46484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.46983
SDev	.00219
%RSD	.46722

#1	.47210
#2	.47113
#3	.46726
#4	.46883

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHQWDF

Operator: WTR

Run Time: 03/20/01 16:16:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04891	1.9015	1.9451	1.0863	1.9328	.04788	148.11
SDev	.00238	.0100	.0515	.0081	.0173	.00036	1.26
%RSD	4.8693	.52451	2.6481	.74992	.89590	.74536	.85065
#1	.05137	1.8918	2.0014	1.0821	1.9164	.04775	148.97
#2	.04579	1.9040	1.9677	1.0973	1.9455	.04837	148.81
#3	.04995	1.9143	1.8815	1.0873	1.9195	.04752	148.41
#4	.04855	1.8957	1.9296	1.0785	1.9499	.04789	146.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05084	.46727	.18604	.24373	.98536	53.734	.98547
SDev	.00330	.00446	.00441	.00241	.00690	.394	.01737
%RSD	6.4929	.95391	2.3719	.98808	.69989	.73269	1.7623
#1	.04879	.46613	.19101	.24414	.98773	53.769	.96565
#2	.04951	.47387	.18618	.24665	.99321	54.224	.99330
#3	.05577	.46455	.18671	.24081	.98365	53.264	.97769
#4	.04929	.46455	.18027	.24331	.97684	53.677	1.0052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.677	.46587	.93970	162.61	.46804	.50489	.52470
SDev	.410	.00294	.01329	2.17	.02023	.00012	.03195
%RSD	.72340	.63193	1.4141	1.3317	4.3219	.02276	6.0889
#1	56.359	.46587	.95815	160.56	.48726	.50484	.50871
#2	57.134	.46795	.93970	163.84	.48300	.50505	.50876
#3	56.303	.46794	.93354	161.00	.44595	.50488	.57262
#4	56.911	.46170	.92739	165.02	.45593	.50479	.50870
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8834	18.413	1.9385	1.5395	.92819	1.9392	.47197
SDev	.0760	.056	.0271	.0110	.00367	.1309	.00269
%RSD	4.0368	.30339	1.3966	.71303	.39554	6.7515	.56940
#1	1.8239	18.374	1.9233	1.5285	.92583	1.9354	.47393
#2	1.8239	18.495	1.9706	1.5492	.93345	1.9053	.47464

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#3	1.9033	18.397	1.9499	1.5316	.92552	1.8006	.46974
#4	1.9827	18.385	1.9101	1.5487	.92796	2.1154	.46957
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .47302
SDev .00555
%RSD 1.1726

#1 .47981
#2 .47208
#3 .47383
#4 .46634

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHRFF

Operator: WTR

Run Time: 03/20/01 16:19:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00106	.02592	.02793	1.3436	.31232	.00008	119.47
SDev	.00288	.01081	.02835	.0194	.00223	.00012	.72
%RSD	272.04	41.711	101.50	1.4422	.71323	142.40	.60086
#1	.00422	.03270	-.01168	1.3286	.30931	-.00002	120.16
#2	-.00140	.01068	.03647	1.3379	.31387	.00025	119.97
#3	.00279	.03444	.05544	1.3358	.31194	.00000	119.14
#4	-.00137	.02587	.03149	1.3720	.31413	.00011	118.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	.00176	.00161	.01392	1.6049	49.202	1.1357
SDev	.00273	.00270	.00259	.00068	.0038	.344	.0122
%RSD	277.57	153.23	160.98	4.8861	.23595	.69964	1.0754
#1	.00007	.00409	.00214	.01309	1.6078	49.124	1.1191
#2	-.00432	.00410	.00375	.01475	1.6085	49.393	1.1400
#3	.00209	-.00058	-.00214	.01391	1.6010	48.753	1.1356
#4	-.00177	-.00057	.00268	.01391	1.6023	49.536	1.1481
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	62.999	.09454	.00329	264.18	.00526	.00847	.00004
SDev	.265	.00000	.00308	2.39	.00698	.03463	.01057
%RSD	.42125	.00082	93.595	.90624	132.83	408.89	24044.
#1	62.778	.09454	.00482	261.09	.00870	-.01166	.01297
#2	63.226	.09454	-.00133	265.36	.01178	-.01166	.00018
#3	62.760	.09454	.00482	263.65	-.00432	-.00284	-.00007
#4	63.231	.09454	.00482	266.63	.00487	.06004	-.01291
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02474	8.6078	-.00044	4.1110	-.00671	-.02809	.00246
SDev	.03789	.0137	.04088	.0235	.00080	.13593	.00279
%RSD	153.11	.15891	9218.1	.57062	11.954	483.89	113.34
#1	-.08059	8.5890	-.03066	4.0818	-.00587	-.19678	.00487
#2	-.00115	8.6179	-.03597	4.1322	-.00740	.13296	-.00003

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#3	-.00117	8.6063	.01403	4.1024	-.00618	-.00177	.00012
#4	-.01606	8.6180	.05082	4.1277	-.00740	-.04678	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00127
SDev	.00109
%RSD	86.211

#1	.00110
#2	.00011
#3	.00274
#4	.00111

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHTDF

Operator: WTR

Run Time: 03/20/01 16:23:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00160	.01229	.01565	.13682	.06007	.00015	110.91
SDev	.00069	.00999	.05745	.00647	.00101	.00005	.39
%RSD	43.509	81.297	367.15	4.7293	1.6868	35.993	.35087
#1	.00127	.01224	.03234	.12858	.06142	.00023	110.46
#2	.00124	.00208	-.02974	.14199	.06003	.00012	110.97
#3	.00264	.02586	.08979	.13473	.05897	.00012	110.80
#4	.00124	.00897	-.02980	.14199	.05985	.00012	111.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00229	.00191	.00067	.00218	.91055	4.3323	.01175
SDev	.00216	.00089	.00220	.00136	.00449	.3423	.00044
%RSD	94.330	46.742	328.31	62.315	.49370	7.9008	3.7258
#1	-.00075	.00114	.00268	.00385	.91650	4.7952	.01238
#2	.00374	.00268	.00000	.00218	.91038	4.1135	.01145
#3	.00393	.00268	-.00214	.00218	.90561	4.0377	.01145
#4	.00225	.00113	.00215	.00052	.90969	4.3828	.01173
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.7757	.09020	.00473	115.13	.00967	.02669	.00326
SDev	.0821	.00000	.00502	1.76	.00845	.03908	.00640
%RSD	1.4220	.00168	106.12	1.5315	87.363	146.41	196.14
#1	5.8816	.09020	.00473	117.46	.00767	.06037	.01287
#2	5.7963	.09020	.00473	115.51	-.00131	.06040	-.00001
#3	5.6951	.09020	.01088	113.52	.01782	-.01148	.00017
#4	5.7298	.09019	-.00142	114.04	.01451	-.00253	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05920	10.150	.01199	.63838	-.00656	-.01362	.00131
SDev	.05922	.061	.03132	.00769	.00029	.06296	.00238
%RSD	100.04	.60510	261.22	1.2050	4.4531	462.14	181.97
#1	-.05297	10.205	.01137	.64834	-.00679	.05371	.00487
#2	-.03810	10.200	-.00447	.63991	-.00648	-.08106	.00012

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#3	-.14237	10.084	-.01500	.63039	-.00618	.02392	.00027
#4	-.00335	10.113	.05606	.63488	-.00679	-.05106	-.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	-.00116
SDev	.00185
%RSD	160.25

#1	-.00367
#2	.00026
#3	-.00142
#4	.00022

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHTKF

Operator: WTR

Run Time: 03/20/01 16:26:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00045	.00766	.00606	.12979	.03205	.00012	78.592
SDev	.00134	.00596	.02998	.00191	.00018	.00010	.603
%RSD	296.98	77.775	494.39	1.4727	.56245	81.103	.76685
#1	.00221	.01063	-.02990	.13251	.03207	.00023	77.987
#2	-.00061	.00548	.01332	.12954	.03181	.00012	78.341
#3	.00079	.00046	.04207	.12809	.03207	.00000	78.636
#4	-.00058	.01406	-.00123	.12900	.03225	.00011	79.404
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00087	.00504	.00134	.00121	5.3321	4.9319	.00465
SDev	.00073	.00201	.00250	.00042	.0255	.1767	.00041
%RSD	84.451	39.810	186.25	34.432	.47899	3.5833	8.7492
#1	-.00112	.00737	.00375	.00183	5.3120	5.0645	.00512
#2	-.00041	.00271	.00161	.00100	5.3134	4.7194	.00453
#3	-.00016	.00426	-.00215	.00100	5.3365	4.8541	.00481
#4	-.00178	.00582	.00214	.00101	5.3665	5.0897	.00416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.531	.40230	.00070	21.210	.00815	.01182	.01935
SDev	.035	.00225	.00307	.037	.00215	.03309	.02221
%RSD	.22854	.55980	440.30	.17224	26.440	279.97	114.76
#1	15.510	.40022	-.00084	21.171	.00678	.01409	-.01270
#2	15.534	.40230	.00531	21.255	.00628	.04997	.03858
#3	15.499	.40127	-.00084	21.222	.00848	.01405	.02581
#4	15.579	.40543	-.00084	21.193	.01106	-.03083	.02572
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01427	2.9823	.00007	.63963	-.00488	.01331	.00210
SDev	.02785	.0592	.03179	.00156	.00046	.09192	.00241
%RSD	195.19	1.9838	45350.	.24359	9.3750	690.74	114.80
#1	-.02426	3.0156	-.01981	.63744	-.00435	-.10258	.00473
#2	-.04908	2.8997	-.02222	.63968	-.00526	.10730	.00014

#3	.01057	3.0329	-.00385	.64036	-.00526	.06196	-.00003
#4	.00570	2.9808	.04616	.64103	-.00465	-.01345	.00354

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

Elem	ZN
Units	ppm
Avge	.00799
SDev	.00111
%RSD	13.941

#1	.00832
#2	.00897
#3	.00829
#4	.00639

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHTPF

Operator: WTR

Run Time: 03/20/01 16:29:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00135	.01314	.00076	.04598	.04245	.00014	122.44
SDev	.00281	.01204	.03510	.01140	.00044	.00005	.68
%RSD	207.54	91.602	4642.5	24.793	1.0386	38.427	.55563
#1	.00275	.02767	-.04486	.04145	.04276	.00011	122.65
#2	-.00286	-.00135	-.00623	.03208	.04232	.00012	121.64
#3	.00275	.01574	.01750	.05336	.04188	.00011	122.22
#4	.00278	.01051	.03662	.05701	.04284	.00022	123.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00053	.00271	.00053	.00285	1.3362	2.5943	.00823
SDev	.00142	.00421	.00116	.00172	.0066	.4746	.00050
%RSD	268.76	155.36	216.56	60.245	.49657	18.293	6.0549
#1	-.00015	.00426	.00053	.00140	1.3401	2.0599	.00858
#2	-.00256	-.00350	-.00053	.00139	1.3306	2.3292	.00751
#3	-.00016	.00426	.00214	.00390	1.3306	3.0025	.00855
#4	.00076	.00581	-.00000	.00473	1.3435	2.9857	.00827
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	3.9745	.12281	.00171	70.056	.00987	.00186	.00331
SDev	.0297	.00052	.00355	.906	.00636	.01563	.00647
%RSD	.74822	.42501	207.36	1.2934	64.449	838.87	195.32
#1	3.9586	.12254	-.00136	70.495	.01811	-.01156	.01302
#2	3.9879	.12254	.00479	70.685	.00406	-.01179	.00007
#3	3.9426	.12254	-.00136	68.714	.00575	.01538	.00004
#4	4.0092	.12359	.00479	70.330	.01156	.01542	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02435	9.3059	.00809	.63144	-.00717	.02115	.00449
SDev	.01434	.0563	.02565	.00602	.00046	.04485	.00340
%RSD	58.905	.60465	316.90	.95423	6.3830	212.02	75.677
#1	-.00696	9.3306	.02195	.63452	-.00679	-.02763	.00471
#2	-.02188	9.2784	-.02811	.63407	-.00770	.03256	.00012

#3	-.04174	9.2437	.02979	.62241	-.00679	.07742	.00471
#4	-.02681	9.3712	.00874	.63475	-.00740	.00225	.00842
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00376
SDev .00063
%RSD 16.670

#1 .00343
#2 .00346
#3 .00470
#4 .00346

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHT3F

Operator: WTR

Run Time: 03/20/01 16:32:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	.01657	.00982	.72729	.24476	.00008	120.16
SDev	.00238	.01352	.06254	.02070	.00291	.00006	.29
%RSD	562.60	81.586	637.06	2.8466	1.1882	79.148	.24367
#1	.00147	.02595	.03608	.75828	.24604	.00011	120.53
#2	.00286	.02934	.03608	.71542	.24053	-.00001	120.00
#3	-.00272	.00039	-.08344	.71844	.24710	.00011	119.86
#4	.00008	.01061	.05055	.71699	.24535	.00011	120.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00096	.00025	-.00014	.01164	1.7814	27.368	.45059
SDev	.00259	.00155	.00154	.00041	.0164	.294	.00683
%RSD	269.33	624.17	1122.7	3.5494	.91963	1.0733	1.5157
#1	.00180	.00102	-.00000	.01144	1.7855	27.494	.45418
#2	-.00030	-.00208	.00161	.01226	1.7596	26.930	.44155
#3	-.00091	.00103	-.00215	.01144	1.7814	27.485	.45722
#4	-.00444	.00103	-.00000	.01144	1.7991	27.561	.44940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.675	.03609	-.00130	188.39	.00278	.02412	.02256
SDev	.481	.00052	.00000	2.55	.00699	.03285	.03687
%RSD	.91363	1.4520	.16443	1.3530	251.13	136.16	163.43
#1	52.953	.03635	-.00130	189.75	.00630	.06016	.07711
#2	51.978	.03530	-.00131	184.84	.00627	.00606	.00017
#3	53.033	.03635	-.00130	190.64	.00627	-.01179	.01300
#4	52.737	.03636	-.00130	188.34	-.00770	.04208	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02295	10.443	-.01677	2.7298	-.00747	.00258	.00471
SDev	.04910	.059	.02461	.0261	.00058	.04973	.00000
%RSD	213.96	.56758	146.72	.95447	7.7264	1927.8	.06844
#1	.03912	10.507	.00122	2.7473	-.00709	-.00498	.00471
#2	-.07514	10.379	-.04911	2.6928	-.00709	.04040	.00471

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#3	-.04529	10.478	-.02273	2.7488	-.00831	-.06487	.00471
#4	-.01048	10.408	.00353	2.7302	-.00740	.03977	.00471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00338
SDev	.00128
%RSD	37.771

#1	.00502
#2	.00368
#3	.00206
#4	.00277

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHT7F

Operator: WTR

Run Time: 03/20/01 16:35:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00075	.00893	.01284	.17116	.01505	.00012	27.807
SDev	.00133	.01010	.03145	.00630	.00013	.00001	.069
%RSD	177.59	113.04	244.82	3.6832	.86610	6.0936	.24654
#1	.00109	.01577	.01401	.16914	.01516	.00012	27.844
#2	.00249	.01740	-.02431	.17424	.01490	.00012	27.804
#3	-.00031	-.00465	.05248	.16338	.01498	.00012	27.869
#4	-.00028	.00721	.00920	.17788	.01516	.00011	27.713
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.00038	.00094	.00211	.21418	6.7730	.03455
SDev	.00294	.00297	.00257	.00180	.00540	.1413	.00040
%RSD	699.50	775.33	273.61	85.526	2.5219	2.0867	1.1655
#1	-.00321	-.00194	.00215	.00044	.21231	6.7562	.03440
#2	.00216	-.00195	.00000	.00127	.20754	6.6047	.03412
#3	.00207	.00426	-.00215	.00211	.21708	6.7814	.03507
#4	-.00270	.00117	.00375	.00461	.21980	6.9497	.03459
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.269	.02865	.00003	165.64	.00070	.02464	.00002
SDev	.145	.00000	.00308	1.78	.00671	.03115	.00005
%RSD	.79193	.00356	10965.	1.0752	959.75	126.42	311.72
#1	18.426	.02865	-.00151	167.47	-.00498	.05152	-.00004
#2	18.133	.02865	.00464	164.19	-.00072	-.00238	-.00000
#3	18.160	.02865	-.00151	164.04	-.00189	.05171	.00002
#4	18.357	.02866	-.00151	166.86	.01039	-.00229	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00429	2.7983	-.00391	.45986	-.00206	-.04064	.00119
SDev	.02934	.0111	.01495	.00345	.00018	.16548	.00235
%RSD	683.59	.39693	381.82	.74972	8.5533	407.20	197.80
#1	.01432	2.8070	-.01247	.46385	-.00191	-.28037	-.00003
#2	-.00555	2.7954	-.02036	.45667	-.00191	-.01053	.00012

#3	-.04524	2.7838	.00596	.45731	-.00221	.09417	-.00004
#4	.01931	2.8070	.01122	.46161	-.00221	.03418	.00471

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

Elem ZN
Units ppm
Avge -.00033
SDev .00165
%RSD 495.93

#1 .00167
#2 .00032
#3 -.00131
#4 -.00201

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-7

Operator: WTR

Run Time: 03/20/01 16:38:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96363	47.312	4.9113	4.8189	4.7688	4.8457	47.887
SDev	.00154	.235	.0602	.0515	.0341	.0167	.168
%RSD	.15984	.49697	1.2257	1.0681	.71506	.34536	.35075
#1	.96440	47.443	4.8909	4.8279	4.7893	4.8350	48.036
#2	.96132	46.987	4.8668	4.7481	4.7215	4.8294	47.647
#3	.96445	47.519	5.0002	4.8716	4.7975	4.8661	47.914
#4	.96435	47.301	4.8874	4.8279	4.7670	4.8522	47.951
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	4.9776	4.7677	4.7097	4.7684	48.784	47.310	4.7735
SDev	.0187	.0183	.0195	.0259	.183	.402	.0321
%RSD	.37502	.38443	.41408	.54286	.37441	.84975	.67289
#1	4.9929	4.7797	4.7170	4.7763	48.852	47.634	4.7770
#2	4.9701	4.7410	4.6811	4.7329	48.517	46.733	4.7309
#3	4.9548	4.7704	4.7251	4.7946	48.932	47.525	4.8090
#4	4.9928	4.7797	4.7155	4.7696	48.833	47.348	4.7770
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	47.745	4.7342	4.7580	46.914	4.8818	4.8361	4.8829
SDev	.241	.0165	.0286	.282	.0235	.0590	.0965
%RSD	.50407	.34760	.60102	.60030	.48098	1.2199	1.9773
#1	47.818	4.7433	4.7473	47.034	4.8743	4.9081	4.8347
#2	47.397	4.7100	4.7226	46.531	4.8585	4.7636	4.8222
#3	47.951	4.7454	4.7842	47.191	4.8804	4.8362	5.0268
#4	47.815	4.7381	4.7780	46.901	4.9142	4.8364	4.8478
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	4.6910	4.9471	4.8536	4.7540	4.7453	9.3699	4.7287
SDev	.0372	.0499	.0737	.0311	.0242	.1186	.0195
%RSD	.79200	1.0093	1.5179	.65400	.51086	1.2662	.41290
#1	4.6503	4.9559	4.8803	4.7722	4.7585	9.5111	4.7383
#2	4.6939	4.8744	4.7620	4.7098	4.7100	9.2470	4.7008

#3	4.6803	4.9849	4.9364	4.7787	4.7633	9.4200	4.7451
#4	4.7396	4.9732	4.8357	4.7554	4.7493	9.3016	4.7307

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	4.7649
SDev	.0074
%RSD	.15611

#1	4.7601
#2	4.7570
#3	4.7711
#4	4.7713

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: WTR

Run Time: 03/20/01 16:42:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00281	.02417	-.01583	.03715	.00254	.00230	.03541
SDev	.00134	.00915	.01972	.00345	.00144	.00129	.01634
%RSD	47.690	37.843	124.60	9.2973	56.582	56.184	46.138

#1	.00385	.02075	-.01934	.03986	.00114	.00111	.02097
#2	.00387	.01900	-.03857	.03985	.00184	.00158	.02640
#3	.00105	.01911	.00940	.03263	.00271	.00246	.03627
#4	.00248	.03784	-.01480	.03627	.00446	.00405	.05800

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	.00274	.00387	.00335	.00375	.02316	.37452	.00373
SDev	.00212	.00480	.00207	.00180	.01305	.33287	.00169
%RSD	77.398	123.99	61.727	48.079	56.342	88.878	45.335

#1	.00168	.00116	.00215	.00292	.01413	.27563	.00205
#2	.00272	.00426	.00215	.00375	.01482	.85636	.00329
#3	.00085	-.00039	.00268	.00208	.02163	.09047	.00349
#4	H.00570	.01047	.00644	.00626	.04207	.27563	.00608

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	.03596	.00209	.00769	.05016	.00936	.03153	-.00318
SDev	.01449	.00217	.00355	.01994	.00413	.02975	.02645
%RSD	40.289	103.78	46.153	39.758	44.104	94.360	830.94

#1	.02464	-.00051	.01077	.03490	.01281	.05167	.00001
#2	.03529	.00157	.01077	.03490	.00341	.03384	.02570
#3	.02730	.00261	.00462	.05397	.01002	-.01126	.00002
#4	.05660	.00469	.00462	.07686	.01118	.05187	-.03845

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	-.04213	.03044	.00327	.00247	.00175	-.05660	.00257
SDev	.03873	.02815	.01938	.00153	.00129	.07472	.00274
%RSD	91.928	92.475	592.31	62.103	73.785	132.01	106.58

#1	-.04588	.02028	.01645	.00090	.00053	-.06767	.00028
#2	-.04588	.07247	-.02556	.00179	.00145	.00720	.00502

#3	.00876	.01448	.01118	.00269	.00145	-.15768	.00012
#4	-.08551	.01454	.01102	.00449	.00358	-.00825	.00487
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	.00116
%RSD	123.11

#1	-.00039
#2	.00033
#3	.00191
#4	.00191

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXHVCF

Operator: WTR

Run Time: 03/20/01 16:45:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00222	.01960	.00993	.11449	.04539	.00067	96.279
SDev	.00211	.01312	.03535	.00805	.00138	.00104	.293
%RSD	94.915	66.937	356.12	7.0294	3.0523	155.85	.30462
#1	.00116	.00911	-.02945	.11346	.04408	.00000	95.929
#2	.00116	.00896	.00407	.12219	.04451	.00000	96.470
#3	.00118	.02425	.00866	.10368	.04583	.00048	96.150
#4	.00539	.03608	.05642	.11862	.04714	.00220	96.566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	-.00157	-.00000	.00235	.60391	3.7368	.01482
SDev	.00309	.00150	.00181	.00158	.01235	.3043	.00122
%RSD	874.47	95.095	84107.	66.966	2.0451	8.1422	8.2231
#1	.00222	-.00197	-.00215	.00131	.59369	3.5159	.01432
#2	-.00056	-.00041	-.00054	.00131	.59505	3.4654	.01356
#3	-.00464	-.00040	.00053	.00215	.60663	3.8525	.01499
#4	.00157	-.00353	.00214	.00464	.62026	4.1135	.01643
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.3198	.12833	-.00300	109.97	.00642	-.00925	.00006
SDev	.0965	.00178	.00774	2.33	.00483	.00451	.00005
%RSD	1.3190	1.3872	258.34	2.1150	75.198	48.791	75.779
#1	7.2186	.12754	-.01376	107.79	.00649	-.01150	.00012
#2	7.2559	.12651	-.00146	108.12	.01009	-.01145	.00008
#3	7.4024	.12859	-.00146	112.15	-.00042	-.00248	.00002
#4	7.4024	.13067	.00469	111.79	.00951	-.01157	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02665	8.1095	.01391	.60253	-.00511	.00259	.00200
SDev	.01645	.0734	.00985	.01054	.00133	.06844	.00260
%RSD	61.719	.90470	70.802	1.7496	26.023	2643.1	129.82
#1	-.00434	8.0501	.02444	.59235	-.00587	-.01597	-.00035
#2	-.02916	8.0501	.01654	.59450	-.00557	-.07596	-.00004

#3	-.04402	8.1371	.00075	.61151	-.00587	.08870	.00352
#4	-.02908	8.2008	.01390	.61174	-.00313	.01358	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01504
SDev	.00033
%RSD	2.1883

#1	.01487
#2	.01486
#3	.01490
#4	.01553

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHWLF

Operator: WTR

Run Time: 03/20/01 16:48:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.01272	.06772	1.1367	.26609	.00020	90.896
SDev	.00332	.01714	.03637	.0201	.00210	.00019	.534
%RSD	434.50	134.77	53.711	1.7714	.78900	94.036	.58743
#1	-.00285	.00373	.01748	1.1203	.26664	.00011	91.338
#2	.00134	.02246	.06521	1.1544	.26787	.00011	91.343
#3	-.00425	-.00644	.09899	1.1182	.26682	.00011	90.273
#4	.00271	.03111	.08919	1.1538	.26305	.00049	90.629
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00217	.00024	.00040	.00494	1.4302	28.451	.33996
SDev	.00324	.00269	.00212	.00080	.0070	.507	.00439
%RSD	149.10	1138.8	528.28	16.143	.48775	1.7805	1.2916
#1	-.00373	.00413	.00214	.00557	1.4327	28.975	.34030
#2	-.00051	-.00055	.00214	.00474	1.4389	28.394	.34156
#3	L-.00585	-.00208	-.00054	.00557	1.4239	28.655	.34415
#4	.00140	-.00055	-.00215	.00390	1.4253	27.780	.33383
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.210	.34745	.00173	32.219	.03508	-.00945	.01322
SDev	.435	.00215	.00355	.356	.01026	.00463	.07631
%RSD	.86577	.61782	205.92	1.1037	29.243	48.934	577.19
#1	50.393	.34927	.00480	32.229	.05005	-.00252	.06470
#2	50.465	.34927	.00480	32.333	.02804	-.01175	.00029
#3	50.422	.34615	-.00135	32.579	.03345	-.01191	L-.08945
#4	49.560	.34511	-.00135	31.733	.02880	-.01164	.07735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02311	5.0737	-.02410	.46514	-.00610	-.01653	.00360
SDev	.00704	.0400	.00468	.00408	.00088	.12249	.00243
%RSD	30.469	.78817	19.411	.87812	14.361	740.87	67.414
#1	.02312	5.0897	-.02783	.46610	-.00679	.09205	.00487
#2	.03307	5.1013	-.02547	.46811	-.00587	.07701	.00487

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#3	.01813	5.0897	-.02584	.46722	-.00679	-.16255	.00471
#4	.01813	5.0143	-.01726	.45914	-.00496	-.07264	-.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	.03708
SDev	.00253
%RSD	6.8366

#1	.03930
#2	.03708
#3	.03353
#4	.03840

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHWWF

Operator: WTR

Run Time: 03/20/01 16:51:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.01283	.02503	.28805	.04377	.00024	53.187
SDev	.00198	.00838	.01661	.00426	.00015	.00010	.250
%RSD	2070.4	65.323	66.367	1.4807	.33997	41.618	.46951
#1	.00131	.02267	.01055	.28794	.04389	.00012	53.252
#2	.00131	.01400	.03936	.29308	.04364	.00025	53.512
#3	-.00289	.00222	.01074	.28853	.04364	.00024	53.017
#4	-.00011	.01244	.03948	.28266	.04389	.00037	52.967
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00330	.00387	.00188	.00251	7.6862	3.6821	.03177
SDev	.00300	.00234	.00031	.00048	.0442	.2096	.00133
%RSD	90.884	60.334	16.448	19.038	.57459	5.6925	4.1930
#1	L-.00535	.00582	.00214	.00209	7.7121	3.4906	.03001
#2	.00100	.00270	.00161	.00292	7.7216	3.9030	.03316
#3	L-.00536	.00582	.00161	.00209	7.6875	3.5159	.03161
#4	-.00350	.00115	.00214	.00291	7.6235	3.8189	.03229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.517	.53916	-.00361	29.322	.00622	-.00250	.01933
SDev	.145	.00256	.00615	.287	.00094	.02239	.03393
%RSD	.93325	.47470	170.62	.98020	15.038	895.54	175.59
#1	15.614	.54124	-.00668	29.537	.00628	-.01368	.02571
#2	15.534	.54125	.00562	29.334	.00501	.03109	-.01281
#3	15.614	.53812	-.00668	29.504	.00730	-.01370	.00019
#4	15.308	.53602	-.00669	28.912	.00629	-.01372	.06422
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03045	3.1256	.00824	.34348	-.00351	-.03358	.00051
SDev	.03418	.0206	.03314	.00243	.00038	.06486	.00061
%RSD	112.23	.65980	402.27	.70738	10.942	193.15	120.26
#1	-.08126	3.1430	.04116	.34527	-.00343	.02596	.00102
#2	-.01669	3.1372	-.00374	.34438	-.00343	-.12403	.00015

#3	-.01679	3.1256	-.03263	.34438	-.00404	-.00366	.00102
#4	-.00707	3.0967	.02815	.33989	-.00313	-.03260	-.00016

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

Elem	ZN
Units	ppm
Avge	.01430
SDev	.00079
%RSD	5.5464

#1	.01528
#2	.01461
#3	.01365
#4	.01365

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHWXF

Operator: WTR

Run Time: 03/20/01 16:54:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.01063	.02007	.06999	.02429	.00039	50.791
SDev	.00082	.00275	.02664	.00181	.00022	.00006	.200
%RSD	286.64	25.894	132.70	2.5826	.90186	16.593	.39426

#1	-.00042	.01062	.05243	.06909	.02462	.00037	50.697
#2	-.00042	.01063	-.00983	.06909	.02418	.00049	50.600
#3	.00099	.00726	.02845	.07270	.02418	.00036	50.801
#4	.00099	.01400	.00924	.06908	.02418	.00036	51.064

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00018	.00815	.00027	.02355	.14965	10.299	.00385
SDev	.00259	.00155	.00250	.00080	.00167	.306	.00045
%RSD	1437.5	19.038	931.31	3.3894	1.1150	2.9696	11.614

#1	-.00196	.00582	-.00161	.02292	.15033	10.055	.00397
#2	.00359	.00892	.00268	.02459	.15169	10.417	.00321
#3	-.00177	.00893	-.00215	.02376	.14829	10.678	.00425
#4	-.00058	.00893	.00215	.02293	.14829	10.047	.00397

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.956	.63022	.00310	34.893	.00551	-.00652	.02252
SDev	.055	.00484	.00308	.222	.00363	.00518	.03031
%RSD	.32370	.76814	99.371	.63752	66.013	79.370	134.60

#1	17.031	.63386	.00463	35.214	.00254	-.00204	.06417
#2	16.956	.62659	.00463	34.821	.00995	-.00204	.00006
#3	16.938	.62554	-.00152	34.837	.00253	-.01099	.02581
#4	16.900	.63490	.00463	34.700	.00700	-.01103	.00003

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02063	5.5444	.01065	.37083	-.00313	-.05521	.00186
SDev	.02596	.0058	.01939	.00139	.00025	.08767	.00201
%RSD	125.82	.10473	182.11	.37520	7.9658	158.79	108.19

#1	-.04545	5.5473	.02464	.37286	-.00282	-.09638	.00011
#2	-.00076	5.5357	.01385	.36995	-.00313	.03841	.00012

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#3	.00419	5.5474	-.01763	.37062	-.00343	-.00653	.00351
#4	-.04049	5.5474	.02174	.36991	-.00313	-.15635	.00368

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

Elem	ZN
Units	ppm
Avge	.05253
SDev	.00080
%RSD	1.5221

#1	.05282
#2	.05241
#3	.05150
#4	.05340

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHWOF

Operator: WTR

Run Time: 03/20/01 16:57:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00182	.03746	.03939	.18342	.03189	.00014	73.497
SDev	.00289	.01396	.08155	.01100	.00048	.00006	.848
%RSD	158.72	37.275	207.03	5.9963	1.4920	41.518	1.1534
#1	.00113	.03781	-.01451	.18835	.03207	.00023	74.274
#2	.00252	.03608	.08609	.18684	.03119	.00011	73.839
#3	-.00166	.02091	-.04315	.16716	.03207	.00011	73.574
#4	.00529	.05503	.12913	.19132	.03225	.00012	72.302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00216	.00349	.00201	.00370	12.956	8.4520	.00124
SDev	.00217	.00298	.00202	.00105	.031	.4885	.00033
%RSD	100.49	85.258	100.77	28.378	.23765	5.7792	26.185
#1	-.00089	.00737	.00429	.00516	12.952	9.0875	.00166
#2	-.00464	.00117	.00161	.00349	12.936	8.1448	.00110
#3	-.00324	.00427	.00268	.00350	13.001	8.5741	.00090
#4	.00013	.00115	-.00054	.00266	12.936	8.0018	.00132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.703	.49247	.00016	36.226	.00684	.04056	.00652
SDev	.089	.00157	.00710	.758	.00072	.01351	.06333
%RSD	.65131	.31811	4476.5	2.0927	10.543	33.308	971.80
#1	13.606	.49377	.00631	35.502	.00625	.05629	L-.06414
#2	13.651	.49168	.00631	35.700	.00711	.04737	.08993
#3	13.768	.49378	-.00599	36.585	.00774	.02934	.00018
#4	13.789	.49064	-.00600	37.118	.00627	.02925	.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02009	3.3255	-.00896	.58024	-.00419	-.03668	.00357
SDev	.03210	.0058	.01448	.00678	.00088	.08823	.00248
%RSD	159.75	.17343	161.66	1.1689	20.995	240.56	69.637
#1	-.04493	3.3227	.00193	.57346	-.00404	.01955	.00491
#2	-.00030	3.3227	-.01848	.57548	-.00435	-.16000	.00491

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#3	-.04974	3.3227	-.02411	.58490	-.00526	.03381	.00460
#4	.01459	3.3342	.00483	.58714	-.00313	-.04007	-.00015

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

Elem	ZN
Units	ppm
Avge	.01667
SDev	.00205
%RSD	12.305

#1	.01813
#2	.01746
#3	.01745
#4	.01363

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHW1F

Operator: WTR

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

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00131	.01021	-.01454	.04580	.02192	.00003	48.246
SDev	.00228	.01490	.01577	.00001	.00020	.00006	.138
%RSD	174.90	145.91	108.42	.01551	.89261	236.82	.28544
#1	-.00149	-.00985	-.02992	.04579	.02181	.00012	48.240
#2	.00410	.02598	-.02545	.04581	.02217	-.00000	48.410
#3	.00129	.01068	-.00612	.04579	.02173	.00000	48.074
#4	.00133	.01402	.00333	.04580	.02199	-.00001	48.262
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00037	.00134	.00179	1.1644	1.6096	.00481
SDev	.00209	.00201	.00093	.00083	.0022	.3520	.00088
%RSD	104.93	536.48	69.241	46.490	.18510	21.871	18.363
#1	.00375	.00270	.00161	.00138	1.1637	1.5297	.00377
#2	.00370	-.00196	.00161	.00137	1.1665	1.6727	.00503
#3	-.00047	-.00040	.00000	.00138	1.1617	1.1930	.00456
#4	.00098	.00115	.00214	.00304	1.1658	2.0430	.00588
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6414	.07206	.00015	20.570	.00191	-.00713	.00008
SDev	.0164	.00104	.00308	.150	.01304	.00900	.00015
%RSD	1.0003	1.4427	2017.2	.72850	682.26	126.17	196.06
#1	1.6520	.07155	.00477	20.725	-.01006	-.01154	-.00008
#2	1.6174	.07362	-.00139	20.395	-.00329	-.01170	.00001
#3	1.6440	.07154	-.00139	20.660	.00068	-.01165	.00010
#4	1.6520	.07154	-.00139	20.501	.02032	.00636	.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01372	6.7437	-.03143	.25488	-.00282	.00485	.00119
SDev	.06466	.0405	.01124	.00135	.00066	.05188	.00254
%RSD	471.38	.60099	35.765	.52803	23.354	1070.2	213.03
#1	.05206	6.7640	-.02288	.25645	-.00343	.04980	.00012
#2	.00739	6.7640	-.02288	.25376	-.00191	.01983	.00115

#3	-.10185	6.7640	-.04656	.25555	-.00313	-.07002	-.00122
#4	-.01247	6.6829	-.03341	.25376	-.00282	.01978	.00471

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

Elem	ZN
Units	ppm
Avge	.00298
SDev	.00210
%RSD	70.463

#1	.00218
#2	.00255
#3	.00119
#4	.00601

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHW5F

Operator: WTR

Run Time: 03/20/01 17:04:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00070	.02047	.01592	.02340	.04053	.00015	24.980
SDev	.00081	.01219	.03707	.00240	.00009	.00006	.176
%RSD	114.74	59.545	232.83	10.244	.22258	40.000	.70477
#1	.00000	.00551	-.03064	.02302	.04057	.00012	24.758
#2	.00140	.02426	.01708	.02667	.04057	.00025	25.025
#3	.00000	.01753	.01714	.02089	.04057	.00012	24.954
#4	.00140	.03457	.06011	.02302	.04039	.00012	25.182
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00004	.00891	.00134	.00249	1.7156	2.0536	.00218
SDev	.00114	.00179	.00265	.00105	.0061	.4292	.00046
%RSD	2913.7	20.102	197.17	42.219	.35718	20.901	21.215
#1	.00022	.00736	-.00214	.00144	1.7079	1.7064	.00149
#2	-.00162	.00736	.00161	.00228	1.7229	2.0262	.00245
#3	.00093	.01047	.00161	.00228	1.7161	1.8158	.00233
#4	.00062	.01047	.00429	.00394	1.7154	2.6659	.00245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.772	.19986	.00176	23.316	.01002	-.02280	.00012
SDev	.007	.00100	.00355	.131	.00371	.02243	.00006
%RSD	.06181	.49855	201.50	.56068	36.995	98.368	47.705
#1	10.772	.19856	.00484	23.360	.00495	-.01161	.00005
#2	10.764	.20064	.00484	23.334	.01326	-.01162	.00012
#3	10.780	.19960	-.00131	23.439	.00965	-.05644	.00012
#4	10.774	.20064	-.00131	23.132	.01223	-.01153	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00415	3.4225	-.00637	.18251	-.00175	-.01804	.00005
SDev	.03648	.0055	.01927	.00073	.00063	.07349	.00009
%RSD	878.68	.16207	302.46	.40140	36.203	407.31	181.37
#1	.00909	3.4153	.00876	.18251	-.00252	.04203	.00012
#2	-.02065	3.4211	-.00703	.18251	-.00160	-.10806	.00013

#3	-.02564	3.4269	.00613	.18340	-.00191	.04188	-.00003
#4	.05380	3.4269	-.03335	.18161	-.00099	-.04802	-.00002

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

Elem	ZN
Units	ppm
Avge	.04484
SDev	.00161
%RSD	3.5942

#1	.04267
#2	.04655
#3	.04494
#4	.04521

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHW9F

Operator: WTR

Run Time: 03/20/01 17:07:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00039	.00509	.02803	1.5332	.06422	.00011	153.17
SDev	.00176	.00876	.00813	.0278	.00076	.00000	.82
%RSD	451.70	171.96	29.003	1.8140	1.1861	.23200	.53250

#1	-.00283	.00040	.03166	1.5495	.06518	.00011	151.95
#2	-.00004	-.00473	.01733	1.5097	.06449	.00011	153.54
#3	-.00004	.01061	.02680	1.5097	.06361	.00011	153.68
#4	.00136	.01410	.03634	1.5640	.06361	.00011	153.50

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00173	.00115	.00120	.00309	1.6318	45.921	.03413
SDev	.00297	.00179	.00229	.00166	.0062	.594	.00042
%RSD	171.13	156.68	190.51	53.804	.38153	1.2936	1.2416

#1	.00079	.00269	.00053	.00060	1.6350	46.733	.03429
#2	.00088	-.00042	.00375	.00393	1.6377	45.959	.03353
#3	-.00427	-.00040	.00214	.00392	1.6234	45.631	.03420
#4	-.00433	.00271	-.00161	.00393	1.6309	45.362	.03451

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	64.786	.50219	-.00286	87.689	.00618	.04663	.00013
SDev	.430	.00085	.00308	1.108	.00278	.00895	.00004
%RSD	.66413	.16908	107.47	1.2634	45.064	19.197	27.715

#1	65.378	.50219	-.00132	89.249	.00767	.03321	.00017
#2	64.781	.50219	-.00132	87.546	.00230	.05109	.00009
#3	64.363	.50115	-.00133	86.647	.00862	.05108	.00014
#4	64.624	.50323	-.00748	87.313	.00612	.05116	.00011

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02218	12.982	-.01161	.91096	-.00945	.00739	.00467
SDev	.03098	.069	.02796	.00730	.00029	.01935	.00008
%RSD	139.71	.53102	240.77	.80140	3.0885	261.74	1.7462

#1	.01879	13.062	-.02543	.92071	-.00953	.02981	.00471
#2	-.03085	12.980	-.03069	.91155	-.00984	-.00018	.00472

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#3	-.05571	12.894	-.02017	.90344	-.00923	.01502	.00471
#4	-.02094	12.992	.02983	.90815	-.00923	-.01508	.00455

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

Elem ZN
Units ppm
Avge .00163
SDev .00095
%RSD 58.393

#1 .00020
#2 .00211
#3 .00209
#4 .00210

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXHXC

Operator: WTR

Run Time: 03/20/01 17:10:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00177	.01274	.03510	.48394	.04688	.00011	121.16
SDev	.00115	.00467	.02359	.00548	.00050	.00001	.39
%RSD	64.884	36.676	67.205	1.1320	1.0645	6.5246	.31958
#1	.00317	.01059	.03751	.49131	.04627	.00011	121.14
#2	.00179	.01740	.06132	.48422	.04714	.00011	121.62
#3	.00178	.01571	.00396	.48191	.04670	.00011	121.20
#4	.00035	.00724	.03762	.47832	.04740	.00012	120.68
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	-.00283	-.00079	.00040	.00060	9.3861	19.151	.01505
SDev	.00309	.00149	.00275	.00000	.0386	.236	.00091
%RSD	109.12	189.00	686.73	.57269	.41114	1.2328	6.0510
#1	L-.00655	-.00039	-.00215	.00060	9.3697	18.943	.01527
#2	.00045	-.00196	-.00054	.00061	9.4433	19.103	.01612
#3	-.00121	.00115	.00429	.00060	9.3588	19.490	.01488
#4	-.00401	-.00195	-.00000	.00060	9.3725	19.069	.01392
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.573	.12755	-.00031	375.42	.00410	.02596	.00972
SDev	.157	.00101	.00001	2.24	.00544	.03703	.09280
%RSD	.36133	.78769	1.6361	.59595	132.57	142.65	954.80
#1	43.383	.12780	-.00031	373.20	-.00398	.00338	L-.07700
#2	43.767	.12886	-.00030	377.97	.00625	.05723	L-.06402
#3	43.591	.12676	-.00031	373.92	.00785	.05759	.08994
#4	43.551	.12676	-.00031	376.58	.00630	-.01437	.08997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01518	11.586	-.01527	.82598	-.00717	-.01711	.00355
SDev	.05586	.066	.01964	.00461	.00052	.07786	.00237
%RSD	368.02	.56642	128.62	.55808	7.2673	455.21	66.814
#1	-.09094	11.590	.00937	.82183	-.00740	-.07681	.00473
#2	.04333	11.677	-.03268	.83215	-.00709	.08693	.00473

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#3	-.01154	11.538	-.00837	.82318	-.00648	-.00173	.00474
#4	-.00157	11.538	-.02941	.82677	-.00770	-.07681	-.00001

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

Elem	ZN
Units	ppm
Avge	.01837
SDev	.00172
%RSD	9.3841

#1	.01654
#2	.02071
#3	.01813
#4	.01811

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXFF

Operator: WTR

Run Time: 03/20/01 17:13:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00092	.00678	.02872	.04367	.03058	-.00001	98.974
SDev	.00132	.00769	.02828	.01067	.00031	.00001	.491
%RSD	143.38	113.50	98.465	24.430	1.0262	91.710	.49560
#1	-.00012	.00714	.01792	.03204	.03031	-.00002	98.552
#2	.00128	-.00302	.01799	.03718	.03075	-.00001	99.677
#3	-.00012	.00719	.07060	.05273	.03031	-.00001	98.764
#4	.00264	.01579	.00837	.05273	.03093	.00000	98.902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00274	.00039	-.00040	.00073	1.0093	1.7401	.00479
SDev	.00165	.00297	.00154	.00042	.0048	.1679	.00086
%RSD	60.159	768.03	380.89	56.792	.47191	9.6493	17.902
#1	-.00107	.00427	-.00161	.00053	1.0030	1.6054	.00532
#2	-.00168	.00116	-.00000	.00136	1.0146	1.9841	.00560
#3	-.00463	-.00194	.00161	.00052	1.0098	1.7064	.00368
#4	-.00357	-.00194	-.00161	.00052	1.0098	1.6643	.00456
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7640	.13156	.00013	25.034	.00998	-.02280	.00012
SDev	.0185	.00100	.00308	.138	.00582	.02244	.00006
%RSD	.66993	.75728	2326.9	.54975	58.291	98.432	54.631
#1	2.7733	.13078	.00474	24.960	.00708	-.01145	.00010
#2	2.7813	.13286	-.00140	24.877	.01289	-.05646	.00009
#3	2.7627	.13078	-.00141	25.150	.00347	-.01164	.00007
#4	2.7387	.13182	-.00141	25.149	.01649	-.01164	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02413	8.3427	.00343	.51674	-.00633	.03378	.00326
SDev	.06030	.0289	.02403	.00208	.00039	.10700	.00299
%RSD	249.89	.34683	699.87	.40212	6.2217	316.79	91.710
#1	.05156	8.3283	.00080	.51406	-.00618	.06755	.00486
#2	-.00302	8.3283	.03765	.51617	-.00648	-.11244	.00471

#3	-.06757	8.3283	-.00709	.51864	-.00679	.03752	.00471
#4	-.07750	8.3861	-.01762	.51809	-.00587	.14248	-.00122

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

Elem	ZN
Units	ppm
Avge	.00332
SDev	.00122
%RSD	36.678

#1	.00512
#2	.00281
#3	.00284
#4	.00249

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXHF

Operator: WTR

Run Time: 03/20/01 17:16:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95927	46.702	4.8486	4.7452	4.7013	4.7641	48.275
SDev	.00377	.111	.1069	.0185	.0222	.0219	.272
%RSD	.39320	.23709	2.2037	.38964	.47257	.46018	.56423
#1	.95714	46.704	4.9218	4.7337	4.7181	4.7819	47.943
#2	.96003	46.836	4.8246	4.7660	4.7227	4.7823	48.292
#3	.95567	46.565	4.7077	4.7261	4.6802	4.7375	48.257
#4	.96423	46.703	4.9405	4.7551	4.6841	4.7549	48.609
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0111	4.7654	4.7058	4.6653	48.550	45.986	4.6557
SDev	.0256	.0209	.0142	.0263	.116	.133	.0426
%RSD	.50989	.43898	.30089	.56281	.23893	.28836	.91588
#1	4.9828	4.7534	4.6935	4.6896	48.545	45.883	4.6947
#2	5.0160	4.7642	4.7074	4.6863	48.622	46.018	4.6877
#3	5.0021	4.7487	4.6972	4.6413	48.388	45.883	4.6347
#4	5.0436	4.7952	4.7251	4.6439	48.644	46.161	4.6060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.146	4.7212	4.7626	45.770	4.8803	4.8567	4.8538
SDev	.162	.0149	.0295	.310	.0512	.0257	.0925
%RSD	.34412	.31645	.61937	.67668	1.0483	.52958	1.9053
#1	47.282	4.7152	4.7349	46.060	4.8703	4.8362	4.9117
#2	47.242	4.7277	4.7411	46.009	4.8581	4.8364	4.9372
#3	46.920	4.7037	4.7780	45.566	4.8383	4.8898	4.7313
#4	47.138	4.7381	4.7965	45.446	4.9544	4.8642	4.8350
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.6518	4.9034	4.9325	4.7001	4.7066	9.3624	4.7072
SDev	.0975	.0408	.0209	.0200	.0135	.1811	.0108
%RSD	2.0950	.83223	.42466	.42645	.28634	1.9341	.22887
#1	4.5202	4.8744	4.9413	4.7132	4.7097	9.2615	4.7011
#2	4.6793	4.9440	4.9045	4.7207	4.7219	9.5299	4.7156

Analysis Report

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#3	4.6538	4.8627	4.9538	4.6788	4.6892	9.1590	4.6951
#4	4.7539	4.9325	4.9305	4.6876	4.7057	9.4994	4.7170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 4.7459
SDev .0187
%RSD .39358

#1 4.7441
#2 4.7491
#3 4.7224
#4 4.7678

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-8

Operator: WTR

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

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00070	L.01484	L.01902	L.03714	L.00120	L.00123	L.01986
SDev	.00176	.01480	.02754	.00181	.00096	.00073	.01137
%RSD	250.41	99.760	144.83	4.8662	79.279	59.442	57.220

#1	L.00105	L.01748	L.04295	L.03985	L.00070	L.00062	L.01207
#2	L-.00174	L.00037	L-.00480	L.03623	L.00026	L.00074	L.00905
#3	L.00245	L.00713	L-.00487	L.03623	L.00140	L.00135	L.02487
#4	L.00105	L.03438	L.04279	L.03626	L.00245	L.00221	L.03346

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.00270	L.00116	L.00081	L.00125	L.01396	L-.18516	L.00127
SDev	.00211	.00253	.00217	.00096	.00730	.12357	.00133
%RSD	78.286	219.09	268.78	77.012	52.302	66.740	104.44

#1	L-.00043	L-.00194	L.00215	L.00042	L.00800	L-.09468	L.00025
#2	L.00351	L.00116	L-.00214	L.00042	L.00868	L-.36400	L.00014
#3	L.00352	L.00426	L.00054	L.00209	L.01550	L-.11152	L.00177
#4	L.00420	L.00115	L.00269	L.00209	L.02367	L-.17043	L.00293

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L-.00599	L.00105	L.00615	L.02775	L.00474	L-.01795	L-.00002
SDev	.01076	.00060	.00589	.01184	.00534	.00455	.00011
%RSD	179.62	57.752	95.727	42.684	112.58	25.379	603.85

#1	L-.01531	L.00052	L-.00154	L.01964	L.01068	L-.02028	L.00005
#2	L-.01265	L.00052	L.00461	L.01621	L.00377	L-.02018	L.00006
#3	L-.00466	L.00157	L.01077	L.03376	L-.00204	L-.01111	L-.00017
#4	L.00866	L.00157	L.01077	L.04138	L.00656	L-.02021	L-.00001

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.00253	L.00869	L.00987	L.00151	L.00091	L.08221	L.00016
SDev	.03042	.00473	.02895	.00076	.00091	.06820	.00015
%RSD	1204.0	54.433	293.38	50.421	99.536	82.965	94.863

#1	L.03354	L.01448	L.01645	L.00090	L.00053	L.12728	L-.00003
#2	L.02361	L.00869	L-.01513	L.00090	L-.00008	L.06730	L.00011

#3	L-.02602	L.00869	L.04803	L.00179	L.00114	L.14210	L.00027
#4	L-.02103	L.00290	L-.00987	L.00247	L.00206	L-.00786	L.00028

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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 L.00029
SDev .00079
%RSD 274.34

#1	L-.00037
#2	L-.00035
#3	L.00062
#4	L.00126

Errors	LC Low
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB8

Operator: WTR

Run Time: 03/20/01 17:23:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.02732	.02126	.11978	.02205	.00061	H132.70
SDev	.00229	.00744	.06147	.00217	.00038	.00036	.30
%RSD	3986.6	27.221	289.08	1.8124	1.7240	59.761	.22889
#1	.00007	.01748	.00694	.12030	.02155	.00023	H132.47
#2	.00004	.03455	-.04580	.11670	.02199	.00037	H133.06
#3	.00286	.03120	.02120	.12031	.02243	.00085	H132.43
#4	-.00274	.02605	.10271	.12181	.02225	.00098	H132.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00119	.01204	.00107	.00358	H2.2180	3.8799	.00258
SDev	.00204	.00335	.00131	.00198	.0036	.4012	.00094
%RSD	171.13	27.852	122.69	55.256	.16441	10.342	36.327
#1	.00253	.01204	.00053	.00400	H2.2132	4.0882	.00146
#2	-.00159	.00739	.00215	.00483	H2.2180	3.4317	.00217
#3	.00094	.01515	.00214	.00067	H2.2187	4.3239	.00349
#4	.00289	.01359	-.00054	.00484	H2.2221	3.6758	.00321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H23.386	H.64117	-.00279	H22.656	.01008	-.00267	.00019
SDev	.046	.00134	.00308	.034	.00634	.00010	.01053
%RSD	.19602	.20955	110.42	.15037	62.913	3.6238	5557.6
#1	H23.322	H.63961	-.00125	H22.645	.00362	-.00267	.00013
#2	H23.418	H.64169	-.00125	H22.618	.00693	-.00281	.00015
#3	H23.420	H.64065	-.00740	H22.699	.01149	-.00260	-.01266
#4	H23.386	H.64273	-.00125	H22.663	.01826	-.00261	.01314
Errors	LC High	LC High	LC Pass	LC High	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	.00077	H3.9295	-.00760	H1.1009	-.00755	-.04222	.00260
SDev	.03780	.0364	.02666	.0012	.00018	.06854	.00240
%RSD	4936.9	.92711	350.59	.11232	2.3327	162.34	92.370
#1	.02557	H3.8788	-.00695	H1.0994	-.00770	.03651	.00471
#2	-.02902	H3.9657	-.02800	H1.1003	-.00740	-.11334	-.00003

#3	.04048	H3.9368	.02984	H1.1017	-.00740	-.00855	.00456
#4	-.03397	H3.9367	-.02531	H1.1020	-.00770	-.08349	.00115

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

Elem ZN
Units ppm
Avge H.03233
SDev .00112
%RSD 3.4614

#1 H.03100
#2 H.03354
#3 H.03289
#4 H.03188

Errors LC High
High .02000
Low -.02000

Method: QUANMET Sample Name: DXHXKF

Operator: WTR

Run Time: 03/20/01 17:26:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	.01229	.06561	.13496	.03310	.00024	68.444
SDev	.00114	.00368	.04521	.00307	.00021	.00017	.103
%RSD	101.77	29.941	68.912	2.2764	.62617	71.590	.14978
#1	.00114	.01567	.01165	.13315	.03312	.00011	68.572
#2	-.00029	.00717	.08364	.13680	.03294	.00012	68.455
#3	.00250	.01401	.11712	.13164	.03294	.00025	68.427
#4	.00113	.01232	.05002	.13823	.03338	.00048	68.323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00055	.00348	.00201	.00281	6.6816	5.6599	.00091
SDev	.00354	.00391	.00154	.00118	.0119	.2136	.00069
%RSD	649.54	112.17	76.506	41.943	.17849	3.7743	75.800
#1	.00118	.00737	.00214	.00282	6.6898	5.6115	-.00006
#2	-.00343	-.00195	.00000	.00114	6.6925	5.4011	.00090
#3	.00503	.00425	.00215	.00365	6.6775	5.7125	.00129
#4	-.00061	.00426	.00375	.00364	6.6666	5.9145	.00149
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.3180	.33871	.00395	11.306	.00740	-.00891	.01608
SDev	.0451	.00060	.00308	.065	.00640	.00899	.03216
%RSD	.54175	.17774	77.887	.57697	86.538	100.88	199.97
#1	8.3692	.33819	.00549	11.340	.01475	-.01322	.06433
#2	8.3000	.33923	.00549	11.360	-.00042	-.01359	-.00006
#3	8.2654	.33923	.00549	11.213	.00568	-.01340	-.00000
#4	8.3373	.33818	-.00066	11.310	.00958	.00457	.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00611	2.0553	.00942	.80192	-.00412	-.06035	.00248
SDev	.02162	.0087	.01061	.00272	.00015	.04962	.00270
%RSD	354.02	.42423	112.61	.33903	3.7037	82.221	108.93
#1	.00986	2.0655	-.00616	.80411	-.00404	-.10924	.00489
#2	.03469	2.0480	.01199	.80411	-.00435	-.03422	.00014

678 921

#3	-.01500	2.0480	.01462	.79850	-.00404	-.09399	.00014
#4	-.00511	2.0597	.01725	.80097	-.00404	-.00394	.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	.00906
SDev	.00124
%RSD	13.714

#1	.00761
#2	.00955
#3	.00857
#4	.01049

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXHXMf

Operator: WTR

Run Time: 03/20/01 17:29:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.00807	.00692	.02621	.06315	.00033	196.59
SDev	.00070	.00458	.01858	.00106	.00046	.00012	.74
%RSD	259.11	56.728	268.32	4.0291	.73104	36.163	.37635
#1	-.00005	.00538	-.01109	.02567	.06317	.00034	197.50
#2	-.00010	.00377	.02737	.02567	.06291	.00025	196.42
#3	-.00009	.00904	.01774	.02779	.06273	.00049	195.71
#4	.00133	.01409	-.00633	.02570	.06379	.00023	196.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00134	.00076	-.00014	.00076	1.2228	2.9162	.01136
SDev	.00201	.00149	.00051	.00208	.0079	.3620	.00059
%RSD	150.01	196.00	375.51	274.54	.64219	12.412	5.2039
#1	-.00042	.00115	.00053	.00388	1.2189	3.4570	.01142
#2	-.00325	-.00040	-.00053	-.00028	1.2196	2.7500	.01201
#3	-.00272	.00271	-.00000	-.00028	1.2182	2.7668	.01058
#4	.00104	-.00041	-.00054	-.00028	1.2345	2.6911	.01145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.4402	.14513	-.00138	139.50	.00999	.00862	.02258
SDev	.0547	.00100	.00710	1.79	.00655	.05265	.04491
%RSD	.84982	.68675	515.52	1.2835	65.580	611.11	198.95
#1	6.4063	.14539	.00477	137.78	.01182	.05141	.08994
#2	6.3983	.14435	.00477	139.09	.00671	-.01166	.00007
#3	6.4382	.14435	-.00753	139.11	.00318	.05131	.00007
#4	6.5181	.14643	-.00753	142.02	.01826	-.05659	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02098	11.089	.01476	.96236	-.01197	-.02191	.00352
SDev	.01242	.077	.01468	.00831	.00043	.11704	.00379
%RSD	59.179	.69135	99.440	.86405	3.6031	534.19	107.52
#1	-.00734	11.092	.01964	.95624	-.01197	-.11556	.00842
#2	-.03712	11.040	-.00705	.95961	-.01167	.13928	.00012

#3	-.02224	11.028	.02190	.95894	-.01258	-.01060	.00100
#4	-.01722	11.196	.02453	.97464	-.01167	-.10076	.00455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00361
SDev .00081
%RSD 22.457

#1 .00376
#2 .00375
#3 .00444
#4 .00249

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-9

Operator: WTR

Run Time: 03/20/01 17:32:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97908	48.825	4.9383	4.9200	4.9817	4.9659	48.146
SDev	.00251	.250	.0471	.0417	.0294	.0246	.145
%RSD	.25633	.51172	.95308	.84841	.58955	.49441	.30078
#1	.98178	48.526	4.9806	4.8659	4.9489	4.9328	48.174
#2	.97775	48.844	4.8816	4.9243	4.9800	4.9728	48.301
#3	.97628	48.792	4.9733	4.9221	4.9775	4.9664	48.159
#4	.98050	49.136	4.9177	4.9677	5.0204	4.9918	47.951
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	5.0032	4.8360	4.7626	4.9584	49.727	48.890	5.0369
SDev	.0095	.0205	.0072	.0389	.117	.206	.0549
%RSD	.18976	.42424	.15021	.78381	.23491	.42129	1.0908
#1	4.9928	4.8245	4.7567	4.9163	49.563	48.770	4.9800
#2	5.0146	4.8632	4.7680	4.9539	49.823	49.191	5.0225
#3	4.9987	4.8166	4.7696	4.9530	49.725	48.745	5.0333
#4	5.0066	4.8399	4.7562	5.0105	49.796	48.854	5.1117
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	49.133	4.8093	4.8566	49.135	4.9678	4.8977	4.9792
SDev	.191	.0116	.0203	.413	.0247	.0225	.0447
%RSD	.38876	.24037	.41875	.84034	.49736	.45926	.89867
#1	48.891	4.7945	4.8335	48.709	4.9461	4.9088	4.9631
#2	49.107	4.8226	4.8704	49.043	4.9471	4.9097	5.0012
#3	49.181	4.8091	4.8458	49.087	4.9932	4.9083	4.9249
#4	49.352	4.8112	4.8766	49.700	4.9846	4.8639	5.0273
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	4.8702	5.0858	4.9398	4.9479	4.8784	9.6279	4.8309
SDev	.0555	.0339	.0721	.0262	.0176	.0838	.0077
%RSD	1.1397	.66606	1.4598	.53042	.36145	.87013	.15881
#1	4.8560	5.1016	4.8990	4.9167	4.8557	9.5144	4.8211
#2	4.8072	5.0671	5.0333	4.9488	4.8850	9.6150	4.8399

#3	4.8764	5.0496	4.8698	4.9454	4.8753	9.6918	4.8310
#4	4.9412	5.1249	4.9570	4.9809	4.8975	9.6905	4.8317

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	4.8219
SDev	.0126
%RSD	.26206

#1	4.8119
#2	4.8264
#3	4.8115
#4	4.8378

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB9

Operator: WTR

Run Time: 03/20/01 17:36:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00246	.04842	.00192	.03810	.00434	.00409	.09566
SDev	.00113	.00216	.02364	.00467	.00027	.00038	.00794
%RSD	45.801	4.4600	1228.2	12.257	6.3087	9.1891	8.3006
#1	.00246	.04795	.02829	.04353	.00465	.00406	.09762
#2	.00385	.04802	.00436	.03990	.00421	.00357	.08417
#3	.00246	.05142	-.02922	.03630	.00446	.00430	.10240
#4	.00109	.04627	.00428	.03268	.00403	.00441	.09845
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	.00346	.00503	.00604	.00667	.04479	.27774	.00446
SDev	.00185	.00090	.00080	.00144	.00475	.31546	.00041
%RSD	53.428	17.839	13.301	21.627	10.606	113.58	9.2223
#1	.00178	.00581	.00483	.00542	.04547	.21672	.00447
#2	.00195	.00426	.00644	.00625	.03798	.68803	.00416
#3	H.00518	.00425	.00644	.00626	.04684	.28405	.00416
#4	.00494	.00581	.00644	.00876	.04888	-.07785	.00503
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	.04395	.00391	.01231	.07800	.01305	.02029	-.01925
SDev	.00700	.00052	.00308	.00911	.00241	.03635	.05393
%RSD	15.939	13.312	24.989	11.675	18.502	179.18	280.23
#1	.03795	.00470	.01692	.08983	.01553	.05174	-.02562
#2	.04861	.00365	.01077	.06808	.01459	.05180	.03847
#3	.05127	.00365	.01077	.07915	.01039	-.01115	.00002
#4	.03795	.00365	.01077	.07495	.01168	-.01124	L-.08985
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	-.01724	.06520	.00254	.00428	.00396	.03674	.00181
SDev	.03253	.01094	.02373	.00047	.00015	.09395	.00221
%RSD	188.73	16.787	933.35	10.876	3.8462	255.74	122.53
#1	-.00606	.06663	-.01788	.00449	.00389	.15663	.00044
#2	-.04084	.07242	.03239	.00359	.00419	-.03807	.00029

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#3	.02373	.07244	-.01514	.00449	.00389	-.03822	.00147
#4	-.04577	.04930	.01080	.00458	.00389	.06662	.00503
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 .00277
SDev .00086
%RSD 31.128

#1 .00351
#2 .00188
#3 .00352
#4 .00219

Errors LC Pass
High .02000
Low -.02000

#	Sample Name	AG	AS	CD	CR	PB	SB
1	STD1	-.0022	-.01008	.00081	.00062		
2	STD6	9.10031	5.21799	11.016			
3	STD7				8.71651		
4	ICV3-1 0087-116-5	.50903	.25793	.25361	1.0247	.25458	.25951
5	ICB1	.00041	.00071	.00019	.00085	.00017	.00227
6	ICSA 0087-133-5	-.00019	.00567	.00069	.00435	.00449	.00222
7	ICSAB 0087-081-6	1.1259	1.0447	.95055	.52389	1.0135	1.0587
8	DW91NB	.00027	.00177	.00029	.00163	.00114	.00419
9	DW91NC	.05202	1.9945	.04855	.20820	.50119	.50475
10	DW652	-.00021	.04727	-.00001	.08387	.09739	.00126
11	DW652P5	-.00026	.01152	.00005	.01696	.02064	.00066
12	DW652S	.04835	1.9128	.04458	.31220	.56229	.21376
13	DW652D	.04847	1.9206	.04502	.31105	.56398	.21235
14	DW8TKB	.00011	.00209	.00048	.00148	.00047	-.00037
15	DW8TKC	.05039	1.9836	.04915	.20690	.49708	L.00269
16	CCV3-1 0087-118-1	1.0245	.51259	.49194	2.0275	.50271	.51182
17	CCB1	-.00010	.00171	.00028	.00025	.00033	.00019
18	DW7Q1	-.00087	.05368	.00057	.09653	.10069	.00202
19	DW7Q1P5	-.00026	.01373	.00018	.02042	.02081	.00004
20	DW7Q1S	.04631	1.8556	.04507	.28553	.54862	-.00002
21	DW7Q1D	.04580	1.8497	.04510	.28656	.54912	.00058
22	DW7Q3	-.00015	.05532	.00154	.08340	.08661	.00254
23	DW7Q4	-.00015	.05960	.00089	.09357	.07190	.00144
24	DXG4QB	.00030	.00210	.00032	.00151	.00097	.00168
25	DXG4QC	.05020	1.9534	.04664	.20050	.48752	.49104
26	DXGMH	.00055	.00691	.00044	.02958	.00678	.00783
27	DXGMHP5	-.00009	.00188	.00017	.00639	.00127	.00265
28	CCV3-2	1.0237	.51300	.49555	2.0383	.50498	.51213
29	CCB2	.00023	.00217	-.00001	.00060	-.00066	.00021
30	DXGMHS	.05171	1.9568	.04529	.22779	.48295	.50052
31	DXGMHD	.05147	1.9829	.04540	.23111	.48798	.50080
32	DW8T9B	.00034	.00142	.00025	.00043	-.00036	.00079
33	DW8T9C	.05045	2.0574	.04797	.20283	.50454	.50425
34	DW79V	.00034	.00928	-.00002	.15678	-.00030	.00241
35	DW795	.00012	.00709	.00030	.09550	.00028	.00033
36	DW797	.00026	.02282	-.00019	.07866	.00261	.00333
37	DW8AA	-.00011	.00678	-.00001	.01668	-.00041	.00214
38	DW8AE	-.00014	.00995	-.00018	.27767	.00145	.00108
39	DW8AL	.00062	.03074	.00003	.20426	.00189	.00204
40	CCV3-3	1.0206	.51470	.49573	2.0364	.50746	.51364
41	CCB3	.00025	.00157	.00005	.00091	-.00152	-.00065
42	DW8AM	-.00022	.00354	.00005	.00642	-.00073	.00180
43	DW8AMP5	.00020	.00097	.00006	.00269	-.00033	.00031
44	DW8AMS	.05048	2.0358	.04591	.20073	.49095	.49261
45	DW8AMD	.04946	2.0241	.04583	.19969	.48760	.49258
46	DW8AP	-.00012	.00620	-.00028	.32266	.00246	.00080
47	DW8AQ	.00036	.00452	.00013	.03621	.00078	.00286
48	DW8AT	.00008	.00102	-.00009	.01214	-.00071	.00174
49	DW79VF	.00045	.00885	.00004	.00169	.00006	.00138
50	DW795F	.00064	.00678	.00007	.00242	-.00030	.00221
51	DW797F	-.00023	.02377	.00009	.00091	.00129	.00180
52	CCV3-4	1.0027	.51474	.49720	2.0238	.50889	.51028
53	CCB4	.00009	.00066	.00029	-.00021	-.00018	.00162

#	Sample Name	AG	AS	CD	CR	PB	SB
54	DW8AAF	.00053	.00415	-.00005	.00122	.00032	.00159
55	DW8AEF	-.00035	.00249	-.00008	.00136	.00003	-.00020
56	DW8ALF	.00016	.02474	.00002	.00288	-.00017	-.00004
57	DW8AMF	.00022	.00273	-.00005	.00047	.00065	.00123
58	DW8AMP5F	-.00040	.00214	.00018	.00023	.00007	.00052
59	DW8AMSF	.05028	2.0654	.04736	.20236	.50051	.50368
60	DW8AMDF	.05139	2.1069	.04809	.20667	.51097	.51093
61	DW8APF	.00008	.00370	-.00010	.00104	-.00070	.00139
62	DW8AQF	.00002	.00357	.00014	.00183	-.00030	-.00069
63	DW8ATF	.00003	.00436	.00015	.00101	.00058	.00037
64	CCV3-5	1.0200	.52328	.50534	2.0702	.51607	.52241
65	CCB5	-.00015	.00190	.00010	.00044	-.00042	.00034
66	DWEW2B	-.00033	.00056	.00022	.00086	.00099	.00187
67	DWEW2C	.04866	1.9894	.04950	.20663	.49719	L.00321
68	DW54JF	.00035	.00316	.00029	.00180	.00089	.00159
69	DW54JP5F	-.00008	.00123	-.00004	.00040	-.00017	.00104
70	DW8T9B RERUN	-.00027	.00108	.00000	.00054	-.00042	.00108
71	CCV3-6	1.0184	.52316	.50316	2.0665	.51574	.52240
72	CCB6	-.00010	.00193	.00049	.00038	-.00150	-.00006

#	Sample Name	SE	TL
1	STD1		-.02873
2	STD6		2.93879
3	STD7		
4	ICV3-1 0087-116-5	.26080	.52491
5	ICB1	.00373	.00374
6	ICSA 0087-133-5	.00185	-.01288
7	ICSAB 0087-081-6	1.0567	1.0130
8	DW91NB	.00129	-.00325
9	DW91NC	1.9550	2.0883
10	DW652	.00466	.00264
11	DW652P5	.00401	.00210
12	DW652S	1.8334	1.9289
13	DW652D	1.8533	1.9452
14	DW8TKB	.00245	.00103
15	DW8TKC	1.9543	1.9973
16	CCV3-1 0087-118-1	.52038	1.0171
17	CCB1	.00211	.00580
18	DW7Q1	-.00270	-.00145
19	DW7Q1P5	.00335	-.00270
20	DW7Q1S	1.8001	1.8408
21	DW7Q1D	1.8232	1.8439
22	DW7Q3	-.00052	.00465
23	DW7Q4	.00061	-.00054
24	DXG4QB	.00130	-.00283
25	DXG4QC	1.9638	2.0345
26	DXGMH	.00242	.00303
27	DXGMHP5	.00023	.00422
28	CCV3-2	.52475	1.0306
29	CCB2	.00022	.00536
30	DXGMHS	1.9702	2.0419
31	DXGMHD	1.9874	2.0681

#	Sample Name	SE	TL

32	DW8T9B	.00156	H.01016
33	DW8T9C	2.1747	2.0886
34	DW79V	.00029	.00789
35	DW795	.00267	.00540
36	DW797	.00325	.00473
37	DW8AA	.00082	.00726
38	DW8AE	.00124	.00347
39	DW8AL	.00291	.00935
40	CCV3-3	.52290	1.0404
41	CCB3	.00041	.00613
42	DW8AM	.00013	.00192
43	DW8AMP5	.00326	.00972
44	DW8AMS	2.1292	2.0642
45	DW8AMD	2.1386	2.0697
46	DW8AP	.00284	.00719
47	DW8AQ	-.00065	.00789
48	DW8AT	.00202	.00056
49	DW79VF	-.00063	.00090
50	DW795F	.00421	.00087
51	DW797F	.00152	-.00118
52	CCV3-4	.51998	1.0472
53	CCB4	.00139	.00909
54	DW8AAF	.00017	.00336
55	DW8AEF	.00220	.00626
56	DW8ALF	.00109	.00583
57	DW8AMF	.00132	.00167
58	DW8AMP5F	.00044	.00435
59	DW8AMSF	2.1869	2.0721
60	DW8AMDF	2.2334	2.1121
61	DW8APF	.00232	.00680
62	DW8AQF	.00291	.00333
63	DW8ATF	.00276	.00380
64	CCV3-5	.53224	1.0595
65	CCB5	-.00266	.00673
66	DWEW2B	.00177	-.00163
67	DWEW2C	1.9663	2.0003
68	DW54JF	.00166	.00227
69	DW54JP5F	-.00003	.00360
70	DW8T9B RERUN	-.00035	.00244
71	CCV3-6	.53213	1.0546
72	CCB6	.00210	.00707

WTR 3-20-01

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T10320A	METTRA	03/20/01	09:54		X	IR
2	STD6	T10320A	METTRA	03/20/01	09:58		X	IR
3	STD7	T10320A	METTRA	03/20/01	10:03		X	IR
4	ICV3-1 0087-116-5	T10320A	METTRA	03/20/01	10:06	WTR	S	CONC
5	ICB1	T10320A	METTRA	03/20/01	10:11	WTR	S	CONC
6	ICSA 0087-133-5	T10320A	METTRA	03/20/01	10:15	WTR	Q	CONC
7	ICSAB 0087-081-6	T10320A	METTRA	03/20/01	10:20	WTR	Q	CONC
8	DW91NB	T10320A	METTRA	03/20/01	10:24	WTR	S	CONC
9	DW91NC	T10320A	METTRA	03/20/01	10:29	WTR	S	CONC
10	DW652	T10320A	METTRA	03/20/01	10:33	WTR	S	CONC
11	DW652P5	T10320A	METTRA	03/20/01	10:37	WTR	S	CONC
12	DW652S	T10320A	METTRA	03/20/01	10:42	WTR	S	CONC
13	DW652D	T10320A	METTRA	03/20/01	10:46	WTR	S	CONC
14	DW8TKB	T10320A	METTRA	03/20/01	10:51	WTR	S	CONC
15	DW8TKC	T10320A	METTRA	03/20/01	10:55	WTR	S	CONC
16	CCV3-1 0087-118-1	T10320A	METTRA	03/20/01	10:59	WTR	S	CONC
17	CCB1	T10320A	METTRA	03/20/01	11:04	WTR	S	CONC
18	DW7Q1	T10320A	METTRA	03/20/01	11:08	WTR	S	CONC
19	DW7Q1P5	T10320A	METTRA	03/20/01	11:13	WTR	S	CONC
20	DW7Q1S	T10320A	METTRA	03/20/01	11:17	WTR	S	CONC
21	DW7Q1D	T10320A	METTRA	03/20/01	11:21	WTR	S	CONC
22	DW7Q3	T10320A	METTRA	03/20/01	11:26	WTR	S	CONC
23	DW7Q4	T10320A	METTRA	03/20/01	11:30	WTR	S	CONC
24	DXG4QB	T10320A	METTRA	03/20/01	11:35	WTR	S	CONC
25	DXG4QC	T10320A	METTRA	03/20/01	11:39	WTR	S	CONC
26	DXGMH	T10320A	METTRA	03/20/01	11:43	WTR	S	CONC
27	DXGMHP5	T10320A	METTRA	03/20/01	11:48	WTR	S	CONC
28	CCV3-2	T10320A	METTRA	03/20/01	11:52	WTR	S	CONC
29	CCB2	T10320A	METTRA	03/20/01	11:57	WTR	S	CONC
30	DXGMHS	T10320A	METTRA	03/20/01	12:01	WTR	S	CONC
31	DXGMHD	T10320A	METTRA	03/20/01	12:05	WTR	S	CONC
32	DW8T9B	T10320A	METTRA	03/20/01	12:10	WTR	S	CONC
33	DW8T9C	T10320A	METTRA	03/20/01	12:14	WTR	S	CONC
34	DW79V	T10320A	METTRA	03/20/01	12:19	WTR	S	CONC
35	DW795	T10320A	METTRA	03/20/01	12:23	WTR	S	CONC
36	DW797	T10320A	METTRA	03/20/01	12:28	WTR	S	CONC
37	DW8AA	T10320A	METTRA	03/20/01	12:32	WTR	S	CONC
38	DW8AE	T10320A	METTRA	03/20/01	12:36	WTR	S	CONC
39	DW8AL	T10320A	METTRA	03/20/01	12:41	WTR	S	CONC
40	CCV3-3	T10320A	METTRA	03/20/01	12:45	WTR	S	CONC
41	CCB3	T10320A	METTRA	03/20/01	12:50	WTR	S	CONC
42	DW8AM	T10320A	METTRA	03/20/01	12:54	WTR	S	CONC
43	DW8AMP5	T10320A	METTRA	03/20/01	12:58	WTR	S	CONC
44	DW8AMS	T10320A	METTRA	03/20/01	13:03	WTR	S	CONC
45	DW8AMD	T10320A	METTRA	03/20/01	13:07	WTR	S	CONC
46	DW8AP	T10320A	METTRA	03/20/01	13:12	WTR	S	CONC
47	DW8AQ	T10320A	METTRA	03/20/01	13:17	WTR	S	CONC
48	DW8AT	T10320A	METTRA	03/20/01	13:21	WTR	S	CONC
49	DW79VF	T10320A	METTRA	03/20/01	13:26	WTR	S	CONC
50	DW795F	T10320A	METTRA	03/20/01	13:30	WTR	S	CONC
51	DW797F	T10320A	METTRA	03/20/01	13:34	WTR	S	CONC
52	CCV3-4	T10320A	METTRA	03/20/01	13:39	WTR	S	CONC
53	CCB4	T10320A	METTRA	03/20/01	13:43	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DW8AAF	T10320A	METTRA	03/20/01	13:48	WTR	S	CONC
55	DW8AEF	T10320A	METTRA	03/20/01	13:52	WTR	S	CONC
56	DW8ALF	T10320A	METTRA	03/20/01	13:56	WTR	S	CONC
57	DW8AMF	T10320A	METTRA	03/20/01	14:01	WTR	S	CONC
58	DW8AMP5F	T10320A	METTRA	03/20/01	14:05	WTR	S	CONC
59	DW8AMSF	T10320A	METTRA	03/20/01	14:10	WTR	S	CONC
60	DW8AMDF	T10320A	METTRA	03/20/01	14:14	WTR	S	CONC
61	DW8APF	T10320A	METTRA	03/20/01	14:18	WTR	S	CONC
62	DW8AQF	T10320A	METTRA	03/20/01	14:23	WTR	S	CONC
63	DW8ATF	T10320A	METTRA	03/20/01	14:27	WTR	S	CONC
64	CCV3-5	T10320A	METTRA	03/20/01	14:32	WTR	S	CONC
65	CCB5	T10320A	METTRA	03/20/01	14:36	WTR	S	CONC
66	DWEW2B	T10320A	METTRA	03/20/01	14:41	WTR	S	CONC
67	DWEW2C	T10320A	METTRA	03/20/01	14:45	WTR	S	CONC
68	DW54JF	T10320A	METTRA	03/20/01	14:49	WTR	S	CONC
69	DW54JP5F	T10320A	METTRA	03/20/01	14:54	WTR	S	CONC
70	DW8T9B RERUN	T10320A	METTRA	03/20/01	14:58	WTR	S	CONC
71	CCV3-6	T10320A	METTRA	03/20/01	15:03	WTR	S	CONC
72	CCB6	T10320A	METTRA	03/20/01	15:07	WTR	S	CONC

Method: METTRA Standard: STD1
Run Time: 03/20/01 09:54:11

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Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00220	.10595	-.01008	.00089	-.02758	.00230	.00081
SDev	.00122	.00476	.000273	.00031	.00443	.00000	.00020
%RSD	55.219	4.4889	27.073	34.533	16.065	.14156	24.820
#1	-.00134	.10931	-.00815	.00110	-.02445	.00230	.00067
#2	-.00306	.10259	-.01201	.00067	-.03072	.00230	.00096
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00050	.00062	.00160	-.00110	-.00014	.00091	.00139
SDev	.00003	.00007	.00132	.00034	.00047	.00034	.00020
%RSD	6.8756	11.019	82.226	30.879	330.61	37.348	14.770
#1	-.00053	.00067	.00067	-.00134	.00019	.00115	.00153
#2	-.00048	.00057	.00254	-.00086	-.00048	.00067	.00124
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00048	.01533	.00111	-.00560	-.00600	-.09545	.04377
SDev	.00068	.00883	.01158	.00114	.01864	.01036	.00441
%RSD	141.42	57.571	1043.8	20.410	310.58	10.858	10.071
#1	.00096	.02157	.00930	-.00479	-.01918	-.08812	.04066
#2	.00000	.00909	-.00708	-.00641	.00718	-.10278	.04689
Elem	TL	V	ZN				
Avge	-.02874	.00010	-.00026				
SDev	.00045	.00000	.00017				
%RSD	1.5558	.14157	64.170				
#1	-.02905	.00010	-.00014				
#2	-.02842	.00010	-.00038				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10439	--	--	--	--	--	--
SDev	14.77881	--	--	--	--	--	--
%RSD	.1415676	--	--	--	--	--	--
#1	10429	--	--	--	--	--	--
#2	10450	--	--	--	--	--	--

Standardization Rpt.

03/20/01 10:02:59 AM

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Method: METTRA Standard: STD6
Run Time: 03/20/01 09:58:37

0087-154-1

673

935

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	9.1003	5.2180	11.016	4.0768	5.8042	7.0105	3.4984
SDev	.0072	.0362	.020	.0076	.0283	.0240	.0075
%RSD	.07957	.69282	.18271	.18608	.48742	.34237	.21514
#1	9.1054	5.2436	11.030	4.0714	5.8242	7.0274	3.5038
#2	9.0952	5.1924	11.002	4.0822	5.7842	6.9935	3.4931
Elem	SE/1	SE/2	TL				
Avge	4.6039	2.7728	2.9388				
SDev	.0394	.0464	.0114				
%RSD	.85542	1.6731	.38920				
#1	4.6318	2.8056	2.9469				
#2	4.5761	2.7400	2.9307				
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10179	--	--	--	--	--	--
SDev	9.228296	--	--	--	--	--	--
%RSD	.0906617	--	--	--	--	--	--
#1	10185	--	--	--	--	--	--
#2	10172	--	--	--	--	--	--

Method: METTRA Standard: STD7
Run Time: 03/20/01 10:03:03

0087-154-Z

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	5.1962	12.729	9.5777	4.0195	2.2643	8.7165	2.8398
SDev	.0282	.072	.0430	.0163	.0112	.0357	.0169
%RSD	.54351	.56572	.44887	.40623	.49344	.40989	.59376
#1	5.1763	12.678	9.5473	4.0080	2.2564	8.6913	2.8279
#2	5.2162	12.780	9.6081	4.0311	2.2722	8.7418	2.8518
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	2.1660	10.344	6.4473	2.2174	1.7206	.67556	2.0892
SDev	.0121	.047	.0309	.0101	.0135	.00306	.0130
%RSD	.55991	.45258	.47932	.45641	.78279	.45326	.62413
#1	2.1574	10.310	6.4255	2.2102	1.7111	.67339	2.0800
#2	2.1746	10.377	6.4692	2.2246	1.7302	.67772	2.0984
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10101	--	--	--	--	--	--
SDev	45.78516	--	--	--	--	--	--
%RSD	.4532568	--	--	--	--	--	--
#1	10134	--	--	--	--	--	--
#2	10069	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

678 937

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.219720	.000484	03/20/01 10:03:03
AL	308.215	STD7	STD1	9.84486	-1.04305	03/20/01 10:03:03
AS	189.042	STD6	STD1	.191275	.001928	03/20/01 10:03:03
BA	493.409	STD7	STD1	.314267	-.000279	03/20/01 10:03:03
BE	313.042	STD7	STD1	.413932	.011418	03/20/01 10:03:03
CA	317.933	STD7	STD1	24.8927	-.057228	03/20/01 10:03:03
CD	226.502	STD6	STD1	.090784	-.000074	03/20/01 10:03:03
CO	228.616	STD7	STD1	1.76614	.000888	03/20/01 10:03:03
CR	267.716	STD7	STD1	.458780	-.000286	03/20/01 10:03:03
CU	324.753	STD7	STD1	1.40932	-.002260	03/20/01 10:03:03
FE	271.441	STD7	STD1	23.1952	.025557	03/20/01 10:03:03
MG	279.078	STD7	STD1	9.66768	.001386	03/20/01 10:03:03
MN	257.610	STD7	STD1	.620501	-.000565	03/20/01 10:03:03
MO	202.030	STD7	STD1	1.80505	-.002507	03/20/01 10:03:03
NI	231.604	STD7	STD1	2.32385	-.001114	03/20/01 10:03:03
PB/1	220.351	STD6	STD1	.246216	-.003775	03/20/01 10:03:03
PB/2	220.352	STD6	STD1	.172321	-.000191	03/20/01 10:03:03
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.142530	.000799	03/20/01 10:03:03
SB/2	206.832	STD6	STD1	.285353	.001712	03/20/01 10:03:03
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.212795	.020311	03/20/01 10:03:03
SE/2	196.022	STD6	STD1	.366432	-.016040	03/20/01 10:03:03
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.673961	.019368	03/20/01 10:03:03
V	292.402	STD7	STD1	5.90026	-.000565	03/20/01 10:03:03
ZN	213.856	STD7	STD1	1.92716	.000507	03/20/01 10:03:03

Analysis Report

William J. Hartman 3-20-01
03/20/01 10:11:20 AM

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Method: METTRA .. Sample Name: ICV3-1 0087-116-5 Operator: WTR
Run Time: 03/20/01 10:06:58
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	.50903	11.789	.25793	1.0015	1.0109	25.335	.25362
SDev	.00023	.253	.00515	.0029	.0034	.129	.00536
%RSD	.04566	2.1454	1.9949	.29212	.33182	.50924	2.1144
#1	.50920	11.610	.26157	1.0036	1.0133	25.426	.25741
#2	.50887	11.968	.25429	.99948	1.0085	25.244	.24982
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0397	1.0247	.97024	12.760	24.601	1.0183	1.0263
SDev	.0006	.0026	.00979	.004	.024	.0032	.0029
%RSD	.05420	.25488	1.0092	.03068	.09865	.31836	.28194
#1	1.0401	1.0265	.96332	12.763	24.619	1.0206	1.0283
#2	1.0393	1.0228	.97717	12.757	24.584	1.0160	1.0242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0525	.25688	.25344	.25459	.25538	.26158	.25952
SDev	.0452	.00243	.00012	.00073	.00082	.00477	.00346
%RSD	4.2941	.94644	.04732	.28658	.31968	1.8250	1.3317
#1	1.0844	.25859	.25336	.25510	.25596	.26496	.26196
#2	1.0205	.25516	.25353	.25407	.25481	.25821	.25707
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.25253	.26493	.26080	.52492	1.0199	1.0685	
SDev	.00510	.00091	.00109	.01531	.0083	.0240	
%RSD	2.0197	.34221	.41937	2.9159	.81118	2.2453	
#1	.24892	.26557	.26003	.53574	1.0258	1.0855	
#2	.25614	.26429	.26158	.51409	1.0141	1.0516	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10164	--	--	--	--	--	--
SDev	21.14277	--	--	--	--	--	--
%RSD	.2080162	--	--	--	--	--	--
#1	10149	--	--	--	--	--	--
#2	10179	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: WTR

Run Time: 03/20/01 10:11:24

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
Avge	.00042	-.01072	.00071	-.00015	-.00126	-.00035	.00019
SDev	.00042	.00737	.00030	.00008	.00026	.00186	.00007
%RSD	100.92	68.735	42.124	50.610	20.693	531.25	36.478
#1	.00072	-.01593	.00050	-.00010	-.00107	-.00166	.00024
#2	.00012	-.00551	.00092	-.00020	-.00144	.00096	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.00085	.00154	.01204	-.00049	.00007	-.00093
SDev	.00036	.00016	.00014	.01908	.00132	.00013	.00025
%RSD	1202.5	18.873	8.7952	158.43	269.01	184.50	27.191
#1	-.00023	.00074	.00164	-.00145	-.00143	.00016	-.00111
#2	.00029	.00097	.00145	.02553	.00044	-.00002	-.00075
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	-.00213	-.00011	.00032	.00018	-.00019	.00351	.00228
SDev	.00144	.00094	.00087	.00026	.00083	.00225	.00122
%RSD	67.427	865.99	272.09	149.61	443.48	64.121	53.742
#1	-.00314	.00056	-.00029	-.00001	-.00077	.00510	.00314
#2	-.00111	-.00078	.00093	.00036	.00040	.00192	.00141
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	.00308	.00406	.00373	.00374	.00059	-.00023	
SDev	.00218	.00071	.00120	.00297	.00001	.00001	
%RSD	70.797	17.566	32.188	79.367	1.4498	5.0054	
#1	.00154	.00355	.00288	.00164	.00058	-.00022	
#2	.00462	.00456	.00458	.00584	.00059	-.00024	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10285	--	--	--	--	--	--
SDev	26.19817	--	--	--	--	--	--
%RSD	.2547190	--	--	--	--	--	--
#1	10304	--	--	--	--	--	--
#2	10267	--	--	--	--	--	--

Analysis Report

QC Standard

03/20/01 10:20:10 AM

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Method: METTRA

Sample Name: ICSA 0087-133-5

Operator: WTR

Run Time: 03/20/01 10:15:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	BA ppm	BE ppm	CA ppm	CD ppm
Avge	-.00019	524.95	.00568	.00174	-.00239	492.97	.00070
SDev	.00014	1.34	.00375	.00004	.00023	.99	.00096
%RSD	74.508	.25591	66.103	2.3281	9.7762	.20021	137.81
#1	-.00009	524.00	.00302	.00171	-.00223	493.67	.00002
#2	-.00030	525.90	.00833	.00177	-.00256	492.27	.00137
Errors Value Range	NOCHECK	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	QC Pass 500.00 20.000	NOCHECK
Elem Units	CO ppm	CR ppm	CU ppm	FE ppm	MG ppm	MN ppm	MO ppm
Avge	-.00022	.00435	-.00108	204.86	534.89	.00767	-.00477
SDev	.00013	.00092	.00041	.09	.33	.00007	.00186
%RSD	58.020	21.165	38.205	.04221	.06135	.88163	39.032
#1	-.00013	.00500	-.00137	204.80	535.13	.00763	-.00345
#2	-.00031	.00370	-.00079	204.92	534.66	.00772	-.00609
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	QC Pass 200.00 20.000	QC Pass 500.00 20.000	NOCHECK	NOCHECK
Elem Units	NI ppm	PB/1 ppm	PB/2 ppm	PB ppm	SB/1 ppm	SB/2 ppm	SB ppm
Avge	.00193	-.00889	.01118	.00449	.00631	.00019	.00223
SDev	.00224	.00058	.00145	.00077	.00136	.00038	.00020
%RSD	116.43	6.4752	12.946	17.211	21.584	202.43	8.8219
#1	.00351	-.00848	.01015	.00395	.00535	.00046	.00209
#2	.00034	-.00930	.01220	.00504	.00728	-.00008	.00237
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Elem Units	SE/1 ppm	SE/2 ppm	SE ppm	TL ppm	V ppm	ZN ppm	
Avge	-.00672	.00614	.00186	-.01289	.00989	.00403	
SDev	.00759	.00399	.00014	.00315	.00017	.00027	
%RSD	113.04	65.060	7.2996	24.435	1.7140	6.7654	
#1	-.00135	.00331	.00176	-.01511	.00977	.00384	
#2	-.01208	.00896	.00195	-.01066	.01001	.00422	
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	9565	--	--	--	--	--	--
SDev	27.96594	--	--	--	--	--	--
%RSD	.2923785	--	--	--	--	--	--
#1	9545	--	--	--	--	--	--
#2	9585	--	--	--	--	--	--

Method: METTRA

Sample Name: ICSAB 0087-081-6

Operator: WTR

Run Time: 03/20/01 10:20:13

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	1.1259	538.34	1.0447	.54492	.51739	505.26	.95055
SDev	.0023	1.79	.0043	.00093	.00094	1.06	.00352
%RSD	.20064	.33301	.40781	.17027	.18209	.20928	.37034
#1	1.1275	537.08	1.0477	.54558	.51805	506.00	.95304
#2	1.1243	539.61	1.0417	.54427	.51672	504.51	.94806
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51474	.52390	.56481	210.02	547.53	.53432	1.0181
SDev	.00081	.00043	.00005	.13	.17	.00021	.0007
%RSD	.15822	.08124	.00804	.06005	.03127	.03944	.07131
#1	.51532	.52420	.56484	209.93	547.65	.53446	1.0176
#2	.51417	.52359	.56478	210.11	547.41	.53417	1.0186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0108	1.0133	1.0136	1.0135	1.0517	1.0622	1.0587
SDev	.0101	.0026	.0039	.0035	.0013	.0002	.0006
%RSD	1.0018	.25919	.38640	.34404	.12518	.01677	.05263
#1	1.0179	1.0152	1.0163	1.0160	1.0526	1.0623	1.0591
#2	1.0036	1.0115	1.0108	1.0110	1.0507	1.0620	1.0583
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			1.0000			1.0000
Range	20.000			20.000			20.000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.0455	1.0623	1.0567	1.0130	.53852	1.0819	
SDev	.0100	.0009	.0028	.0015	.00208	.0019	
%RSD	.96026	.08365	.26030	.14852	.38581	.17795	
#1	1.0526	1.0616	1.0586	1.0120	.53999	1.0832	
#2	1.0384	1.0629	1.0547	1.0141	.53705	1.0805	
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	
Value			1.0000	1.0000	.50000	1.0000	
Range			20.000	20.000	20.000	20.000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	9491	--	--	--	--	--	--
SDev	33.26993	--	--	--	--	--	--
%RSD	.3505575	--	--	--	--	--	--
#1	9467	--	--	--	--	--	--
#2	9514	--	--	--	--	--	--

Method: METTRA Sample Name: DW91NB

Operator: WTR

Run Time: 03/20/01 10:24:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00028	.00176	.00178	-.00015	-.00152	.02949	.00029
SDev	.00017	.01700	.00052	.00002	.00012	.01083	.00010
%RSD	61.227	968.39	29.182	14.713	8.2373	36.719	33.052
#1	.00040	.01378	.00214	-.00014	-.00143	.03714	.00022
#2	.00016	-.01027	.00141	-.00017	-.00160	.02183	.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00171	.00163	.00160	.05800	.01823	.00098	.00046
SDev	.00156	.00039	.00028	.01281	.00346	.00009	.00012
%RSD	91.566	24.137	17.754	22.083	18.999	9.4978	25.471
#1	-.00281	.00191	.00140	.04894	.02068	.00104	.00037
#2	-.00060	.00135	.00180	.06706	.01578	.00091	.00054
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	.00108	.00611	-.00133	.00114	.00117	.00570	.00419
SDev	.00048	.00289	.00001	.00095	.00044	.00079	.00038
%RSD	44.743	47.240	.96554	83.222	38.022	13.889	9.0722
#1	.00074	.00815	-.00134	.00182	.00148	.00514	.00393
#2	.00142	.00407	-.00132	.00047	.00085	.00627	.00446
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	-.01284	.00835	.00129	-.00326	-.00026	-.00051	
SDev	.00067	.00443	.00273	.00149	.00042	.00007	
%RSD	5.2413	53.051	211.12	45.707	163.55	13.164	
#1	-.01236	.00522	-.00064	-.00220	-.00055	-.00056	
#2	-.01331	.01148	.00322	-.00431	.00004	-.00046	
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	10050	--	--	--	--	--	--
SDev	36.83999	--	--	--	--	--	--
%RSD	.3665780	--	--	--	--	--	--
#1	10024	--	--	--	--	--	--
#2	10076	--	--	--	--	--	--

Method: METTRA Sample Name: DW91NC

Operator: WTR

Run Time: 03/20/01 10:29:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	BA ppm	BE ppm	CA ppm	CD ppm
Avge	.05202	2.0399	1.9945	2.0174	.04927	51.716	.04856
SDev	.00057	.0183	.0026	.0041	.00027	.012	.00057
%RSD	1.1058	.89688	.12797	.20421	.55578	.02376	1.1733
#1	.05243	2.0270	1.9963	2.0203	.04947	51.725	.04815
#2	.05162	2.0529	1.9927	2.0145	.04908	51.707	.04896
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 Units	CO ppm	CR ppm	CU ppm	FE ppm	MG ppm	MN ppm	MO ppm
Avge	.51483	.20821	.25392	.93627	50.260	.51299	1.0396
SDev	.00007	.00003	.00067	.01569	.021	.00117	.0017
%RSD	.01446	.01182	.26249	1.6756	.04100	.22853	.16487
#1	.51477	.20819	.25345	.94737	50.246	.51216	1.0408
#2	.51488	.20823	.25439	.92518	50.275	.51382	1.0384
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 Units	NI ppm	PB/1 ppm	PB/2 ppm	PB ppm	SB/1 ppm	SB/2 ppm	SB ppm
Avge	.50718	.51341	.49510	.50119	.49232	.51096	.50475
SDev	.00345	.00263	.00068	.00042	.00244	.00159	.00025
%RSD	.68089	.51257	.13782	.08403	.49567	.31133	.04922
#1	.50962	.51527	.49462	.50149	.49060	.51208	.50493
#2	.50474	.51155	.49558	.50090	.49405	.50983	.50458
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem Units	SE/1 ppm	SE/2 ppm	SE ppm	TL ppm	V_ ppm	ZN ppm	
Avge	1.9542	1.9553	1.9550	2.0883	.50552	.51879	
SDev	.0054	.0046	.0013	.0181	.00399	.00051	
%RSD	.27559	.23411	.06444	.86886	.78904	.09861	
#1	1.9504	1.9585	1.9558	2.0754	.50834	.51915	
#2	1.9580	1.9521	1.9541	2.1011	.50270	.51843	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10195	--	--	--	--	--	--
SDev	14.31891	--	--	--	--	--	--
%RSD	.1404479	--	--	--	--	--	--
#1	10185	--	--	--	--	--	--
#2	10205	--	--	--	--	--	--

Method: METTRA Sample Name: DW652

Run Time: 03/20/01 10:33:27

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	53.101	.04727	.22572	.00457	2.0330	-.00002
SDev	.00009	.214	.00279	.00102	.00023	.0011	.00032
%RSD	40.177	.40273	5.9106	.45251	4.9558	.05423	2146.4
#1	-.00028	52.950	.04925	.22644	.00473	2.0337	-.00024
#2	-.00015	53.252	.04530	.22500	.00441	2.0322	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09512	.08387	.11120	162.09	9.8730	2.5726	.00341
SDev	.00130	.00021	.00012	.02	.0127	.0028	.00024
%RSD	1.3708	.24788	.10704	.01117	.12844	.10740	7.1966
#1	.09605	.08372	.11111	162.07	9.8820	2.5746	.00323
#2	.09420	.08402	.11128	162.10	9.8641	2.5707	.00358
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	.10304	.10230	.09496	.09740	.00316	.00032	.00126
SDev	.00128	.00095	.00083	.00087	.00296	.00527	.00450
%RSD	1.2384	.93086	.87369	.89368	93.477	1670.7	356.26
#1	.10394	.10162	.09437	.09678	.00107	-.00341	-.00192
#2	.10214	.10297	.09554	.09802	.00525	.00405	.00445
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	-.00608	.01003	.00466	.00265	.12463	.41028	
SDev	.00117	.00143	.00134	.00304	.00009	.00184	
%RSD	19.171	14.290	28.816	114.97	.06979	.44855	
#1	-.00526	.01104	.00561	.00049	.12457	.41159	
#2	-.00690	.00901	.00371	.00480	.12469	.40898	
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	10683	--	--	--	--	--	--
SDev	11.20737	--	--	--	--	--	--
%RSD	.1049121	--	--	--	--	--	--
#1	10691	--	--	--	--	--	--
#2	10675	--	--	--	--	--	--

Method: METTRA Sample Name: DW652P5

Run Time: 03/20/01 10:37:50

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00027	10.689	.01152	.04675	.00011	.43006	.00006
SDev	.00029	.004	.00125	.00005	.00021	.00013	.00016
%RSD	109.95	.04196	10.879	.10088	200.34	.03125	292.71
#1	-.00047	10.686	.01064	.04679	.00025	.42996	-.00006
#2	-.00006	10.692	.01241	.04672	-.00004	.43015	.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	.01922	.01696	.02322	33.920	2.0405	.53924	-.00003
SDev	.00076	.00006	.00014	.000	.0011	.00067	.00013
%RSD	3.9588	.36673	.60940	.00138	.05217	.12326	499.56
#1	.01976	.01692	.02312	33.920	2.0398	.53971	-.00012
#2	.01868	.01701	.02332	33.919	2.0413	.53877	.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	.02038	.02027	.02082	.02064	.00093	.00053	.00066
SDev	.00101	.00306	.00117	.00024	.00045	.00312	.00223
%RSD	4.9640	15.077	5.6130	1.1541	48.142	593.02	336.90
#1	.02109	.01811	.02165	.02047	.00125	.00273	.00224
#2	.01966	.02243	.02000	.02081	.00062	-.00168	-.00091
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	-.00056	.00630	.00401	.00211	.02416	.08783	
SDev	.00536	.00701	.00289	.00056	.00034	.00004	
%RSD	953.25	111.33	72.060	26.709	1.4107	.04930	
#1	-.00435	.01125	.00606	.00171	.02440	.08786	
#2	.00323	.00134	.00197	.00251	.02392	.08780	
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	10549	--	--	--	--	--	--
SDev	39.03174	--	--	--	--	--	--
%RSD	.3700059	--	--	--	--	--	--
#1	10577	--	--	--	--	--	--
#2	10521	--	--	--	--	--	--

Method: METTRA Sample Name: DW652S

Operator: WTR

Run Time: 03/20/01 10:42:15

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	.04836	95.813	1.9128	2.1431	.05370	50.732	.04458
SDev	.00040	.127	.0022	.0058	.00031	.064	.00066
%RSD	.83641	.13306	.11683	.27059	.57738	.12524	1.4787
#1	.04807	95.723	1.9144	2.1472	.05392	50.776	.04505
#2	.04864	95.903	1.9112	2.1390	.05348	50.687	.04412
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	.56743	.31221	.36543	187.43	59.904	2.5212	.94642
SDev	.00043	.00094	.00057	.27	.039	.0018	.00051
%RSD	.07600	.30015	.15702	.14456	.06441	.07275	.05392
#1	.56713	.31154	.36584	187.24	59.876	2.5199	.94678
#2	.56774	.31287	.36502	187.62	59.931	2.5225	.94606
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	.60522	.57232	.55729	.56230	.20546	.21791	.21377
SDev	.00424	.00196	.00175	.00051	.00193	.00106	.00135
%RSD	.70006	.34261	.31322	.09094	.94033	.48470	.63053
#1	.60821	.57371	.55606	.56193	.20410	.21717	.21281
#2	.60222	.57093	.55853	.56266	.20683	.21866	.21472
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	1.8230	1.8385	1.8334	1.9289	.64851	.95311	
SDev	.0063	.0017	.0010	.0036	.00116	.00185	
%RSD	.34576	.09083	.05374	.18570	.17822	.19414	
#1	1.8186	1.8397	1.8327	1.9264	.64933	.95442	
#2	1.8275	1.8374	1.8341	1.9315	.64770	.95180	
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	10483	--	--	--	--	--	--
SDev	21.77875	--	--	--	--	--	--
%RSD	.2077530	--	--	--	--	--	--
#1	10468	--	--	--	--	--	--
#2	10498	--	--	--	--	--	--

Method: METTRA Sample Name: DW652D

Run Time: 03/20/01 10:46:38

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04848	96.146	1.9206	2.1518	.05297	51.085	.04503
SDev	.00017	.110	.0044	.0051	.00051	.241	.00049
%RSD	.35920	.11436	.22882	.23606	.96262	.47108	1.0767
#1	.04860	96.068	1.9237	2.1553	.05333	51.255	.04537
#2	.04835	96.224	1.9175	2.1482	.05261	50.915	.04469
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	.57031	.31106	.38047	182.38	61.678	2.6866	.95237
SDev	.00231	.00121	.00021	.31	.115	.0069	.00384
%RSD	.40457	.38986	.05653	.16847	.18573	.25562	.40368
#1	.57194	.31192	.38062	182.60	61.759	2.6915	.95508
#2	.56868	.31020	.38032	182.16	61.597	2.6818	.94965
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	.60878	.57159	.56019	.56399	.20126	.21790	.21236
SDev	.00897	.00149	.00119	.00030	.00024	.00044	.00021
%RSD	1.4734	.26089	.21249	.05273	.11995	.20131	.09992
#1	.61512	.57054	.56103	.56420	.20109	.21821	.21251
#2	.60243	.57265	.55935	.56378	.20143	.21759	.21221
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	1.8528	1.8536	1.8533	1.9452	.64727	.97508	
SDev	.0064	.0031	.0000	.0051	.00621	.00351	
%RSD	.34654	.16953	.00227	.26160	.95977	.36024	
#1	1.8573	1.8514	1.8533	1.9488	.65166	.97756	
#2	1.8482	1.8558	1.8533	1.9416	.64288	.97259	
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	10603	--	--	--	--	--	--
SDev	31.99658	--	--	--	--	--	--
%RSD	.3017670	--	--	--	--	--	--
#1	10580	--	--	--	--	--	--
#2	10626	--	--	--	--	--	--

Method: METTRA

Sample Name: DW8TKB

Operator: WTR

Run Time: 03/20/01 10:51:03

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	.00012	-.02385	.00210	-.00006	-.00132	.02046	.00048
SDev	.00073	.00787	.00001	.00003	.00020	.00028	.00035
%RSD	615.93	32.980	.34335	59.201	14.845	1.3564	72.405
#1	.00063	-.01829	.00210	-.00008	-.00118	.02027	.00073
#2	-.00040	-.02942	.00209	-.00003	-.00146	.02066	.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	-.00303	.00148	.00156	.05748	.00232	.00113	.00092
SDev	.00005	.00021	.00064	.01292	.00400	.00008	.00061
%RSD	1.5477	14.521	41.491	22.473	172.16	7.0412	66.007
#1	-.00306	.00163	.00110	.04835	.00515	.00119	.00136
#2	-.00300	.00133	.00201	.06662	-.00050	.00107	.00049
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	.00208	-.00033	.00047	-.00001	-.00056	-.00038
SDev	.00097	.00020	.00078	.00046	.00138	.00176	.00072
%RSD	70.393	9.5095	236.34	96.554	11861.	313.66	189.59
#1	.00069	.00222	-.00088	.00015	-.00098	.00069	.00013
#2	.00206	.00194	.00022	.00079	.00096	-.00181	-.00089
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	-.00490	.00612	.00245	.00104	.00031	.00637	
SDev	.00142	.00841	.00608	.00109	.00121	.00021	
%RSD	29.104	137.35	248.00	104.72	388.33	3.3571	
#1	-.00389	.01207	H.00675	.00181	.00117	.00622	
#2	-.00590	.00018	-.00185	.00027	-.00055	.00652	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10253	--	--	--	--	--	--
SDev	36.62799	--	--	--	--	--	--
%RSD	.3572313	--	--	--	--	--	--
#1	10279	--	--	--	--	--	--
#2	10227	--	--	--	--	--	--

Method: METTRA Sample Name: DW8TKC

Run Time: 03/20/01 10:55:27

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05040	1.7893	1.9836	1.9690	.04878	L.02014	.04916
SDev	.00031	.0019	.0018	.0045	.00048	.00020	.00038
%RSD	.61402	.10804	.09033	.23093	.98783	.98808	.76205
#1	.05062	1.7906	1.9849	1.9722	.04912	L.02028	.04942
#2	.05018	1.7879	1.9824	1.9658	.04844	L.02000	.04889
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	.52189	.20691	.24413	1.0868	L.00139	.50917	L-.00014
SDev	.00031	.00038	.00083	.0099	.00398	.00029	.00086
%RSD	.05920	.18117	.33887	.91128	286.39	.05662	607.79
#1	.52211	.20717	.24471	1.0798	L.00421	.50937	L-.00075
#2	.52167	.20664	.24354	1.0938	L-.00143	.50896	L.00047
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	.51631	.50369	.49379	.49708	-.00115	.00461	L.00269
SDev	.00005	.00186	.00241	.00223	.00281	.00143	.00189
%RSD	.01034	.37017	.48727	.44775	243.23	31.023	70.186
#1	.51635	.50500	.49549	.49866	.00083	.00562	L.00403
#2	.51628	.50237	.49209	.49551	-.00314	.00360	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	1.9611	1.9509	1.9543	1.9973	.50376	.51835	
SDev	.0017	.0080	.0059	.0057	.00073	.00161	
%RSD	.08844	.41000	.30255	.28720	.14543	.30958	
#1	1.9623	1.9566	1.9585	2.0013	.50324	.51949	
#2	1.9598	1.9453	1.9501	1.9932	.50428	.51722	
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	

678 961

03/20/01 10:59:49 AM

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10296	--	--	--	--	--	--
SDev	26.48129	--	--	--	--	--	--
%RSD	.2571991	--	--	--	--	--	--
#1	10277	--	--	--	--	--	--
#2	10315	--	--	--	--	--	--

Analysis Report

678 962

03/20/01 11:04:13 AM

page 1

Method: METTRA Sample Name: CCV3-1 0087-118-1 Operator: WTR
 Run Time: 03/20/01 10:59:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0245	24.110	.51259	1.9943	2.0358	50.412	.49195
SDev	.0027	.013	.00232	.0072	.0092	.224	.00188
%RSD	.26545	.05314	.45236	.36113	.45406	.44513	.38184
#1	1.0265	24.101	.51423	1.9994	2.0423	50.571	.49327
#2	1.0226	24.119	.51095	1.9892	2.0292	50.253	.49062
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0397	2.0275	1.9623	25.051	49.161	2.0201	2.0304
SDev	.0042	.0054	.0067	.026	.116	.0055	.0068
%RSD	.20735	.26507	.34187	.10540	.23587	.27258	.33635
#1	2.0427	2.0313	1.9671	25.033	49.243	2.0240	2.0352
#2	2.0367	2.0237	1.9576	25.070	49.079	2.0162	2.0256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0163	.50776	.50019	.50271	.50824	.51361	.51182
SDev	.0096	.00188	.00260	.00111	.00432	.00159	.00038
%RSD	.47674	.37039	.51929	.22005	.85012	.30905	.07425
#1	2.0231	.50643	.50203	.50349	.51130	.51249	.51209
#2	2.0095	.50909	.49835	.50193	.50519	.51474	.51156
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.51603	.52256	.52039	1.0171	2.0109	2.0469	
SDev	.00301	.00085	.00157	.0074	.0077	.0061	
%RSD	.58332	.16364	.30222	.73063	.38067	.29833	
#1	.51816	.52316	.52150	1.0118	2.0163	2.0512	
#2	.51390	.52195	.51927	1.0223	2.0055	2.0426	
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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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10392	--	--	--	--	--	--
SDev	2.262880	--	--	--	--	--	--
%RSD	.0217747	--	--	--	--	--	--
#1	10391	--	--	--	--	--	--
#2	10394	--	--	--	--	--	--

Analysis Report

678 964

03/20/01 11:08:37 AM

page 1

Method: METTRA Sample Name: CCB1

Run Time: 03/20/01 11:04:15

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	-.03731	.00172	-.00012	-.00095	.00374	.00029
SDev	.00001	.00330	.00481	.00002	.00020	.00016	.00009
%RSD	12.352	8.8325	279.75	18.464	20.925	4.2807	30.163
#1	-.00012	-.03964	.00512	-.00013	-.00081	.00362	.00023
#2	-.00010	-.03498	-.00168	-.00010	-.00109	.00385	.00035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.00025	.00103	.01568	-.00135	.00020	-.00030
SDev	.00035	.00003	.00013	.00778	.00130	.00009	.00072
%RSD	63.320	11.484	12.889	49.619	96.084	43.382	240.16
#1	.00031	.00028	.00112	.02118	-.00043	.00014	.00021
#2	.00080	.00023	.00093	.01018	-.00226	.00025	-.00080
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	-.00208	.00154	.00033	-.00017	.00038	.00019
SDev	.00140	.00044	.00057	.00053	.00222	.00161	.00181
%RSD	403.51	21.201	37.007	157.29	1277.1	424.36	931.05
#1	-.00133	-.00176	.00194	.00071	-.00174	-.00076	-.00109
#2	.00064	-.00239	.00114	-.00004	.00140	.00151	.00147
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	.00438	.00098	.00211	.00581	-.00056	-.00017	
SDev	.00642	.00040	.00187	.00493	.00000	.00007	
%RSD	146.47	40.447	88.578	84.880	.40510	41.584	
#1	-.00016	.00126	.00079	.00929	-.00056	-.00012	
#2	.00892	.00070	.00344	.00232	-.00056	-.00022	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

678 965

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10616	--	--	--	--	--	--
SDev	27.85959	--	--	--	--	--	--
%RSD	.2624290	--	--	--	--	--	--
#1	10636	--	--	--	--	--	--
#2	10596	--	--	--	--	--	--

Analysis Report

673 966

03/20/01 11:13:02 AM

page 1

Method: METTRA Sample Name: DW7Q1

Run Time: 03/20/01 11:08:40

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00087	57.799	.05368	.26686	.00547	26.976	.00058
SDev	.00018	.135	.00004	.00188	.00029	.122	.00024
%RSD	20.381	.23294	.06641	.70493	5.2810	.45292	40.904
#1	-.00100	57.894	.05371	.26819	.00567	27.062	.00074
#2	-.00075	57.704	.05366	.26553	.00526	26.889	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07896	.09654	.10546	205.44	11.898	1.6777	.00050
SDev	.00014	.00023	.00028	.28	.012	.0033	.00058
%RSD	.17579	.23394	.26681	.13823	.10238	.19842	116.88
#1	.07886	.09669	.10566	205.65	11.907	1.6801	.00009
#2	.07906	.09638	.10526	205.24	11.890	1.6754	.00091
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	.14297	.10255	.09976	.10069	.00282	.00163	.00203
SDev	.00294	.00105	.00080	.00089	.00072	.00096	.00088
%RSD	2.0555	1.0291	.80235	.87924	25.412	59.006	43.448
#1	.14505	.10180	.09920	.10007	.00333	.00231	.00265
#2	.14089	.10330	.10033	.10132	.00231	.00095	.00141
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	-.00834	.00011	-.00271	-.00146	.11996	.53012	
SDev	.00241	.00014	.00071	.00620	.00064	.00019	
%RSD	28.901	130.67	26.154	424.80	.53286	.03501	
#1	-.00664	.00001	-.00221	.00292	.12042	.53025	
#2	-.01005	.00021	-.00321	-.00584	.11951	.52999	
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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		678	967				
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11108	--	--	--	--	--	--
SDev	35.74480	--	--	--	--	--	--
%RSD	.3217984	--	--	--	--	--	--
#1	11133	--	--	--	--	--	--
#2	11083	--	--	--	--	--	--

Method: METTRA Sample Name: DW7Q1P5

Run Time: 03/20/01 11:13:05

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00027	11.545	.01374	.05529	.00078	5.6679	.00019
SDev	.00049	.055	.00049	.00045	.00005	.0541	.00016
%RSD	183.91	.47680	3.5777	.81994	6.2892	.95389	87.426
#1	-.00061	11.584	.01339	.05561	.00074	5.7061	.00030
#2	.00008	11.506	.01409	.05497	.00081	5.6296	.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	.01447	.02042	.02205	43.145	2.4604	.35301	-.00151
SDev	.00003	.00002	.00045	.230	.0183	.00296	.00118
%RSD	.19531	.07312	2.0605	.53361	.74538	.83805	78.061
#1	.01449	.02043	.02172	43.308	2.4733	.35510	-.00068
#2	.01445	.02041	.02237	42.982	2.4474	.35092	-.00234
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	.02972	.01886	.02178	.02081	-.00061	.00037	.00004
SDev	.00084	.00359	.00071	.00072	.00192	.00302	.00138
%RSD	2.8400	19.030	3.2441	3.4786	315.24	820.01	3167.6
#1	.02912	.01632	.02228	.02030	.00075	-.00177	-.00093
#2	.03031	.02140	.02128	.02132	-.00196	.00251	.00102
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	.00111	.00448	.00336	-.00270	.02779	.11302	
SDev	.00409	.00023	.00120	.00163	.00010	.00091	
%RSD	368.02	5.2437	35.890	60.219	.35985	.80671	
#1	-.00178	.00464	.00250	-.00155	.02786	.11366	
#2	.00400	.00431	.00421	-.00385	.02772	.11237	
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

678 969

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10857	--	--	--	--	--	--
SDev	22.59151	--	--	--	--	--	--
%RSD	.2080810	--	--	--	--	--	--
#1	10841	--	--	--	--	--	--
#2	10873	--	--	--	--	--	--

Analysis Report

673 970

03/20/01 11:21:51 AM

page 1

Method: METTRA

Sample Name: DW7Q1S

Operator: WTR

Run Time: 03/20/01 11:17:29

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	.04632	61.274	1.8556	2.4504	.05165	35.763	.04507
SDev	.00058	.080	.0069	.0117	.00048	.105	.00011
%RSD	1.2483	.13063	.37020	.47756	.92471	.29431	.23284
#1	.04673	61.331	1.8604	2.4587	.05198	35.837	.04500
#2	.04591	61.217	1.8507	2.4421	.05131	35.689	.04515
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	.56659	.28554	.34019	220.99	12.393	4.1682	.00115
SDev	.00087	.00048	.00162	.05	.010	.0039	.00035
%RSD	.15314	.16965	.47523	.02043	.07884	.09308	30.646
#1	.56720	.28588	.34134	220.96	12.400	4.1709	.00140
#2	.56597	.28520	.33905	221.02	12.386	4.1655	.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	.61163	.55633	.54478	.54863	.00186	-.00096	-.00002
SDev	.00566	.00062	.00154	.00123	.00129	.00050	.00076
%RSD	.92539	.11160	.28270	.22492	69.204	52.437	3354.9
#1	.61563	.55677	.54587	.54950	.00277	-.00061	.00052
#2	.60762	.55589	.54369	.54776	.00095	-.00132	-.00056
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	1.7974	1.8015	1.8001	1.8408	.58948	1.0106	
SDev	.0055	.0033	.0040	.0207	.00003	.0043	
%RSD	.30717	.18089	.22288	1.1258	.00526	.42777	
#1	1.8013	1.8038	1.8030	1.8554	.58950	1.0136	
#2	1.7935	1.7992	1.7973	1.8261	.58946	1.0075	
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	11098	--	--	--	--	--	--
SDev	24.74874	--	--	--	--	--	--
%RSD	.2229987	--	--	--	--	--	--
#1	11081	--	--	--	--	--	--
#2	11116	--	--	--	--	--	--

Method: METTRA Sample Name: DW7Q1D

Run Time: 03/20/01 11:21:54

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04580	62.407	1.8497	2.3633	.05164	23.512	.04510
SDev	.00007	.052	.0022	.0081	.00040	.081	.00015
%RSD	.15842	.08397	.12100	.34422	.76549	.34492	.33533
#1	.04585	62.369	1.8513	2.3691	.05192	23.569	.04499
#2	.04575	62.444	1.8481	2.3576	.05136	23.454	.04521
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	.56589	.28656	.33672	214.25	12.338	4.2388	.00000
SDev	.00093	.00069	.00028	.06	.001	.0049	.00080
%RSD	.16370	.23971	.08162	.02721	.00539	.11487	28753.
#1	.56654	.28705	.33692	214.21	12.338	4.2422	-.00056
#2	.56523	.28607	.33653	214.29	12.337	4.2353	.00057
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	.61012	.55468	.54636	.54913	-.00035	.00105	.00058
SDev	.00575	.00290	.00088	.00155	.00074	.00116	.00053
%RSD	.94215	.52243	.16043	.28219	213.49	111.11	90.888
#1	.61419	.55673	.54698	.55023	-.00087	.00187	.00096
#2	.60606	.55263	.54574	.54803	.00018	.00022	.00021
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8166	1.8264	1.8232	1.8439	.58419	1.0154	
SDev	.0011	.0132	.0092	.0061	.00173	.0020	
%RSD	.05878	.72363	.50304	.32969	.29561	.19541	
#1	1.8173	1.8358	1.8296	1.8482	.58541	1.0168	
#2	1.8158	1.8171	1.8167	1.8396	.58296	1.0140	
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	11146	--	--	--	--	--	--
SDev	2.722776	--	--	--	--	--	--
%RSD	.0244278	--	--	--	--	--	--
#1	11148	--	--	--	--	--	--
#2	11144	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DW7Q3

Run Time: 03/20/01 11:26:19

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	41.137	.05533	.65844	.00452	28.516	.00155
SDev	.00009	.020	.00032	.00301	.00028	.188	.00001
%RSD	55.957	.04856	.58269	.45692	6.1729	.66092	.31631
#1	-.00021	41.151	.05510	.66057	.00471	28.650	.00154
#2	-.00009	41.123	.05555	.65631	.00432	28.383	.00155
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	.07036	.08341	.08257	197.48	10.389	4.9394	-.00136
SDev	.00064	.00034	.00029	.52	.042	.0179	.00000
%RSD	.91196	.40533	.35052	.26231	.39947	.36148	.16029
#1	.07081	.08317	.08237	197.84	10.418	4.9520	-.00136
#2	.06991	.08365	.08277	197.11	10.359	4.9268	-.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12018	.08774	.08605	.08662	.00277	.00243	.00254
SDev	.00007	.00239	.00060	.00040	.00105	.00011	.00042
%RSD	.05478	2.7267	.69775	.45745	37.761	4.5793	16.632
#1	.12013	.08605	.08648	.08634	.00351	.00250	.00284
#2	.12023	.08944	.08563	.08690	.00203	.00235	.00224
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00846	.00343	-.00053	.00466	.10839	.44402	
SDev	.00017	.00098	.00060	.00215	.00025	.00367	
%RSD	1.9951	28.505	113.32	46.143	.22987	.82648	
#1	-.00857	.00412	-.00010	.00314	.10857	.44661	
#2	-.00834	.00274	-.00095	.00617	.10822	.44142	
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	11040	--	--	--	--	--	--
SDev	21.07164	--	--	--	--	--	--
%RSD	.1908724	--	--	--	--	--	--
#1	11025	--	--	--	--	--	--
#2	11055	--	--	--	--	--	--

Method: METTRA Sample Name: DW7Q4
 Run Time: 03/20/01 11:30:44 Operator: WTR
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	40.437	.05961	.46565	.00402	6.7925	.00090
SDev	.00028	.022	.00069	.00200	.00043	.0188	.00026
%RSD	177.40	.05380	1.1517	.43003	10.808	.27708	28.460
#1	.00004	40.422	.06009	.46706	.00433	6.8059	.00108
#2	-.00036	40.453	.05912	.46423	.00371	6.7792	.00072
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	.05958	.09358	.08005	186.10	8.9991	2.5606	.00014
SDev	.00007	.00070	.00005	.02	.0222	.0022	.00047
%RSD	.11310	.74521	.05935	.01173	.24691	.08504	346.45
#1	.05953	.09407	.08001	186.11	9.0148	2.5622	.00047
#2	.05962	.09309	.08008	186.08	8.9833	2.5591	-.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	.12124	.07614	.06978	.07190	.00178	.00127	.00144
SDev	.00087	.00419	.00299	.00060	.00094	.00055	.00005
%RSD	.71536	5.5064	4.2907	.83597	52.825	43.262	3.6781
#1	.12063	.07910	.06767	.07148	.00112	.00166	.00148
#2	.12185	.07317	.07190	.07233	.00245	.00088	.00140
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	-.00684	.00433	.00061	-.00054	.10831	.41866	
SDev	.00174	.00014	.00049	.00586	.00016	.00153	
%RSD	25.489	3.1908	79.777	1084.7	.14428	.36486	
#1	-.00560	.00423	.00096	-.00468	.10842	.41974	
#2	-.00807	.00443	.00027	.00360	.10820	.41758	
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	10924	--	--	--	--	--	--
SDev	30.01682	--	--	--	--	--	--
%RSD	.2747755	--	--	--	--	--	--
#1	10903	--	--	--	--	--	--
#2	10945	--	--	--	--	--	--

Method: METTRA

Sample Name: DXG4QB

Operator: WTR

Run Time: 03/20/01 11:35:08

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	.00030	-.02811	.00210	-.00010	-.00129	.01272	.00032
SDev	.00002	.01169	.00102	.00010	.00031	.00015	.00021
%RSD	4.8379	41.592	48.227	93.198	23.753	1.2059	66.074
#1	.00031	-.01984	.00139	-.00017	-.00108	.01282	.00017
#2	.00029	-.03638	.00282	-.00004	-.00151	.01261	.00047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.00152	.00146	.06715	.00186	.00055	.00055
SDev	.00037	.00029	.00023	.01126	.00331	.00005	.00036
%RSD	684.48	18.923	15.966	16.764	178.31	8.2106	65.900
#1	-.00031	.00172	.00130	.07511	.00420	.00058	.00030
#2	.00020	.00131	.00163	.05919	-.00048	.00052	.00081
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	.00069	.00402	-.00054	.00098	-.00004	.00255	.00169
SDev	.00128	.00105	.00001	.00034	.00008	.00044	.00032
%RSD	185.53	26.203	2.1849	35.067	189.64	17.471	19.136
#1	.00159	.00328	-.00053	.00074	.00001	.00286	.00191
#2	-.00021	.00477	-.00055	.00122	-.00010	.00223	.00146
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	-.00437	.00414	.00130	-.00283	.00003	-.00016	
SDev	.00250	.00374	.00166	.00106	.00080	.00012	
%RSD	57.259	90.390	127.40	37.468	3189.3	77.723	
#1	-.00614	.00678	.00248	-.00208	-.00054	-.00007	
#2	-.00260	.00149	.00013	-.00358	.00059	-.00024	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10321	--	--	--	--	--	--
SDev	22.62742	--	--	--	--	--	--
%RSD	.2192388	--	--	--	--	--	--
#1	10305	--	--	--	--	--	--
#2	10337	--	--	--	--	--	--

Method: METTRA Sample Name: DXG4QC Operator: WTR
 Run Time: 03/20/01 11:39:32
 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	.05021	1.9291	1.9534	1.9425	.04783	50.028	.04664
SDev	.00012	.0087	.0087	.0078	.00058	.211	.00003
%RSD	.23031	.44932	.44571	.40382	1.2201	.42203	.07379
#1	.05029	1.9353	1.9596	1.9481	.04824	50.177	.04662
#2	.05013	1.9230	1.9473	1.9370	.04742	49.878	.04667
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	.50037	.20050	.24342	.91985	48.897	.49494	.99684
SDev	.00054	.00062	.00027	.02232	.057	.00037	.00031
%RSD	.10869	.30859	.10938	2.4260	.11686	.07541	.03133
#1	.49999	.20006	.24323	.93563	48.937	.49520	.99706
#2	.50076	.20094	.24361	.90407	48.857	.49467	.99662
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	.49062	.49650	.48305	.48753	.47952	.49680	.49105
SDev	.00462	.00280	.00324	.00123	.00485	.00037	.00186
%RSD	.94112	.56351	.67137	.25259	1.0121	.07526	.37990
#1	.49389	.49452	.48534	.48840	.48295	.49707	.49237
#2	.48736	.49847	.48076	.48666	.47609	.49654	.48973
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	1.9609	1.9653	1.9638	2.0345	.49335	.50282	
SDev	.0026	.0127	.0093	.0044	.00181	.00165	
%RSD	.13292	.64682	.47595	.21475	.36615	.32807	
#1	1.9627	1.9743	1.9705	2.0315	.49462	.50398	
#2	1.9590	1.9563	1.9572	2.0376	.49207	.50165	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10435	--	--	--	--	--	--
SDev	21.14208	--	--	--	--	--	--
%RSD	.2026161	--	--	--	--	--	--
#1	10420	--	--	--	--	--	--
#2	10450	--	--	--	--	--	--

Method: METTRA Sample Name: DXGMH

Operator: WTR

Run Time: 03/20/01 11:43:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00056	2.8945	.00691	.08721	-.00148	39.832	.00045
SDev	.00055	.0152	.00144	.00072	.00029	.256	.00010
%RSD	98.714	.52620	20.837	.82944	19.398	.64220	22.582
#1	.00095	2.9052	.00793	.08772	-.00128	40.013	.00038
#2	.00017	2.8837	.00589	.08670	-.00168	39.652	.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	.00131	.02959	.02635	2.9221	6.2428	.21163	.00728
SDev	.00012	.00065	.00040	.0129	.0307	.00087	.00043
%RSD	9.3294	2.1916	1.5186	.43993	.49165	.41004	5.8632
#1	.00140	.03004	.02606	2.9312	6.2645	.21224	.00758
#2	.00123	.02913	.02663	2.9130	6.2211	.21101	.00698
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	.01395	.00947	.00545	.00679	.00843	.00753	.00783
SDev	.00120	.00095	.00046	.00001	.00443	.00062	.00106
%RSD	8.5729	10.048	8.3901	.17536	52.503	8.1878	13.565
#1	.01479	.01014	.00512	.00679	.00530	.00797	.00708
#2	.01310	.00879	.00577	.00678	.01156	.00710	.00858
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	.00364	.00181	.00242	.00304	.01218	.07906	
SDev	.00295	.00207	.00236	.00017	.00008	.00073	
%RSD	80.866	114.39	97.592	5.6961	.62386	.92793	
#1	.00573	.00328	.00409	.00316	.01223	.07957	
#2	.00156	.00035	.00075	.00292	.01213	.07854	
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	10419	--	--	--	--	--	--
SDev	63.28606	--	--	--	--	--	--
%RSD	.6074013	--	--	--	--	--	--
#1	10374	--	--	--	--	--	--
#2	10464	--	--	--	--	--	--

Method: METTRA Sample Name: DXGMHP5

Run Time: 03/20/01 11:48:21

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	.51258	.00188	.01730	-.00112	8.1135	.00017
SDev	.00006	.00304	.00287	.00012	.00038	.0756	.00024
%RSD	60.748	.59396	152.55	.66368	34.135	.93216	139.55
#1	-.00005	.51473	.00391	.01739	-.00085	8.1669	.00034
#2	-.00013	.51042	-.00015	.01722	-.00139	8.0600	.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	.00014	.00640	.00588	.59534	1.2607	.04294	.00063
SDev	.00023	.00035	.00007	.01674	.0043	.00039	.00013
%RSD	163.81	5.4617	1.2626	2.8120	.33934	.91265	20.247
#1	.00031	.00615	.00583	.60718	1.2637	.04321	.00072
#2	-.00002	.00665	.00593	.58350	1.2577	.04266	.00054
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	.00271	.00065	.00159	.00127	.00245	.00275	.00265
SDev	.00078	.00168	.00141	.00038	.00264	.00140	.00005
%RSD	28.854	259.76	88.897	30.087	107.69	50.768	1.9606
#1	.00326	-.00054	.00259	.00154	.00432	.00176	.00261
#2	.00215	.00183	.00059	.00100	.00058	.00374	.00269
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	.00348	-.00138	.00024	.00423	-.00039	.01639	
SDev	.00064	.00312	.00187	.00098	.00000	.00048	
%RSD	18.333	225.85	790.21	23.080	1.2487	2.9270	
#1	.00393	-.00359	-.00109	.00354	-.00039	.01673	
#2	.00303	.00083	.00156	.00492	-.00039	.01605	
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	10648	--	--	--	--	--	--
SDev	25.31498	--	--	--	--	--	--
%RSD	.2377451	--	--	--	--	--	--
#1	10630	--	--	--	--	--	--
#2	10666	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: WTR

Run Time: 03/20/01 11:52:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0237	24.002	.51301	1.9976	2.0434	50.603	.49556
SDev	.0027	.027	.00201	.0123	.0054	.164	.00017
%RSD	.26829	.11446	.39226	.61532	.26625	.32344	.03502
#1	1.0257	24.021	.51159	2.0063	2.0472	50.718	.49568
#2	1.0218	23.982	.51443	1.9889	2.0395	50.487	.49543
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	2.0531	2.0383	1.9610	25.171	49.437	2.0307	2.0373
SDev	.0018	.0032	.0060	.053	.063	.0011	.0003
%RSD	.08877	.15690	.30365	.21149	.12823	.05256	.01639
#1	2.0544	2.0406	1.9652	25.133	49.481	2.0314	2.0376
#2	2.0518	2.0361	1.9568	25.208	49.392	2.0299	2.0371
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	2.0142	.51225	.50135	.50498	.50872	.51384	.51213
SDev	.0287	.00147	.00057	.00087	.00248	.00078	.00135
%RSD	1.4268	.28627	.11339	.17179	.48857	.15115	.26276
#1	2.0345	.51121	.50095	.50437	.50696	.51329	.51118
#2	1.9939	.51329	.50176	.50560	.51048	.51439	.51309
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	.52050	.52688	.52475	1.0306	2.0129	2.0504	
SDev	.00612	.00123	.00122	.0000	.0068	.0059	
%RSD	1.1751	.23288	.23219	.00416	.33679	.28959	
#1	.51618	.52775	.52389	1.0306	2.0177	2.0546	
#2	.52483	.52601	.52562	1.0306	2.0081	2.0462	
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	

678 987

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10375	--	--	--	--	--	--
SDev	12.69271	--	--	--	--	--	--
%RSD	.1223396	--	--	--	--	--	--
#1	10384	--	--	--	--	--	--
#2	10366	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: WTR

Run Time: 03/20/01 11:57:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	-.03058	.00218	-.00012	-.00095	.00492	-.00002
SDev	.00009	.00291	.00081	.00009	.00017	.00164	.00010
%RSD	37.341	9.5118	37.221	76.496	17.926	33.216	497.38

#1	.00030	-.02852	.00275	-.00006	-.00083	.00608	.00005
#2	.00017	-.03263	.00160	-.00019	-.00107	.00377	-.00009

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

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00060	.00060	.00129	.02661	.00002	.00022	.00004
SDev	.00053	.00015	.00005	.00769	.00193	.00004	.00120
%RSD	88.721	25.405	3.5327	28.888	10072.	18.547	2767.1

#1	.00097	.00071	.00132	.03205	.00139	.00020	.00089
#2	.00022	.00049	.00126	.02117	-.00135	.00025	-.00081

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	.00075	-.00358	.00079	-.00066	.00275	-.00105	.00022
SDev	.00108	.00184	.00014	.00070	.00179	.00411	.00215
%RSD	145.01	51.339	17.415	106.23	64.988	392.56	994.30

#1	.00151	-.00228	.00089	-.00016	.00401	-.00396	-.00130
#2	-.00002	-.00487	.00069	-.00116	.00149	.00186	.00174

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	.00368	-.00149	.00023	.00536	-.00056	.00000
SDev	.00117	.00230	.00192	.00445	.00000	.00006
%RSD	31.813	153.67	841.58	82.931	.40258	6050.6

#1	.00285	-.00312	-.00113	.00851	-.00056	.00004
#2	.00451	.00013	.00159	.00222	-.00056	-.00004

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

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10614	--	--	--	--	--	--
SDev	3.889087	--	--	--	--	--	--
%RSD	.0366428	--	--	--	--	--	--
#1	10616	--	--	--	--	--	--
#2	10611	--	--	--	--	--	--

Method: METTRA

Sample Name: DXGMHS

Operator: WTR

Run Time: 03/20/01 12:01:34

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	.05172	5.7873	1.9568	2.0078	.04680	87.660	.04530
SDev	.00025	.0074	.0014	.0093	.00032	.155	.00013
%RSD	.48854	.12851	.06957	.46225	.68870	.17690	.28998

#1	.05190	5.7925	1.9578	2.0143	.04702	87.770	.04520
#2	.05154	5.7820	1.9558	2.0012	.04657	87.550	.04539

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	.48785	.22780	.27692	3.7252	55.125	.69351	.98480
SDev	.00141	.00012	.00053	.0285	.007	.00044	.00259
%RSD	.28867	.05366	.19113	.76385	.01321	.06290	.26268

#1	.48885	.22771	.27655	3.7051	55.120	.69320	.98297
#2	.48685	.22788	.27730	3.7454	55.131	.69381	.98663

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	.48918	.49549	.47669	.48295	.48483	.50836	.50052
SDev	.00324	.00010	.00150	.00103	.00331	.00423	.00172
%RSD	.66215	.01935	.31457	.21371	.68377	.83169	.34287

#1	.49147	.49542	.47563	.48222	.48717	.50537	.49931
#2	.48689	.49556	.47775	.48368	.48248	.51135	.50173

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	1.9722	1.9693	1.9702	2.0419	.49820	.57877
SDev	.0072	.0157	.0081	.0060	.00352	.00080
%RSD	.36335	.79712	.41029	.29406	.70726	.13808

#1	1.9672	1.9804	1.9760	2.0462	.50069	.57934
#2	1.9773	1.9582	1.9645	2.0377	.49571	.57821

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	10297	--	--	--	--	--	--
SDev	14.39004	--	--	--	--	--	--
%RSD	.1397542	--	--	--	--	--	--
#1	10286	--	--	--	--	--	--
#2	10307	--	--	--	--	--	--

Method: METTRA Sample Name: DXGMHD

Operator: WTR

Run Time: 03/20/01 12:05:58

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
Avg	.05147	6.0657	1.9829	2.0226	.04750	89.782	.04541
SDev	.00000	.0149	.0073	.0065	.00042	.295	.00010
%RSD	.00035	.24497	.37052	.32204	.88702	.32879	.21001
#1	.05147	6.0552	1.9880	2.0272	.04780	89.990	.04534
#2	.05147	6.0762	1.9777	2.0180	.04721	89.573	.04548
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	.49324	.23112	.27953	3.8260	55.877	.70704	.99209
SDev	.00108	.00038	.00008	.0033	.062	.00032	.00054
%RSD	.21836	.16449	.02982	.08511	.11145	.04492	.05400
#1	.49401	.23085	.27947	3.8237	55.921	.70726	.99247
#2	.49248	.23139	.27959	3.8283	55.833	.70681	.99171
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	.49338	.49948	.48224	.48798	.48847	.50696	.50080
SDev	.00261	.00059	.00368	.00226	.00207	.00262	.00106
%RSD	.52987	.11815	.76389	.46325	.42372	.51692	.21140
#1	.49153	.49906	.48485	.48958	.48994	.50511	.50006
#2	.49523	.49990	.47964	.48638	.48701	.50881	.50155
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	1.9904	1.9859	1.9874	2.0681	.50450	.58760	
SDev	.0046	.0113	.0091	.0092	.00010	.00099	
%RSD	.23202	.57057	.45767	.44246	.02001	.16885	
#1	1.9937	1.9939	1.9938	2.0745	.50457	.58830	
#2	1.9872	1.9779	1.9810	2.0616	.50443	.58690	
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	10326	--	--	--	--	--	--
SDev	51.76035	--	--	--	--	--	--
%RSD	.5012381	--	--	--	--	--	--
#1	10290	--	--	--	--	--	--
#2	10363	--	--	--	--	--	--

Method: METTRA Sample Name: DW8T9B

Operator: WTR

Run Time: 03/20/01 12:10:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	-.00362	.00143	-.00011	-.00097	.01262	.00025
SDev	.00013	.00633	.00035	.00003	.00027	.00187	.00028
%RSD	38.082	174.86	24.817	29.261	28.042	14.827	108.70

#1	.00044	-.00810	.00168	-.00013	-.00078	.01395	.00045
#2	.00025	.00086	.00118	-.00008	-.00116	.01130	.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	-.00004	.00044	.00112	.02554	-.00183	-.00000	.00050
SDev	.00024	.00040	.00004	.01870	.00194	.00004	.00013
%RSD	666.41	92.603	3.3636	73.221	106.11	1066.2	26.117

#1	-.00021	.00072	.00110	.01232	-.00046	.00003	.00059
#2	.00013	.00015	.00115	.03876	-.00320	-.00003	.00041

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00089	-.00136	.00013	-.00036	.00072	.00083	.00079
SDev	.00000	.00049	.00076	.00067	.00368	.00117	.00201
%RSD	.05235	35.564	570.66	183.96	509.19	141.59	252.93

#1	-.00089	-.00171	-.00041	-.00084	-.00188	-.00000	-.00063
#2	-.00089	-.00102	.00067	.00011	.00332	.00166	.00221

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	-.00241	.00355	.00157	H.01017	-.00056	.00037
SDev	.00150	.00572	.00332	.00098	.00001	.00020
%RSD	62.160	161.14	211.79	9.5991	.97882	52.830

#1	-.00135	-.00049	-.00078	.00948	-.00056	.00051
#2	-.00346	.00759	.00391	H.01086	-.00055	.00023

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

678 995

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10513	--	--	--	--	--	--
SDev	29.69848	--	--	--	--	--	--
%RSD	.2824822	--	--	--	--	--	--
#1	10492	--	--	--	--	--	--
#2	10534	--	--	--	--	--	--

Method: METTRA Sample Name: DW8T9C

Operator: WTR

Run Time: 03/20/01 12:14:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05045	1.9822	2.0574	1.9790	.05012	50.318	.04798
SDev	.00005	.0013	.0048	.0052	.00060	.207	.00017
%RSD	.10665	.06479	.23117	.26391	1.1977	.41075	.35960

#1	.05049	1.9831	2.0607	1.9827	.05054	50.464	.04786
#2	.05041	1.9813	2.0540	1.9753	.04969	50.172	.04810

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	.51303	.20283	.24473	.91176	49.205	.50920	1.0011
SDev	.00120	.00016	.00017	.01605	.018	.00039	.0021
%RSD	.23413	.08076	.07086	1.7607	.03745	.07719	.20584

#1	.51388	.20272	.24485	.90041	49.218	.50947	.99966
#2	.51218	.20295	.24460	.92311	49.192	.50892	1.0026

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	.49765	.50588	.50388	.50455	.49576	.50849	.50425
SDev	.00345	.00010	.00628	.00422	.00397	.00350	.00366
%RSD	.69257	.01960	1.2470	.83719	.80146	.68827	.72533

#1	.50008	.50595	.50832	.50753	.49295	.50602	.50167
#2	.49521	.50581	.49944	.50156	.49857	.51097	.50684

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

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1686	2.1778	2.1747	2.0886	.50080	.52356
SDev	.0055	.0091	.0079	.0046	.00168	.00169
%RSD	.25140	.41747	.36233	.21986	.33582	.32295

#1	2.1724	2.1842	2.1803	2.0854	.50199	.52476
#2	2.1647	2.1714	2.1692	2.0919	.49961	.52237

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

678 99.7

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10521	--	--	--	--	--	--
SDev	22.87463	--	--	--	--	--	--
%RSD	.2174275	--	--	--	--	--	--
#1	10537	--	--	--	--	--	--
#2	10504	--	--	--	--	--	--

Method: METTRA Sample Name: DW79V

Operator: WTR

Run Time: 03/20/01 12:19:12

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	.00035	.37600	.00928	.14282	-.00065	103.30	-.00003
SDev	.00058	.00202	.00013	.00052	.00023	.40	.00015
%RSD	166.99	.53847	1.4442	.36426	35.453	.38748	499.99
#1	-.00006	.37457	.00919	.14319	-.00048	103.59	-.00013
#2	.00076	.37743	.00938	.14245	-.00081	103.02	.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	.00089	.15678	.01390	.95637	19.551	.02262	.02716
SDev	.00048	.00057	.00006	.00011	.019	.00004	.00006
%RSD	53.715	.36375	.46943	.01107	.09860	.19010	.20259
#1	.00123	.15719	.01385	.95645	19.565	.02265	.02720
#2	.00055	.15638	.01395	.95630	19.538	.02259	.02712
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	.12069	-.00176	.00042	-.00031	.00350	.00187	.00241
SDev	.00101	.00011	.00107	.00068	.00127	.00038	.00068
%RSD	.83797	6.3233	257.90	220.68	36.436	20.495	28.186
#1	.12140	-.00183	.00117	.00017	.00440	.00214	.00289
#2	.11997	-.00168	-.00034	-.00079	.00260	.00160	.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	
Avge	.00251	-.00081	.00030	.00790	.00310	.02785	
SDev	.00095	.00010	.00025	.00239	.00001	.00008	
%RSD	37.991	12.646	83.992	30.285	.20360	.29921	
#1	.00184	-.00074	.00012	.00959	.00310	.02779	
#2	.00318	-.00088	.00047	.00620	.00309	.02791	
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	10465	--	--	--	--	--	--
SDev	19.40953	--	--	--	--	--	--
%RSD	.1854740	--	--	--	--	--	--
#1	10451	--	--	--	--	--	--
#2	10479	--	--	--	--	--	--

Method: METTRA Sample Name: DW795

Operator: WTR

Run Time: 03/20/01 12:23:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	.24971	.00709	.11815	-.00068	58.087	.00031
SDev	.00083	.00249	.00052	.00064	.00023	.202	.00027
%RSD	638.92	.99589	7.3714	.54423	34.142	.34755	89.398
#1	-.00046	.24795	.00672	.11860	-.00052	58.230	.00011
#2	.00071	.25147	.00746	.11769	-.00085	57.944	.00050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00110	.09551	.00249	1.4469	11.304	.01388	.04818
SDev	.00053	.00065	.00009	.0043	.030	.00001	.00008
%RSD	48.640	.68427	3.6252	.29831	.26625	.09369	.15703
#1	.00072	.09597	.00256	1.4439	11.325	.01387	.04823
#2	.00148	.09504	.00243	1.4500	11.283	.01389	.04812
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	.24896	-.00214	.00150	.00029	-.00036	.00069	.00034
SDev	.00462	.00157	.00131	.00139	.00313	.00423	.00387
%RSD	1.8537	73.545	87.211	484.23	875.44	616.13	1139.6
#1	.25222	-.00102	.00242	.00127	.00186	.00368	.00307
#2	.24569	-.00325	.00057	-.00070	-.00257	-.00231	-.00239
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00448	.00177	.00267	.00540	.00210	.00880	
SDev	.00179	.00003	.00057	.00202	.00000	.00036	
%RSD	39.861	1.8049	21.470	37.455	.15616	4.0414	
#1	.00322	.00179	.00227	.00397	.00210	.00855	
#2	.00575	.00175	.00308	.00683	.00210	.00905	
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	10524	--	--	--	--	--	--
SDev	9.474816	--	--	--	--	--	--
%RSD	.0900301	--	--	--	--	--	--
#1	10531	--	--	--	--	--	--
#2	10517	--	--	--	--	--	--

Method: METTRA Sample Name: DW797

Operator: WTR

Run Time: 03/20/01 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
Avg	.00026	1.3912	.02283	.12892	-.00064	67.206	-.00019
SDev	.00049	.0007	.00214	.00078	.00021	.255	.00005
%RSD	188.02	.05297	9.3926	.60691	32.104	.37938	25.254

#1	-.00009	1.3917	.02434	.12948	-.00050	67.386	-.00016
#2	.00061	1.3906	.02131	.12837	-.00079	67.025	-.00023

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

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00119	.07866	.01093	1.5238	11.259	.10258	.04186
SDev	.00030	.00018	.00046	.0025	.009	.00013	.00007
%RSD	25.332	.22721	4.1732	.16271	.08056	.12788	.17808

#1	.00140	.07854	.01061	1.5256	11.266	.10268	.04191
#2	.00097	.07879	.01125	1.5221	11.253	.10249	.04180

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	.12171	.00149	.00319	.00262	.00164	.00418	.00334
SDev	.00005	.00086	.00077	.00022	.00058	.00342	.00209
%RSD	.04010	57.838	24.040	8.5794	35.465	81.628	62.451

#1	.12174	.00088	.00373	.00278	.00123	.00660	.00481
#2	.12167	.00209	.00264	.00246	.00205	.00177	.00186

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	.00293	.00342	.00326	.00473	.00300	.01820
SDev	.00514	.00048	.00203	.00259	.00041	.00049
%RSD	175.33	14.060	62.431	54.681	13.570	2.7083

#1	.00657	.00376	.00469	.00290	.00328	.01785
#2	-.00070	.00308	.00182	.00656	.00271	.01854

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

678 1003

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10416	--	--	--	--	--	--
SDev	17.50089	--	--	--	--	--	--
%RSD	.1680197	--	--	--	--	--	--
#1	10404	--	--	--	--	--	--
#2	10428	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AA

Operator: WTR

Run Time: 03/20/01 12:32:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00011	.71269	.00678	.15380	-.00060	64.767	-.00002
SDev	.00040	.01074	.00056	.00118	.00016	.189	.00007
%RSD	352.64	1.5076	8.2832	.76472	26.129	.29211	446.69

#1	.00017	.70509	.00639	.15297	-.00049	64.634	.00003
#2	-.00040	.72029	.00718	.15464	-.00072	64.901	-.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	.00047	.01668	.00463	.79620	19.296	.22411	.00240
SDev	.00024	.00034	.00036	.00641	.106	.00099	.00063
%RSD	50.598	2.0603	7.7588	.80450	.55061	.44206	26.146

#1	.00030	.01644	.00438	.80073	19.220	.22341	.00196
#2	.00063	.01692	.00488	.79167	19.371	.22481	.00284

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	.01374	-.00153	.00013	-.00042	.00301	.00171	.00215
SDev	.00068	.00137	.00107	.00117	.00333	.00222	.00259
%RSD	4.9808	89.483	801.71	279.01	110.69	129.46	120.69

#1	.01325	-.00249	-.00062	-.00125	.00065	.00014	.00031
#2	.01422	-.00056	.00089	.00041	.00537	.00328	.00398

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	.00239	.00004	.00083	.00727	.00304	.00668
SDev	.00312	.00303	.00098	.00395	.00001	.00015
%RSD	130.47	6749.5	119.14	54.404	.36573	2.2704

#1	.00019	.00219	.00152	.00447	.00304	.00657
#2	.00459	-.00210	.00013	.01006	.00305	.00679

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

678 1005

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10485	--	--	--	--	--	--
SDev	40.37552	--	--	--	--	--	--
%RSD	.3850715	--	--	--	--	--	--
#1	10514	--	--	--	--	--	--
#2	10457	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AE

Operator: WTR

Run Time: 03/20/01 12:36:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	1.5568	.00996	.18553	-.00036	65.016	-.00018
SDev	.00028	.0075	.00024	.00052	.00023	.259	.00004
%RSD	187.40	.47893	2.3802	.27794	65.216	.39844	22.011

#1	-.00034	1.5621	.00979	.18590	-.00019	65.199	-.00015
#2	.00005	1.5515	.01012	.18517	-.00053	64.833	-.00021

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

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00422	.27768	.01064	5.6136	19.465	.54361	.13851
SDev	.00047	.00016	.00008	.0096	.042	.00127	.00056
%RSD	11.258	.05880	.74147	.17025	.21725	.23276	.40213

#1	.00389	.27780	.01069	5.6069	19.495	.54450	.13890
#2	.00456	.27756	.01058	5.6204	19.435	.54271	.13811

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	.74348	-.00019	.00227	.00145	.00175	.00076	.00109
SDev	.00657	.00139	.00086	.00103	.00121	.00165	.00151
%RSD	.88330	728.99	37.915	71.386	69.398	218.01	138.44

#1	.74812	.00079	.00288	.00218	.00089	-.00041	.00002
#2	.73883	-.00117	.00166	.00072	.00261	.00193	.00215

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

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00617	-.00121	.00125	.00347	.00274	.01495
SDev	.00041	.00147	.00112	.00129	.00001	.00001
%RSD	6.6927	121.94	89.625	37.149	.17317	.06334

#1	.00646	-.00017	.00204	.00438	.00274	.01496
#2	.00588	-.00225	.00046	.00256	.00275	.01494

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	10599	--	--	--	--	--	--
SDev	12.44549	--	--	--	--	--	--
%RSD	.1174236	--	--	--	--	--	--
#1	10608	--	--	--	--	--	--
#2	10590	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AL

Operator: WTR

Run Time: 03/20/01 12:41:14

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	.00063	2.2316	.03074	.06883	-.00022	79.186	.00004
SDev	.00003	.0010	.00009	.00004	.00000	.226	.00026
%RSD	4.6745	.04486	.29832	.05177	1.5796	.28534	719.18
#1	.00061	2.2309	.03081	.06880	-.00022	79.346	.00022
#2	.00065	2.2323	.03068	.06885	-.00022	79.026	-.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	.00219	.20426	.01163	2.8068	21.379	.18196	.03470
SDev	.00030	.00023	.00019	.0215	.005	.00043	.00012
%RSD	13.533	.11117	1.6129	.76487	.02151	.23791	.35866
#1	.00198	.20410	.01150	2.7916	21.382	.18226	.03479
#2	.00239	.20442	.01176	2.8220	21.376	.18165	.03461
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	.18376	.00079	.00245	.00190	.00208	.00202	.00204
SDev	.00045	.00022	.00119	.00072	.00038	.00033	.00009
%RSD	.24488	27.683	48.461	37.961	18.357	16.250	4.5114
#1	.18344	.00094	.00161	.00139	.00181	.00226	.00211
#2	.18408	.00063	.00329	.00241	.00235	.00179	.00198
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	.00384	.00246	.00292	.00936	.00165	.02848	
SDev	.00550	.00450	.00117	.00348	.00040	.00007	
%RSD	143.44	183.20	40.089	37.197	24.304	.25377	
#1	.00773	-.00073	.00209	.01182	.00137	.02853	
#2	-.00005	.00564	.00374	.00690	.00194	.02843	
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	10552	--	--	--	--	--	--
SDev	.9902257	--	--	--	--	--	--
%RSD	.0093839	--	--	--	--	--	--
#1	10552	--	--	--	--	--	--
#2	10553	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: WTR

Run Time: 03/20/01 12:45:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0206	23.558	.51470	1.9881	2.0324	50.444	.49573
SDev	.0001	.078	.00157	.0031	.0021	.056	.00147
%RSD	.00950	.33107	.30493	.15610	.10418	.11084	.29723
#1	1.0206	23.503	.51359	1.9902	2.0339	50.483	.49678
#2	1.0205	23.613	.51581	1.9859	2.0309	50.404	.49469
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0556	2.0364	1.9402	25.177	49.345	2.0359	2.0399
SDev	.0043	.0019	.0016	.034	.061	.0014	.0016
%RSD	.20813	.09234	.08275	.13446	.12272	.06758	.07956
#1	2.0526	2.0350	1.9391	25.153	49.302	2.0349	2.0388
#2	2.0587	2.0377	1.9413	25.201	49.388	2.0369	2.0411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0107	.51446	.50397	.50747	.50977	.51558	.51364
SDev	.0116	.00392	.00157	.00236	.00560	.00042	.00214
%RSD	.57476	.76249	.31220	.46422	1.0989	.08041	.41701
#1	2.0188	.51169	.50286	.50580	.50581	.51528	.51213
#2	2.0025	.51723	.50509	.50913	.51373	.51587	.51516
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52158	.52357	.52291	1.0404	2.0107	2.0515	
SDev	.00248	.00034	.00105	.0026	.0062	.0036	
%RSD	.47549	.06502	.20136	.24731	.30939	.17541	
#1	.51983	.52333	.52217	1.0386	2.0151	2.0540	
#2	.52334	.52381	.52365	1.0423	2.0063	2.0489	
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	10448	--	--	--	--	--	--
SDev	44.54773	--	--	--	--	--	--
%RSD	.4263736	--	--	--	--	--	--
#1	10480	--	--	--	--	--	--
#2	10417	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: WTR

Run Time: 03/20/01 12:50:03

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	.00026	-.02888	.00158	-.00012	-.00011	.00316	.00005
SDev	.00009	.00784	.00107	.00001	.00020	.00023	.00011
%RSD	34.026	27.159	67.881	7.8396	176.81	7.4350	212.46
#1	.00020	-.02334	.00233	-.00013	.00003	.00333	.00013
#2	.00032	-.03443	.00082	-.00012	-.00026	.00300	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00056	.00091	.00067	.05583	.00003	.00010	-.00032
SDev	.00012	.00048	.00031	.00625	.00063	.00004	.00001
%RSD	21.097	52.551	47.204	11.193	1860.1	43.063	2.6812
#1	.00048	.00057	.00044	.06025	.00048	.00013	-.00031
#2	.00064	.00125	.00089	.05141	-.00041	.00007	-.00032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00100	-.00307	-.00076	-.00153	.00001	-.00099	-.00065
SDev	.00077	.00320	.00136	.00016	.00383	.00127	.00043
%RSD	76.402	104.32	179.55	10.292	25908.	129.09	65.405
#1	-.00046	-.00533	.00020	-.00164	-.00270	-.00009	-.00096
#2	-.00155	-.00081	-.00172	-.00142	.00273	-.00189	-.00035
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	.00504	-.00190	.00041	.00613	-.00055	-.00026	
SDev	.00078	.00144	.00070	.00275	.00000	.00020	
%RSD	15.524	75.797	170.60	44.840	.33237	76.633	
#1	.00560	-.00292	-.00008	.00808	-.00055	-.00040	
#2	.00449	-.00088	.00091	.00419	-.00055	-.00012	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10717	--	--	--	--	--	--
SDev	41.71930	--	--	--	--	--	--
%RSD	.3892706	--	--	--	--	--	--
#1	10688	--	--	--	--	--	--
#2	10747	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AM

Operator: WTR

Run Time: 03/20/01 12:54:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	BA ppm	BE ppm	CA ppm	CD ppm
Avge	-.00022	-.00407	.00354	.05209	-.00020	285.96	.00005
SDev	.00006	.00029	.00022	.00007	.00022	.31	.00015
%RSD	26.216	7.1186	6.1358	.13567	106.29	.10716	268.08
#1	-.00018	-.00428	.00339	.05214	-.00005	285.75	.00016
#2	-.00027	-.00387	.00370	.05204	-.00035	286.18	-.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 Units	CO ppm	CR ppm	CU ppm	FE ppm	MG ppm	MN ppm	MO ppm
Avge	-.00012	.00643	.00118	L-.12013	58.583	.01310	-.00003
SDev	.00000	.00009	.00042	.00336	.199	.00005	.00012
%RSD	.30010	1.3999	35.990	2.7994	.34014	.35321	423.39
#1	-.00012	.00636	.00088	L-.12251	58.442	.01313	.00006
#2	-.00012	.00649	.00148	L-.11775	58.724	.01306	-.00011
Errors	LC Pass	LC Pass	LC Pass	LC Low	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 Units	NI ppm	PB/1 ppm	PB/2 ppm	PB ppm	SB/1 ppm	SB/2 ppm	SB ppm
Avge	.00362	-.00149	-.00036	-.00073	.00024	.00258	.00180
SDev	.00171	.00100	.00105	.00037	.00130	.00172	.00071
%RSD	47.280	67.423	294.56	49.910	544.24	66.466	39.454
#1	.00241	-.00220	.00039	-.00047	.00116	.00137	.00130
#2	.00483	-.00078	-.00110	-.00099	-.00068	.00380	.00231
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem Units	SE/1 ppm	SE/2 ppm	SE ppm	TL ppm	V ppm	ZN ppm	
Avge	.00202	-.00081	.00013	.00192	.00359	.00634	
SDev	.00123	.00270	.00139	.00041	.00040	.00001	
%RSD	60.936	332.53	1064.5	21.404	10.992	.17680	
#1	.00115	.00110	.00112	.00163	.00331	.00635	
#2	.00289	-.00272	-.00085	.00221	.00387	.00634	
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	10559	--	--	--	--	--	--
SDev	3.641186	--	--	--	--	--	--
%RSD	.0344826	--	--	--	--	--	--
#1	10557	--	--	--	--	--	--
#2	10562	--	--	--	--	--	--

Method: METTRA

Sample Name: DW8AMP5

Operator: WTR

Run Time: 03/20/01 12:58:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	-.02254	.00098	.01007	-.00024	58.758	.00007
SDev	.00042	.00021	.00064	.00019	.00028	.000	.00009
%RSD	205.58	.91235	65.450	1.8821	118.23	.00056	128.34
#1	-.00009	-.02239	.00053	.01020	-.00004	58.757	.00013
#2	.00050	-.02268	.00143	.00994	-.00043	58.758	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	.00270	.00016	-.00157	11.449	.00282	-.00157
SDev	.00024	.00038	.00013	.01374	.013	.00010	.00085
%RSD	67.132	14.146	79.848	876.53	.11694	3.5182	53.851
#1	-.00019	.00243	.00025	-.01128	11.439	.00275	-.00217
#2	-.00053	.00297	.00007	.00815	11.458	.00289	-.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
Avg	.00151	-.00043	-.00028	-.00033	-.00168	.00132	.00032
SDev	.00001	.00054	.00022	.00032	.00290	.00231	.00251
%RSD	.84726	127.09	76.341	98.019	172.32	175.30	784.19
#1	.00150	-.00081	-.00044	-.00056	.00037	.00296	.00209
#2	.00152	-.00004	-.00013	-.00010	-.00373	-.00032	-.00145
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	.00530	.00225	.00327	.00973	-.00001	.00526	
SDev	.00197	.00427	.00351	.00373	.00001	.00009	
%RSD	37.224	189.79	107.36	38.294	66.638	1.6321	
#1	.00669	.00527	.00574	.01236	-.00001	.00520	
#2	.00390	-.00077	.00079	.00710	-.00001	.00532	
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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03/20/01 01:03:12 PM

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10621	--	--	--	--	--	--
SDev	52.43224	--	--	--	--	--	--
%RSD	.4936484	--	--	--	--	--	--
#1	10658	--	--	--	--	--	--
#2	10584	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AMS Operator: WTR
 Run Time: 03/20/01 13:03:15
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	BA ppm	BE ppm	CA ppm	CD ppm
Avge	.05048	2.0434	2.0358	2.0061	.04883	329.38	.04591
SDev	.00026	.0251	.0212	.0169	.00046	2.44	.00016
%RSD	.52374	1.2298	1.0421	.84053	.94912	.74090	.35768
#1	.05067	2.0611	2.0508	2.0180	.04915	331.10	.04603
#2	.05030	2.0256	2.0208	1.9942	.04850	327.65	.04580
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 Units	CO ppm	CR ppm	CU ppm	FE ppm	MG ppm	MN ppm	MO ppm
Avge	.49407	.20074	.24587	.89087	107.79	.51187	.96907
SDev	.00387	.00225	.00174	.00054	.77	.00350	.00652
%RSD	.78348	1.1208	.70674	.06047	.71552	.68346	.67251
#1	.49681	.20233	.24710	.89049	108.34	.51434	.97367
#2	.49134	.19915	.24464	.89125	107.25	.50940	.96446
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 Units	NI ppm	PB/1 ppm	PB/2 ppm	PB ppm	SB/1 ppm	SB/2 ppm	SB ppm
Avge	.47966	.50001	.48643	.49095	.47905	.49938	.49261
SDev	.00572	.00101	.00492	.00361	.00054	.00428	.00268
%RSD	1.1932	.20106	1.0106	.73606	.11225	.85717	.54324
#1	.48371	.50072	.48991	.49351	.47867	.50241	.49450
#2	.47562	.49930	.48296	.48840	.47943	.49636	.49072
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem Units	SE/1 ppm	SE/2 ppm	SE ppm	TL ppm	V_ ppm	ZN ppm	
Avge	2.1372	2.1252	2.1292	2.0642	.49109	.51552	
SDev	.0115	.0151	.0139	.0134	.00351	.00443	
%RSD	.53624	.71004	.65195	.65084	.71389	.85831	
#1	2.1453	2.1359	2.1390	2.0737	.49357	.51865	
#2	2.1291	2.1145	2.1194	2.0547	.48861	.51239	
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	10428	--	--	--	--	--	--
SDev	48.93193	--	--	--	--	--	--
%RSD	.4692202	--	--	--	--	--	--
#1	10394	--	--	--	--	--	--
#2	10463	--	--	--	--	--	--

Method: METTRA

Sample Name: DW8AMD

Operator: WTR

Run Time: 03/20/01 13:07:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04947	2.0308	2.0241	1.9904	.04894	328.16	.04584
SDev	.00058	.0059	.0046	.0003	.00008	.28	.00022
%RSD	1.1679	.28963	.22649	.01578	.16468	.08500	.47302
#1	.04987	2.0267	2.0273	1.9906	.04900	328.36	.04568
#2	.04906	2.0350	2.0209	1.9902	.04888	327.97	.04599
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	.49175	.19970	.24468	.84322	107.35	.50910	.96473
SDev	.00046	.00104	.00024	.01173	.02	.00067	.00012
%RSD	.09300	.51979	.09955	1.3912	.01582	.13098	.01232
#1	.49142	.20043	.24451	.83493	107.34	.50958	.96465
#2	.49207	.19896	.24485	.85152	107.36	.50863	.96481
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	.48203	.49511	.48386	.48760	.48224	.49774	.49258
SDev	.00544	.00163	.00470	.00259	.00279	.00531	.00261
%RSD	1.1284	.32950	.97176	.53177	.57808	1.0670	.53067
#1	.48588	.49395	.48718	.48944	.48027	.50150	.49443
#2	.47819	.49626	.48053	.48577	.48421	.49399	.49073
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	2.1383	2.1388	2.1386	2.0697	.49049	.51459	
SDev	.0066	.0014	.0031	.0122	.00216	.00063	
%RSD	.30902	.06496	.14622	.58824	.44014	.12234	
#1	2.1429	2.1398	2.1408	2.0783	.49202	.51503	
#2	2.1336	2.1378	2.1364	2.0611	.48896	.51414	
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	10423	--	--	--	--	--	--
SDev	11.91516	--	--	--	--	--	--
%RSD	.1143196	--	--	--	--	--	--
#1	10414	--	--	--	--	--	--
#2	10431	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AP

Run Time: 03/20/01 13:12:49

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	2.8258	.00620	.35909	.00232	114.25	-.00029
SDev	.00027	.0008	.00004	.00454	.00164	.80	.00032
%RSD	208.42	.02973	.64977	1.2646	70.616	.70404	110.64
#1	-.00032	2.8252	.00623	.36230	.00348	114.82	-.00051
#2	.00006	2.8264	.00617	.35588	.00116	113.68	-.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	.00267	.32266	.00344	4.6479	28.573	.06079	.10299
SDev	.00049	.00165	.00085	.0014	.008	.00008	.00053
%RSD	18.164	.51123	24.671	.02911	.02969	.13279	.51448
#1	.00302	.32383	.00284	4.6489	28.579	.06085	.10336
#2	.00233	.32150	.00404	4.6470	28.567	.06074	.10261
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	.59634	.00116	.00312	.00246	.00095	.00073	.00081
SDev	.02281	.00298	.00005	.00103	.00123	.00129	.00045
%RSD	3.8250	257.51	1.6366	41.653	129.34	175.48	55.577
#1	.61247	.00327	.00315	.00319	.00183	-.00018	.00049
#2	.58021	-.00095	.00308	.00174	.00008	.00164	.00112
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	.00001	.00426	.00285	.00719	.00419	.01640	
SDev	.00128	.00357	.00281	.00374	.00481	.00039	
%RSD	13699.	83.694	98.566	51.953	114.72	2.4053	
#1	.00091	.00679	.00483	.00984	.00079	.01668	
#2	-.00090	.00174	.00086	.00455	.00760	.01612	
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	10386	--	--	--	--	--	--
SDev	27.96663	--	--	--	--	--	--
%RSD	.2692769	--	--	--	--	--	--
#1	10366	--	--	--	--	--	--
#2	10406	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AQ

Run Time: 03/20/01 13:17:13

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.26807	.00453	.25308	.00132	66.537	.00013
SDev	.00016	.01139	.00074	.00007	.00022	.184	.00025
%RSD	44.675	4.2496	16.398	.02921	16.812	.27684	182.75
#1	.00025	.26002	.00505	.25313	.00117	66.667	-.00004
#2	.00048	.27613	.00400	.25303	.00148	66.407	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.03621	-.00101	.36854	11.164	.00728	.00903
SDev	.00000	.00003	.00014	.01261	.007	.00004	.00135
%RSD	.00098	.08640	14.272	3.4225	.06440	.57981	14.943
#1	-.00047	.03623	-.00091	.37746	11.169	.00725	.00999
#2	-.00047	.03619	-.00111	.35963	11.159	.00731	.00808
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	.05373	.00222	.00007	.00079	.00023	.00418	.00286
SDev	.00079	.00151	.00004	.00048	.00314	.00154	.00002
%RSD	1.4704	68.171	50.489	60.875	1374.1	36.831	.71448
#1	.05317	.00329	.00005	.00113	.00245	.00309	.00288
#2	.05428	.00115	.00010	.00045	-.00199	.00526	.00285
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	-.00095	-.00050	-.00065	.00789	.00209	.00769	
SDev	.00276	.00027	.00110	.00133	.00040	.00000	
%RSD	289.51	53.756	168.58	16.841	19.322	.03218	
#1	-.00291	-.00069	-.00143	.00695	.00238	.00769	
#2	.00100	-.00031	.00013	.00883	.00181	.00769	
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	10403	--	--	--	--	--	--
SDev	.0352172	--	--	--	--	--	--
%RSD	.0003385	--	--	--	--	--	--
#1	10403	--	--	--	--	--	--
#2	10403	--	--	--	--	--	--

Method: METTRA

Sample Name: DW8AT

Operator: WTR

Run Time: 03/20/01 13:21:38

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	.00008	.01983	.00102	.31995	.00059	62.892	-.00010
SDev	.00039	.00100	.00171	.00004	.00005	.053	.00010
%RSD	454.39	5.0239	167.22	.01169	8.9196	.08354	101.22
#1	-.00019	.01913	-.00019	.31992	.00063	62.855	-.00016
#2	.00036	.02053	.00223	.31997	.00055	62.930	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00047	.01214	-.00031	.15782	9.6707	.00112	.00422
SDev	.00000	.00028	.00028	.00779	.0030	.00004	.00073
%RSD	.02842	2.2658	92.691	4.9384	.03142	3.7741	17.394
#1	.00047	.01195	-.00051	.15231	9.6728	.00115	.00474
#2	.00047	.01234	-.00011	.16333	9.6685	.00109	.00370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03019	-.00216	.00001	-.00071	.00179	.00173	.00175
SDev	.00032	.00180	.00090	.00000	.00110	.00259	.00210
%RSD	1.0726	83.398	10870.	.21008	61.638	150.25	120.04
#1	.03042	-.00088	-.00063	-.00071	.00101	-.00011	.00026
#2	.02996	-.00343	.00064	-.00071	.00257	.00356	.00323
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00259	.00175	.00203	.00056	.00117	.00130	
SDev	.00131	.00280	.00143	.00001	.00000	.00020	
%RSD	50.694	160.16	70.481	.86160	.14878	15.060	
#1	.00166	.00373	.00304	.00056	.00117	.00116	
#2	.00352	-.00023	.00102	.00057	.00117	.00144	
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	10466	--	--	--	--	--	--
SDev	3.288323	--	--	--	--	--	--
%RSD	.0314183	--	--	--	--	--	--
#1	10464	--	--	--	--	--	--
#2	10469	--	--	--	--	--	--

Method: METTRA Sample Name: DW79VF

Operator: WTR

Run Time: 03/20/01 13:26:03

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	.00045	.04574	.00886	.11529	.00140	99.752	.00004
SDev	.00064	.00789	.00077	.00075	.00043	.537	.00006
%RSD	141.31	17.259	8.7209	.65326	30.682	.53797	145.41
#1	.00091	.05132	.00831	.11582	.00170	100.13	.00009
#2	.00000	.04016	.00940	.11475	.00109	99.372	-.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	-.00017	.00169	-.00094	-.03071	18.880	.00119	.00234
SDev	.00018	.00049	.00024	.01105	.061	.00005	.00148
%RSD	107.03	29.197	25.047	35.974	.32188	3.7905	63.180
#1	-.00030	.00134	-.00111	-.03853	18.923	.00122	.00338
#2	-.00004	.00204	-.00078	-.02290	18.837	.00116	.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
Avge	.00356	-.00112	.00066	.00007	.00039	.00188	.00138
SDev	.00157	.00245	.00082	.00027	.00264	.00128	.00173
%RSD	44.002	218.48	124.12	392.97	678.51	68.040	125.30
#1	.00245	-.00285	.00124	-.00012	.00225	.00278	.00260
#2	.00467	.00061	.00008	.00026	-.00148	.00097	.00016
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	.00419	-.00304	-.00063	.00091	.00197	.01092	
SDev	.00522	.00476	.00491	.00140	.00040	.00003	
%RSD	124.60	156.52	775.58	154.09	20.239	.25112	
#1	.00788	.00032	.00284	-.00008	.00169	.01094	
#2	.00050	-.00641	-.00411	.00190	.00225	.01090	
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	10439	--	--	--	--	--	--
SDev	18.03122	--	--	--	--	--	--
%RSD	.1727360	--	--	--	--	--	--
#1	10426	--	--	--	--	--	--
#2	10451	--	--	--	--	--	--

Method: METTRA

Sample Name: DW795F

Operator: WTR

Run Time: 03/20/01 13:30:27

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	.00064	.02307	.00679	.10782	.00127	56.101	.00007
SDev	.00010	.02321	.00263	.00176	.00033	.495	.00007
%RSD	15.957	100.63	38.734	1.6344	25.802	.88167	101.17
#1	.00057	.03948	.00493	.10907	.00151	56.451	.00002
#2	.00071	.00665	.00865	.10658	.00104	55.751	.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	.00001	.00243	-.00065	.02600	10.948	.00130	.00248
SDev	.00029	.00004	.00055	.02661	.096	.00006	.00029
%RSD	5044.1	1.5122	85.313	102.36	.87490	4.5616	11.675
#1	.00021	.00240	-.00104	.00718	11.016	.00134	.00269
#2	-.00020	.00245	-.00026	.04482	10.880	.00126	.00228
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	.01028	-.00186	.00047	-.00031	.00042	.00312	.00222
SDev	.00193	.00321	.00020	.00094	.00082	.00221	.00120
%RSD	18.761	172.46	42.136	304.48	196.47	70.915	54.073
#1	.00892	.00041	.00033	.00036	-.00016	.00468	.00307
#2	.01165	-.00413	.00061	-.00097	.00100	.00155	.00137
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	.00554	.00356	.00422	.00088	.00226	.00661	
SDev	.00276	.00454	.00395	.00137	.00081	.00007	
%RSD	49.885	127.61	93.630	156.65	36.041	1.0706	
#1	.00359	.00035	.00143	.00184	.00283	.00666	
#2	.00749	.00677	.00701	-.00009	.00168	.00656	
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	10491	--	--	--	--	--	--
SDev	98.03994	--	--	--	--	--	--
%RSD	.9345437	--	--	--	--	--	--
#1	10421	--	--	--	--	--	--
#2	10560	--	--	--	--	--	--

Method: METTRA

Sample Name: DW797F

Operator: WTR

Run Time: 03/20/01 13:34:52

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	-.00024	.02240	.02378	.10465	.00097	61.416	.00010
SDev	.00096	.02887	.00007	.00031	.00095	.122	.00009
%RSD	403.53	128.90	.29159	.29536	98.284	.19836	89.442
#1	-.00092	.04281	.02373	.10487	.00165	61.502	.00016
#2	.00044	.00198	.02383	.10443	.00030	61.330	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00026	.00091	-.00052	-.01163	10.622	.02785	.02073
SDev	.00018	.00004	.00103	.00136	.015	.00005	.00023
%RSD	70.006	4.0187	198.09	11.654	.13932	.18597	1.1182
#1	.00013	.00094	-.00125	-.01068	10.633	.02789	.02090
#2	.00039	.00089	.00021	-.01259	10.612	.02782	.02057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00131	-.00093	.00241	.00130	.00344	.00099	.00181
SDev	.00280	.00005	.00105	.00072	.00357	.00140	.00212
%RSD	213.96	5.1902	43.542	55.187	103.65	141.23	117.39
#1	-.00067	-.00090	.00315	.00180	.00596	.00198	.00330
#2	.00329	-.00096	.00167	.00079	.00092	.00000	.00031
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00321	.00068	.00152	-.00119	.00196	.00325	
SDev	.00313	.00329	.00324	.00168	.00041	.00010	
%RSD	97.445	486.15	212.96	141.61	20.910	3.1461	
#1	.00100	-.00165	-.00077	-.00238	.00224	.00318	
#2	.00542	.00301	.00381	.00000	.00167	.00332	
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	10525	--	--	--	--	--	--
SDev	50.06371	--	--	--	--	--	--
%RSD	.4756783	--	--	--	--	--	--
#1	10489	--	--	--	--	--	--
#2	10560	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: CCV3-4

Operator: WTR

Run Time: 03/20/01 13:39:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0027	L22.382	.51475	1.9471	2.0070	49.899	.49720
SDev	.0005	.391	.00011	.0090	.0039	.057	.00208
%RSD	.05183	1.7470	.02037	.46039	.19329	.11491	.41847
#1	1.0023	L22.106	.51482	1.9408	2.0042	49.859	.49868
#2	1.0031	22.659	.51468	1.9534	2.0097	49.940	.49573
Errors	LC Pass	LC Low	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	2.0444	2.0238	1.8805	24.936	48.877	2.0274	2.0300
SDev	.0029	.0020	.0134	.061	.002	.0008	.0031
%RSD	.14388	.09830	.71507	.24553	.00485	.03701	.15392
#1	2.0423	2.0224	1.8710	24.892	48.876	2.0280	2.0278
#2	2.0464	2.0252	1.8900	24.979	48.879	2.0269	2.0322
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	2.0200	.51345	.50662	.50890	.50750	.51167	.51028
SDev	.0225	.00050	.00303	.00219	.00571	.00687	.00648
%RSD	1.1148	.09769	.59833	.43013	1.1254	1.3420	1.2703
#1	2.0359	.51380	.50877	.51044	.51154	.51653	.51486
#2	2.0041	.51309	.50448	.50735	.50346	.50682	.50570
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	.51767	.52114	.51998	1.0472	1.9825	2.0505	
SDev	.00320	.01386	.00818	.0095	.0039	.0129	
%RSD	.61822	2.6595	1.5728	.90661	.19832	.63154	
#1	.51541	.53094	.52577	1.0539	1.9797	2.0597	
#2	.51994	.51134	.51420	1.0405	1.9853	2.0414	
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	10528	--	--	--	--	--	--
SDev	10.81860	--	--	--	--	--	--
%RSD	.1027597	--	--	--	--	--	--
#1	10520	--	--	--	--	--	--
#2	10536	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Run Time: 03/20/01 13:43:45

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	-.00343	.00067	-.00020	.00052	.01781	.00029
SDev	.00032	.00236	.00130	.00001	.00024	.00036	.00033
%RSD	350.18	68.933	194.69	5.5086	47.543	2.0207	113.67
#1	-.00013	-.00510	.00158	-.00020	.00069	.01755	.00006
#2	.00032	-.00176	-.00025	-.00019	.00034	.01806	.00052
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	.00031	-.00022	.00013	.01245	.00411	.00008	-.00115
SDev	.00070	.00058	.00018	.00606	.00128	.00000	.00047
%RSD	228.54	264.81	136.37	48.688	30.981	3.9455	41.315
#1	-.00019	-.00063	.00025	.00816	.00502	.00008	-.00081
#2	.00080	.00019	.00000	.01674	.00321	.00008	-.00148
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	-.00002	-.00402	.00172	-.00019	.00371	.00059	.00163
SDev	.00154	.00048	.00324	.00232	.00168	.00035	.00079
%RSD	6675.3	11.894	188.05	1223.0	45.128	58.987	48.461
#1	.00107	-.00368	.00401	.00145	.00253	.00034	.00107
#2	-.00111	-.00436	-.00057	-.00183	.00490	.00083	.00219
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	.00344	.00037	.00139	.00909	-.00056	-.00022	
SDev	.00042	.00448	.00285	.00399	.00000	.00026	
%RSD	12.048	1221.5	204.94	43.869	.31511	118.63	
#1	.00315	.00354	.00341	.00627	-.00056	-.00040	
#2	.00374	-.00280	-.00063	H.01191	-.00056	-.00004	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10616	--	--	--	--	--	--
SDev	50.91169	--	--	--	--	--	--
%RSD	.4795864	--	--	--	--	--	--
#1	10652	--	--	--	--	--	--
#2	10580	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AAF

Run Time: 03/20/01 13:48:09

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	.00795	.00415	.13318	.00036	64.763	-.00005
SDev	.00010	.00215	.00144	.00032	.00007	.159	.00012
%RSD	19.326	27.068	34.754	.23672	20.078	.24599	229.14
#1	.00046	.00948	.00313	.13340	.00041	64.876	.00003
#2	.00061	.00643	.00517	.13296	.00031	64.650	-.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	.00005	.00122	-.00001	-.00237	19.245	.00514	.00489
SDev	.00012	.00003	.00014	.01878	.025	.00004	.00048
%RSD	254.51	2.5859	1490.7	792.25	.12830	.72720	9.8328
#1	.00013	.00125	.00009	-.01565	19.262	.00512	.00455
#2	-.00004	.00120	-.00011	.01091	19.227	.00517	.00523
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	.02514	.00090	.00003	.00032	.00224	.00128	.00160
SDev	.00049	.00248	.00164	.00192	.00076	.00083	.00081
%RSD	1.9507	274.62	5045.3	595.64	33.899	65.147	50.544
#1	.02548	.00265	.00119	.00168	.00171	.00069	.00103
#2	.02479	-.00085	-.00113	-.00103	.00278	.00187	.00217
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	.00129	-.00038	.00018	.00337	.00196	.00180	
SDev	.00101	.00170	.00147	.00078	.00040	.00007	
%RSD	77.883	451.99	820.52	23.282	20.419	3.6539	
#1	.00058	-.00158	-.00086	.00281	.00168	.00185	
#2	.00200	.00083	.00122	.00392	.00225	.00176	
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	10491	--	--	--	--	--	--
SDev	8.131728	--	--	--	--	--	--
%RSD	.0775141	--	--	--	--	--	--
#1	10485	--	--	--	--	--	--
#2	10496	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AEF

Operator: WTR

Run Time: 03/20/01 13:52:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	.00750	.00249	.13262	.00040	63.989	-.00009
SDev	.00016	.01028	.00357	.00011	.00007	.050	.00023
%RSD	45.396	137.15	143.27	.08399	18.337	.07790	264.98
#1	-.00024	.00023	.00502	.13270	.00045	64.024	.00008
#2	-.00048	.01477	-.00003	.13254	.00035	63.954	-.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	.00137	-.00009	-.00563	19.023	.01032	.00537
SDev	.00024	.00013	.00071	.00162	.001	.00007	.00050
%RSD	176.98	9.1920	809.52	28.693	.00516	.63552	9.2592
#1	.00030	.00128	-.00059	-.00449	19.023	.01037	.00501
#2	-.00003	.00146	.00042	-.00677	19.024	.01027	.00572
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	.02632	-.00104	.00057	.00003	.00038	-.00050	-.00021
SDev	.00042	.00253	.00068	.00038	.00002	.00109	.00073
%RSD	1.6079	242.94	120.07	1122.2	5.5668	216.93	350.66
#1	.02662	.00075	.00009	.00031	.00039	.00027	.00031
#2	.02602	-.00283	.00105	-.00024	.00036	-.00127	-.00073
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	.00202	.00221	.00626	.00167	.00147	
SDev	.00104	.00047	.00003	.00269	.00000	.00013	
%RSD	40.406	23.252	1.4849	42.952	.18861	9.0756	
#1	.00331	.00169	.00223	.00436	.00167	.00138	
#2	.00184	.00236	.00219	.00817	.00167	.00156	
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	10547	--	--	--	--	--	--
SDev	17.07621	--	--	--	--	--	--
%RSD	.1619070	--	--	--	--	--	--
#1	10559	--	--	--	--	--	--
#2	10535	--	--	--	--	--	--

Method: METTRA Sample Name: DW8ALF Operator: WTR
 Run Time: 03/20/01 13:56:58
 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	.00016	.03138	.02475	.02397	.00056	74.715	.00003
SDev	.00004	.00099	.00101	.00006	.00017	.117	.00004
%RSD	27.356	3.1566	4.0770	.23142	29.960	.15690	152.98
#1	.00013	.03068	.02403	.02401	.00068	74.632	.00005
#2	.00019	.03208	.02546	.02393	.00044	74.798	-.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	.00047	.00289	.00004	-.00249	20.003	.04169	.00365
SDev	.00036	.00025	.00033	.01715	.042	.00014	.00121
%RSD	75.630	8.5601	747.95	688.71	.20998	.33150	33.181
#1	.00072	.00271	-.00019	-.01461	19.973	.04159	.00279
#2	.00022	.00306	.00028	.00964	20.033	.04179	.00451
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	.01155	-.00015	-.00019	-.00017	.00148	-.00081	-.00005
SDev	.00140	.00129	.00039	.00069	.00053	.00104	.00052
%RSD	12.102	853.19	212.39	398.68	36.024	127.99	1061.6
#1	.01254	-.00106	-.00046	-.00066	.00186	-.00155	-.00041
#2	.01056	.00076	.00009	.00031	.00111	-.00008	.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	.00560	-.00116	.00109	.00583	.00139	.00926	
SDev	.00627	.00460	.00516	.00339	.00040	.00020	
%RSD	111.99	397.48	472.30	58.155	28.824	2.1768	
#1	.00117	-.00441	-.00256	.00823	.00111	.00912	
#2	.01003	.00210	.00474	.00343	.00168	.00940	
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	10551	--	--	--	--	--	--
SDev	3.358757	--	--	--	--	--	--
%RSD	.0318344	--	--	--	--	--	--
#1	10553	--	--	--	--	--	--
#2	10548	--	--	--	--	--	--

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Method: METTRA Sample Name: DW8AMF

Run Time: 03/20/01 14:01:22

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00058	.00273	.05076	.00070	282.10	-.00005
SDev	.00007	.00617	.00020	.00031	.00020	.37	.00004
%RSD	33.541	1059.7	7.4940	.60232	28.607	.13260	84.811
#1	.00027	.00495	.00288	.05097	.00084	282.36	-.00002
#2	.00017	-.00378	.00259	.05054	.00056	281.83	-.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	-.00050	.00048	-.00038	L-.17024	57.757	.01221	-.00027
SDev	.00006	.00028	.00000	.01110	.024	.00005	.00073
%RSD	11.973	58.186	.22879	6.5193	.04146	.39100	275.29
#1	-.00046	.00028	-.00038	L-.16239	57.774	.01217	-.00078
#2	-.00055	.00068	-.00037	L-.17809	57.740	.01224	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Low	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	.00399	-.00055	.00125	.00065	-.00160	.00265	.00124
SDev	.00032	.00298	.00096	.00163	.00226	.00168	.00037
%RSD	7.9232	541.83	76.416	250.72	140.95	63.479	30.072
#1	.00377	-.00266	.00057	-.00050	-.00001	.00146	.00097
#2	.00421	.00156	.00192	.00180	-.00319	.00384	.00150
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00111	.00143	.00133	.00168	.00277	.00681	
SDev	.00255	.00129	.00171	.00382	.00000	.00006	
%RSD	228.67	89.997	128.76	227.86	.06141	.91681	
#1	-.00069	.00052	.00012	-.00102	.00277	.00686	
#2	.00292	.00235	.00254	.00437	.00277	.00677	
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	10470	--	--	--	--	--	--
SDev	4.772971	--	--	--	--	--	--
%RSD	.0455863	--	--	--	--	--	--
#1	10474	--	--	--	--	--	--
#2	10467	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AMP5F

Run Time: 03/20/01 14:05:46

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00041	.00157	.00214	.00992	.00078	58.489	.00019
SDev	.00012	.00021	.00051	.00016	.00011	.113	.00019
%RSD	29.525	13.358	23.823	1.6604	14.520	.19389	101.51
#1	-.00032	.00142	.00250	.01004	.00086	58.569	.00032
#2	-.00049	.00172	.00178	.00980	.00070	58.409	.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	.00005	.00023	-.00023	-.03673	11.415	.00236	-.00123
SDev	.00118	.00055	.00005	.01718	.005	.00007	.00061
%RSD	2196.3	236.60	23.021	46.765	.04201	3.0887	49.260
#1	.00089	.00062	-.00027	-.02459	11.418	.00241	-.00166
#2	-.00078	-.00016	-.00020	-.04888	11.411	.00231	-.00080
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00141	-.00376	.00199	.00008	.00283	-.00062	.00053
SDev	.00047	.00058	.00168	.00093	.00321	.00337	.00118
%RSD	33.599	15.304	84.322	1217.5	113.25	541.12	223.28
#1	.00107	-.00417	.00318	.00073	.00510	-.00301	-.00031
#2	.00174	-.00335	.00080	-.00058	.00056	.00176	.00136
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	.00214	-.00040	.00044	.00436	-.00002	.00137	
SDev	.00224	.00069	.00029	.00215	.00078	.00006	
%RSD	104.69	169.72	64.947	49.402	4272.6	4.5068	
#1	.00056	.00008	.00024	.00284	-.00057	.00141	
#2	.00372	-.00089	.00064	.00588	.00054	.00132	
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	10607	--	--	--	--	--	--
SDev	35.67368	--	--	--	--	--	--
%RSD	.3363164	--	--	--	--	--	--
#1	10632	--	--	--	--	--	--
#2	10582	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AMSF

Run Time: 03/20/01 14:10:10

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05029	1.9964	2.0654	2.0179	.05071	333.00	.04736
SDev	.00008	.0050	.0028	.0029	.00020	.45	.00056
%RSD	.16791	.24956	.13455	.14286	.39930	.13457	1.1869
#1	.05034	1.9928	2.0673	2.0200	.05085	333.31	.04776
#2	.05023	1.9999	2.0634	2.0159	.05057	332.68	.04696
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	.50477	.20237	.24519	.79932	109.30	.52113	.98578
SDev	.00117	.00027	.00011	.01131	.09	.00004	.00089
%RSD	.23093	.13216	.04368	1.4150	.08141	.00822	.09011
#1	.50559	.20218	.24527	.80732	109.36	.52116	.98515
#2	.50394	.20256	.24512	.79132	109.24	.52110	.98641
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	.49302	.50804	.49677	.50052	.49238	.50933	.50369
SDev	.00232	.00362	.00083	.00176	.00332	.00094	.00173
%RSD	.47108	.71176	.16629	.35066	.67342	.18425	.34348
#1	.49466	.51059	.49735	.50176	.49472	.51000	.50491
#2	.49138	.50548	.49618	.49928	.49003	.50867	.50246
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	2.1843	2.1883	2.1869	2.0721	.49718	.52657	
SDev	.0048	.0052	.0051	.0064	.00409	.00188	
%RSD	.22039	.23870	.23261	.31056	.82272	.35733	
#1	2.1877	2.1920	2.1905	2.0766	.49429	.52790	
#2	2.1809	2.1846	2.1833	2.0675	.50007	.52524	
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	10377	--	--	--	--	--	--
SDev	48.79037	--	--	--	--	--	--
%RSD	.4701825	--	--	--	--	--	--
#1	10342	--	--	--	--	--	--
#2	10411	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AMDF

Operator: WTR

Run Time: 03/20/01 14:14:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05139	2.0288	2.1069	2.0552	.05162	349.48	.04809
SDev	.00019	.0037	.0088	.0054	.00024	.63	.00023
%RSD	.37094	.18475	.41973	.26401	.47539	.17949	.47957
#1	.05126	2.0262	2.1132	2.0590	.05180	349.92	.04826
#2	.05153	2.0315	2.1007	2.0513	.05145	349.03	.04793
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	.51286	.20667	.24955	.84540	113.43	.53079	1.0041
SDev	.00016	.00019	.00032	.00154	.18	.00038	.0021
%RSD	.03111	.09343	.12781	.18212	.16293	.07260	.20876
#1	.51297	.20681	.24978	.84649	113.56	.53106	1.0056
#2	.51274	.20654	.24932	.84431	113.30	.53052	1.0026
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	.50220	.52045	.50625	.51098	.49616	.51831	.51094
SDev	.00852	.00220	.00272	.00108	.00165	.00089	.00005
%RSD	1.6963	.42319	.53806	.21203	.33166	.17275	.00964
#1	.50823	.51889	.50818	.51174	.49500	.51895	.51097
#2	.49618	.52201	.50432	.51021	.49732	.51768	.51090
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	2.2371	2.2315	2.2334	2.1121	.50897	.53615	
SDev	.0040	.0007	.0008	.0049	.00134	.00101	
%RSD	.17789	.03196	.03804	.22985	.26295	.18859	
#1	2.2343	2.2320	2.2328	2.1155	.50992	.53687	
#2	2.2399	2.2310	2.2340	2.1087	.50803	.53544	
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	10386	--	--	--	--	--	--
SDev	19.09188	--	--	--	--	--	--
%RSD	.1838197	--	--	--	--	--	--
#1	10373	--	--	--	--	--	--
#2	10400	--	--	--	--	--	--

Method: METTRA Sample Name: DW8APF

Operator: WTR

Run Time: 03/20/01 14:18:59

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	.00009	.00061	.00370	.25133	.00075	112.05	-.00010
SDev	.00018	.00925	.00116	.00047	.00013	.31	.00019
%RSD	206.65	1510.8	31.315	.18722	16.819	.27659	188.75
#1	-.00004	.00715	.00452	.25166	.00084	112.27	.00003
#2	.00021	-.00593	.00288	.25099	.00066	111.83	-.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
Avg	-.00012	.00105	.00032	-.06776	28.088	.00727	.01511
SDev	.00071	.00071	.00014	.00466	.072	.00003	.00014
%RSD	588.41	67.797	42.964	6.8797	.25605	.44159	.94878
#1	-.00063	.00054	.00023	-.06447	28.139	.00724	.01522
#2	.00038	.00155	.00042	-.07106	28.037	.00729	.01501
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	.07049	-.00198	-.00006	-.00070	.00067	.00176	.00140
SDev	.00087	.00257	.00247	.00079	.00067	.00316	.00188
%RSD	1.2354	129.78	3865.0	112.72	100.10	179.81	134.94
#1	.07110	-.00380	.00168	-.00014	.00020	.00399	.00273
#2	.06987	-.00016	-.00181	-.00126	.00115	-.00048	.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	
Avg	.00281	.00208	.00233	.00680	-.00058	.00607	
SDev	.00137	.00027	.00064	.00805	.00000	.00007	
%RSD	48.637	13.064	27.384	118.30	.23266	1.1062	
#1	.00185	.00189	.00188	.00111	-.00058	.00612	
#2	.00378	.00228	.00278	.01249	-.00059	.00603	
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	10499	--	--	--	--	--	--
SDev	13.01104	--	--	--	--	--	--
%RSD	.1239241	--	--	--	--	--	--
#1	10490	--	--	--	--	--	--
#2	10508	--	--	--	--	--	--

Method: METTRA Sample Name: DW8AQF Operator: WTR
 Run Time: 03/20/01 14:23:23
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.00343	.00357	.24526	.00095	65.918	.00015
SDev	.00047	.00291	.00115	.00010	.00006	.141	.00016
%RSD	1976.4	84.821	32.079	.03974	6.1359	.21395	108.20
#1	-.00031	.00137	.00276	.24533	.00099	66.018	.00004
#2	.00036	.00549	.00438	.24519	.00091	65.819	.00026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	.00183	-.00021	.00638	11.047	.00165	.00222
SDev	.00036	.00022	.00033	.02030	.017	.00013	.00012
%RSD	746.29	11.842	154.41	318.25	.15177	7.5604	5.4270
#1	.00030	.00168	.00002	-.00797	11.059	.00174	.00230
#2	-.00020	.00199	-.00045	.02073	11.036	.00156	.00213
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	.01204	-.00222	.00065	-.00031	.00130	-.00169	-.00069
SDev	.00109	.00522	.00116	.00097	.00258	.00001	.00087
%RSD	9.0632	235.20	179.59	312.74	197.50	.88103	125.53
#1	.01282	.00147	-.00017	.00037	-.00052	-.00170	-.00130
#2	.01127	-.00591	.00147	-.00099	.00313	-.00168	-.00008
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00205	.00335	.00292	.00334	.00168	.00498	
SDev	.00217	.00038	.00098	.00200	.00001	.00019	
%RSD	105.54	11.424	33.465	59.893	.38534	3.8182	
#1	.00358	.00362	.00361	.00475	.00168	.00512	
#2	.00052	.00308	.00223	.00193	.00169	.00485	
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	10508	--	--	--	--	--	--
SDev	2.616433	--	--	--	--	--	--
%RSD	.0248998	--	--	--	--	--	--
#1	10510	--	--	--	--	--	--
#2	10506	--	--	--	--	--	--

Method: METTRA Sample Name: DW8ATF

Operator: WTR

Run Time: 03/20/01 14:27:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.00687	.00436	.32479	.00093	63.665	.00016
SDev	.00025	.00543	.00040	.00007	.00004	.062	.00022
%RSD	819.02	79.050	9.2750	.02161	4.3395	.09675	138.50
#1	-.00015	.01071	.00465	.32474	.00090	63.621	.00000
#2	.00021	.00303	.00407	.32484	.00095	63.708	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.00101	.00000	-.02496	9.8298	-.00006	-.00052
SDev	.00066	.00022	.00033	.00305	.0154	.00004	.00012
%RSD	86.228	21.599	11495.	12.210	.15652	70.422	23.916
#1	-.00030	.00117	-.00023	-.02280	9.8189	-.00009	-.00043
#2	-.00123	.00086	.00024	-.02711	9.8407	-.00003	-.00060
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	.00045	.00040	.00068	.00059	.00121	-.00004	.00038
SDev	.00221	.00384	.00118	.00049	.00408	.00010	.00143
%RSD	495.32	962.35	173.97	83.848	336.40	262.80	375.88
#1	.00201	-.00232	.00151	.00024	-.00167	-.00011	-.00063
#2	-.00111	.00311	-.00016	.00093	.00410	.00003	.00139
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00039	.00434	.00277	.00380	.00056	.00143	
SDev	.00421	.00229	.00293	.00538	.00080	.00001	
%RSD	1092.4	52.845	105.98	141.52	142.93	.77288	
#1	-.00336	.00272	.00069	.00760	-.00001	.00142	
#2	.00259	.00596	.00484	-.00000	.00112	.00144	
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	10432	--	--	--	--	--	--
SDev	7.318279	--	--	--	--	--	--
%RSD	.0701551	--	--	--	--	--	--
#1	10426	--	--	--	--	--	--
#2	10437	--	--	--	--	--	--

Analysis Report

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Method: METTRA

Sample Name: CCV3-5

Operator: WTR

Run Time: 03/20/01 14:32:11

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
Avg	1.0200	22.805	.52329	1.9849	2.0468	50.793	.50534
SDev	.0007	.012	.00021	.0023	.0055	.115	.00252
%RSD	.06514	.05227	.03968	.11547	.27010	.22721	.49785
#1	1.0205	22.814	.52343	1.9866	2.0507	50.875	.50712
#2	1.0196	22.797	.52314	1.9833	2.0429	50.712	.50356
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0958	2.0702	1.9169	25.476	49.908	2.0752	2.0816
SDev	.0075	.0055	.0015	.007	.089	.0041	.0003
%RSD	.35566	.26451	.07937	.02884	.17914	.19609	.01284
#1	2.1011	2.0741	1.9180	25.471	49.971	2.0781	2.0814
#2	2.0905	2.0663	1.9159	25.481	49.845	2.0723	2.0818
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0344	.52353	.51235	.51607	.51929	.52398	.52242
SDev	.0111	.00130	.00195	.00087	.00162	.00238	.00212
%RSD	.54647	.24748	.37985	.16794	.31113	.45343	.40633
#1	2.0423	.52444	.51097	.51546	.52043	.52566	.52392
#2	2.0266	.52261	.51372	.51668	.51815	.52230	.52092
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52911	.53381	.53224	1.0595	2.0201	2.0727	
SDev	.00256	.00029	.00105	.0011	.0044	.0088	
%RSD	.48349	.05440	.19645	.10120	.21565	.42612	
#1	.53092	.53401	.53298	1.0588	2.0232	2.0789	
#2	.52730	.53360	.53150	1.0603	2.0170	2.0664	
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	10372	--	--	--	--	--	--
SDev	1.731859	--	--	--	--	--	--
%RSD	.0166977	--	--	--	--	--	--
#1	10371	--	--	--	--	--	--
#2	10373	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: CCB5

Run Time: 03/20/01 14:36:36

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	-.00381	.00191	-.00015	.00131	.00725	.00010
SDev	.00003	.00022	.00063	.00009	.00031	.00476	.00029
%RSD	17.190	5.6962	33.073	61.353	23.563	65.590	279.10
#1	-.00018	-.00396	.00235	-.00009	.00153	.01062	.00031
#2	-.00014	-.00365	.00146	-.00022	.00110	.00389	-.00010
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	.00018	.00045	-.00027	.00152	.00047	-.00010	-.00064
SDev	.00065	.00013	.00010	.00306	.00129	.00008	.00025
%RSD	360.78	27.773	37.497	201.29	273.00	83.344	38.774
#1	.00064	.00036	-.00034	-.00064	.00139	-.00004	-.00081
#2	-.00028	.00054	-.00020	.00368	-.00044	-.00015	-.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	-.00368	.00120	-.00043	.00018	.00043	.00034
SDev	.00030	.00118	.00199	.00172	.00077	.00009	.00020
%RSD	35.453	32.091	166.06	404.39	437.21	21.698	57.157
#1	.00107	-.00451	-.00021	-.00164	.00072	.00036	.00048
#2	.00064	-.00284	.00261	.00079	-.00037	.00049	.00020
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	-.00138	-.00330	-.00266	.00673	-.00056	-.00031	
SDev	.00155	.00181	.00172	.00023	.00000	.00000	
%RSD	111.91	54.826	64.687	3.3879	.15811	.49904	
#1	-.00029	-.00202	-.00145	.00657	-.00057	-.00031	
#2	-.00248	-.00459	-.00388	.00689	-.00056	-.00032	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10615	--	--	--	--	--	--
SDev	35.70889	--	--	--	--	--	--
%RSD	.3364050	--	--	--	--	--	--
#1	10640	--	--	--	--	--	--
#2	10590	--	--	--	--	--	--

Method: METTRA

Sample Name: DWEW2B

Run Time: 03/20/01 14:41:01

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00033	.01298	.00057	-.00017	.00105	.01351	.00023
SDev	.00031	.00648	.00054	.00004	.00006	.00172	.00006
%RSD	94.873	49.938	94.534	24.783	6.0006	12.764	28.342
#1	-.00011	.01756	.00019	-.00020	.00100	.01473	.00027
#2	-.00055	.00840	.00095	-.00014	.00109	.01229	.00018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00081	.00086	-.00046	H.10271	-.00141	.00012	-.00094
SDev	.00000	.00006	.00024	.00162	.00395	.00004	.00074
%RSD	.08623	7.1802	52.217	1.5781	280.70	34.250	78.195
#1	-.00081	.00082	-.00029	H.10386	.00139	.00009	-.00146
#2	-.00081	.00091	-.00063	H.10156	-.00420	.00015	-.00042
Errors	LC Pass	LC Pass	LC Pass	LC High	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	-.00033	.00355	-.00029	.00099	.00261	.00151	.00188
SDev	.00079	.00481	.00083	.00216	.00050	.00539	.00376
%RSD	239.22	135.58	291.51	217.77	19.007	356.33	200.10
#1	.00023	.00695	.00030	.00252	.00226	-.00230	-.00078
#2	-.00089	.00015	-.00088	-.00054	.00297	.00533	.00454
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	-.00605	.00569	.00178	-.00164	-.00025	-.00015	
SDev	.00025	.00096	.00056	.00152	.00040	.00014	
%RSD	4.1365	16.951	31.464	93.040	159.82	88.556	
#1	-.00587	.00500	.00138	-.00271	-.00053	-.00025	
#2	-.00623	.00637	.00217	-.00056	.00003	-.00006	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10381	--	--	--	--	--	--
SDev	4.277858	--	--	--	--	--	--
%RSD	.0412094	--	--	--	--	--	--
#1	10378	--	--	--	--	--	--
#2	10384	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DWEW2C

Run Time: 03/20/01 14:45:25

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04866	1.6613	1.9894	1.9107	.05032	L.00855	.04951
SDev	.00093	.0033	.0052	.0032	.00009	.00153	.00007
%RSD	1.9061	.20047	.26263	.16718	.18691	17.846	.14395
#1	.04932	1.6589	1.9931	1.9130	.05039	L.00747	.04946
#2	.04801	1.6637	1.9857	1.9085	.05026	L.00963	.04956
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	.52308	.20664	.22938	1.0304	L-.00233	.50845	L-.00069
SDev	.00108	.00068	.00009	.0068	.00001	.00036	.00036
%RSD	.20718	.32814	.03767	.65887	.40201	.06993	52.914
#1	.52231	.20712	.22932	1.0256	L-.00234	.50870	L-.00094
#2	.52385	.20616	.22944	1.0352	L-.00232	.50819	L-.00043
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	.50199	.50353	.49403	.49719	.00101	.00431	L.00321
SDev	.00174	.00341	.00295	.00083	.00017	.00021	.00020
%RSD	.34669	.67664	.59626	.16698	17.138	4.9034	6.1845
#1	.50322	.50594	.49195	.49661	.00089	.00416	L.00307
#2	.50076	.50112	.49611	.49778	.00113	.00446	L.00335
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	1.9712	1.9638	1.9663	2.0003	.49356	.51168	
SDev	.0013	.0084	.0052	.0008	.00525	.00207	
%RSD	.06810	.43012	.26379	.03871	1.0641	.40512	
#1	1.9703	1.9698	1.9700	2.0008	.49727	.51315	
#2	1.9722	1.9579	1.9626	1.9998	.48985	.51022	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10407	--	--	--	--	--	--
SDev	26.23338	--	--	--	--	--	--
%RSD	.2520768	--	--	--	--	--	--
#1	10388	--	--	--	--	--	--
#2	10425	--	--	--	--	--	--

Method: METTRA Sample Name: DW54JF

Operator: WTR

Run Time: 03/20/01 14:49:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.05019	.00317	.03600	.00122	51.023	.00030
SDev	.00024	.01018	.00118	.00007	.00011	.045	.00001
%RSD	66.654	20.290	37.400	.19105	9.0561	.08869	3.5731
#1	.00019	.05739	.00400	.03595	.00130	51.055	.00030
#2	.00053	.04299	.00233	.03605	.00114	50.991	.00029
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	.00347	.00181	.00696	.22713	8.7349	1.7323	-.00060
SDev	.00018	.00072	.00014	.00941	.0020	.0025	.00024
%RSD	5.1866	39.591	2.0376	4.1447	.02343	.14460	40.549
#1	.00360	.00130	.00686	.22048	8.7363	1.7341	-.00043
#2	.00334	.00231	.00706	.23379	8.7334	1.7306	-.00078
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00156	.00339	-.00035	.00089	.00167	.00156	.00160
SDev	.00063	.00152	.00045	.00081	.00221	.00249	.00092
%RSD	40.324	44.905	128.64	90.546	132.03	159.16	57.655
#1	.00112	.00231	-.00067	.00032	.00324	-.00020	.00095
#2	.00201	.00446	-.00003	.00147	.00011	.00332	.00225
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	-.00699	.00599	.00167	.00227	.00007	.06083	
SDev	.00335	.00780	.00632	.00266	.00000	.00008	
%RSD	47.973	130.14	378.31	116.94	3.9868	.13039	
#1	-.00936	.00048	-.00280	.00415	.00006	.06089	
#2	-.00462	.01151	.00614	.00039	.00007	.06077	
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	10433	--	--	--	--	--	--
SDev	1.661425	--	--	--	--	--	--
%RSD	.0159253	--	--	--	--	--	--
#1	10431	--	--	--	--	--	--
#2	10434	--	--	--	--	--	--

Method: METTRA Sample Name: DW54JP5F

Operator: WTR

Run Time: 03/20/01 14:54:14

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
Avg	-.00009	.00574	.00123	.00684	.00136	10.304	-.00005
SDev	.00001	.00671	.00016	.00011	.00012	.012	.00005
%RSD	12.649	117.01	12.998	1.5878	8.8068	.11539	108.68
#1	-.00010	.00099	.00112	.00676	.00144	10.312	-.00001
#2	-.00008	.01048	.00135	.00691	.00127	10.295	-.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	.00060	.00041	.00130	.03594	1.7271	.34932	-.00072
SDev	.00029	.00024	.00002	.00306	.0039	.00021	.00083
%RSD	49.118	59.086	1.8638	8.5234	.22792	.05947	115.93
#1	.00039	.00058	.00132	.03811	1.7244	.34947	-.00013
#2	.00080	.00024	.00129	.03378	1.7299	.34917	-.00131
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	.00042	-.00094	.00020	-.00018	.00212	.00051	.00104
SDev	.00154	.00140	.00091	.00014	.00004	.00206	.00139
%RSD	368.38	148.95	445.68	78.827	1.7371	407.29	133.27
#1	.00151	-.00193	.00084	-.00008	.00209	-.00095	.00006
#2	-.00067	.00005	-.00044	-.00028	.00214	.00197	.00202
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	.00116	-.00063	-.00004	.00360	-.00055	.01293	
SDev	.00328	.00100	.00042	.00367	.00000	.00041	
%RSD	282.53	158.30	1143.3	101.77	.16123	3.1701	
#1	-.00116	.00008	-.00034	.00101	-.00055	.01264	
#2	.00348	-.00134	.00026	.00620	-.00056	.01322	
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	10579	--	--	--	--	--	--
SDev	67.70548	--	--	--	--	--	--
%RSD	.6399701	--	--	--	--	--	--
#1	10627	--	--	--	--	--	--
#2	10532	--	--	--	--	--	--

Method: METTRA Sample Name: DW8T9B RERUN Operator: WTR
 Run Time: 03/20/01 14:58:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	.01626	.00108	-.00017	.00136	.00481	.00000
SDev	.00048	.00425	.00099	.00002	.00003	.00003	.00021
%RSD	173.68	26.145	91.844	12.331	2.3607	.51129	6349.6
#1	.00006	.01325	.00178	-.00016	.00133	.00483	.00015
#2	-.00061	.01927	.00038	-.00019	.00138	.00479	-.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00009	.00055	-.00074	.00779	.00139	-.00012	-.00182
SDev	.00102	.00037	.00043	.01249	.00000	.00004	.00024
%RSD	1196.6	67.941	58.165	160.39	.00000	35.576	13.464
#1	.00063	.00081	-.00044	.01662	.00139	-.00009	-.00199
#2	-.00080	.00029	-.00104	-.00104	.00139	-.00015	-.00164
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	.00022	.00032	-.00079	-.00042	-.00080	.00203	.00109
SDev	.00063	.00203	.00108	.00005	.00138	.00063	.00004
%RSD	282.99	634.80	136.78	11.022	172.27	31.151	3.4027
#1	-.00022	-.00112	-.00003	-.00039	-.00177	.00248	.00106
#2	.00067	.00176	-.00156	-.00046	.00017	.00158	.00111
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	.00086	-.00097	-.00036	.00244	-.00056	.00051	
SDev	.00139	.00744	.00450	.00547	.00000	.00000	
%RSD	161.28	766.87	1250.0	224.05	.64781	.33374	
#1	.00185	-.00623	-.00354	.00631	-.00056	.00051	
#2	-.00012	.00429	.00282	-.00143	-.00057	.00050	
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	10432	--	--	--	--	--	--
SDev	4.136299	--	--	--	--	--	--
%RSD	.0396489	--	--	--	--	--	--
#1	10429	--	--	--	--	--	--
#2	10435	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6

Operator: WTR

Run Time: 03/20/01 15:03:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0184	L22.409	.52317	1.9816	2.0334	50.501	.50317
SDev	.0011	.036	.00021	.0004	.0027	.055	.00096
%RSD	.11228	.16004	.04006	.01988	.13398	.10926	.19081
#1	1.0192	L22.384	.52302	1.9819	2.0354	50.540	.50385
#2	1.0176	L22.435	.52332	1.9813	2.0315	50.462	.50249
Errors	LC Pass	LC Low	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	2.0900	2.0665	1.9028	25.341	49.843	2.0699	2.0786
SDev	.0010	.0019	.0012	.015	.029	.0026	.0003
%RSD	.04653	.09149	.06473	.06033	.05752	.12662	.01488
#1	2.0893	2.0679	1.9019	25.351	49.863	2.0717	2.0788
#2	2.0907	2.0652	1.9037	25.330	49.822	2.0680	2.0784
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	2.0319	.52236	.51244	.51575	.52196	.52263	.52241
SDev	.0067	.00273	.00196	.00040	.00128	.00610	.00449
%RSD	.32794	.52347	.38335	.07751	.24557	1.1671	.86048
#1	2.0366	.52430	.51105	.51546	.52287	.52694	.52558
#2	2.0272	.52043	.51383	.51603	.52106	.51831	.51923
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	.52804	.53418	.53213	1.0546	2.0140	2.0656	
SDev	.00253	.00096	.00148	.0054	.0018	.0033	
%RSD	.47965	.17981	.27889	.50907	.09169	.16183	
#1	.52983	.53486	.53318	1.0584	2.0153	2.0680	
#2	.52625	.53350	.53108	1.0508	2.0127	2.0632	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10322	--	--	--	--	--	--
SDev	.9197912	--	--	--	--	--	--
%RSD	.0089106	--	--	--	--	--	--
#1	10323	--	--	--	--	--	--
#2	10322	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6

Operator: WTR

Run Time: 03/20/01 15:07:34

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	-.00011	.00501	.00193	-.00013	.00186	.01785	.00049
SDev	.00016	.00023	.00036	.00000	.00023	.00053	.00018
%RSD	148.37	4.6283	18.862	.80709	12.580	2.9895	36.584
#1	-.00022	.00485	.00168	-.00013	.00202	.01747	.00062
#2	.00001	.00517	.00219	-.00013	.00169	.01823	.00037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00011	.00039	-.00057	.01138	-.00225	-.00010	-.00081
SDev	.00023	.00059	.00034	.00452	.00255	.00008	.00047
%RSD	208.12	151.49	60.298	39.740	113.41	81.638	58.070
#1	-.00027	-.00003	-.00081	.00818	-.00405	-.00004	-.00048
#2	.00005	.00080	-.00032	.01457	-.00045	-.00015	-.00114
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	-.00176	-.00227	-.00113	-.00151	-.00018	-.00001	-.00006
SDev	.00216	.00081	.00013	.00036	.00111	.00333	.00185
%RSD	122.69	35.667	11.881	23.824	625.29	58164.	2945.6
#1	-.00329	-.00170	-.00103	-.00125	-.00096	.00235	.00125
#2	-.00023	-.00285	-.00122	-.00176	.00061	-.00236	-.00137
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00554	.00040	.00211	.00708	-.00056	-.00021	
SDev	.00114	.00366	.00206	.00085	.00000	.00015	
%RSD	20.597	917.18	97.702	12.068	.23492	68.551	
#1	.00634	-.00219	.00065	.00648	-.00056	-.00011	
#2	.00473	.00299	.00357	.00768	-.00056	-.00031	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10610	--	--	--	--	--	--
SDev	75.41322	--	--	--	--	--	--
%RSD	.7107698	--	--	--	--	--	--
#1	10663	--	--	--	--	--	--
#2	10557 ,	--	--	--	--	--	--

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Analysis Report 60103 Averages

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#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.00915	.00004	.00249	-.00239	-.0002	.00009
2	STD5A		4.76965	16.9024		1.309	2.54064
3	STD5B	11.8223			26.541		
4	ICV2-1 0087-119-4	25.028	.96824	.95747	24.760	.98346	.96757
5	ICB1	.00165	.00006	.00005	.03902	.00038	.00196
6	ICSA 0087-133-5	510.35	.00224	.00020	487.50	.01423	.00130
7	ICSAB 0087-133-6	504.20	.46835	.45875	482.45	.46736	.49583
8	DWXHEB	.00971	.00001	.00003	.01741	.00153	.00059
9	DWXHEC	1.8981	1.8374	.04590	47.535	.47080	.23099
10	DWV7J	.09177	.11814	.00008	162.53	.00646	.00203
11	DWV7JP5	.01739	.02404	.00008	33.277	.00190	.00119
12	DWV7JS	2.0670	1.9343	.04489	205.98	.45543	.23065
13	DWV7JD	2.0258	1.8994	.04407	199.33	.44511	.22690
14	DWV79	.07495	.11175	.00005	152.60	.00648	.00124
15	DWV8G	.82064	.26274	.00013	137.65	.00597	.00389
16	CCV2-1 0087-121-12	49.128	4.7389	4.7641	49.475	4.8107	4.7441
17	CCB1	.00374	.00012	.00014	.01084	.00192	.00196
18	DWV81	.02708	.17885	.00005	169.50	.00412	.00197
19	DWV82	.99247	.03333	.00016	80.329	.00342	.00416
20	DWV89	1.4196	.22057	.00010	55.376	.00982	.00782
21	DWV9J	8.2470	.20120	.00048	122.16	.02431	.01252
22	DWV9N	.04060	.20161	.00007	109.18	.00487	.00357
23	DWV9R	.03507	.18384	.00008	175.62	.00603	.00218
24	DWV9T	.00763	.00028	.00003	.05152	.00230	.00275
25	DWV7JF	.00888	.11385	.00004	160.78	.00570	.00182
26	DWV7JP5F	.00799	.02310	.00000	32.462	.00114	.00041
27	DWV7JSF	1.9445	1.9540	.04606	211.63	.46728	.23340
28	CCV2-2	48.681	4.6830	4.7305	49.757	4.8127	4.6751
29	CCB2	-.00045	.00008	.00017	.00568	.00268	.00078
30	DWV7JDF	1.9417	1.9682	.04596	207.12	.45924	.23437
31	DWV79F	.01308	.12011	.00007	167.23	.00492	.00242
32	DWV8GF	.09615	.26234	.00008	137.01	.00407	.00232
33	DWV81F	.01779	.19367	.00008	172.49	.00565	.00172
34	DWV82F	.02155	.02633	.00013	78.943	.00613	.00158
35	DWV89F	.06264	.20417	.00011	53.101	.01062	.00152
36	DWV9JF	.00852	.12370	.00008	118.86	.01682	.00309
37	DWV9NF	.01520	.20897	.00005	108.54	.00448	.00260
38	DWV9RF	.01435	.19868	.00011	173.51	.00411	.00197
39	DWV9TF	.00804	.00016	.00011	.02279	.00153	.00079
40	CCV2-3	49.627	4.8120	4.8193	49.757	4.8445	4.7965
41	CCB3	.00592	.00010	.00014	.00805	.00422	.00039
42	DW8TXB	-.00083	.00008	.00008	.01293	.00192	.00138
43	DW8TXC	1.9573	1.9330	.04775	47.530	.47301	.24083
44	DW8LD	.24286	.41055	.00007	242.57	.00167	.00246
45	DW8LDP5	.05539	.08607	.00013	50.366	.00264	.00120
46	DW8LDS	2.3035	2.1919	.04469	281.94	.44341	.23263
47	DW8LDD	2.3325	2.2248	.04520	289.15	.44721	.23480
48	DW8L1	2.7202	.54450	.00021	90.455	.00563	.01010
49	DW8L2	.05439	.92369	.00016	374.97	.00405	.01672
50	DW8L4	.01058	.00008	.00011	.03873	.00077	.00098
51	DW8L5	1.8335	11.583	.00024	363.89	-.00007	.00451
52	CCV2-4	49.409	4.7961	4.7831	49.412	4.8101	4.7677
53	CCB4	.00171	.00012	.00021	.00618	.00192	.00157

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Analysis Report

Averages

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#	Sample Name	AL	BA	BE	CA	CO	CU
54	DW8L6	23.667	3.0279	.00234	H601.29	.02330	.04290
55	DW8L8	1.7920	1.2230	.00021	394.17	.00530	.06285
56	DXCMMB	.00253	.00006	.00008	.02213	.00192	.00059
57	DXCMMC	1.9559	1.9283	.04766	49.074	.48027	.24162
58	DW7DJ	.06041	.98474	.00018	242.70	.00247	.00295
59	DW7DJP5	.01984	.21352	.00013	49.912	.00217	.00159
60	DW7DJS	2.0447	2.8174	.04514	290.60	.45140	.24454
61	DW7DJD	2.0148	2.7764	.04460	275.88	.43725	.24448
62	DW7D5	.05246	.00945	.00016	168.42	.00538	.00359
63	DW7ED	13.313	.44913	.00085	267.74	.00967	.02040
64	CCV2-5	51.378	5.0837	4.9936	48.750	4.8436	5.0854
65	CCB5	.01770	.00052	.00079	.01210	.00191	.00177
66	DW7EF	.17935	.22499	.00023	201.79	.05015	.00536
67	DW7EM	.01816	.00001	.00017	.02369	.00345	.00236
68	DW7EV	.04352	.07857	.00025	244.08	.00726	.00733
69	DW7E5	2.2711	.14662	.00023	228.90	.00634	.01694
70	DXG4QB	.01437	-.00002	.00008	.05269	.00306	.00079
71	DXG4QC	1.9045	1.8913	.04645	47.842	.46575	.23826
72	DXGMH	2.5770	.08237	.00018	37.445	.00409	.02370
73	DXGMHP5	.50782	.01677	.00005	7.5904	.00113	.00498
74	DXGMHS	5.1444	1.8786	.04526	83.345	.45076	.25585
75	DXGMHD	5.3661	1.8731	.04525	84.590	.45192	.25704
76	CCV2-6	50.199	4.9209	4.8926	49.459	4.8409	4.8903
77	CCB6	.00674	.00037	.00050	.00791	.00307	.00098
78	DXKAWB	.01990	.00079	.00082	.02581	.00115	.00197
79	DXKAWC	L.01579	L.00046	L.00011	L.02042	L.00037	L.00118
80	DXEVA	2.3850	.01916	.00016	404.14	-.00077	-.00003
81	DXEVAP5	.46388	.00442	.00004	91.923	.00191	.00063
82	DXEVAS	3.3067	.02026	.00023	414.79	.00034	-.00021
83	DXEVAD	3.0680	.01922	.00013	401.82	-.00347	.00173
84	DW8LDS/2 NA	1.0866	1.0557	.02203	143.41	.22538	.10865
85	DW8LDD/2 NA	1.1261	1.0933	.02284	148.76	.23379	.11298
86	DW8L1/2 NA	1.3019	.26586	.00010	46.154	.00397	.00790
87	DW8L2/5 NA	.01227	.18639	.00014	77.731	.00411	.00826
88	CCV2-7	48.012	4.6255	4.7105	50.553	4.8377	4.5463
89	CCB7	.00248	-.00004	.00017	.00531	.00307	.00020
90	DW8L5/10 NA	.18243	1.2467	.00014	40.495	.00228	.00025
91	DW8L6/2 CA	10.901	1.4077	.00113	308.78	.01344	.01594
92	DW8L6/10 NA	2.1692	.28378	.00021	65.875	.00391	.00385
93	DW8L8/10 NA	.16342	.11134	-.00006	41.856	.00069	.00540
94	DW7DJ/5 NA	-.00294	.16080	.00000	49.210	.00374	.00078
95	DW7DJP25	-.00894	.02335	.00007	7.5475	.00229	.00160
96	DW7DJS/5 NA	.20138	.28228	.00490	39.960	.06027	.01867
97	DW7DJD/5 NA	.11455	.16312	.00267	23.957	.03280	.00954
98	DW7D5/2 NA	-.02833	.00183	-.00033	16.339	-.00575	-.00663
99	DW7EF/10 NA	-.01769	.00321	-.00028	4.5507	.00000	-.00327
100	CCV2-8	L.07095	L.00777	L.00864	L.30720	L.00915	L.00729
101	CCB8	H.24232	.02585	H.02763	.48407	.03321	.02248
102	DW7EV/5 NA	-.02042	.00259	.00261	.09920	.00805	.00197
103	DW7E5/5 NA	-.02163	.00469	.00011	23.261	.00153	-.00018
104	DXGMH/5 NA	.07611	.00786	.00044	18.877	.00075	-.00156
105	DXGMHP25	.04057	.00235	.00056	1.2525	.00113	-.00038
106	DXGMHS/5 NA	-.02674	.00081	.00023	.49069	.00230	-.00196
107	DXGMHD/5 NA	.04081	.02341	.00088	1.7659	.01415	.00092

Can over range? Dilution will be analyzed on a future run wire 3-20-01

Void All samples after CCB7: Ulog to the system. Samples will be rerun. wire 3-20-01

#	Sample Name	AL	BA	BE	CA	CO	CU
108	~~DXEVAS/2 SI~~	~~.00082~~	~~.03782~~	~~.00097~~	~~2.7462~~	~~.01297~~	~~-.00036~~
109	CCV2-9	L.06116	L.00920	L.00024	L14.508	L.00686	L-.00037
110	CCB9	H-30152	.00892	H.01112	H36.928	.01483	.00692
VOID Samples: Clog in system. Samples will be rerun W/ 3-20-01							
#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.00085	-.02675	-.00035	.00004	.05584	.00056
2	STD5A				1.955		1.61475
3	STD5B	29.2386	2.43529	7.559		53.2567	
4	ICV2-1 0087-119-4	25.811	24.638	25.082	.98376	24.945	.96984
5	ICB1	.01299	.24369	.00661	.00000	.03007	-.00245
6	ICSA 0087-133-5	187.22	.19495	493.86	.00120	.01513	-.02174
7	ICSAB 0087-133-6	185.35	10.306	486.85	.45625	10.325	.87663
8	DWXHEB	.01009	.21323	.00198	.00025	.01315	-.00336
9	DWXHEC	1.0021	47.292	47.620	.46763	47.519	.45280
10	DWV7J	.61458	6.1493	31.341	3.3401	55.859	.00062
11	DWV7JP5	.12996	1.5942	6.3696	.69650	11.057	-.00134
12	DWV7JS	1.5631	53.858	78.119	3.6881	102.85	.44457
13	DWV7JD	1.5273	52.797	76.153	3.5684	100.44	.43953
14	DWV79	.54019	5.7086	29.458	3.1417	52.804	-.00320
15	DWV8G	14.023	4.4678	30.634	18.724	40.769	-.00395
16	CCV2-1 0087-121-12	50.529	49.022	49.343	4.7888	49.187	4.8160
17	CCB1	.00444	.35945	.01256	-.00025	.01099	-.00366
18	DWV81	10.908	4.4942	27.601	6.9914	67.027	-.00116
19	DWV82	2.1389	5.5218	23.654	3.7363	55.251	.00482
20	DWV89	6.7885	3.2798	21.092	11.191	166.50	.01905
21	DWV9J	13.698	4.0617	30.072	15.880	58.380	.02644
22	DWV9N	2.1349	2.3842	21.462	6.9421	63.774	.00378
23	DWV9R	11.025	4.6729	28.446	7.1390	69.195	-.00724
24	DWV9T	.02479	.33102	.01521	.00026	.09548	-.00446
25	DWV7JF	.44613	6.1311	30.612	3.2184	53.836	-.00290
26	DWV7JP5F	.15253	1.1921	6.2234	.66660	10.733	-.00854
27	DWV7JSF	1.4284	54.485	79.478	3.6990	103.34	.46065
28	CCV2-2	50.365	48.498	48.881	4.7783	48.289	4.8094
29	CCB2	.00085	.36554	.00396	.00000	.00977	-.00535
30	DWV7JDF	1.4166	54.528	78.883	3.6474	104.07	.45731
31	DWV79F	.58038	6.4052	32.055	3.3619	56.862	-.00012
32	DWV8GF	12.323	4.2343	30.317	18.487	40.574	-.00108
33	DWV81F	12.168	4.3480	28.468	7.4865	69.113	-.00661
34	DWV82F	.07882	5.2984	23.717	3.1769	56.842	-.00117
35	DWV89F	4.8689	3.2209	20.258	10.642	161.82	.01590
36	DWV9JF	1.2198	2.0999	29.171	14.394	59.392	.00896
37	DWV9NF	2.2360	2.2278	21.747	7.1177	65.463	.00202
38	DWV9RF	12.695	4.7278	28.806	7.6789	69.559	-.00705
39	DWV9TF	.03215	.15231	.00264	.00051	.02904	-.00276
40	CCV2-3	50.922	49.650	49.728	4.8091	49.779	4.8775
41	CCB3	.02069	.01624	.00330	.00026	.01212	-.00653
42	DW8TXB	.02274	.46302	.00793	.00000	.00441	-.00764
43	DW8TXC	1.0288	48.271	48.574	.47454	49.362	.48150
44	DW8LD	.94584	10.644	68.800	.87723	378.27	-.00056
45	DW8LDP5	.19871	2.6523	14.301	.18695	76.016	-.00233
46	DW8LDS	1.8107	58.967	114.09	1.2901	H417.66	.44332
47	DW8LDD	1.8235	59.587	116.19	1.3190	H428.49	.44790

No over range. Report
2x dilutions. W/ 3-20-01

#	Sample Name	FE	K	MG	MN	NA	NI
48	DW8L1	4.2838	8.7082	45.856	1.2613	H457.06	.00124
49	DW8L2	.07859	100.30	.24605	.00283	S2992.3	.01648
50	DW8L4	.04908	.35742	.00264	.00077	.03383	-.00673
51	DW8L5	10.824	21.703	192.18	1.7481	S-.10497	.00342
52	CCV2-4	50.544	49.313	49.481	4.7773	49.065	4.8232
53	CCB4	.00102	.26806	.00793	-.00025	.01043	-.00333
54	DW8L6	43.571	31.600	222.46	4.9022	S-.10497	.03609
55	DW8L8	8.4414	5.0629	242.11	2.6084	S-.10497	.00765
56	DXCMMB	.00632	.20308	.00529	-.00025	.06184	-.00577
57	DXCMMC	1.0429	49.763	49.916	.47583	49.800	.48521
58	DW7DJ	9.1118	83.433	78.032	.79810	S2988.1	-.00336
59	DW7DJP5	1.9836	17.083	16.488	.17132	198.68	-.00699
60	DW7DJS	10.024	136.47	126.35	1.2409	S2987.1	.44465
61	DW7DJD	9.5859	133.48	122.83	1.1940	S2988.0	.43485
62	DW7D5	5.8857	92.776	33.003	.19690	H537.95	-.00159
63	DW7ED	21.244	8.0766	27.103	.84831	301.43	.01378
64	CCV2-5	51.428	52.818	51.477	4.8210	53.060	4.8926
65	CCB5	.00769	.33102	.01455	.00077	.01738	-.00439
66	DW7EF	32.624	220.67	55.002	2.7826	S-.10497	.03291
67	DW7EM	.02872	.62752	.00793	.00051	.04981	-.00441
68	DW7EV	24.013	68.833	49.094	.74480	S2993.0	.01160
69	DW7E5	27.354	61.585	56.713	.46183	S2994.0	-.00227
70	DXG4QB	.02394	.56863	.01918	.00077	.12048	-.00178
71	DXG4QC	1.0092	48.598	48.781	.46329	49.070	.46378
72	DXGMH	2.7854	4.8415	6.0230	.19551	S2991.7	.00827
73	DXGMHP5	.63550	1.0296	1.2494	.04106	156.28	-.00407
74	DXGMHS	3.7082	54.670	52.677	.63395	S2991.5	.46812
75	DXGMHD	3.7998	54.704	52.798	.64522	S2991.0	.46921
76	CCV2-6	51.073	50.417	50.342	4.8107	50.689	4.9013
77	CCB6	.00427	.21729	.00529	.00051	.02791	-.00821
78	DXKAWB	.06122	.12794	.00595	.00103	.04746	-.00792
79	DXKAWC	L.03445	L.14012	L-.02116	L.00029	L.01907	L-.00813
80	DXEVA	1.4477	481.15	H1109.3	.04967	S-.10497	.00056
81	DXEVAP5	.42685	91.536	276.19	.01186	S-.10497	-.01582
82	DXEVAS	1.6147	484.29	H1125.2	.05145	S-.10497	-.00486
83	DXEVAD	1.5312	446.87	H1085.5	.04939	S-.10497	-.01540
84	DW8LDS/2 NA	.89308	27.105	55.102	.65105	189.47	.22553
85	DW8LDD/2 NA	.92988	28.316	57.135	.67536	199.06	.22448
86	DW8L1/2 NA	2.1493	4.0820	22.427	.63693	212.36	-.00049
87	DW8L2/5 NA	.01708	19.017	.05688	.00051	140.60	-.00026
88	CCV2-7	50.257	47.481	48.070	4.7798	46.186	4.9104
89	CCB7	.01197	.31883	.00264	.00077	.03477	-.00747
90	DW8L5/10 NA	1.2258	2.2684	20.376	19642	153.55	-.00399
91	DW8L6/2 CA	21.766	13.519	105.95	2.4509	S1814.2	.02152
92	DW8L6/10 NA	4.6547	2.5284	21.388	.52507	120.85	.00191
93	DW8L8/10 NA	.87200	.25994	22.851	.27073	150.79	-.00814
94	DW7DJ/5 NA	1.7154	12.254	13.436	.15335	141.41	-.00133
95	DW7DJP25	.26233	2.2705	2.0121	.02308	20.031	-.00369
96	DW7DJS/5 NA	1.2333	11.659	14.264	.15760	90.973	.05413
97	DW7DJD/5 NA	.72477	4.9085	8.2461	.09378	51.924	.02551
98	DW7D5/2 NA	.48328	2.9528	2.5001	.01777	31.514	-.01194
99	DW7EF/10 NA	.59204	1.0865	.94386	.05154	16.697	-.00458
100	CCV2-8	L.11033	L-1.1941	L.16535	L.00949	L.74839	L.00047
101	CCB8	H.36110	1.5962	2.499	H.03413	.60619	.02966

Na over range: Rep dilutions were 3-20-01

Na out range: Dilutions will be analyzed on 3-20-01

VOID All samples after CCB7: Clog in system. Samples will be rerun.

#	Sample Name	FE	K	MG	MN	NA	NI
102	DW7EV/5 NA	.03592	1.1494	.03836	.00333	.31559	.00700
103	DW7E5/5 NA	1.8765	2.7294	3.4527	.06237	36.033	-.00251
104	DXGMH/5 NA	1.8569	1.5576	3.6094	.03424	31.269	-.00356
105	DXGMHP25	.10501	-1.0174	.18321	.00590	9.5965	-.00370
106	DXGMHS/5 NA	.03574	-.99916	.06283	.00180	4.7250	-.00776
107	DXGMHD/5 NA	.07238	1.4459	.76858	.01178	9.4507	.00681
108	DXEVAS/2 SI	.10593	-1.1418	1.3731	.01793	15.348	.00855
109	CCV2-9	L.00327	L7.6786	L37.516	L.00514	S763.07	L.00296
110	CCB9	H.30153	H22.796	H84.536	H.01773	S1595.0	-.08346

Void Samples: Clog in system. samples will be rerun.

#	Sample Name	V	ZN	WPC 3-20-01
1	STD1	0	.00021	
2	STD5A	1.6879	1.24966	
3	STD5B			
4	ICV2-1 0087-119-4	.98197	.98503	
5	ICB1	.00288	.00378	
6	ICSA 0087-133-5	.00163	.00406	
7	ICSAB 0087-133-6	.46885	.95961	
8	DWXHEB	-.00078	.00106	
9	DWXHEC	.47326	.47207	
10	DWV7J	.00245	.00781	
11	DWV7JP5	-.00007	.00183	
12	DWV7JS	.46237	.46742	
13	DWV7JD	.45136	.45747	
14	DWV79	.00193	.00729	
15	DWV8G	.00354	.01843	
16	CCV2-1 0087-121-12	4.7859	4.8703	
17	CCB1	.00184	.00057	
18	DWV81	.00002	.00390	
19	DWV82	.00548	.01002	
20	DWV89	.00467	.01321	
21	DWV9J	.01631	.04265	
22	DWV9N	.00346	.00400	
23	DWV9R	.00241	.00432	
24	DWV9T	-.00086	.00143	
25	DWV7JF	.00370	.00817	
26	DWV7JP5F	.00093	.00171	
27	DWV7JSF	.46942	.47881	
28	CCV2-2	4.7601	4.8514	
29	CCB2	.00065	-.00142	
30	DWV7JDF	.46352	.47397	
31	DWV79F	.00461	.00742	
32	DWV8GF	.00100	.00499	
33	DWV81F	.00028	.00533	
34	DWV82F	.00349	.01703	
35	DWV89F	.00038	.00568	
36	DWV9JF	.00115	.00903	
37	DWV9NF	.00123	.00191	
38	DWV9RF	.00209	.00305	
39	DWV9TF	.00000	.00130	
40	CCV2-3	4.8148	4.8793	
41	CCB3	-.00025	-.00029	

#	Sample Name	V_	ZN

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42	DW8TXB	.00000	-.00062
43	DW8TXC	.47913	.47517
44	DW8LD	.00469	.00371
45	DW8LDP5	.00349	.00203
46	DW8LDS	.45200	.45980
47	DW8LDD	.45807	.46615
48	DW8L1	.00813	.01500
49	DW8L2	.00494	.00905
50	DW8L4	.00112	.00027
51	DW8L5	.00799	.00927
52	CCV2-4	4.7686	4.8277
53	CCB4	-.00115	-.00063
54	DW8L6	.06705	.12679
55	DW8L8	.00669	.06859
56	DXCMMB	.00115	-.00075
57	DXCMMC	.47918	.47700
58	DW7DJ	.00587	.02196
59	DW7DJP5	.00321	.00438
60	DW7DJS	.45965	.47560
61	DW7DJD	.45235	.46430
62	DW7D5	.00405	.00359
63	DW7ED	.03205	.04389
64	CCV2-5	4.8610	4.8670
65	CCB5	.00184	-.00022
66	DW7EF	.00182	.00515
67	DW7EM	.00123	.00047
68	DW7EV	.00249	.00418
69	DW7E5	.01040	.02469
70	DXG4QB	.00119	.00043
71	DXG4QC	.46637	.46392
72	DXGMH	.00749	.07539
73	DXGMHP5	.00102	.01453
74	DXGMHS	.45906	.53377
75	DXGMHD	.46111	.53664
76	CCV2-6	4.8112	4.8549
77	CCB6	-.00075	-.00085
78	DXKAWB	.00082	.00155
79	DXKAWC	L.00051	L.00058
80	DXEVA	.01436	.00403
81	DXEVAP5	.00367	.00156
82	DXEVAS	.01514	.00461
83	DXEVAD	.01387	.00558
84	DW8LDS/2 NA	.22549	.22807
85	DW8LDD/2 NA	.23150	.23538
86	DW8L1/2 NA	.00466	.00777
87	DW8L2/5 NA	.00144	.00141
88	CCV2-7	4.7126	4.8145
89	CCB7	.00155	.00052
90	DW8L5/10 NA	~~.00000~~	~~-.00072~~
91	DW8L6/2 CA	.03464	.06105
92	DW8L6/10 NA	.00686	.01275
93	DW8L8/10 NA	.00075	.00461
94	DW7DJ/5 NA	.00083	.00484
95	DW7DJP25	~~.00380~~	~~.00809~~

Void samples after CCB7: clog in system. Samples will be rerun.

#	Sample Name	V_	ZN

678 1082

96	DW7DJS/5 NA	.05505	.05876
97	DW7DJD/5 NA	.02817	.03411
98	DW7D5/2 NA	-.00573	-.00053
99	DW7EF/10 NA	-.00354	-.00007
100	CCV2-8	L.00827	L.00802
101	CCB8	.02666	H.03581
102	DW7EV/5 NA	-.00002	.00232
103	DW7E5/5 NA	.00181	.00117
104	DXGMH/5 NA	-.00013	.00124
105	DXGMHP25	.00097	.00060
106	DXGMHS/5 NA	.00018	-.00051
107	DXGMHD/5 NA	.00989	.00979
108	DXEVAS/2 SI	.01224	.01609
109	CCV2-9	L.00658	L.00793
110	CCB9	.01051	.01320

Void samples: Clog in system. samples will be rerun.
WRC 3-20-01

WIX 3-20-01 673 1083

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J10319A	QUANMET	03/19/01	11:11		X	IR
2	STD5A	J10319A	QUANMET	03/19/01	11:15		X	IR
3	STD5B	J10319A	QUANMET	03/19/01	11:18		X	IR
4	ICV2-1 0087-119-4	J10319A	QUANMET	03/19/01	11:21	WTR	S	CONC
5	ICB1	J10319A	QUANMET	03/19/01	11:24	WTR	S	CONC
6	ICSA 0087-133-5	J10319A	QUANMET	03/19/01	11:27	WTR	Q	CONC
7	ICSAB 0087-133-6	J10319A	QUANMET	03/19/01	11:30	WTR	Q	CONC
8	DWXHEB	J10319A	QUANMET	03/19/01	11:35	WTR	S	CONC
9	DWXHEC	J10319A	QUANMET	03/19/01	11:38	WTR	S	CONC
10	DWV7J	J10319A	QUANMET	03/19/01	11:41	WTR	S	CONC
11	DWV7JP5	J10319A	QUANMET	03/19/01	11:44	WTR	S	CONC
12	DWV7JS	J10319A	QUANMET	03/19/01	11:47	WTR	S	CONC
13	DWV7JD	J10319A	QUANMET	03/19/01	11:50	WTR	S	CONC
14	DWV79	J10319A	QUANMET	03/19/01	11:54	WTR	S	CONC
15	DWV8G	J10319A	QUANMET	03/19/01	11:57	WTR	S	CONC
16	CCV2-1 0087-121-12	J10319A	QUANMET	03/19/01	12:00	WTR	S	CONC
17	CCB1	J10319A	QUANMET	03/19/01	12:03	WTR	S	CONC
18	DWV81	J10319A	QUANMET	03/19/01	12:06	WTR	S	CONC
19	DWV82	J10319A	QUANMET	03/19/01	12:09	WTR	S	CONC
20	DWV89	J10319A	QUANMET	03/19/01	12:13	WTR	S	CONC
21	DWV9J	J10319A	QUANMET	03/19/01	12:16	WTR	S	CONC
22	DWV9N	J10319A	QUANMET	03/19/01	12:19	WTR	S	CONC
23	DWV9R	J10319A	QUANMET	03/19/01	12:22	WTR	S	CONC
24	DWV9T	J10319A	QUANMET	03/19/01	12:25	WTR	S	CONC
25	DWV7JF	J10319A	QUANMET	03/19/01	12:28	WTR	S	CONC
26	DWV7JP5F	J10319A	QUANMET	03/19/01	12:31	WTR	S	CONC
27	DWV7JSF	J10319A	QUANMET	03/19/01	12:35	WTR	S	CONC
28	CCV2-2	J10319A	QUANMET	03/19/01	12:38	WTR	S	CONC
29	CCB2	J10319A	QUANMET	03/19/01	12:41	WTR	S	CONC
30	DWV7JDF	J10319A	QUANMET	03/19/01	12:44	WTR	S	CONC
31	DWV79F	J10319A	QUANMET	03/19/01	12:47	WTR	S	CONC
32	DWV8GF	J10319A	QUANMET	03/19/01	12:50	WTR	S	CONC
33	DWV81F	J10319A	QUANMET	03/19/01	12:54	WTR	S	CONC
34	DWV82F	J10319A	QUANMET	03/19/01	12:57	WTR	S	CONC
35	DWV89F	J10319A	QUANMET	03/19/01	13:00	WTR	S	CONC
36	DWV9JF	J10319A	QUANMET	03/19/01	13:03	WTR	S	CONC
37	DWV9NF	J10319A	QUANMET	03/19/01	13:06	WTR	S	CONC
38	DWV9RF	J10319A	QUANMET	03/19/01	13:09	WTR	S	CONC
39	DWV9TF	J10319A	QUANMET	03/19/01	13:13	WTR	S	CONC
40	CCV2-3	J10319A	QUANMET	03/19/01	13:16	WTR	S	CONC
41	CCB3	J10319A	QUANMET	03/19/01	13:19	WTR	S	CONC
42	DW8TXB	J10319A	QUANMET	03/19/01	13:22	WTR	S	CONC
43	DW8TXC	J10319A	QUANMET	03/19/01	13:25	WTR	S	CONC
44	DW8LD	J10319A	QUANMET	03/19/01	13:28	WTR	S	CONC
45	DW8LDP5	J10319A	QUANMET	03/19/01	13:31	WTR	S	CONC
46	DW8LDS	J10319A	QUANMET	03/19/01	13:35	WTR	S	CONC
47	DW8LDD	J10319A	QUANMET	03/19/01	13:38	WTR	S	CONC
48	DW8L1	J10319A	QUANMET	03/19/01	13:41	WTR	S	CONC
49	DW8L2	J10319A	QUANMET	03/19/01	13:44	WTR	S	CONC
50	DW8L4	J10319A	QUANMET	03/19/01	13:47	WTR	S	CONC
51	DW8L5	J10319A	QUANMET	03/19/01	13:50	WTR	S	CONC
52	CCV2-4	J10319A	QUANMET	03/19/01	13:54	WTR	S	CONC
53	CCB4	J10319A	QUANMET	03/19/01	13:57	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DW8L6	J10319A	QUANMET	03/19/01	14:00	WTR	S	CONC
55	DW8L8	J10319A	QUANMET	03/19/01	14:03	WTR	S	CONC
56	DXCMMB	J10319A	QUANMET	03/19/01	14:06	WTR	S	CONC
57	DXCMMC	J10319A	QUANMET	03/19/01	14:09	WTR	S	CONC
58	DW7DJ	J10319A	QUANMET	03/19/01	14:13	WTR	S	CONC
59	DW7DJP5	J10319A	QUANMET	03/19/01	14:16	WTR	S	CONC
60	DW7DJS	J10319A	QUANMET	03/19/01	14:19	WTR	S	CONC
61	DW7DJD	J10319A	QUANMET	03/19/01	14:22	WTR	S	CONC
62	DW7D5	J10319A	QUANMET	03/19/01	14:25	WTR	S	CONC
63	DW7ED	J10319A	QUANMET	03/19/01	14:28	WTR	S	CONC
64	CCV2-5	J10319A	QUANMET	03/19/01	14:32	WTR	S	CONC
65	CCB5	J10319A	QUANMET	03/19/01	14:35	WTR	S	CONC
66	DW7EF	J10319A	QUANMET	03/19/01	14:38	WTR	S	CONC
67	DW7EM	J10319A	QUANMET	03/19/01	14:41	WTR	S	CONC
68	DW7EV	J10319A	QUANMET	03/19/01	14:44	WTR	S	CONC
69	DW7E5	J10319A	QUANMET	03/19/01	14:47	WTR	S	CONC
70	DXG4QB	J10319A	QUANMET	03/19/01	14:51	WTR	S	CONC
71	DXG4QC	J10319A	QUANMET	03/19/01	14:54	WTR	S	CONC
72	DXGMH	J10319A	QUANMET	03/19/01	14:57	WTR	S	CONC
73	DXGMHP5	J10319A	QUANMET	03/19/01	15:00	WTR	S	CONC
74	DXGMHS	J10319A	QUANMET	03/19/01	15:03	WTR	S	CONC
75	DXGMHD	J10319A	QUANMET	03/19/01	15:06	WTR	S	CONC
76	CCV2-6	J10319A	QUANMET	03/19/01	15:09	WTR	S	CONC
77	CCB6	J10319A	QUANMET	03/19/01	15:13	WTR	S	CONC
78	DXKAWB	J10319A	QUANMET	03/19/01	15:22	WTR	S	CONC
79	DXKAWC	J10319A	QUANMET	03/19/01	15:26	WTR	S	CONC
80	DXEVA	J10319A	QUANMET	03/19/01	15:29	WTR	S	CONC
81	DXEVAP5	J10319A	QUANMET	03/19/01	15:32	WTR	S	CONC
82	DXEVAS	J10319A	QUANMET	03/19/01	15:35	WTR	S	CONC
83	DXEVAD	J10319A	QUANMET	03/19/01	15:38	WTR	S	CONC
84	DW8LDS/2 NA	J10319A	QUANMET	03/19/01	15:41	WTR	S	CONC
85	DW8LDD/2 NA	J10319A	QUANMET	03/19/01	15:45	WTR	S	CONC
86	DW8L1/2 NA	J10319A	QUANMET	03/19/01	15:48	WTR	S	CONC
87	DW8L2/5 NA	J10319A	QUANMET	03/19/01	15:52	WTR	S	CONC
88	CCV2-7	J10319A	QUANMET	03/19/01	15:56	WTR	S	CONC
89	CCB7	J10319A	QUANMET	03/19/01	15:59	WTR	S	CONC
90	DW8L5/10 NA	J10319A	QUANMET	03/19/01	16:02	WTR	S	CONC
91	DW8L6/2 CA	J10319A	QUANMET	03/19/01	16:05	WTR	S	CONC
92	DW8L6/10 NA	J10319A	QUANMET	03/19/01	16:08	WTR	S	CONC
93	DW8L8/10 NA	J10319A	QUANMET	03/19/01	16:11	WTR	S	CONC
94	DW7DJ/5 NA	J10319A	QUANMET	03/19/01	16:15	WTR	S	CONC
95	DW7DJP25	J10319A	QUANMET	03/19/01	16:18	WTR	S	CONC
96	DW7DJS/5 NA	J10319A	QUANMET	03/19/01	16:21	WTR	S	CONC
97	DW7DJD/5 NA	J10319A	QUANMET	03/19/01	16:24	WTR	S	CONC
98	DW7D5/2 NA	J10319A	QUANMET	03/19/01	16:27	WTR	S	CONC
99	DW7EF/10 NA	J10319A	QUANMET	03/19/01	16:30	WTR	S	CONC
100	CCV2-8	J10319A	QUANMET	03/19/01	16:34	WTR	S	CONC
101	CCB8	J10319A	QUANMET	03/19/01	16:37	WTR	S	CONC
102	DW7EV/5 NA	J10319A	QUANMET	03/19/01	16:40	WTR	S	CONC
103	DW7E5/5 NA	J10319A	QUANMET	03/19/01	16:43	WTR	S	CONC
104	DXGMH/5 NA	J10319A	QUANMET	03/19/01	16:47	WTR	S	CONC
105	DXGMHP25	J10319A	QUANMET	03/19/01	16:50	WTR	S	CONC
106	DXGMHS/5 NA	J10319A	QUANMET	03/19/01	16:53	WTR	S	CONC
107	DXGMHD/5 NA	J10319A	QUANMET	03/19/01	16:56	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DXEVAS/2 SI	J10319A	QUANMET	03/19/01	16:59	WTR	S	CONC
109	CCV2-9	J10319A	QUANMET	03/19/01	17:02	WTR	S	CONC
110	CCB9	J10319A	QUANMET	03/19/01	17:06	WTR	S	CONC

Method: QUANMET Standard: STD1
Run Time: 03/19/01 11:11:47

Elem	AG	AL	AS	B _u	BA	BE	CA
Avge	-.00050	.00915	-.00030	.00000	.00004	.00250	-.00239
SDev	.00035	.00117	.00058	.00000	.00013	.00012	.00072
%RSD	69.282	12.792	192.45	.00000	325.35	4.6188	29.994

#1	-.00080	.00780	-.00040	.00000	.00000	.00260	-.00212
#2	-.00020	.01040	-.00020	.00000	.00008	.00240	-.00273
#3	-.00080	.00860	.00040	.00000	-.00012	.00240	-.00319
#4	-.00020	.00980	-.00100	.00000	.00020	.00260	-.00154

Elem	CD	CO	CR	CU	FE	K _u	LI
Avge	.00013	-.00020	.00055	.00010	.00085	-.02675	-.00069
SDev	.00014	.00028	.00097	.00026	.00041	.00988	.00026
%RSD	104.18	141.42	176.59	258.20	48.507	36.929	38.096

#1	.00032	-.00020	.00000	.00000	.00060	-.02260	-.00056
#2	.00000	-.00060	.00000	.00020	.00120	-.02880	-.00040
#3	.00008	.00000	.00020	-.00020	.00040	-.03940	-.00100
#4	.00012	.00000	.00200	.00040	.00120	-.01620	-.00080

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00035	.00005	.00000	.05585	.00057	.00010	-.00005
SDev	.00154	.00010	.00016	.00260	.00069	.00012	.00025
%RSD	438.61	200.00	.00000	4.6542	122.29	115.47	503.32

#1	.00000	.00020	.00000	.05360	.00042	.00000	.00000
#2	-.00100	.00000	.00020	.05820	.00144	.00020	.00020
#3	-.00200	.00000	.00000	.05360	.00066	.00020	-.00040
#4	.00160	.00000	-.00020	.05800	-.00025	.00000	.00000

Elem	SE	SI	SN	SR	TI	TL	V _u
Avge	-.00050	.00015	.00090	.00002	.00170	-.00045	.00000
SDev	.00060	.00019	.00082	.00017	.00026	.00038	.00000
%RSD	120.00	127.66	91.625	962.25	15.188	84.132	.00000

#1	-.00080	.00000	.00100	-.00016	.00140	-.00100	.00000
#2	.00000	.00040	.00180	.00012	.00200	-.00020	.00000
#3	-.00120	.00020	.00100	.00020	.00160	-.00020	.00000
#4	.00000	.00000	-.00020	-.00008	.00180	-.00040	.00000

Elem	ZN
Avge	.00022
SDev	.00015
%RSD	69.012

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

Method: QUANMET Standard: STD5A

Run Time: 03/19/01 11:15:00

0087-031-4

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Elem	AG	AS	B	BA	BE	CD	CO
Avge	.28405	.44150	.57375	4.7697	16.902	.79623	1.3090
SDev	.00184	.00252	.00204	.0254	.037	.00345	.0067
%RSD	.64883	.57121	.35634	.53148	.21729	.43376	.51209

#1	.28500	.44100	.57101	4.7519	16.874	.79782	1.3092
#2	.28180	.44400	.57596	4.8016	16.953	.79126	1.3016
#3	.28600	.44280	.57401	4.7469	16.877	.79911	1.3178
#4	.28340	.43820	.57401	4.7782	16.906	.79674	1.3074

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.8242	2.5406	4.4955	1.9550	.33665	1.6148	.21945
SDev	.0165	.0166	.0527	.0065	.00116	.0078	.00128
%RSD	.43257	.65432	1.1727	.33097	.34428	.48290	.58297

#1	3.8280	2.5264	4.4539	1.9564	.33660	1.6198	.22000
#2	3.8024	2.5618	4.5662	1.9472	.33540	1.6032	.21780
#3	3.8424	2.5284	4.4567	1.9628	.33640	1.6188	.22080
#4	3.8240	2.5460	4.5052	1.9536	.33820	1.6173	.21920

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.16255	.41930	.34980	.76535	9.2844	6.7579	.27780
SDev	.00154	.00350	.00063	.01194	.0373	.0059	.00075
%RSD	.94974	.83575	.18080	1.5604	.40187	.08660	.26938

#1	.16320	.42340	.34900	.76900	9.2577	6.7500	.27760
#2	.16160	.41600	.35040	.75100	9.3327	6.7638	.27700
#3	.16440	.42100	.35020	.77940	9.2524	6.7574	.27880
#4	.16100	.41680	.34960	.76200	9.2948	6.7602	.27780

Elem	V	ZN
Avge	1.6879	1.2497
SDev	.0031	.0037
%RSD	.18522	.29632

#1	1.6884	1.2498
#2	1.6838	1.2455
#3	1.6914	1.2545
#4	1.6880	1.2490

Method: QUANMET Standard: STD5B

Run Time: '03/19/01 11:18:11

0087-032-1

Elem	AL	CA	FE	K_	MG	NA
Avge	11.822	26.541	29.239	2.4353	7.5590	53.257
SDev	.050	.071	.078	.0131	.0305	.383
%RSD	.41879	.26702	.26776	.53939	.40349	.71997
#1	11.764	26.563	29.173	2.4170	7.5296	52.807
#2	11.834	26.436	29.196	2.4468	7.5572	53.488
#3	11.809	26.573	29.237	2.4350	7.5478	53.081
#4	11.883	26.592	29.349	2.4424	7.6014	53.650

Method: QUANMET

Slope = Conc(SIR)/IR

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	6.83644	.003418	03/19/01 11:18:11
AL	308.215	STD5B	STD1	8.46511	-.077456	03/19/01 11:18:11
AS	193.696	STD5A	STD1	23.0180	.006905	03/19/01 11:18:11
B_	249.600	STD5A	STD1	17.4696	.000000	03/19/01 11:18:11
BA	493.409	STD5A	STD1	2.09660	-.000086	03/19/01 11:18:11
BE	313.042	STD5A	STD1	.593547	-.001484	03/19/01 11:18:11
CA	317.933	STD5B	STD1	3.76741	.009020	03/19/01 11:18:11
CD	228.802	STD5A	STD1	12.6948	-.001643	03/19/01 11:18:11
CO	228.616	STD5A	STD1	7.67594	.001535	03/19/01 11:18:11
CR	267.716	STD5A	STD1	2.61592	-.001439	03/19/01 11:18:11
CU	324.754	STD5A	STD1	3.93238	-.000393	03/19/01 11:18:11
FE	259.940	STD5B	STD1	3.42023	-.002907	03/19/01 11:18:11
K_	766.491	STD5B	STD1	40.6166	1.08649	03/19/01 11:18:11
LI	670.789	STD5A	STD1	2.22410	.001537	03/19/01 11:18:11
MG	279.079	STD5B	STD1	13.2287	.004630	03/19/01 11:18:11
MN	257.610	STD5A	STD1	5.11363	-.000256	03/19/01 11:18:11
MO	202.030	STD5A	STD1	29.7044	.000000	03/19/01 11:18:11
NA	588.995	STD5B	STD1	1.87967	-.104980	03/19/01 11:18:11
NI	231.604	STD5A	STD1	6.19289	-.003515	03/19/01 11:18:11
PB	220.353	STD5A	STD1	44.1491	-.004415	03/19/01 11:18:11
SB	206.838	STD5A	STD1	61.5711	.003079	03/19/01 11:18:11
SE	196.026	STD5A	STD1	23.8209	.011910	03/19/01 11:18:11
SI	288.158	STD5A	STD1	28.2884	-.004243	03/19/01 11:18:11
SN	189.989	STD5A	STD1	13.0754	-.011768	03/19/01 11:18:11
SR	409.552	STD5A	STD1	1.07708	-.000019	03/19/01 11:18:11
TI	334.941	STD5A	STD1	1.48013	-.002516	03/19/01 11:18:11
TL	190.864	STD5A	STD1	72.2681	.032521	03/19/01 11:18:11
V_	292.402	STD5A	STD1	5.76257	.000000	03/19/01 11:18:11
ZN	213.856	STD5A	STD1	8.02848	-.001747	03/19/01 11:18:11

Analysis Report

 3-19-01

03/19/01 11:24:29 AM

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page 1

Method: QUANMET Sample Name: ICV2-1 0087-119-4 Operator: WTR
 Run Time: 03/19/01 11:21:22
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49729	25.028	.96083	1.0186	.96824	.95747	24.760
SDev	.00298	.053	.08561	.0025	.00310	.00202	.160
%RSD	.59876	.21192	8.9098	.24754	.31985	.21120	.64767
#1	.49316	25.016	.92078	1.0202	.97012	.95644	24.582
#2	.50005	24.973	1.0866	1.0210	.96502	.95559	24.897
#3	.49867	25.021	.93896	1.0178	.96628	.95762	24.894
#4	.49728	25.100	L.89697	1.0154	.97155	.96024	24.667
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	.98924	.98347	.98583	.96758	25.811	24.638	.96896
SDev	.01630	.00193	.00743	.00390	.067	.146	.00896
%RSD	1.6476	.19602	.75381	.40343	.26029	.59431	.92487
#1	.97795	.98081	.97720	.96835	25.718	24.547	.97504
#2	1.0007	.98383	.99447	.96286	25.838	24.839	.96088
#3	.97276	.98543	.98871	.96680	25.875	24.652	.96169
#4	1.0056	.98380	.98295	.97230	25.812	24.514	.97823
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	25.082	.98377	.95838	24.945	.96985	.98651	.98414
SDev	.052	.00229	.01015	.147	.00737	.00512	.01847
%RSD	.20607	.23248	1.0591	.58777	.76036	.51861	1.8773
#1	25.078	.98093	.94797	25.059	.96394	.98203	.97492
#2	25.015	.98506	.97175	24.775	.97880	.98212	.97489
#3	25.097	.98609	.95393	24.871	.97298	.99095	.97491
#4	25.139	.98300	.95986	25.075	.96366	.99093	1.0119
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	.97798	1.0305	.94306	.95948	.95580	4.8585	.98198
SDev	.05445	.0330	.03017	.00256	.00234	.1243	.00242
%RSD	5.5677	3.2030	3.1995	.26651	.24436	2.5576	.24617
#1	.97412	1.0022	.97505	.96094	.95454	4.7407	.98026
#2	1.0269	1.0532	.92277	.95663	.95365	4.7966	.98550

#3	.90315	1.0644	.96199	.95814	.95602	5.0273	.98158
#4	1.0078	1.0022	.91244	.96223	.95898	4.8693	.98057
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	.98504						
SDev	.00605						
%RSD	.61469						
#1	.97610						
#2	.98951						
#3	.98694						
#4	.98760						
Errors	LC Pass						
High	1.1000						
Low	.90000						

Method: QUANMET Sample Name: ICB1

Operator: WTR

Run Time: 03/19/01 11:24:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00066	.00166	.01258	.03234	.00006	.00005	.03903
SDev	.00250	.00782	.01851	.00175	.00033	.00001	.00353
%RSD	376.96	471.23	147.12	5.4227	533.67	16.827	9.0407

#1	.00208	.00720	.00215	.03497	.00033	.00005	.04075
#2	-.00340	-.00131	.03447	.03147	-.00033	.00005	.03424
#3	.00071	.00876	.02055	.03147	.00033	.00004	.04239
#4	-.00205	-.00801	-.00683	.03146	-.00009	.00006	.03872

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00211	.00039	-.00026	.00197	.01300	.24370	-.00002
SDev	.00196	.00316	.00268	.00064	.00103	.19285	.00044
%RSD	92.811	813.78	1017.8	32.574	7.9097	79.133	2266.7

#1	-.00167	-.00307	.00274	.00275	.01420	.41226	.00065
#2	-.00189	.00001	-.00301	.00118	.01214	.11982	-.00024
#3	-.00478	.00001	.00118	.00197	.01351	.40413	-.00024
#4	-.00008	.00461	-.00196	.00197	.01214	.03859	-.00024

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	.00661	.00000	.00000	.03007	-.00246	.03754	.00309
SDev	.00501	.00051	.00485	.00567	.00283	.01670	.00004
%RSD	75.719	14982.	285030.	18.857	115.33	44.496	1.2226

#1	.00992	-.00025	-.00594	.03788	-.00206	.04847	.00313
#2	-.00066	-.00025	.00000	.02960	-.00038	.04856	.00312
#3	.00992	.00077	.00594	.02434	-.00082	.01324	.00306
#4	.00728	-.00025	.00000	.02848	-.00657	.03987	.00306

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	-.02021	.03681	-.01241	.00013	.00037	.07566	.00288
SDev	.08814	.02747	.01054	.00025	.00061	.05535	.00275
%RSD	436.17	74.645	84.970	191.41	164.92	73.161	95.444

#1	-.06427	.05238	-.02745	.00045	.00104	.11901	.00447
#2	-.06428	-.00421	-.00391	-.00002	-.00015	.00340	.00345

#3	-.06427	.05239	-.01176	.00020	.00074	.06119	.00476
#4	.11200	.04666	-.00652	-.00011	-.00015	.11902	-.00116

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	.00379
SDev	.00162
%RSD	42.889

#1	.00242
#2	.00563
#3	.00242
#4	.00468

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0087-133-5

Operator: WTR

Run Time: 03/19/01 11:27:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP 678 1094

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00578	510.35	-.00806	.02063	.00224	.00020	487.50
SDev	.00237	2.00	.11837	.01192	.00025	.00012	2.55
%RSD	41.075	.39146	1468.4	57.803	11.225	57.452	.52279

#1	-.00337	507.99	-.05588	.02679	.00218	.00016	490.10
#2	-.00891	512.51	-.10117	.00912	.00201	.00006	484.04
#3	-.00471	511.38	.16523	.03430	.00218	.00030	488.37
#4	-.00614	509.52	-.04042	.01231	.00260	.00030	487.49

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	-.00023	.01423	.00131	.00131	187.22	.19496	.00176
SDev	.00251	.00317	.00198	.00120	.19	.13436	.00046
%RSD	1068.1	22.274	151.48	91.528	.10390	68.918	26.083

#1	-.00300	.01692	.00117	.00190	187.22	.19293	.00227
#2	.00236	.01077	-.00144	-.00049	187.01	.06296	.00117
#3	-.00163	.01692	.00275	.00193	187.48	.37976	.00190
#4	.00134	.01231	.00275	.00189	187.17	.14419	.00169

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	493.86	.00121	-.00371	.01513	-.02174	.04855	.02167
SDev	.79	.00008	.01017	.00518	.01304	.01997	.06785
%RSD	.15957	6.5272	274.42	34.216	59.996	41.119	313.18

#1	492.89	.00127	.00075	.02096	-.00902	.03480	.10193
#2	494.06	.00109	-.01710	.01156	-.02021	.07579	-.02132
#3	494.79	.00125	.00672	.01006	-.03993	.03249	.05216
#4	493.70	.00121	-.00520	.01795	-.01781	.05114	-.04610

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	-.09161	.08771	-.10915	.01367	-.02006	.53712	.00164
SDev	.13410	.00286	.03931	.00018	.00098	.24238	.00279
%RSD	146.38	3.2558	36.019	1.3183	4.8768	45.126	170.08

#1	-.05231	.09199	-.16439	.01350	-.01880	.88033	.00578
#2	-.01485	.08629	-.11000	.01375	-.02117	.31998	.00072

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#3	-.00862	.08628	-.08349	.01354	-.02028	.51504	.00018
#4	-.29067	.08628	-.07871	.01388	-.01998	.43314	-.00013

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00407
SDev	.00241
%RSD	59.278

#1	.00579
#2	.00583
#3	.00396
#4	.00070

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0087-133-6 Operator: WTR

Run Time: 03/19/01 11:30:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP **673 1096**

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96815	504.20	1.0645	.97402	.46835	.45876	482.45
SDev	.00261	1.59	.1120	.02862	.00189	.00165	1.00
%RSD	.26983	.31533	10.519	2.9382	.40289	.35938	.20627

#1	.97107	506.48	Q1.2111	1.0089	.47118	.46109	483.83
#2	.96671	503.20	1.0223	.95080	.46741	.45743	482.53
#3	.96532	503.02	1.0791	.95042	.46741	.45779	481.75
#4	.96951	504.11	.94562	.98593	.46741	.45872	481.69

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	.96663	.46737	.44671	.49584	185.35	10.306	.99950
SDev	.00393	.00315	.00138	.00309	.50	.205	.00472
%RSD	.40649	.67514	.30966	.62330	.27011	1.9846	.47202

#1	.96652	.47005	.44592	.50005	186.08	10.461	1.0054
#2	.96831	.46545	.44540	.49286	185.07	10.168	1.0013
#3	.97043	.47005	.44854	.49443	184.99	10.501	.99550
#4	.96124	.46393	.44697	.49602	185.27	10.095	.99587

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	486.85	.45626	.90203	10.325	.87664	.93790	.97204
SDev	1.31	.00230	.00574	.044	.01974	.02894	.01544
%RSD	.26962	.50394	.63653	.42909	2.2514	3.0857	1.5889

#1	488.76	.45946	.90956	10.391	.88882	.95171	.95059
#2	485.90	.45621	.90348	10.298	.88948	.97169	.97521
#3	486.09	.45414	.89753	10.310	.84766	.91900	.97492
#4	486.65	.45521	.89757	10.303	.88060	.90922	.98744

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	.88393	1.1409	.84966	.93399	.88275	9.4103	.46886
SDev	.05511	.0374	.02497	.00372	.00274	.1450	.00310
%RSD	6.2346	3.2762	2.9384	.39862	.31038	1.5414	.66035

#1	.81595	1.1664	.84507	.93955	.88675	9.5507	.47221
#2	.95093	1.1663	.85553	.93210	.88201	9.3496	.46630

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#3	.88397	1.1437	.81891	.93171	.88053	9.2352	.46615
#4	.88485	1.0872	.87914	.93262	.88172	9.5055	.47076

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	.95962
SDev	.00337
%RSD	.35151

#1	.96311
#2	.95781
#3	.96172
#4	.95584

Errors	QC Pass
Value	1.0000
Range	20.000

Method: QUANMET Sample Name: DWXHEB Operator: WTR
 Run Time: 03/19/01 11:35:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.00972	.00683	.01574	.00002	.00003	.01742
SDev	.00172	.00348	.02229	.01816	.00025	.00005	.00311
%RSD	500.80	35.806	326.33	115.36	1365.7	161.01	17.861
#1	-.00068	.01057	.01139	.00002	-.00009	.00006	.01633
#2	-.00071	.00547	.02534	.03147	.00009	-.00005	.01589
#3	-.00205	.00898	.01603	.00001	-.00026	.00006	.01540
#4	.00206	.01384	-.02545	.03146	.00033	.00006	.02205
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	-.00169	.00154	.00039	.00059	.01009	.21324	.00135
SDev	.00364	.00331	.00124	.00135	.00079	.18482	.00076
%RSD	215.90	215.36	315.89	227.27	7.8391	86.675	55.872
#1	L-.00680	.00155	-.00039	.00040	.00941	.24979	.00117
#2	-.00080	-.00307	-.00091	-.00118	.00941	-.03452	.00065
#3	.00184	.00307	.00170	.00118	.01077	.22542	.00117
#4	-.00099	.00461	.00118	.00197	.01078	.41226	.00243
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	.00026	.00297	.01316	-.00337	.01549	.00304
SDev	.01036	.00059	.00767	.00152	.00245	.02094	.00007
%RSD	522.10	227.87	258.08	11.518	72.620	135.19	2.3811
#1	.01521	.00077	.00000	.01231	-.00104	.03094	.00306
#2	-.00860	.00077	.00594	.01194	-.00548	-.01334	.00299
#3	-.00331	-.00025	-.00594	.01306	-.00147	.01333	.00313
#4	.00463	-.00025	.01188	.01532	-.00548	.03103	.00297
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	.00480	.02404	-.00522	-.00001	.00030	.01790	-.00079
SDev	.02350	.03301	.01236	.00013	.00051	.08264	.00251
%RSD	489.99	137.32	236.86	1973.2	173.21	461.56	317.97
#1	.00718	.04669	.01178	-.00002	.00015	.10463	.00115
#2	.03100	-.00429	-.01437	-.00015	-.00015	.06135	-.00446

Analysis Report

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#3	.00718	-.00424	-.01437	-.00002	.00015	-.08330	-.00015
#4	-.02617	.05799	-.00391	.00016	.00104	-.01105	.00030

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

Elem ZN
Units ppm
Avge .00107
SDev .00200
%RSD 187.15

#1	-.00014
#2	.00052
#3	-.00014
#4	.00402

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DWXHEC

Operator: WTR

Run Time: 03/19/01 11:38:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04725	1.8981	1.8147	.92096	1.8374	.04590	47.535
SDev	.00112	.0058	.0383	.01160	.0086	.00008	.242
%RSD	2.3616	.30726	2.1108	1.2598	.46976	.16607	.50820
#1	.04724	1.8900	1.7688	.91488	1.8376	.04597	47.565
#2	.04863	1.9037	1.8239	.93831	1.8374	.04584	47.454
#3	.04590	1.9003	1.8055	.91634	1.8267	.04584	47.849
#4	.04724	1.8986	1.8608	.91429	1.8478	.04597	47.273
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	.05483	.47080	.18956	.23100	1.0021	47.292	.92311
SDev	.00368	.00406	.00347	.00079	.0023	.136	.00678
%RSD	6.7103	.86279	1.8307	.34061	.23224	.28777	.73491
#1	.05996	.47462	.19219	.23139	1.0023	47.389	.92428
#2	.05147	.47311	.18904	.23139	.99885	47.300	.92346
#3	.05310	.47005	.19218	.22982	1.0043	47.097	.91412
#4	.05476	.46542	.18486	.23139	1.0030	47.381	.93058
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	47.620	.46764	.92691	47.519	.45280	.51419	.49100
SDev	.135	.00118	.00840	.329	.01653	.02334	.02653
%RSD	.28363	.25202	.90642	.69199	3.6500	4.5382	5.4038
#1	47.675	.46662	.93879	47.510	.46942	.53856	.46641
#2	47.559	.46866	.92097	47.565	.43156	.52977	.52785
#3	47.469	.46866	.92097	47.100	.46149	.49428	.47880
#4	47.779	.46662	.92691	47.901	.44874	.49416	.49094
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	1.8636	9.4365	1.8614	.91034	.91006	1.9125	.47326
SDev	.0117	.0028	.0184	.00303	.00135	.0796	.00249
%RSD	.62647	.03014	.99074	.33246	.14877	4.1619	.52706
#1	1.8683	9.4322	1.8750	.91113	.91043	1.8619	.47126
#2	1.8540	9.4379	1.8360	.91035	.90984	2.0065	.47542

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						678	1101
#3	1.8779	9.4379	1.8594	.90630	.90836	1.9486	.47542
#4	1.8540	9.4379	1.8751	.91358	.91161	1.8331	.47095
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	.47207						
SDev	.00395						
%RSD	.83588						
#1	.47532						
#2	.46837						
#3	.47565						
#4	.46896						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DWV7J

Operator: WTR

Run Time: 03/19/01 11:41:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00418	.09177	.01581	.50260	.11815	.00008	162.53
SDev	.00205	.01195	.03207	.00201	.00088	.00006	1.34
%RSD	49.096	13.019	202.82	.40034	.74115	79.110	.82578

#1	-.00248	.09519	.01928	.50434	.11809	.00018	161.65
#2	-.00659	.07657	-.02661	.50434	.11935	.00006	161.48
#3	-.00519	.09005	.01924	.50086	.11792	.00004	162.58
#4	-.00246	.10528	.05134	.50086	.11725	.00004	164.41

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00647	-.00196	.00204	.61459	6.1493	.00113
SDev	.00171	.00147	.00200	.00111	.00103	.3523	.00131
%RSD	115.69	22.696	102.18	54.512	.16719	5.7291	115.78

#1	-.00277	.00762	.00066	.00283	.61407	6.4641	.00206
#2	.00055	.00761	-.00353	.00047	.61339	5.7168	-.00024
#3	-.00068	.00608	-.00353	.00204	.61544	6.0092	.00028
#4	-.00301	.00455	-.00144	.00282	.61544	6.4073	.00243

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.341	3.3401	.00602	55.859	.00062	-.00227	.01235
SDev	.057	.0135	.00000	.453	.00337	.03560	.02535
%RSD	.18150	.40544	.00223	.81140	540.28	1567.7	205.29

#1	31.306	3.3299	.00602	55.744	-.00322	-.00444	.01539
#2	31.423	3.3289	.00602	56.410	-.00112	-.03098	-.02145
#3	31.338	3.3442	.00602	55.960	.00399	.04849	.01542
#4	31.298	3.3575	.00602	55.321	.00284	-.02216	.04005

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02933	6.2716	-.00050	.50118	-.00881	-.02414	.00245
SDev	.02788	.0214	.03022	.00209	.00051	.07506	.00266
%RSD	95.072	.34065	6081.1	.41699	5.7406	310.88	108.46

#1	-.00045	6.2418	-.01421	.50040	-.00903	.05531	.00015
#2	.06148	6.2928	-.03529	.50385	-.00932	-.04586	.00014

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#3	.04243	6.2758	.03286	.50157	-.00873	.01199	.00475
#4	.01384	6.2758	.01465	.49890	-.00814	-.11801	.00476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00782
SDev	.00078
%RSD	10.023

#1	.00812
#2	.00718
#3	.00718
#4	.00878

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV7JP5

Operator: WTR

Run Time: 03/19/01 11:44:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	.01740	.01008	.11345	.02405	.00009	33.277
SDev	.00137	.00915	.03627	.01294	.00012	.00006	.089
%RSD	1506.1	52.565	359.88	11.402	.51282	66.667	.26811

#1	.00196	.03091	.04795	.13056	.02399	.00018	33.362
#2	-.00077	.01405	.03427	.09911	.02399	.00006	33.262
#3	-.00078	.01066	-.02094	.11206	.02423	.00006	33.324
#4	-.00077	.01397	-.02097	.11207	.02399	.00006	33.158

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00006	.00191	.00078	.00120	.12996	1.5942	.00074
SDev	.00329	.00148	.00193	.00064	.00129	.3290	.00047
%RSD	5403.5	77.474	246.01	53.747	.99573	20.637	62.892

#1	-.00048	.00306	.00327	.00120	.12911	1.9394	.00101
#2	-.00292	.00307	.00065	.00120	.12979	1.2815	.00065
#3	-.00148	.00153	.00065	.00198	.12911	1.8095	.00012
#4	.00464	-.00002	-.00144	.00041	.13184	1.3464	.00117

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.3696	.69651	-.00295	11.057	-.00135	.00442	.00310
SDev	.0459	.00098	.00343	.059	.00302	.02394	.00003
%RSD	.72054	.14059	116.14	.53167	224.12	541.48	1.1459

#1	6.3438	.69523	.00002	10.994	-.00337	.03977	.00307
#2	6.3200	.69625	-.00592	11.026	.00304	-.00437	.00315
#3	6.4205	.69728	-.00592	11.082	-.00177	-.00442	.00307
#4	6.3941	.69728	.00002	11.126	-.00330	-.01330	.00310

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01351	1.2786	-.00520	.10239	-.00148	.05592	-.00007
SDev	.05547	.0311	.01892	.00057	.00075	.03823	.00009
%RSD	410.60	2.4336	364.09	.55331	50.332	68.363	119.34

#1	-.01627	1.3253	-.02220	.10180	-.00044	.07760	.00001
#2	.05520	1.2631	.00396	.10201	-.00222	.04868	-.00015

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#3	.06472	1.2631	.01703	.10287	-.00163	.00535	-.00015
#4	-.04961	1.2631	-.01958	.10287	-.00163	.09204	-.00000

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

Elem	ZN
Units	ppm
Avge	.00183
SDev	.00126
%RSD	68.763

#1	.00335
#2	.00238
#3	.00079
#4	.00080

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV7JS

Operator: WTR

Run Time: 03/19/01 11:47:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04369	2.0670	1.8509	1.3997	1.9343	.04490	205.98
SDev	.00206	.0082	.0754	.0000	.0043	.00015	.56
%RSD	4.7175	.39447	4.0725	.00131	.21992	.32944	.26989

#1	.04129	2.0549	1.8085	1.3997	1.9304	.04470	205.53
#2	.04542	2.0698	1.7944	1.3997	1.9376	.04492	205.77
#3	.04539	2.0717	1.9602	1.3997	1.9309	.04493	206.79
#4	.04265	2.0717	1.8406	1.3996	1.9384	.04505	205.84

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05146	.45543	.17923	.23065	1.5631	53.858	.94381
SDev	.00328	.00620	.00207	.00001	.0044	.359	.00358
%RSD	6.3813	1.3625	1.1530	.00254	.27917	.66586	.37961

#1	.05406	.45006	.17857	.23065	1.5590	54.156	.94162
#2	.05358	.45159	.18224	.23065	1.5665	54.034	.94066
#3	.04687	.45622	.17857	.23065	1.5672	53.344	.94429
#4	.05135	.46387	.17753	.23066	1.5597	53.896	.94866

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	78.119	3.6881	.89579	102.85	.44458	.49353	.46354
SDev	.148	.0073	.01015	.36	.00828	.03753	.00622
%RSD	.18987	.19790	1.1327	.35160	1.8633	7.6037	1.3408

#1	77.903	3.6791	.88540	102.59	.43584	.50221	.46656
#2	78.178	3.6863	.90916	103.00	.44072	.44044	.46655
#3	78.157	3.6965	.89134	102.52	.45507	.52887	.46683
#4	78.239	3.6904	.89728	103.29	.44669	.50258	.45422

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8236	15.443	1.8065	1.3847	.88712	1.9105	.46237
SDev	.0458	.003	.0544	.0029	.00133	.0606	.00241
%RSD	2.5096	.02103	3.0107	.20809	.15017	3.1741	.52066

#1	1.8415	15.446	1.8202	1.3813	.88527	1.9720	.46067
#2	1.8558	15.441	1.7627	1.3863	.88793	1.9141	.46589

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						678	1107
#3	1.8415	15.441	1.7653	1.3835	.88704	1.8274	.46197
#4	1.7557	15.446	1.8777	1.3878	.88823	1.9286	.46097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.46743
SDev	.00439
%RSD	.93805

#1	.46920
#2	.47213
#3	.46659
#4	.46180

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV7JD

Operator: WTR

Run Time: 03/19/01 11:50:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04227	2.0258	1.8262	1.3856	1.8994	.04407	199.33
SDev	.00303	.0152	.0360	.0086	.0091	.00012	.61
%RSD	7.1712	.75173	1.9721	.61805	.47668	.26902	.30512
#1	.04671	2.0195	1.7905	1.3751	1.8909	.04401	198.97
#2	.04124	2.0347	1.8549	1.3856	1.8956	.04401	200.20
#3	.03988	2.0076	1.7998	1.3856	1.8990	.04401	199.27
#4	.04125	2.0414	1.8594	1.3961	1.9120	.04425	198.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05313	.44512	.17387	.22690	1.5273	52.797	.92903
SDev	.00359	.00261	.00128	.00076	.0042	.262	.00800
%RSD	6.7644	.58644	.73693	.33270	.27744	.49639	.86075
#1	.05208	.44244	.17334	.22670	1.5220	52.710	.92553
#2	.04908	.44398	.17491	.22592	1.5268	52.507	.92346
#3	.05771	.44856	.17491	.22749	1.5282	52.840	.92621
#4	.05366	.44549	.17230	.22749	1.5323	53.133	.94089
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	76.153	3.5684	.88242	100.44	.43954	.48659	.43288
SDev	.253	.0079	.00343	.60	.01827	.03079	.03393
%RSD	.33171	.22123	.38875	.59597	4.1572	6.3286	7.8394
#1	75.900	3.5605	.87945	99.942	.45507	.50200	.45455
#2	76.096	3.5779	.87945	100.09	.45061	.50198	.41756
#3	76.114	3.5636	.88539	100.44	.43817	.44040	.46665
#4	76.503	3.5717	.88539	101.28	.41432	.50198	.39276
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.7902	15.046	1.7574	1.3518	.86921	1.8311	.45136
SDev	.0463	.076	.0511	.0051	.00208	.1394	.00009
%RSD	2.5838	.50578	2.9053	.37411	.23981	7.6104	.01904
#1	1.8128	15.050	1.7784	1.3472	.86691	1.8709	.45129
#2	1.7366	14.994	1.7782	1.3498	.86928	1.8999	.45129

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#3	1.7699	14.988	1.7915	1.3513	.86869	1.9286	.45144
#4	1.8414	15.152	1.6814	1.3590	.87195	1.6251	.45144
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .45747
SDev .00033
%RSD .07300

#1 .45759
#2 .45761
#3 .45698
#4 .45772

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV79

Operator: WTR

Run Time: 03/19/01 11:54:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00280	.07496	-.02885	.44829	.11176	.00005	152.60
SDev	.00132	.00490	.03409	.00001	.00076	.00001	.67
%RSD	47.148	6.5361	118.19	.00182	.67727	13.966	.44149
#1	-.00244	.08160	-.01283	.44828	.11079	.00004	152.57
#2	-.00384	.07331	-.07713	.44830	.11180	.00006	151.74
#3	-.00108	.07498	.00105	.44830	.11180	.00005	153.38
#4	-.00384	.06994	-.02647	.44830	.11264	.00006	152.69
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	-.00482	.00648	-.00288	.00124	.54020	5.7087	.00052
SDev	.00194	.00262	.00228	.00064	.00383	.3685	.00053
%RSD	40.316	40.462	79.052	51.787	.70903	6.4554	103.44
#1	-.00358	.00916	.00013	.00203	.53746	6.1148	.00065
#2	-.00404	.00303	-.00249	.00045	.53677	5.2862	.00065
#3	L- .00772	.00764	-.00406	.00125	.54499	5.8955	.00101
#4	-.00394	.00609	-.00510	.00124	.54156	5.5381	-.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.458	3.1417	-.00290	52.804	-.00321	.01099	-.00298
SDev	.136	.0116	.00594	.452	.00513	.02432	.03253
%RSD	.46231	.36924	204.87	.85594	160.02	221.38	1090.7
#1	29.274	3.1284	.00601	52.186	-.00408	-.00432	.04003
#2	29.438	3.1356	-.00587	53.030	-.00986	-.01342	-.02148
#3	29.579	3.1519	-.00587	52.775	.00223	.03967	-.03370
#4	29.542	3.1509	-.00587	53.227	-.00111	.02202	.00323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00307	5.8727	-.01757	.47469	-.00866	.05183	.00194
SDev	.03534	.0141	.01503	.00323	.00051	.13060	.00249
%RSD	1152.5	.24053	85.557	.68118	5.8387	252.00	128.51
#1	-.01022	5.8515	-.00889	.47003	-.00844	-.11808	.00476
#2	-.00069	5.8797	-.03791	.47585	-.00932	.05550	-.00015

#3	.04221	5.8798	-.00397	.47542	-.00814	.06985	.00330
#4	-.04356	5.8797	-.01950	.47748	-.00873	.20002	-.00016

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

Elem ZN
Units ppm
Avge .00729
SDev .00092
%RSD 12.619

#1 .00627
#2 .00721
#3 .00719
#4 .00850

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV8G

Operator: WTR

Run Time: 03/19/01 11:57:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00276	.82065	-.00124	.64796	.26274	.00014	137.65
SDev	.00135	.00107	.01638	.01161	.00082	.00006	.84
%RSD	48.898	.12997	1318.4	1.7911	.31160	44.930	.60834
#1	-.00343	.82157	-.00124	.64863	.26352	.00005	136.63
#2	-.00344	.81973	-.02426	.66262	.26226	.00016	137.64
#3	-.00343	.81972	.00793	.63432	.26335	.00016	137.64
#4	-.00074	.82157	.01259	.64626	.26184	.00018	138.68
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	-.00229	.00598	.00157	.00389	14.023	4.4678	.00234
SDev	.00320	.00125	.00239	.00045	.026	.3696	.00075
%RSD	139.42	20.883	152.51	11.601	.18239	8.2727	32.078
#1	-.00353	.00445	.00274	.00428	13.997	4.6526	.00332
#2	.00112	.00750	.00013	.00428	14.007	4.4252	.00206
#3	L-.00614	.00599	.00432	.00350	14.040	4.8232	.00154
#4	-.00064	.00597	-.00092	.00350	14.050	3.9703	.00243
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.634	18.724	.00332	40.769	-.00395	.01250	-.00615
SDev	.060	.058	.00569	.127	.01008	.02650	.01183
%RSD	.19631	.30878	171.29	.31211	254.88	212.05	192.29
#1	30.658	18.666	-.00411	40.895	.00333	-.00962	-.00907
#2	30.584	18.698	.00777	40.663	-.01380	-.00955	-.02168
#3	30.708	18.731	.00778	40.863	-.01138	.02575	.00299
#4	30.587	18.801	.00184	40.656	.00603	.04340	.00316
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02383	6.5177	-.02126	.50210	.00185	-.00428	.00354
SDev	.01844	.0404	.02428	.00110	.00037	.10917	.00234
%RSD	77.364	.61918	114.19	.21991	20.133	2550.4	65.950
#1	.00350	6.4625	-.04939	.50303	.00133	-.08367	.00451
#2	.03688	6.5135	.00025	.50066	.00192	.00304	.00481

#3	.01316	6.5417	-.03364	.50290	.00192	-.08400	.00482
#4	.04178	6.5530	-.00226	.50182	.00222	.14751	.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 .01844
SDev .00116
%RSD 6.3110

#1 .01832
#2 .01715
#3 .01998
#4 .01829

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-1 0087-121-12 Operator: WTR
 Run Time: 03/19/01 12:00:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97216	49.128	4.7736	4.8353	4.7389	4.7641	49.475
SDev	.00292	.132	.0852	.0234	.0258	.0119	.212
%RSD	.30050	.26938	1.7854	.48362	.54491	.24951	.42895
#1	.97073	49.067	4.7927	4.8034	4.7294	4.7582	49.365
#2	.97624	48.982	4.8393	4.8391	4.7073	4.7514	49.791
#3	.96953	49.286	4.8134	4.8597	4.7649	4.7786	49.400
#4	.97213	49.177	4.6490	4.8391	4.7542	4.7682	49.342
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	4.9615	4.8107	4.7971	4.7441	50.529	49.022	4.7739
SDev	.0343	.0171	.0112	.0252	.084	.343	.0455
%RSD	.69174	.35545	.23306	.53124	.16674	.70003	.95373
#1	4.9461	4.7889	4.7924	4.7364	50.419	49.152	4.7594
#2	5.0126	4.8302	4.8060	4.7129	50.537	49.095	4.7159
#3	4.9480	4.8088	4.8065	4.7711	50.624	49.315	4.8138
#4	4.9391	4.8150	4.7835	4.7561	50.537	48.527	4.8064
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	49.343	4.7888	4.7771	49.187	4.8161	4.8629	4.8465
SDev	.119	.0080	.0109	.335	.0139	.0279	.0419
%RSD	.24195	.16702	.22719	.68078	.28817	.57336	.86477
#1	49.289	4.7793	4.7712	49.102	4.8119	4.8492	4.8989
#2	49.258	4.7988	4.7831	48.752	4.8256	4.8945	4.8619
#3	49.519	4.7896	4.7890	49.496	4.7983	4.8318	4.8124
#4	49.305	4.7876	4.7653	49.397	4.8284	4.8762	4.8130
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	4.7705	5.0521	4.8804	4.7292	4.7575	9.5441	4.7859
SDev	.0358	.0032	.0378	.0222	.0097	.2222	.0101
%RSD	.75055	.06347	.77494	.46994	.20470	2.3280	.21038
#1	4.7869	5.0549	4.8375	4.7215	4.7514	9.8531	4.7797
#2	4.7301	5.0549	4.9262	4.7018	4.7484	9.4608	4.7823

#3	4.8113	5.0495	4.8920	4.7516	4.7700	9.5317	4.8009
#4	4.7539	5.0492	4.8658	4.7421	4.7603	9.3308	4.7807
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 4.8703
SDev .0049
%RSD .10156

#1 4.8724
#2 4.8740
#3 4.8630
#4 4.8719

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB1

Operator: WTR

Run Time: 03/19/01 12:03:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00033	.00374	-.00812	.03844	.00012	.00014	.01085
SDev	.00131	.00894	.01371	.00285	.00017	.00006	.00347
%RSD	398.05	239.01	168.74	7.4265	140.95	41.044	32.032

#1	-.00204	-.00812	-.02068	.03843	-.00009	.00006	.00862
#2	-.00068	.00211	-.01153	.03844	.00009	.00018	.00964
#3	.00071	.01216	-.01169	.03494	.00033	.00016	.01602
#4	.00069	.00881	.01141	.04193	.00016	.00017	.00911

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	-.00106	.00192	.00105	.00197	.00445	.35946	.00087
SDev	.00383	.00262	.00156	.00129	.00117	.39633	.00026
%RSD	363.25	136.49	149.18	65.371	26.301	110.26	30.424

#1	-.00447	.00308	-.00091	.00197	.00393	-.09951	.00065
#2	-.00261	-.00153	.00065	.00039	.00325	.30665	.00117
#3	-.00154	.00461	.00275	.00354	.00599	.86716	.00065
#4	.00440	.00152	.00170	.00197	.00462	.36352	.00101

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	.01257	-.00025	.00446	.01100	-.00366	.01992	.00303
SDev	.01449	.00000	.00297	.00799	.00352	.02733	.01009
%RSD	115.31	.44149	66.660	72.658	96.292	137.16	332.91

#1	.00463	-.00025	.00594	.00479	-.00796	-.00432	.00306
#2	.00992	-.00025	.00000	.00555	-.00330	.00437	.00304
#3	.03373	-.00025	.00594	.02209	.00064	.02223	.01536
#4	.00198	-.00025	.00594	.01156	-.00403	.05742	-.00935

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	.01788	.06367	-.00456	.00026	.00037	.01074	.00184
SDev	.03779	.01035	.02380	.00013	.00051	.07874	.00204
%RSD	211.37	16.249	521.48	48.781	136.63	733.23	110.81

#1	.00716	.06932	-.03790	.00020	-.00015	.00351	.00130
#2	.01668	.05799	-.00391	.00020	.00015	-.01088	.00000

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#3	.06910	.07502	.00660	.00045	.00104	-.06882	.00477
#4	-.02142	.05235	.01696	.00020	.00044	.11915	.00131
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00058
SDev .00124
%RSD 214.27

#1 .00177
#2 -.00013
#3 .00147
#4 -.00079

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DWV81

Operator: WTR

Run Time: 03/19/01 12:06:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00283	.02709	-.01441	.32426	.17885	.00006	169.50
SDev	.00177	.01331	.02578	.00698	.00051	.00000	.86
%RSD	62.301	49.127	178.93	2.1520	.28764	.00000	.50591
#1	-.00351	.03931	.00848	.32286	.17948	.00006	169.74
#2	-.00489	.00896	-.00502	.31516	.17889	.00006	168.24
#3	-.00215	.03428	-.05130	.32776	.17882	.00006	170.18
#4	-.00078	.02581	-.00980	.33126	.17822	.00006	169.83
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00124	.00412	-.00327	.00198	10.908	4.4942	.00139
SDev	.00168	.00230	.00275	.00136	.022	.2990	.00026
%RSD	135.48	55.862	84.180	68.943	.20438	6.6535	18.997
#1	.00135	.00758	-.00039	.00316	10.930	4.8151	.00169
#2	.00292	.00297	-.00144	.00315	10.877	4.6445	.00117
#3	.00177	.00297	-.00562	.00080	10.912	4.1327	.00154
#4	-.00108	.00298	-.00562	.00080	10.912	4.3846	.00117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	27.601	6.9914	.00143	67.027	-.00116	.00962	.00931
SDev	.033	.0201	.00485	.228	.00357	.02798	.01583
%RSD	.11985	.28712	339.85	.34080	306.92	290.92	169.95
#1	27.639	7.0012	.00737	67.130	-.00474	.04505	.02766
#2	27.594	6.9623	-.00452	67.301	.00006	-.01689	.00323
#3	27.560	7.0073	.00143	66.836	.00327	-.00807	.01550
#4	27.610	6.9950	.00143	66.841	-.00323	.01838	-.00913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01455	6.8401	-.01956	.45215	-.00977	.05314	.00003
SDev	.07749	.0401	.02464	.00071	.00057	.06420	.00012
%RSD	532.65	.58633	125.97	.15722	5.8026	120.81	423.81
#1	.09867	6.8755	.00536	.45309	-.00992	.07450	.00019
#2	-.05395	6.7906	-.04443	.45214	-.01051	.13297	-.00012

#3	-.07290	6.8698	-.00254	.45201	-.00932	.01704	.00002
#4	-.03002	6.8246	-.03663	.45137	-.00932	-.01193	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00390
SDev .00169
%RSD 43.360

#1 .00157
#2 .00382
#3 .00477
#4 .00545

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV82

Operator: WTR

Run Time: 03/19/01 12:09:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00047	.99248	.01260	.62709	.03334	.00016	80.329
SDev	.00131	.00688	.00594	.01572	.00037	.00001	.369
%RSD	278.67	.69317	47.152	2.5076	1.1123	3.1274	.45902

#1	.00055	.98571	.01037	.61921	.03321	.00016	80.126
#2	-.00080	.98745	.01490	.61922	.03304	.00015	80.047
#3	.00055	.99920	.00564	.65067	.03321	.00016	80.863
#4	-.00218	.99756	.01947	.61925	.03388	.00016	80.282

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00343	.00274	.00417	2.1389	5.5218	.00332
SDev	.00242	.00317	.00171	.00079	.0072	.1890	.00043
%RSD	212.48	92.463	62.307	18.914	.33549	3.4228	12.884

#1	.00241	.00150	.00274	.00299	2.1293	5.3106	.00279
#2	-.00163	.00611	.00274	.00456	2.1375	5.7493	.00384
#3	-.00261	.00612	.00484	.00456	2.1437	5.5868	.00332
#4	-.00274	-.00003	.00065	.00456	2.1450	5.4406	.00332

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.654	3.7363	.00028	55.251	.00483	.01200	.00624
SDev	.151	.0138	.00485	.438	.00521	.01917	.04424
%RSD	.64008	.36935	1732.3	.79190	107.80	159.84	709.39

#1	23.454	3.7220	.00028	54.803	.00033	.01188	-.03383
#2	23.665	3.7271	-.00566	55.290	.01134	.00320	-.02138
#3	23.676	3.7496	.00622	55.075	.00671	.03865	.06471
#4	23.821	3.7465	.00028	55.835	.00093	-.00576	.01546

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00638	7.4272	-.01805	.27620	.00651	.05198	.00549
SDev	.02409	.0143	.01209	.00169	.00051	.08617	.00163
%RSD	377.61	.19187	66.965	.61204	7.8730	165.78	29.714

#1	.02337	7.4074	-.01953	.27432	.00607	.00510	.00462
#2	-.03378	7.4414	-.00117	.27626	.00636	.17838	.00793

#3	-.01470	7.4300	-.02173	.27583	.00636	-.00947	.00478
#1	-.00040	7.4300	-.02978	.27841	.00725	.03391	.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	.01003
SDev	.00140
%RSD	13.992

#1	.01028
#2	.00865
#3	.00931
#4	.01188

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV89

Operator: WTR

Run Time: 03/19/01 12:13:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00032	1.4196	-.00050	.91394	.22058	.00010	55.376
SDev	.00112	.0050	.03109	.01770	.00059	.00007	.311
%RSD	345.96	.35253	6164.7	1.9368	.26885	66.118	.56217
#1	-.00105	1.4141	.01567	.88750	.22058	.00005	55.157
#2	.00169	1.4209	-.01664	.92392	.22099	.00016	55.597
#3	.00033	1.4175	-.03501	.92390	.22099	.00016	55.064
#4	.00032	1.4258	.03396	.92042	.21974	.00004	55.687
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	-.00230	.00983	.00379	.00783	6.7885	3.2798	.00322
SDev	.00250	.00199	.00166	.00046	.0115	.1065	.00105
%RSD	109.11	20.208	43.676	5.8372	.16927	3.2483	32.653
#1	-.00291	.00752	.00170	.00743	6.7726	3.1417	.00368
#2	-.00072	.01059	.00327	.00822	6.7979	3.4016	.00295
#3	.00000	.00905	.00484	.00743	6.7877	3.2879	.00436
#4	L-.00556	.01214	.00536	.00822	6.7959	3.2879	.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	21.092	11.191	.00237	166.50	.01906	-.02058	.00945
SDev	.063	.031	.00748	.47	.00415	.01694	.01229
%RSD	.30078	.27865	314.89	.28124	21.793	82.297	130.08
#1	21.022	11.176	.00089	166.83	.02104	-.04273	.00328
#2	21.176	11.220	-.00505	166.43	.02366	-.00733	.00338
#3	21.094	11.154	.00089	166.87	.01420	-.00733	.02788
#4	21.078	11.214	.01277	165.86	.01732	-.02494	.00325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00347	8.4583	-.02339	.24134	.01206	-.00158	.00468
SDev	.01923	.0071	.01995	.00025	.00061	.06912	.00019
%RSD	553.84	.08417	85.263	.10298	5.0590	4363.7	4.0759
#1	-.00492	8.4597	-.00054	.24170	.01288	-.05560	.00464
#2	.02375	8.4654	-.01623	.24127	.01199	-.05578	.00449

#3	-.01916	8.4484	-.02920	.24118	.01140	.01631	.00464
#4	.01421	8.4597	-.04761	.24118	.01199	.08874	.00494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01322
SDev .00184
%RSD 13.951

#1 .01399
#2 .01369
#3 .01052
#4 .01466

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV9J

Operator: WTR

Run Time: 03/19/01 12:16:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00261	8.2470	.00925	.38594	.20120	.00048	122.16
SDev	.00132	.0149	.01971	.00003	.00131	.00001	.76
%RSD	50.429	.18101	213.08	.00724	.65182	1.7271	.62429
#1	-.00433	8.2639	-.01961	.38592	.20279	.00049	121.18
#2	-.00158	8.2300	.01282	.38590	.19986	.00048	122.43
#3	-.00158	8.2402	.02191	.38596	.20045	.00048	123.00
#4	-.00297	8.2538	.02189	.38596	.20171	.00049	122.05
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00050	.02432	.01098	.01252	13.698	4.0617	.01111
SDev	.00085	.00125	.00278	.00101	.014	.3203	.00022
%RSD	167.92	5.1511	25.319	8.0930	.10165	7.8848	1.9977
#1	.00071	.02431	.00745	.01213	13.692	3.7266	.01132
#2	-.00056	.02432	.01111	.01370	13.682	4.2708	.01117
#3	-.00107	.02585	.01111	.01135	13.711	3.8565	.01117
#4	-.00109	.02278	.01425	.01292	13.708	4.3927	.01080
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	30.072	15.880	.00625	58.380	.02645	.04158	.00325
SDev	.089	.036	.00297	.563	.00543	.02533	.00009
%RSD	.29727	.22680	47.519	.96477	20.528	60.911	2.8966
#1	30.155	15.837	.00773	59.089	.01995	.05702	.00311
#2	29.968	15.876	.00773	57.925	.03321	.04822	.00332
#3	30.028	15.925	.00774	57.929	.02585	.00410	.00327
#4	30.137	15.882	.00179	58.576	.02679	.05699	.00331
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02043	18.651	-.01172	.37705	.07401	-.00396	.01632
SDev	.02922	.039	.03379	.00211	.00101	.12160	.00271
%RSD	143.06	.21057	288.32	.55830	1.3663	3073.5	16.583
#1	.05495	18.683	.03404	.37967	.07415	-.03659	.01404
#2	-.01655	18.604	-.01303	.37497	.07297	-.15189	.01866

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#3	.02166	18.632	-.02088	.37579	.07534	.03580	.01866
#4	.02165	18.683	-.04702	.37777	.07356	.13685	.01391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04266
SDev	.00077
%RSD	1.8168

#1	.04276
#2	.04208
#3	.04371
#4	.04208

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV9N

Operator: WTR

Run Time: 03/19/01 12:19:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.04061	-.02688	.28400	.20162	.00008	109.18
SDev	.00112	.00786	.02639	.00247	.00113	.00011	.39
%RSD	14759.	19.349	98.167	.87036	.56085	143.71	.35722
#1	.00137	.04780	.00411	.28523	.20028	.00016	109.10
#2	-.00137	.03085	-.01416	.28030	.20296	-.00007	108.69
#3	-.00000	.03771	-.04644	.28523	.20195	.00016	109.31
#4	-.00003	.04607	-.05105	.28526	.20129	.00006	109.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	.00487	.00039	.00358	2.1349	2.3842	.01169
SDev	.00253	.00230	.00193	.00197	.0061	.3848	.00121
%RSD	594.83	47.185	494.96	54.977	.28347	16.141	10.319
#1	.00249	.00755	.00274	.00457	2.1354	2.6787	.01206
#2	.00111	.00295	-.00144	.00063	2.1286	2.0126	.00991
#3	.00136	.00602	.00117	.00456	2.1327	2.7518	.01221
#4	-.00326	.00296	-.00091	.00456	2.1429	2.0938	.01258
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.462	6.9421	.00028	63.774	.00379	.01484	.00010
SDev	.056	.0127	.00485	.396	.00787	.01819	.02721
%RSD	.26158	.18265	1735.6	.62055	207.69	122.60	26324.
#1	21.406	6.9313	.00028	63.405	.00712	.00386	-.00907
#2	21.509	6.9334	.00028	64.327	.00239	-.00506	.01556
#3	21.422	6.9446	-.00566	63.609	.01206	.03027	-.03368
#4	21.512	6.9589	.00622	63.755	-.00642	.03027	.02761
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02934	8.4286	-.01542	.26126	-.00562	.04037	.00347
SDev	.03956	.0056	.03082	.00116	.00057	.03795	.00221
%RSD	134.82	.06683	199.91	.44295	10.078	93.998	63.716
#1	-.02426	8.4257	-.03507	.25989	-.00488	.09447	.00462
#2	.02337	8.4257	-.04804	.26260	-.00607	.00791	.00461

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#3	.05673	8.4257	.00667	.26087	-.00607	.03679	.00447
#4	.06152	8.4370	.01477	.26170	-.00548	.02231	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00400
SDev .00032
%RSD 8.1122

#1 .00449
#2 .00386
#3 .00381
#4 .00385

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV9R

Operator: WTR

Run Time: 03/19/01 12:22:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00214	.03507	-.01579	.32840	.18384	.00008	175.62
SDev	.00113	.00347	.03411	.00469	.00078	.00006	.92
%RSD	52.823	9.8981	216.00	1.4280	.42391	79.003	.52282

#1	-.00214	.03593	-.04688	.33298	.18493	.00018	175.71
#2	-.00352	.03089	-.01452	.32934	.18367	.00006	174.29
#3	-.00076	.03923	-.03313	.32943	.18308	.00004	176.27
#4	-.00212	.03424	.03135	.32184	.18367	.00005	176.20

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	.00604	-.00092	.00219	11.025	4.6729	.00150
SDev	.00228	.00376	.00154	.00076	.035	.1502	.00037
%RSD	228.10	62.192	168.32	34.551	.31970	3.2133	24.433

#1	.00431	.01063	.00013	.00318	11.062	4.8557	.00154
#2	.00045	.00297	-.00249	.00238	10.977	4.6526	.00101
#3	-.00090	.00297	.00065	.00160	11.025	4.6932	.00154
#4	.00014	.00758	-.00196	.00160	11.036	4.4902	.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	28.446	7.1390	.00441	69.195	-.00724	.00964	.01538
SDev	.078	.0253	.00343	.263	.00790	.02980	.01004
%RSD	.27455	.35478	77.770	.37952	109.06	309.17	65.314

#1	28.560	7.1464	.00739	69.382	-.00213	.05391	.01537
#2	28.404	7.1014	.00144	69.442	-.01480	-.00807	.02764
#3	28.388	7.1536	.00738	68.886	.00108	.00072	.01546
#4	28.433	7.1546	.00144	69.070	-.01313	-.00800	.00304

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03704	7.0424	-.01102	.46686	-.00940	.03763	.00241
SDev	.02418	.0246	.01658	.00131	.00044	.08839	.00266
%RSD	65.295	.34996	150.45	.28148	4.7244	234.87	110.33

#1	.01333	7.0565	.00794	.46847	-.00903	.14549	.00019
#2	.07023	7.0509	-.01555	.46727	-.00962	-.02683	.00003

#3	.03703	7.0057	-.03129	.46542	-.00903	.07386	.00480
#4	.02754	7.0566	-.00519	.46628	-.00992	-.04198	.00464
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00432
SDev .00079
%RSD 18.293

#1 .00382
#2 .00415
#3 .00384
#4 .00549

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV9T

Operator: WTR

Run Time: 03/19/01 12:25:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00137	.00764	-.00238	.05595	.00029	.00003	.05152
SDev	.00286	.00558	.03263	.00000	.00031	.00011	.00844
%RSD	209.26	73.002	1373.3	.00414	107.06	335.59	16.377
#1	.00206	.01566	-.04851	.05595	.00016	.00017	.05906
#2	-.00205	.00382	.02066	.05595	.00058	.00006	.04674
#3	-.00068	.00721	-.00239	.05594	.00051	-.00006	.05822
#4	-.00481	.00387	.02074	.05595	-.00009	-.00005	.04208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	.00230	.00157	.00276	.02480	.33102	.00033
SDev	.00082	.00153	.00278	.00129	.00234	.62018	.00096
%RSD	957.31	66.600	177.04	46.626	9.4259	187.35	287.82
#1	-.00083	.00307	.00484	.00433	.02719	.98089	.00154
#2	.00076	.00307	.00013	.00276	.02582	.21730	-.00061
#3	.00048	.00307	.00275	.00276	.02446	.59909	.00065
#4	-.00075	.00000	-.00144	.00118	.02172	-.47318	-.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01521	.00026	.00000	.09549	-.00446	.01330	.00303
SDev	.01896	.00059	.00000	.00335	.00706	.03748	.00009
%RSD	124.60	225.37	9.4259	3.5122	158.35	281.71	2.8754
#1	.04167	.00077	.00000	.09727	-.00927	.06630	.00295
#2	.01257	-.00025	.00000	.09051	-.00577	.01333	.00300
#3	.00992	.00077	.00000	.09765	.00588	-.01316	.00315
#4	-.00331	-.00025	.00000	.09652	-.00869	-.01325	.00302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02985	.17396	-.00129	.00018	.00022	.06103	-.00086
SDev	.00456	.00329	.01695	.00037	.00044	.02641	.00256
%RSD	15.285	1.8881	1310.9	201.85	200.00	43.266	297.38
#1	.03105	.17682	.00917	.00067	.00074	.04652	.00116
#2	.02628	.17114	.01701	.00011	-.00015	.08991	.00000

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#3	.03581	.17680	-.01698	.00020	.00044	.03212	.00001
#4	.02627	.17109	-.01437	-.00023	-.00015	.07558	-.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	.00144
SDev	.00077
%RSD	53.296

#1	.00082
#2	.00081
#3	.00238
#4	.00175

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV7JF

Operator: WTR

Run Time: 03/19/01 12:28:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00282	.00888	.00283	.48567	.11385	.00005	160.78
SDev	.00206	.00822	.04127	.00440	.00076	.00001	.52
%RSD	72.861	92.471	1457.4	.90579	.66480	11.005	.32422

#1	-.00384	.00546	.06155	.48654	.11389	.00005	160.07
#2	-.00111	.00209	-.00749	.49003	.11389	.00005	161.26
#3	-.00111	.02079	-.03526	.47955	.11288	.00005	160.74
#4	-.00523	.00721	-.00747	.48655	.11473	.00006	161.06

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00570	-.00013	.00182	.44614	6.1311	.00118
SDev	.00281	.00194	.00151	.00039	.00420	.2103	.00039
%RSD	800.43	33.965	1131.4	21.530	.94082	3.4295	32.754

#1	.00153	.00301	.00117	.00202	.44101	6.1879	.00065
#2	.00249	.00608	-.00144	.00202	.44648	5.9199	.00138
#3	-.00343	.00763	.00117	.00202	.44580	6.3991	.00117
#4	-.00199	.00609	-.00144	.00123	.45127	6.0173	.00154

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.612	3.2184	-.00143	53.836	-.00291	.01991	.02161
SDev	.140	.0135	.00297	.200	.00408	.02433	.01589
%RSD	.45682	.42002	208.19	.37225	140.32	122.19	73.519

#1	30.544	3.2030	.00006	53.821	.00151	.03084	.00319
#2	30.769	3.2317	.00006	53.941	-.00140	-.00437	.01540
#3	30.454	3.2112	-.00588	53.562	-.00816	.04868	.04009
#4	30.679	3.2276	.00006	54.020	-.00358	.00447	.02776

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01170	6.0226	-.01224	.48842	-.00925	-.05833	.00371
SDev	.01369	.0396	.02778	.00199	.00051	.06567	.00171
%RSD	116.99	.65688	226.86	.40840	5.4650	112.59	46.019

#1	-.02005	6.0043	-.03259	.48752	-.00932	-.13058	.00461
#2	.00855	6.0608	.02761	.48955	-.00903	-.07273	.00461

#3	-.02004	5.9760	-.02982	.48610	-.00873	.02834	.00446
#4	-.01526	6.0495	-.01418	.49053	-.00992	-.05834	.00115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00818
SDev .00044
%RSD 5.3402

#1 .00880
#2 .00787
#3 .00789
#4 .00815

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV7JP5F

Operator: WTR

Run Time: 03/19/01 12:31:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00213	.00800	-.01751	.11211	.02311	-.00000	32.462
SDev	.00112	.00750	.01737	.00002	.00009	.00007	.051
%RSD	52.504	93.729	99.175	.01334	.37363	2456.6	.15751
#1	-.00213	.01728	-.01182	.11211	.02315	.00006	32.478
#2	-.00211	.00379	-.03938	.11209	.02298	.00005	32.409
#3	-.00350	.00037	-.02089	.11210	.02315	-.00006	32.435
#4	-.00076	.01056	.00205	.11213	.02315	-.00006	32.526
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00114	-.00052	.00041	.15254	1.1921	-.00002
SDev	.00035	.00441	.00089	.00064	.00264	.1341	.00050
%RSD	100.36	386.54	170.73	156.70	1.7328	11.252	2561.3
#1	-.00051	-.00001	-.00039	.00120	.15373	1.3139	.00028
#2	.00016	.00459	.00065	.00041	.14894	1.2733	.00028
#3	-.00043	.00460	-.00091	.00041	.15236	1.0134	-.00077
#4	-.00063	-.00462	-.00144	-.00038	.15510	1.1677	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.2234	.66660	.00299	10.733	-.00854	.00660	.00305
SDev	.0264	.00251	.00343	.077	.00633	.02196	.00009
%RSD	.42441	.37590	114.70	.71594	74.136	332.61	3.0258
#1	6.1983	.66660	.00596	10.698	-.01065	-.00447	.00303
#2	6.2036	.66353	.00002	10.643	-.00308	-.00433	.00314
#3	6.2406	.66660	.00596	10.811	-.01656	-.00433	.00293
#4	6.2512	.66967	.00002	10.781	-.00388	.03954	.00310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02430	1.2560	-.02807	.10002	-.00185	.01566	.00094
SDev	.03680	.0175	.01545	.00041	.00044	.02980	.00168
%RSD	151.44	1.3939	55.044	.40769	24.000	190.28	179.18
#1	.00287	1.2574	-.04311	.10007	-.00163	-.00964	.00015
#2	.00285	1.2461	-.03003	.09943	-.00222	-.00964	.00346

#3	.07909	1.2404	-.00650	.10029	-.00222	.04816	.00015
#4	.01240	1.2800	-.03265	.10029	-.00133	.03376	-.00000

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

Elem	ZN
Units	ppm
Avge	.00172
SDev	.00139
%RSD	81.055

#1	- .00012
#2	.00148
#3	.00245
#4	.00307

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV7JSF

Operator: WTR

Run Time: 03/19/01 12:35:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04438	1.9445	1.8796	1.4535	1.9540	.04606	211.63
SDev	.00259	.0053	.0502	.0035	.0157	.00015	.44
%RSD	5.8333	.27113	2.6710	.24095	.80164	.33487	.20577
#1	.04815	1.9411	1.9521	1.4552	1.9314	.04585	212.28
#2	.04402	1.9396	1.8509	1.4483	1.9672	.04622	211.44
#3	.04268	1.9512	1.8737	1.4553	1.9574	.04609	211.39
#4	.04268	1.9460	1.8415	1.4553	1.9602	.04609	211.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.05511	.46729	.18446	.23340	1.4284	54.485	.94440
SDev	.00283	.00423	.00150	.00198	.0056	.502	.01018
%RSD	5.1415	.90438	.81402	.84794	.38946	.92072	1.0776
#1	.05818	.46999	.18328	.23065	1.4250	53.945	.92920
#2	.05578	.47150	.18642	.23537	1.4270	55.155	.94845
#3	.05513	.46230	.18485	.23379	1.4250	54.473	.94926
#4	.05134	.46537	.18329	.23379	1.4366	54.367	.95068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	79.478	3.6990	.91211	103.34	.46065	.50499	.43576
SDev	.304	.0043	.01029	.97	.01061	.00846	.02130
%RSD	.38235	.11629	1.1282	.93637	2.3040	1.6758	4.8869
#1	79.027	3.6944	.90914	101.90	.47619	.51173	.45432
#2	79.686	3.7016	.90320	103.99	.45264	.50287	.40507
#3	79.580	3.6965	.90914	103.62	.45550	.51148	.44196
#4	79.620	3.7037	.92697	103.84	.45827	.49391	.44170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9304	15.545	1.8730	1.4005	.90014	1.8945	.46942
SDev	.0795	.043	.0662	.0087	.00322	.1263	.00246
%RSD	4.1163	.27469	3.5330	.62126	.35762	6.6692	.52431
#1	2.0459	15.514	1.9300	1.3878	.89563	1.9739	.47050
#2	1.9173	15.582	1.8068	1.4074	.90273	1.9017	.46574

#3	1.8887	15.503	1.8253	1.4020	.90007	1.9885	.47050
#4	1.8697	15.582	1.9299	1.4046	.90214	1.7137	.47095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.47881
SDev	.00292
%RSD	.61035

#1	.47687
#2	.47945
#3	.47626
#4	.48267

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: WTR

Run Time: 03/19/01 12:38:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97300	48.681	4.8054	4.7995	4.6830	4.7305	49.757
SDev	.00232	.110	.0719	.0092	.0146	.0127	.096
%RSD	.23888	.22527	1.4952	.19258	.31211	.26877	.19361

#1	.97338	48.793	4.7308	4.8115	4.7028	4.7439	49.622
#2	.97066	48.703	4.7913	4.8013	4.6821	4.7380	49.764
#3	.97607	48.698	4.7961	4.7899	4.6791	4.7239	49.848
#4	.97192	48.530	4.9036	4.7953	4.6678	4.7162	49.793

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	4.9700	4.8127	4.7824	4.6751	50.365	48.498	4.6582
SDev	.0124	.0126	.0079	.0151	.062	.345	.0237
%RSD	.24904	.26158	.16517	.32218	.12317	.71188	.50802

#1	4.9703	4.8288	4.7804	4.6932	50.394	48.843	4.6892
#2	4.9840	4.8134	4.7877	4.6814	50.410	48.177	4.6640
#3	4.9719	4.8104	4.7893	4.6656	50.381	48.746	4.6424
#4	4.9539	4.7982	4.7720	4.6601	50.273	48.226	4.6373

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	48.881	4.7783	4.7727	48.289	4.8094	4.8722	4.8773
SDev	.150	.0030	.0196	.173	.0141	.0329	.0324
%RSD	.30785	.06310	.41113	.35739	.29276	.67511	.66434

#1	49.041	4.7814	4.7593	48.508	4.7954	4.8947	4.9235
#2	48.943	4.7804	4.7534	48.295	4.8017	4.8854	4.8741
#3	48.855	4.7763	4.7831	48.263	4.8274	4.8853	4.8495
#4	48.686	4.7752	4.7949	48.087	4.8132	4.8233	4.8620

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	4.7188	4.9585	4.9231	4.6837	4.7254	9.3661	4.7601
SDev	.1350	.0046	.0680	.0133	.0087	.1882	.0065
%RSD	2.8613	.09211	1.3819	.28483	.18381	2.0092	.13640

#	4.7534	4.9529	4.9318	4.7005	4.7330	9.3618	4.7644
#	4.8488	4.9586	4.9682	4.6851	4.7309	9.1015	4.7666

#3	4.7439	4.9585	4.9681	4.6809	4.7238	9.4923	4.7570
#4	4.5291	4.9641	4.8243	4.6681	4.7138	9.5086	4.7526
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 4.8514
SDev .0105
%RSD .21578

#1 4.8607
#2 4.8600
#3 4.8449
#4 4.8401

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB2

Operator: WTR

Run Time: 03/19/01 12:41:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00068	-.00046	-.02763	.03581	.00008	.00018	.00568
SDev	.00193	.00854	.02772	.00334	.00033	.00010	.00358
%RSD	284.15	1875.9	100.34	9.3287	415.39	54.055	62.965
#1	-.00068	.01221	-.01163	.03843	.00058	.00029	.00995
#2	-.00341	-.00628	.00234	.03842	-.00009	.00017	.00166
#3	.00069	-.00310	-.05753	.03493	-.00009	.00018	.00698
#4	.00068	-.00466	-.04370	.03145	-.00009	.00006	.00414
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	.00021	.00269	.00026	.00079	.00086	.36555	.00046
SDev	.00171	.00193	.00116	.00136	.00119	.33006	.00109
%RSD	818.04	72.006	443.33	172.65	138.70	90.292	235.18
#1	-.00005	.00460	.00066	.00197	.00188	.68845	.00206
#2	-.00210	.00308	-.00144	-.00118	-.00086	.16856	.00028
#3	.00133	.00307	.00118	.00118	.00120	.59909	-.00024
#4	.00166	-.00001	.00065	.00118	.00120	.00609	-.00024
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	.00397	.00000	.00297	.00977	-.00535	.00229	.00304
SDev	.01109	.00051	.00767	.00172	.00808	.00849	.00004
%RSD	279.55	43876.	258.19	17.590	150.98	370.73	1.3000
#1	.02050	-.00025	.00594	.01194	-.00337	.01338	.00299
#2	-.00331	-.00026	-.00594	.00930	-.01641	-.00432	.00306
#3	-.00066	-.00025	.01188	.01006	-.00461	.00451	.00302
#4	-.00066	.00077	.00000	.00780	.00297	-.00441	.00308
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	.02263	.04244	-.00914	.00027	.00022	.01803	.00065
SDev	.03615	.03146	.02589	.00012	.00066	.06131	.00060
%RSD	159.73	74.121	283.19	45.199	295.65	340.14	92.538
#1	.02144	.06366	.01701	.00045	.00074	.03244	.00130
#2	.03573	-.00423	-.03267	.00023	-.00074	.07586	.00100

#3	.05956	.05233	-.03006	.00020	.00044	.03247	.00030
#-	-.02620	.05799	.00916	.00020	.00044	-.06867	.00000
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 -.00142
SDev .00150
%RSD 105.24

#1 .00015
#2 -.00074
#3 -.00334
#4 -.00176

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DWV7JDF Operator: WTR
 Run Time: 03/19/01 12:44:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04435	1.9417	1.8808	1.4293	1.9682	.04596	207.12
SDev	.00323	.0153	.0410	.0210	.0180	.00026	1.10
%RSD	7.2831	.78645	2.1794	1.4663	.91587	.55469	.52950

#1	.04405	1.9393	1.8692	1.4483	1.9749	.04621	207.63
#2	.04674	1.9362	1.9385	1.3994	1.9423	.04564	208.29
#3	.04673	1.9635	1.8416	1.4343	1.9720	.04588	206.81
#4	.03989	1.9279	1.8741	1.4353	1.9838	.04612	205.75

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.05039	.45924	.17897	.23437	1.4166	54.528	.95889
SDev	.00378	.00218	.00261	.00260	.0012	.228	.01406
%RSD	7.4930	.47411	1.4603	1.1089	.08303	.41897	1.4665

#1	.04858	.46231	.18119	.23615	1.4168	54.863	.96551
#2	.04658	.45928	.18067	.23143	1.4154	54.367	.93919
#3	.05534	.45769	.17857	.23300	1.4161	54.481	.95929
#4	.05107	.45769	.17543	.23693	1.4181	54.400	.97158

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	78.883	3.6474	.89577	104.07	.45732	.47606	.43595
SDev	.368	.0035	.01404	1.27	.00447	.03608	.00709
%RSD	.46661	.09721	1.5671	1.2186	.97839	7.5777	1.6274

#1	79.109	3.6505	.91508	104.43	.45506	.51149	.44193
#2	78.345	3.6484	.89726	102.31	.45943	.44957	.42970
#3	78.948	3.6484	.88538	104.20	.46242	.50249	.42992
#4	79.130	3.6423	.88538	105.33	.45237	.44071	.44225

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9530	15.313	1.8129	1.4036	.89474	1.8764	.46352
SDev	.0794	.055	.0481	.0105	.00320	.1071	.00480
%RSD	4.0648	.35763	2.6527	.74704	.35736	5.7104	1.0346

#1	2.0507	15.339	1.8384	1.4080	.89681	1.7571	.47064
#2	1.9697	15.231	1.8619	1.3888	.89000	2.0174	.46212

673 1143

#3	1.9316	15.344	1.7991	1.4044	.89563	1.8728	.46067
#4	1.8601	15.339	1.7521	1.4132	.89652	1.8583	.46066
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.47398
SDev	.00078
%RSD	.16404

#1	.47370
#2	.47461
#3	.47459
#4	.47300

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV79F

Operator: WTR

Run Time: 03/19/01 12:47:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00247	.01308	-.01923	.50341	.12012	.00007	167.23
SDev	.00158	.00739	.05790	.00175	.00079	.00006	.49
%RSD	63.841	56.470	301.10	.34752	.66082	79.351	.29374
#1	-.00110	.02409	.01060	.50078	.11959	.00016	167.11
#2	-.00384	.00878	-.06293	.50427	.11959	.00004	167.20
#3	-.00111	.01062	.04754	.50428	.12001	.00005	167.90
#4	-.00384	.00884	-.07214	.50429	.12127	.00005	166.73
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	-.00007	.00493	-.00039	.00243	.58038	6.4052	.00131
SDev	.00123	.00147	.00226	.00136	.00226	.1275	.00085
%RSD	1644.6	29.825	572.34	56.165	.38925	1.9902	64.781
#1	.00131	.00608	.00170	.00361	.57987	6.5941	.00065
#2	-.00158	.00609	.00065	.00282	.57782	6.3666	.00243
#3	-.00045	.00455	-.00040	.00282	.58055	6.3423	.00154
#4	.00041	.00301	-.00353	.00046	.58329	6.3179	.00065
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	32.055	3.3619	.00008	56.862	-.00012	.03969	.01237
SDev	.156	.0077	.00485	.396	.00805	.01904	.00619
%RSD	.48760	.22814	6383.2	.69564	6535.8	47.976	50.028
#1	31.954	3.3544	.00008	56.611	-.00854	.03972	.01534
#2	31.899	3.3575	.00602	56.579	.00800	.01324	.01547
#3	32.129	3.3718	-.00586	56.825	.00538	.05734	.01560
#4	32.238	3.3636	.00008	57.432	-.00534	.04845	.00309
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02684	6.3041	-.00181	.51321	-.00955	.07767	.00461
SDev	.03241	.0372	.02051	.00247	.00051	.06934	.00012
%RSD	120.76	.59078	1136.0	.48027	5.2956	89.267	2.6754
#1	.02803	6.2815	.00670	.51100	-.00903	.01259	.00462
#2	-.00533	6.2645	.00932	.51186	-.00962	.17163	.00476

#3	.01374	6.3437	-.03252	.51337	-.00932	.08496	.00446
#4	.07091	6.3267	.00927	.51660	-.01021	.04152	.00460
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00743
SDev	.00143
%RSD	19.257

#1	.00816
#2	.00811
#3	.00528
#4	.00816

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV8GF

Operator: WTR

Run Time: 03/19/01 12:50:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00209	.09615	-.02228	.63894	.26234	.00009	137.01
SDev	.00283	.00712	.02701	.00664	.00190	.00005	.52
%RSD	135.13	7.4024	121.22	1.0388	.72393	61.244	.37789

#1	.00168	.10372	-.01201	.64726	.25999	.00016	137.53
#2	-.00245	.09544	-.00726	.63822	.26209	.00006	137.04
#3	-.00517	.08678	-.00720	.63924	.26268	.00006	136.30
#4	-.00243	.09868	-.06265	.63104	.26460	.00006	137.16

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00181	.00407	.00039	.00233	12.323	4.2343	.00176
SDev	.00103	.00316	.00216	.00118	.055	.2623	.00062
%RSD	56.839	77.725	553.23	50.659	.44364	6.1958	35.052

#1	-.00098	.00599	.00274	.00410	12.298	4.5470	.00243
#2	-.00104	.00138	.00065	.00173	12.292	3.9053	.00154
#3	-.00206	.00753	.00065	.00174	12.298	4.2546	.00101
#4	-.00317	.00139	-.00249	.00174	12.405	4.2302	.00206

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.317	18.487	-.00581	40.574	-.00109	.00247	.01239
SDev	.205	.051	.00748	.464	.00470	.01327	.01182
%RSD	.67501	.27451	128.63	1.1433	431.86	536.83	95.441

#1	30.110	18.472	-.00433	39.962	.00093	-.00852	.00321
#2	30.227	18.475	-.01621	40.503	-.00547	-.00861	.02781
#3	30.343	18.441	.00161	40.785	.00458	.01804	.01551
#4	30.589	18.559	-.00432	41.044	-.00439	.00897	.00302

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01372	5.6082	-.00958	.50116	-.00659	-.04426	.00101
SDev	.03513	.0441	.03510	.00385	.00066	.06558	.00234
%RSD	255.99	.78572	366.23	.76751	9.9656	148.16	232.51

#1	-.00184	5.6026	-.03643	.49687	-.00577	-.05844	.00451
#2	.05531	5.6082	-.02064	.50010	-.00636	-.11608	-.00041

#3	-.02566	5.5573	-.02330	.50152	-.00725	.04258	.00004
#4	.02708	5.6648	.04204	.50613	-.00696	-.04511	-.00011

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

Elem	ZN
Units	ppm
Avge	.00500
SDev	.00190
%RSD	38.068

#1	.00373
#2	.00695
#3	.00304
#4	.00628

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV81F

Operator: WTR

Run Time: 03/19/01 12:54:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00332	.01780	.00155	.31847	.19367	.00009	172.49
SDev	.00193	.00459	.04779	.00671	.00125	.00006	.83
%RSD	58.292	25.799	3082.4	2.1068	.64652	65.092	.48280
#1	-.00195	.02236	.02109	.32818	.19231	.00017	173.09
#2	-.00605	.01237	.00735	.31426	.19524	.00006	171.54
#3	-.00195	.01572	.04419	.31771	.19315	.00006	172.03
#4	-.00331	.02074	-.06642	.31373	.19399	.00006	173.27
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00262	.00566	-.00079	.00172	12.168	4.3480	-.00002
SDev	.00178	.00340	.00178	.00203	.033	.4994	.00132
%RSD	67.878	60.110	227.00	118.04	.27018	11.486	6726.5
#1	-.00332	.00758	.00170	.00408	12.144	4.9938	.00117
#2	-.00007	.00910	-.00144	.00094	12.172	4.1652	-.00150
#3	-.00292	.00144	-.00249	-.00064	12.142	3.8078	-.00077
#4	-.00419	.00451	-.00092	.00251	12.213	4.4252	.00101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	28.468	7.4865	.00011	69.113	-.00661	.00040	.00313
SDev	.141	.0201	.00569	.701	.00508	.01020	.03021
%RSD	.49704	.26790	5269.9	1.0149	76.821	2564.0	966.36
#1	28.319	7.4832	.00753	68.276	-.00243	-.00841	-.02154
#2	28.634	7.4801	-.00435	69.993	-.00525	.00939	.04017
#3	28.388	7.4678	-.00435	69.070	-.00476	.00907	-.02151
#4	28.531	7.5149	.00160	69.113	-.01400	-.00846	.01539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01654	7.0438	-.03120	.47059	-.00977	.01823	.00029
SDev	.04504	.0255	.02237	.00310	.00051	.01382	.00071
%RSD	272.29	.36147	71.703	.65881	5.2486	75.821	244.90
#1	.01673	7.0566	-.02085	.46666	-.00932	.01494	.00135
#2	-.07846	7.0565	-.05458	.47402	-.01021	.00003	-.00011

#3	-.02139	7.0565	-.00516	.46998	-.01021	.02941	-.00012
#4	.01695	7.0056	-.04422	.47170	-.00932	.02854	.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	.00534
SDev	.00104
%RSD	19.420

#1	.00657
#2	.00403
#3	.00536
#4	.00537

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV82F

Operator: WTR

Run Time: 03/19/01 12:57:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00222	.02155	-.00492	.61508	.02633	.00014	78.943
SDev	.00069	.00853	.01428	.00001	.00040	.00006	.442
%RSD	31.107	39.592	290.08	.00132	1.5086	45.066	.55969
#1	-.00118	.03249	.01108	.61508	.02591	.00016	79.368
#2	-.00256	.02408	-.01187	.61508	.02608	.00005	78.959
#3	-.00255	.01387	-.02099	.61507	.02658	.00016	79.115
#4	-.00258	.01577	.00209	.61507	.02675	.00018	78.330
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00613	.00118	.00159	.07882	5.2984	.00224
SDev	.00199	.00218	.00200	.00187	.00259	.3560	.00048
%RSD	434.40	35.479	170.51	118.02	3.2883	6.7185	21.249
#1	-.00170	.00613	.00275	.00277	.08259	5.5462	.00243
#2	.00249	.00305	-.00144	-.00038	.07848	4.8395	.00243
#3	-.00101	.00767	.00275	.00355	.07711	5.6112	.00258
#4	-.00163	.00767	.00065	.00041	.07711	5.1969	.00154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.717	3.1769	.00150	56.842	-.00118	.00457	.01233
SDev	.180	.0072	.00569	.950	.00555	.01252	.01851
%RSD	.76078	.22534	380.34	1.6720	470.20	273.82	150.11
#1	23.454	3.1692	.00595	55.575	-.00235	-.00428	.00302
#2	23.771	3.1856	.00001	57.135	.00349	-.00431	.04010
#3	23.779	3.1794	.00595	56.807	.00268	.02227	.00315
#4	23.864	3.1733	-.00593	57.851	-.00854	.00461	.00306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02764	6.0693	-.00058	.27563	-.00437	.08805	.00350
SDev	.03573	.0477	.01647	.00294	.00066	.04921	.00243
%RSD	129.27	.78529	2854.6	1.0680	15.033	55.892	69.525
#1	.03599	5.9986	.01180	.27152	-.00340	.04819	.00477
#2	.03121	6.0948	.00412	.27678	-.00459	.04837	.00461

#3	.06456	6.0835	-.02480	.27583	-.00488	.14949	.00477
#4	-.02120	6.1004	.00658	.27841	-.00459	.10614	-.00015

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

Elem	ZN
Units	ppm
Avge	.01703
SDev	.00212
%RSD	12.473

#1	.01687
#2	.01592
#3	.02006
#4	.01527

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV89F

Operator: WTR

Run Time: 03/19/01 13:00:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	.06264	-.01963	.89985	.20418	.00012	53.101
SDev	.00068	.00524	.04190	.00174	.00126	.00011	.252
%RSD	228.38	8.3717	213.45	.19383	.61555	93.078	.47376
#1	-.00002	.05784	-.01736	.90070	.20363	.00028	53.212
#2	.00133	.06979	.03786	.89723	.20422	.00006	53.041
#3	-.00006	.06314	-.04029	.90074	.20590	.00007	52.782
#4	-.00005	.05979	-.05873	.90072	.20296	.00006	53.370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00149	.01062	.00157	.00152	4.8689	3.2209	.00265
SDev	.00281	.00331	.00108	.00075	.0069	.4997	.00070
%RSD	188.12	31.182	68.576	49.387	.14143	15.515	26.422
#1	-.00033	.01523	.00222	.00172	4.8620	3.8890	.00347
#2	L-.00570	.00756	.00066	.00250	4.8675	3.0605	.00227
#3	-.00004	.00908	.00066	.00093	4.8784	2.6949	.00190
#4	.00010	.01062	.00275	.00093	4.8675	3.2392	.00295
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.258	10.642	.00361	161.82	.01591	.01407	.01250
SDev	.075	.014	.00767	1.40	.00770	.01961	.03072
%RSD	.37006	.13277	212.57	.86259	48.418	139.36	245.77
#1	20.205	10.638	.01252	160.73	.02687	.00316	.00334
#2	20.252	10.631	.00658	161.87	.01455	-.00594	-.02135
#3	20.366	10.636	.00064	163.77	.00889	.03837	.05240
#4	20.210	10.663	-.00530	160.90	.01332	.02070	.01561
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02721	6.3748	-.01375	.23362	-.00200	.05047	.00038
SDev	.02333	.0492	.02493	.00114	.00044	.04797	.00345
%RSD	85.737	.77164	181.35	.48735	22.222	95.048	900.74
#1	.05578	6.3324	-.01117	.23278	-.00252	.04326	.00493
#2	-.00138	6.3324	-.04266	.23361	-.00163	.11551	.00017

#3	.02724	6.4115	.01780	.23524	-.00222	-.00025	-.00344
#4	.02721	6.4229	-.01897	.23287	-.00163	.04338	-.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	.00568
SDev	.00076
%RSD	13.399

#1	.00517
#2	.00679
#3	.00557
#4	.00520

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV9JF

Operator: WTR

Run Time: 03/19/01 13:03:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00356	.00852	-.02904	.38151	.12371	.00009	118.86
SDev	.00177	.01252	.04792	.00605	.00127	.00005	.45
%RSD	49.825	146.86	165.00	1.5870	1.0223	61.118	.37957
#1	-.00425	.00566	.00093	.39024	.12354	.00006	119.07
#2	-.00150	.01905	-.09585	.37625	.12245	.00006	118.41
#3	-.00286	.01738	.00996	.37976	.12337	.00016	119.39
#4	-.00562	-.00799	-.03119	.37977	.12546	.00006	118.57
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00209	.01683	-.00131	.00310	1.2198	2.0999	.00265
SDev	.00199	.00307	.00173	.00076	.0039	.2617	.00090
%RSD	95.437	18.218	132.06	24.380	.31878	12.465	34.075
#1	-.00211	.01836	.00065	.00290	1.2215	1.8826	.00243
#2	-.00081	.01836	-.00091	.00369	1.2140	2.4675	.00368
#3	-.00054	.01836	-.00144	.00369	1.2215	2.1019	.00295
#4	-.00489	.01223	-.00353	.00211	1.2222	1.9476	.00154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.171	14.394	.00016	59.392	.00896	.03538	.00022
SDev	.154	.050	.00485	.577	.00603	.03857	.00617
%RSD	.52900	.34581	3037.0	.97156	67.308	109.00	2786.9
#1	29.232	14.410	-.00578	59.362	.01193	.05749	-.00904
#2	28.949	14.320	.00610	58.816	.01106	.04867	.00331
#3	29.200	14.430	.00016	59.204	-.00002	.05750	.00322
#4	29.303	14.415	.00016	60.186	.01288	-.02213	.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	.03480	7.1400	-.02271	.35267	-.00710	-.03197	.00115
SDev	.04485	.0142	.03232	.00251	.00051	.07228	.00231
%RSD	128.87	.19821	142.29	.71088	7.2169	226.05	200.04
#1	.03481	7.1471	.01713	.35303	-.00696	-.01023	-.00014
#2	.09672	7.1188	-.04035	.34973	-.00666	-.03951	.00015

673 1155

#3	.01575	7.1471	-.01158	.35214	-.00696	-.12579	.00461
#4	-.00807	7.1471	-.05604	.35580	-.00784	.04765	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00903
SDev	.00168
%RSD	18.559

#1	.01029
#2	.00680
#3	.01035
#4	.00869

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV9NF

Operator: WTR

Run Time: 03/19/01 13:06:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00208	.01520	.01238	.28107	.20898	.00006	108.54
SDev	.00078	.00733	.02499	.00648	.00162	.00001	.81
%RSD	37.607	48.193	201.86	2.3062	.77497	12.787	.75013
#1	-.00276	.00552	-.01398	.27144	.20740	.00006	107.50
#2	-.00140	.02236	.01350	.28338	.20824	.00006	108.48
#3	-.00140	.01900	.04573	.28547	.21118	.00006	108.72
#4	-.00275	.01393	.00427	.28401	.20908	.00005	109.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00008	.00448	.00026	.00261	2.2360	2.2278	.01204
SDev	.00167	.00217	.00144	.00045	.0121	.1522	.00039
%RSD	2005.3	48.435	549.91	17.382	.53924	6.8314	3.2202
#1	.00216	.00448	-.00144	.00221	2.2230	2.1669	.01206
#2	-.00014	.00141	.00170	.00300	2.2298	2.3131	.01169
#3	-.00185	.00602	-.00039	.00222	2.2503	2.0450	.01258
#4	-.00051	.00602	.00117	.00300	2.2407	2.3862	.01185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.747	7.1177	.00326	65.463	.00203	.02144	.00929
SDev	.151	.0427	.00343	.620	.00509	.02278	.02133
%RSD	.69612	.60014	105.13	.94717	251.16	106.26	229.51
#1	21.575	7.0623	.00029	65.160	.00705	.03027	.00316
#2	21.692	7.1062	.00623	65.058	-.00045	.01251	.00312
#3	21.932	7.1482	.00624	66.386	.00539	-.00496	.04007
#4	21.790	7.1543	.00029	65.248	-.00388	.04795	-.00918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01441	8.3946	-.01406	.26682	-.00622	.05784	.00124
SDev	.02722	.0524	.02447	.00208	.00017	.09333	.00226
%RSD	188.88	.62396	174.10	.78080	2.7493	161.36	182.74
#1	-.00492	8.3521	.01207	.26497	-.00636	.07943	.00000
#2	-.02872	8.3465	-.04285	.26570	-.00607	-.00713	.00016

#3	-.04295	8.4427	-.00085	.26971	-.00607	-.02172	.00016
#4	.01895	8.4371	-.02459	.26691	-.00636	.18078	.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	.00192
SDev	.00170
%RSD	88.532

#1	.00192
#2	.00383
#3	.00221
#4	-.00029

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DWV9RF

Operator: WTR

Run Time: 03/19/01 13:09:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00219	.01435	-.01169	.30576	.19868	.00011	173.51
SDev	.00343	.00929	.05143	.01702	.00198	.00012	1.23
%RSD	156.25	64.770	440.11	5.5650	.99820	102.00	.71139

#1	.00226	.02070	.02963	.28045	.19877	.00017	174.63
#2	-.00323	.01220	-.03004	.31119	.19818	.00018	173.54
#3	-.00596	.00212	.02988	.31615	.20129	-.00006	171.78
#4	-.00184	.02239	-.07622	.31527	.19650	.00016	174.10

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00055	.00411	.00052	.00197	12.695	4.7278	.00096
SDev	.00410	.00316	.00312	.00186	.024	.8837	.00057
%RSD	745.03	76.760	596.80	94.259	.18875	18.693	58.950

#1	-.00233	.00450	.00118	.00336	12.729	5.5056	.00138
#2	.00124	.00449	.00223	.00178	12.684	4.7014	.00117
#3	-.00279	-.00010	-.00405	-.00059	12.696	3.4991	.00012
#4	.00608	.00755	.00274	.00335	12.673	5.2050	.00117

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	28.806	7.6789	.00315	69.559	-.00705	.02224	-.00312
SDev	.185	.0190	.00297	1.091	.00597	.04242	.01594
%RSD	.64323	.24718	94.346	1.5683	84.688	190.76	510.44

#1	28.854	7.7073	.00167	69.207	-.01044	.05311	-.02160
#2	28.830	7.6705	.00760	69.356	-.01022	.00019	.00299
#3	28.991	7.6674	.00166	71.112	-.00942	-.02645	-.00934
#4	28.549	7.6705	.00166	68.562	.00188	.06211	.01546

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00417	7.0933	-.00175	.47660	-.00984	.06170	.00210
SDev	.03528	.0350	.02292	.00449	.00112	.05933	.00234
%RSD	847.16	.49387	1311.9	.94309	11.353	96.164	111.48

#1	-.01478	7.1414	-.01032	.47614	-.00873	.06494	.00350
#2	.04701	7.0735	-.02068	.47596	-.00962	.05100	.00020

#3	-.03394	7.0961	.03157	.48260	-.01140	.13756	.00003
#4	-.01495	7.0622	-.00756	.47170	-.00962	-.00671	.00466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00306
SDev .00070
%RSD 22.759

#1 .00307
#2 .00278
#3 .00401
#4 .00238

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DWV9TF

Operator: WTR

Run Time: 03/19/01 13:13:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00136	.00805	-.02887	.00006	.00017	.00012	.02279
SDev	.00238	.00888	.03983	.00000	.00029	.00006	.00513
%RSD	174.98	110.35	137.96	1.9164	172.50	52.787	22.507
#1	-.00066	.00886	.00674	.00006	.00058	.00017	.02812
#2	.00069	.01236	-.00244	.00006	.00009	.00018	.02449
#3	-.00480	-.00462	-.03907	.00006	-.00009	.00007	.01589
#4	-.00068	.01559	-.08073	.00006	.00009	.00006	.02267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	.00134	.00153	.00092	.00079	.03215	.15231	.00043
SDev	.00307	.00217	.00346	.00136	.00264	.57479	.00132
%RSD	229.83	141.75	377.45	172.33	8.2207	377.37	310.77
#1	.00489	.00306	.00484	.00276	.03472	.95652	.00206
#2	-.00012	.00307	.00065	.00040	.03335	.17668	.00012
#3	.00266	-.00154	-.00353	-.00039	.02856	-.24573	-.00113
#4	-.00209	.00154	.00170	.00040	.03198	-.27822	.00065
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	.00265	.00052	.00000	.02904	-.00277	.03093	-.00002
SDev	.01900	.00051	.00485	.00495	.00457	.05347	.00612
%RSD	718.22	98.183	115230.	17.059	165.00	172.87	39987.
#1	.03109	.00078	.00000	.02735	.00261	.06630	.00308
#2	-.00860	.00077	-.00594	.03487	-.00337	.05745	-.00919
#3	-.00595	.00077	.00000	.02321	-.00847	.04851	.00302
#4	-.00595	-.00025	.00595	.03073	-.00184	-.04853	.00304
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01439	.06223	-.00653	.00002	.00007	-.00051	.00000
SDev	.01481	.00851	.01026	.00035	.00037	.04778	.00283
%RSD	102.91	13.677	156.99	1562.4	503.32	9408.0	139120.
#1	.02631	.07500	.00655	.00023	.00015	.03194	.00347
#2	-.00704	.05799	-.01703	.00032	.00044	-.06919	-.00015

#3	.01676	.05795	-.00391	-.00045	-.00044	.03212	-.00346
#4	.02154	.05799	-.01175	-.00002	.00015	.00310	.00015

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

Elem	ZN
Units	ppm
Avge	.00130
SDev	.00135
%RSD	103.85

#1	.00080
#2	.00308
#3	-.00013
#4	.00147

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-3

Operator: WTR

Run Time: 03/19/01 13:16:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97856	49.627	4.8837	4.8864	4.8120	4.8193	49.757
SDev	.00422	.415	.0829	.0527	.0566	.0413	.280
%RSD	.43113	.83606	1.6983	1.0789	1.1765	.85638	.56347
#1	.97662	49.878	4.8951	4.9100	4.8486	4.8502	49.680
#2	.97626	49.019	4.8251	4.8077	4.7289	4.7601	49.820
#3	.98489	49.706	4.8181	4.9075	4.8229	4.8223	50.101
#4	.97648	49.905	4.9967	4.9203	4.8474	4.8447	49.429
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	5.0349	4.8445	4.8089	4.7965	50.922	49.650	4.8311
SDev	.0372	.0196	.0211	.0611	.258	.303	.0844
%RSD	.73833	.40452	.43845	1.2734	.50733	.60961	1.7473
#1	5.0101	4.8637	4.8112	4.8388	51.075	50.029	4.8804
#2	5.0264	4.8301	4.8003	4.7113	50.560	49.290	4.7180
#3	5.0896	4.8590	4.8369	4.7932	51.136	49.615	4.8176
#4	5.0133	4.8254	4.7872	4.8427	50.919	49.664	4.9084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.728	4.8091	4.8114	49.779	4.8775	4.9099	4.8900
SDev	.382	.0217	.0171	.743	.0241	.0287	.0420
%RSD	.76892	.45173	.35512	1.4932	.49481	.58484	.85901
#1	49.967	4.8184	4.8129	50.291	4.9019	4.9301	4.9241
#2	49.160	4.7835	4.7890	48.760	4.8556	4.8856	4.8377
#3	49.845	4.8337	4.8129	49.693	4.8945	4.9389	4.9238
#4	49.940	4.8010	4.8307	50.370	4.8580	4.8848	4.8742
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	4.8266	5.0496	4.9314	4.8051	4.8047	9.6352	4.8148
SDev	.0992	.0049	.0594	.0509	.0330	.1982	.0236
%RSD	2.0563	.09623	1.2041	1.0602	.68649	2.0574	.49112
#1	4.8461	5.0498	4.9289	4.8383	4.8292	9.6254	4.8281
#2	4.7063	5.0436	4.8503	4.7300	4.7561	9.4748	4.7836

#3	4.9463	5.0555	4.9577	4.8168	4.8147	9.5233	4.8373
#4	4.8075	5.0496	4.9888	4.8351	4.8189	9.9172	4.8100
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 4.8793
SDev .0211
%RSD .43151

#1 4.8842
#2 4.8588
#3 4.9067
#4 4.8676

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB3

Operator: WTR

Run Time: 03/19/01 13:19:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00068	.00593	.04022	.03497	.00010	.00015	.00806
SDev	.00251	.01268	.09675	.00285	.00034	.00005	.00555
%RSD	369.49	213.80	240.58	8.1637	328.50	34.222	68.846
#1	.00208	.02064	.11252	.03847	.00051	.00016	.01527
#2	-.00207	-.00628	-.01600	.03147	.00016	.00007	.00623
#3	.00069	.01222	.13108	.03497	-.00033	.00018	.00871
#4	-.00342	-.00286	-.06673	.03497	.00009	.00018	.00202
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	-.00076	.00422	-.00078	.00040	.02069	.01625	-.00024
SDev	.00401	.00147	.00167	.00170	.00253	.53669	.00091
%RSD	525.63	34.891	213.37	425.64	12.231	3303.4	377.40
#1	-.00139	.00614	.00065	.00276	.02378	.76968	.00101
#2	.00461	.00306	-.00248	-.00117	.01761	-.46506	-.00061
#3	L-.00512	.00462	-.00196	.00040	.02104	-.00203	-.00113
#4	-.00115	.00307	.00065	-.00039	.02035	-.23761	-.00024
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	.00331	.00026	.00149	.01212	-.00654	-.00651	-.00005
SDev	.01801	.00059	.00569	.00484	.00330	.02324	.00618
%RSD	544.55	226.49	382.29	39.911	50.542	356.91	11264.
#1	.02580	.00077	.00594	.01870	-.00570	-.00425	.00307
#2	-.01124	-.00025	.00000	.01269	-.01139	-.03966	-.00932
#3	.00992	.00077	.00594	.00930	-.00402	.00454	.00299
#4	-.01124	-.00025	-.00594	.00780	-.00504	.01333	.00305
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	.02746	.03960	.00327	.00018	.00022	-.00035	-.00025
SDev	.01841	.03009	.02129	.00021	.00088	.01385	.00389
%RSD	67.029	75.970	651.10	112.20	398.14	3916.0	1542.7
#1	.04057	.06370	-.02222	.00045	.00133	-.01129	.00476
#2	.00720	.05228	-.00396	.00007	-.00015	-.01111	-.00462

#3	.01674	.04668	.02747	-.00002	.00044	.00325	.00015
#4	.04532	-.00426	.01179	.00023	-.00074	.01773	-.00130

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 -.00029
SDev .00095
%RSD 325.46

#1	.00017
#2	.00082
#3	-.00108
#4	-.00108

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW8TXB

Operator: WTR

Run Time: 03/19/01 13:22:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00273	-.00084	.00574	.00004	.00008	.00009	.01293
SDev	.00177	.01263	.01660	.00000	.00012	.00011	.00286
%RSD	64.684	1507.1	289.35	2.1951	145.14	127.66	22.115
#1	-.00341	-.01142	.02999	.00004	.00016	.00018	.01545
#2	-.00205	-.00296	.00230	.00004	-.00009	.00018	.01203
#3	-.00478	-.00635	-.00688	.00004	.00016	-.00006	.00929
#4	-.00068	.01737	-.00247	.00004	.00009	.00006	.01496
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	-.00231	.00193	.00118	.00138	.02274	.46303	.00054
SDev	.00174	.00193	.00074	.00118	.00213	.49101	.00084
%RSD	75.034	100.20	62.854	85.410	9.3568	106.04	155.02
#1	-.00335	.00154	.00222	.00197	.02240	.86716	.00044
#2	-.00420	.00155	.00118	.00276	.02172	.89153	.00117
#3	-.00115	.00000	.00065	.00040	.02103	-.07514	-.00061
#4	-.00056	.00461	.00065	.00040	.02582	.16856	.00117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00794	.00001	.00000	.00442	-.00765	.01109	.00301
SDev	.01812	.00051	.00000	.00540	.00160	.04167	.01005
%RSD	228.32	8416.1	9.3568	122.35	20.926	375.68	333.48
#1	.02844	-.00025	.00000	.00103	-.00876	.03977	-.00932
#2	.01786	-.00025	.00000	.00555	-.00606	.03978	.00305
#3	-.00595	-.00025	.00000	-.00047	-.00650	-.04856	.00303
#4	-.00860	.00077	.00000	.01156	-.00927	.01338	.01529
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	.01317	.03536	-.00391	-.00017	-.00030	.05745	.00000
SDev	.02733	.02654	.01266	.00004	.00051	.03805	.00000
%RSD	207.50	75.047	324.08	25.454	173.21	66.229	60.945
#1	.01675	.04668	-.00657	-.00020	-.00015	.08997	.00000
#2	.04533	-.00424	-.01437	-.00020	-.00015	.03217	.00000

#3	-.02137	.05233	-.00913	-.00020	-.00104	.09001	.00000
#4	.01199	.04668	.01445	-.00011	.00015	.01763	.00000

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 -.00062
SDev .00032
%RSD 52.066

#1	-.00079
#2	-.00014
#3	-.00079
#4	-.00078

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW8TXC

Operator: WTR

Run Time: 03/19/01 13:25:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04592	1.9573	1.9212	.95949	1.9330	.04776	47.530
SDev	.00251	.0160	.0705	.00523	.0192	.00033	.352
%RSD	5.4601	.81605	3.6697	.54533	.99518	.69203	.74038
#1	.04730	1.9644	2.0212	.95194	1.9182	.04760	47.781
#2	.04317	1.9374	1.9018	.96035	1.9490	.04797	47.076
#3	.04456	1.9527	1.8556	.96181	1.9503	.04808	47.429
#4	.04867	1.9745	1.9060	.96386	1.9147	.04737	47.833
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	.05301	.47302	.18747	.24083	1.0288	48.271	.97589
SDev	.00364	.00377	.00314	.00231	.0068	.350	.01605
%RSD	6.8564	.79674	1.6748	.95981	.66489	.72481	1.6442
#1	.05559	.47763	.19113	.23927	1.0372	47.820	.96159
#2	.05135	.46994	.18486	.24319	1.0208	48.640	.99168
#3	.04870	.46994	.18485	.24240	1.0270	48.421	.98775
#4	.05642	.47456	.18904	.23848	1.0304	48.202	.96256
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	48.574	.47455	.93137	49.362	.48151	.49434	.48819
SDev	.280	.00194	.00748	.731	.00588	.01261	.06386
%RSD	.57573	.40805	.80265	1.4804	1.2209	2.5501	13.082
#1	48.308	.47583	.93286	48.722	.47316	.49451	.51581
#2	48.805	.47174	.93285	49.984	.48666	.47645	L.39279
#3	48.826	.47582	.92097	50.006	.48204	.50312	.51600
#4	48.358	.47481	.93880	48.736	.48416	.50326	.52817
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	1.8267	9.5342	1.8567	.95368	.92708	2.0602	.47913
SDev	.0431	.0046	.0098	.00838	.00368	.0722	.00229
%RSD	2.3568	.04867	.52887	.87846	.39743	3.5058	.47831
#1	1.8827	9.5342	1.8542	.94635	.92345	2.0492	.48033
#2	1.7779	9.5285	1.8563	.96023	.92819	2.1074	.47571

#3	1.8255	9.5342	1.8464	.96161	.93174	2.1217	.48002
#4	1.8208	9.5398	1.8700	.94653	.92494	1.9626	.48048
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	.47518
SDev	.00376
%RSD	.79111

#1	.46983
#2	.47778
#3	.47527
#4	.47783

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DW8LD

Operator: WTR

Run Time: 03/19/01 13:28:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00128	.24286	.00384	.22972	.41056	.00007	242.57
SDev	.00176	.01223	.03809	.00542	.00163	.00006	.48
%RSD	138.15	5.0349	992.43	2.3577	.39647	78.985	.19988
#1	.00077	.25770	.05896	.23599	.40878	.00005	243.20
#2	-.00059	.23047	-.00527	.23188	.41272	.00016	242.37
#3	-.00196	.24763	-.02842	.22757	.41045	.00005	242.06
#4	-.00333	.23564	-.00992	.22345	.41028	.00004	242.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00177	.00168	.00170	.00246	.94584	10.644	.02616
SDev	.00301	.00193	.00205	.00102	.00168	.109	.00068
%RSD	170.13	115.34	120.75	41.280	.17712	1.0287	2.6160
#1	-.00457	-.00023	.00065	.00128	.94379	10.534	.02577
#2	-.00007	.00129	.00432	.00207	.94721	10.640	.02718
#3	.00160	.00128	-.00040	.00286	.94721	10.607	.02577
#4	-.00405	.00437	.00222	.00365	.94515	10.794	.02592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.800	.87723	.00309	378.27	-.00056	.05035	.00311
SDev	.177	.00129	.00767	1.79	.00416	.03095	.00012
%RSD	.25744	.14659	247.87	.47409	737.91	61.467	3.6803
#1	68.656	.87851	.00012	375.96	.00275	.00393	.00319
#2	69.058	.87749	.01201	380.34	-.00351	.06580	.00295
#3	68.741	.87749	-.00582	378.40	-.00475	.06578	.00320
#4	68.743	.87545	.00606	378.39	.00326	.06588	.00311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01132	7.2574	-.01881	3.8197	-.00718	.08760	.00469
SDev	.01761	.0150	.02484	.0111	.00051	.09332	.00020
%RSD	155.55	.20626	132.09	.28941	7.0426	106.53	4.2154
#1	.00058	7.2433	-.03254	3.8072	-.00666	.16715	.00461
#2	-.01846	7.2772	.00930	3.8342	-.00696	.06590	.00492

673 1171

#3	-.03275	7.2490	-.04561	3.8187	-.00725	.15263	.00446
#4	.00535	7.2603	-.00638	3.8188	-.00784	-.03528	.00477
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00372
SDev	.00192
%RSD	51.706

#1	.00300
#2	.00397
#3	.00623
#4	.00167

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8LDP5

Operator: WTR

Run Time: 03/19/01 13:31:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00072	.05540	-.01223	.05337	.08607	.00014	50.366
SDev	.00193	.00639	.04025	.02435	.00083	.00006	.022
%RSD	269.98	11.540	329.05	45.627	.96815	45.087	.04293
#1	.00070	.05623	-.03980	.05835	.08538	.00018	50.365
#2	.00346	.05963	.02454	.05692	.08538	.00016	50.393
#3	-.00065	.04611	-.05361	.01990	.08647	.00016	50.340
#4	-.00064	.05961	.01994	.07830	.08706	.00005	50.366
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00333	.00264	.00091	.00120	.19871	2.6523	.00563
SDev	.00157	.00384	.00163	.00064	.00086	.1757	.00043
%RSD	47.253	145.29	177.87	53.487	.43372	6.6229	7.7135
#1	-.00134	.00302	.00013	.00042	.19888	2.4350	.00599
#2	-.00435	.00149	.00327	.00120	.19888	2.8249	.00546
#3	-.00480	.00764	.00065	.00200	.19751	2.7599	.00599
#4	-.00283	-.00158	-.00040	.00120	.19957	2.5893	.00510
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.301	.18696	.00151	76.016	-.00233	.02647	.00309
SDev	.058	.00083	.00297	.718	.00480	.02091	.00008
%RSD	.40237	.44624	196.56	.94450	205.83	79.005	2.6538
#1	14.239	.18593	.00597	75.319	-.00665	.03089	.00303
#2	14.265	.18798	.00003	75.488	-.00555	.03968	.00302
#3	14.350	.18695	.00003	76.498	-.00096	-.00428	.00310
#4	14.350	.18695	.00003	76.757	.00384	.03959	.00320
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01129	1.5092	-.00977	.79871	-.00126	.08822	.00350
SDev	.04812	.0294	.01973	.00557	.00051	.06134	.00223
%RSD	426.35	1.9489	202.03	.69720	40.184	69.529	63.792
#1	-.04940	1.4837	-.01957	.79305	-.00104	.17495	.00015
#2	.05065	1.5347	.00396	.79499	-.00074	.07377	.00462

#3	-.04940	1.4838	.00920	.80210	-.00192	.03037	.00461
#4	.00301	1.5347	-.03265	.80469	-.00133	.07378	.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	.00203
SDev	.00161
%RSD	79.058

#1	-.00014
#2	.00243
#3	.00373
#4	.00211

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8LDS

Operator: WTR

Run Time: 03/19/01 13:35:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04307	2.3035	1.7580	1.1265	2.1919	.04469	281.94
SDev	.00193	.0065	.0718	.0058	.0134	.00020	1.19
%RSD	4.4907	.28368	4.0846	.51249	.61215	.45383	.42074

#1	.04309	2.3125	1.8062	1.1346	2.1919	.04472	281.26
#2	.04444	2.3038	1.8248	1.1227	2.1844	.04449	282.46
#3	.04033	2.3007	1.7327	1.1264	2.2107	.04496	280.69
#4	.04444	2.2972	1.6683	1.1221	2.1805	.04461	283.33

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04893	.44341	.17478	.23263	1.8107	58.967	.97075
SDev	.00546	.00149	.00198	.00187	.0020	.533	.01008
%RSD	11.154	.33515	1.1310	.80433	.11130	.90324	1.0383

#1	.05600	.44224	.17543	.23381	1.8107	59.266	.97271
#2	.05034	.44380	.17701	.23067	1.8079	58.510	.96761
#3	.04549	.44225	.17229	.23460	1.8114	59.566	.98338
#4	.04388	.44535	.17439	.23145	1.8127	58.526	.95929

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	114.09	1.2901	.87355	H417.66	.44333	.49517	.48220
SDev	.51	.0014	.00840	4.03	.01363	.01504	.05982
%RSD	.44947	.11226	.96176	.96518	3.0747	3.0382	12.405

#1	114.13	1.2881	.86761	H418.28	.44161	.50181	.51604
#2	113.65	1.2911	.88543	H415.09	.43228	.49301	.50359
#3	114.79	1.2901	.86761	H423.10	.46296	.47533	.51624
#4	113.77	1.2911	.87355	H414.16	.43646	.51055	.39292

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	1.8494	16.794	1.7681	4.5724	.86862	1.7856	.45201
SDev	.0625	.031	.0290	.0232	.00133	.1217	.00164
%RSD	3.3818	.18532	1.6430	.50657	.15336	6.8155	.36303

#1	1.8089	16.815	1.7892	4.5744	.86869	1.7531	.45445
#2	1.8613	16.753	1.7447	4.5576	.86751	1.6375	.45145

#3	1.7946	16.821	1.7970	4.6043	.87047	1.9265	.45099
#4	1.9328	16.787	1.7416	4.5532	.86780	1.8253	.45114
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .45980
SDev .00185
%RSD .40244

#1 .46109
#2 .45791
#3 .46166
#4 .45855

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8LDD

Operator: WTR

Run Time: 03/19/01 13:38:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04276	2.3325	1.8773	1.1320	2.2248	.04521	289.15
SDev	.00130	.0077	.0496	.0168	.0148	.00024	.73
%RSD	3.0478	.33049	2.6427	1.4834	.66520	.53759	.25347

#1	.04173	2.3309	1.8843	1.1571	2.2388	.04542	288.40
#2	.04446	2.3240	1.9396	1.1227	2.2099	.04495	288.77
#3	.04311	2.3326	1.8658	1.1262	2.2143	.04506	289.35
#4	.04175	2.3427	1.8197	1.1221	2.2361	.04541	290.08

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05173	.44721	.17818	.23480	1.8235	59.587	.98057
SDev	.00162	.00384	.00300	.00186	.0069	.469	.00985
%RSD	3.1340	.85845	1.6843	.79175	.37880	.78682	1.0048

#1	.05140	.44221	.17386	.23617	1.8278	59.363	.99236
#2	.05056	.44685	.17962	.23224	1.8155	59.160	.97190
#3	.05411	.44837	.17857	.23460	1.8203	59.582	.97300
#4	.05086	.45142	.18066	.23618	1.8305	60.240	.98501

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	116.19	1.3190	.88543	H428.49	.44791	.47544	.50677
SDev	.62	.0041	.00485	3.46	.01600	.03148	.07691
%RSD	.53656	.31267	.54781	.80774	3.5716	6.6204	15.177

#1	116.74	1.3187	.88543	H431.96	.45881	.43117	.52845
#2	115.61	1.3157	.89137	H425.23	.43390	.49317	.55269
#3	115.69	1.3167	.87949	H425.80	.46443	.47554	.55322
#4	116.72	1.3249	.88543	H430.95	.43450	.50186	.39271

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	1.8912	17.026	1.7813	4.6874	.87335	1.8433	.45808
SDev	.0399	.106	.0317	.0265	.00392	.0557	.00231
%RSD	2.1113	.62256	1.7778	.56597	.44914	3.0233	.50414

#1	1.9043	17.081	1.7683	4.7116	.87609	1.8830	.45605
#2	1.9328	16.889	1.8181	4.6593	.86928	1.7820	.45621

#3	1.8375	17.002	1.7448	4.6702	.87076	1.8108	.45937
#4	1.8900	17.132	1.7938	4.7083	.87727	1.8974	.46067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .46616
SDev .00301
%RSD .64656

#1 .46811
#2 .46179
#3 .46651
#4 .46821

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8L1

Operator: WTR

Run Time: 03/19/01 13:41:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00046	2.7202	-.02213	.25678	.54450	.00021	90.455
SDev	.00172	.0076	.03046	.01048	.00323	.00006	.236
%RSD	376.23	.28039	137.66	4.0829	.59402	30.403	.26093
#1	.00013	2.7295	-.02915	.25569	.54750	.00027	90.625
#2	.00010	2.7194	-.01975	.27065	.54138	.00016	90.662
#3	.00285	2.7209	-.05666	.25561	.54205	.00027	90.376
#4	-.00125	2.7109	.01706	.24516	.54708	.00015	90.157
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.00563	.00588	.01011	4.2838	8.7082	.01627
SDev	.00388	.00126	.00121	.00099	.0156	.2992	.00077
%RSD	2619.0	22.303	20.538	9.7974	.36303	3.4362	4.7458
#1	.00132	.00563	.00693	.01030	4.3035	8.8605	.01666
#2	-.00084	.00410	.00484	.00873	4.2802	8.2594	.01525
#3	.00406	.00562	.00693	.01109	4.2659	8.8605	.01614
#4	L-.00513	.00718	.00483	.01030	4.2857	8.8524	.01703
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.856	1.2613	.00205	H457.06	.00124	.02569	.00598
SDev	.156	.0026	.00297	3.52	.00347	.03414	.00615
%RSD	.33949	.20432	145.10	.77004	279.91	132.90	102.86
#1	45.990	1.2649	.00056	H459.28	-.00235	.04554	.00289
#2	45.704	1.2608	.00056	H453.76	.00173	-.00747	.00293
#3	45.739	1.2588	.00650	H454.37	.00581	.00141	.00290
#4	45.990	1.2608	.00056	H460.81	-.00023	.06328	.01521
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	.00513	12.242	.00474	1.2087	.09946	-.00899	.00813
SDev	.03815	.041	.01198	.0065	.00038	.11632	.00233
%RSD	743.98	.33861	252.81	.54029	.38423	1293.5	28.685
#1	-.05079	12.301	-.00116	1.2147	.09902	.00155	.00925
#2	.03489	12.228	-.00900	1.2032	.09932	.03085	.00463

#3	.02055	12.205	.01191	1.2028	.09961	-.17134	.00940
#4	.01585	12.233	.01720	1.2139	.09991	.10297	.00924
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01501
SDev .00126
%RSD 8.3857

#1 .01559
#2 .01330
#3 .01622
#4 .01492

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8L2

Operator: WTR

Run Time: 03/19/01 13:44:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00235	.05439	.00745	.16786	.92370	.00016	374.97
SDev	.00068	.00539	.03349	.00000	.00525	.00010	1.13
%RSD	29.105	9.9144	449.57	.00103	.56807	59.419	.30011

#1	-.00201	.04933	-.00287	.16786	.92785	.00004	374.22
#2	-.00337	.05095	.03855	.16786	.91754	.00028	373.99
#3	-.00201	.06126	.02926	.16786	.92114	.00016	375.22
#4	-.00201	.05603	-.03515	.16786	.92827	.00016	376.46

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00406	-.00144	.01673	.07859	100.30	.18597
SDev	.00156	.00001	.00267	.00075	.00086	.78	.00178
%RSD	5753.4	.14807	185.71	4.5021	1.0953	.78014	.95825

#1	-.00055	.00406	-.00405	.01614	.07842	101.02	.18779
#2	-.00190	.00407	-.00144	.01614	.07842	99.411	.18548
#3	.00175	.00405	-.00249	.01692	.07979	99.874	.18370
#4	.00058	.00405	.00223	.01771	.07774	100.89	.18690

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24605	.00284	.01338	S2992.3	.01649	.00668	.00325
SDev	.00999	.00000	.00569	.1	.00491	.02432	.00005
%RSD	4.0590	.05800	42.519	.00500	29.787	363.88	1.5692

#1	.23745	.00284	.01189	S2992.4	.02148	-.02201	.00328
#2	.25597	.00284	.01783	S2992.5	.01084	.03097	.00317
#3	.23745	.00283	.00595	S2992.2	.01404	-.00436	.00328
#4	.25333	.00284	.01783	S2992.2	.01958	.02214	.00325

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	.00620	3.2207	-.00774	12.507	-.02102	.02041	.00494
SDev	.06018	.0378	.01728	.065	.00030	.08541	.00015
%RSD	970.34	1.1740	223.15	.51997	1.4084	418.54	2.9735

#1	.05503	3.2546	.01449	12.553	-.02146	.07461	.00490
#2	-.07360	3.1754	-.01167	12.430	-.02087	.10352	.00506

#3	-.00690	3.2490	-.00644	12.477	-.02087	-.08440	.00475
#4	.05027	3.2037	-.02736	12.568	-.02087	-.01210	.00506

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

Elem	ZN
Units	ppm
Avge	.00905
SDev	.00159
%RSD	17.605

#1	.01097
#2	.00874
#3	.00712
#4	.00937

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L4

Operator: WTR

Run Time: 03/19/01 13:47:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00067	.01059	-.00131	.00796	.00008	.00012	.03874
SDev	.00251	.01006	.08383	.01572	.00012	.00007	.00222
%RSD	376.04	95.047	6405.6	197.50	145.14	63.101	5.7395
#1	.00069	.01398	.01595	.03153	.00016	.00006	.04164
#2	-.00341	-.00127	.00226	.00009	-.00009	.00018	.03743
#3	-.00204	.00721	.08966	.00009	.00016	.00018	.03663
#4	.00209	.02243	-.11310	.00011	.00009	.00005	.03925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00122	.00077	.00235	.00099	.04908	.35743	.00074
SDev	.00481	.00294	.00173	.00075	.00201	.16061	.00055
%RSD	393.89	381.48	73.502	76.146	4.1037	44.935	74.784
#1	.00437	.00306	.00484	.00197	.04771	.58285	.00065
#2	-.00061	.00000	.00118	.00040	.04703	.21730	.00028
#3	L-.00736	.00309	.00222	.00040	.05045	.27416	.00154
#4	-.00128	-.00307	.00117	.00118	.05113	.35539	.00049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00265	.00078	-.00148	.03383	-.00674	-.00882	.00303
SDev	.01210	.00000	.00297	.00967	.00512	.02106	.00006
%RSD	457.35	.10878	200.86	28.579	75.998	238.71	2.0390
#1	.00463	.00078	.00001	.04051	-.01095	.02215	.00294
#2	-.01124	.00078	.00001	.02773	.00071	-.01325	.00307
#3	.01786	.00078	.00001	.02359	-.00803	-.02200	.00304
#4	-.00066	.00078	-.00593	.04351	-.00869	-.02219	.00306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03231	.02264	-.00848	.00069	.00000	.02814	.00112
SDev	.02213	.03113	.01305	.00014	.00051	.08941	.00223
%RSD	68.491	137.49	153.92	19.476	440e6	317.75	198.94
#1	.03112	.04668	.00394	.00075	.00044	-.02605	.00001
#2	.04064	-.00424	.00133	.00063	-.00044	.10407	.00000

673 1183

#3	.05495	-.00424	-.02221	.00054	-.00044	-.06946	.00000
#4	.00254	.05238	-.01698	.00084	.00044	.10400	.00446
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00028
SDev	.00097
%RSD	350.19

#1	.00149
#2	-.00015
#3	-.00078
#4	.00056

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L5

Operator: WTR

Run Time: 03/19/01 13:50:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00396	1.8335	-.06354	.97079	11.583	.00024	363.89
SDev	.00250	.0198	.03300	.02234	.106	.00006	2.18
%RSD	63.212	1.0789	51.940	2.3007	.91260	25.697	.59872

#1	-.00671	1.8493	-.05672	.98798	11.734	.00028	361.82
#2	-.00122	1.8051	-.09321	.95354	11.514	.00015	362.92
#3	-.00258	1.8441	-.08436	.99207	11.579	.00027	363.92
#4	-.00531	1.8356	-.01987	.94956	11.505	.00027	366.90

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	-.00294	-.00008	.00222	.00452	10.824	21.703	.01610
SDev	.00228	.00148	.00222	.00075	.031	.285	.00031
%RSD	77.474	1868.2	100.06	16.681	.28276	1.3123	1.9209

#1	-.00283	.00021	.00222	.00393	10.842	21.866	.01577
#2	-.00213	-.00119	-.00092	.00392	10.781	21.297	.01598
#3	-.00071	-.00124	.00379	.00550	10.826	21.931	.01650
#4	L-.00609	.00190	.00379	.00472	10.848	21.720	.01614

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	192.18	1.7481	-.00304	S-.10498	.00343	.05032	.00624
SDev	1.07	.0063	.00569	.00000	.01446	.02537	.00600
%RSD	.55809	.36224	187.14	.00000	422.03	50.413	96.104

#1	193.61	1.7494	-.01046	S-.10498	.01893	.07901	.00329
#2	191.08	1.7402	.00141	S-.10498	.01120	.05252	.00330
#3	192.27	1.7474	-.00452	S-.10498	-.01349	.01719	.01524
#4	191.75	1.7555	.00142	S-.10498	-.00293	.05258	.00314

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02077	11.823	-.04789	3.4416	.04218	.11294	.00800
SDev	.02357	.067	.03889	.0270	.00064	.09335	.00243
%RSD	113.49	.56677	81.206	.78534	1.5160	82.653	30.402

#1	-.03977	11.871	-.02109	3.4797	.04159	.23555	.00435
#2	.01245	11.724	-.08124	3.4221	.04189	.13526	.00925

#3	-.02076	11.854	-.00797	3.4417	.04307	.04787	.00911
#4	-.03498	11.843	-.08124	3.4227	.04218	.03309	.00926
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00928
SDev .00186
%RSD 20.107

#1 .00888
#2 .00704
#3 .01155
#4 .00963

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-4

Operator: WTR

Run Time: 03/19/01 13:54:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97344	49.409	4.7739	4.8483	4.7961	4.7831	49.412
SDev	.00295	.254	.0333	.0402	.0393	.0233	.347
%RSD	.30315	.51505	.69690	.82826	.81847	.48627	.70191
#1	.96932	49.392	4.8086	4.8537	4.7965	4.7835	49.313
#2	.97348	49.771	4.7409	4.8972	4.8512	4.8156	48.964
#3	.97480	49.278	4.7957	4.7995	4.7734	4.7703	49.665
#4	.97614	49.195	4.7504	4.8426	4.7633	4.7630	49.707
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	5.0184	4.8101	4.7565	4.7677	50.544	49.313	4.8096
SDev	.0411	.0178	.0211	.0436	.021	.474	.0688
%RSD	.81962	.36997	.44306	.91442	.04091	.96218	1.4295
#1	5.0028	4.8025	4.7432	4.7671	50.521	48.957	4.8166
#2	4.9699	4.7887	4.7343	4.8292	50.568	49.680	4.9041
#3	5.0361	4.8224	4.7694	4.7427	50.554	49.761	4.7633
#4	5.0650	4.8269	4.7788	4.7317	50.534	48.852	4.7544
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	49.481	4.7773	4.7786	49.065	4.8232	4.8759	4.8498
SDev	.216	.0086	.0244	.563	.0113	.0384	.0831
%RSD	.43746	.18106	.51131	1.1465	.23358	.78831	1.7130
#1	49.451	4.7732	4.7712	49.091	4.8328	4.8228	4.8993
#2	49.787	4.7671	4.7474	49.849	4.8196	4.8751	4.8992
#3	49.408	4.7845	4.7950	48.718	4.8317	4.9117	4.8742
#4	49.279	4.7845	4.8009	48.602	4.8089	4.8940	4.7264
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	4.7301	5.0123	4.9424	4.7729	4.7737	9.5006	4.7686
SDev	.0435	.0283	.0837	.0315	.0138	.1313	.0048
%RSD	.91937	.56462	1.6936	.66082	.28876	1.3821	.10158
#1	4.7538	4.9699	4.9054	4.7717	4.7700	9.3600	4.7669
#2	4.7063	5.0265	5.0178	4.8178	4.7940	9.6051	4.7755

#3	4.7778	5.0265	5.0047	4.7540	4.7665	9.6196	4.7676
#4	4.6824	5.0264	4.8419	4.7481	4.7641	9.4175	4.7643

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 4.8277
SDev .0136
%RSD .28253

#1 4.8351
#2 4.8076
#3 4.8372
#4 4.8308

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB4

Operator: WTR

Run Time: 03/19/01 13:57:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.00172	-.04258	.02533	.00012	.00021	.00618
SDev	.00172	.00721	.05722	.01697	.00024	.00006	.00419
%RSD	495.05	420.15	134.38	66.990	196.30	27.153	67.690
#1	-.00071	-.00798	.00705	-.00000	-.00009	.00019	.00051
#2	-.00205	.00044	-.09438	.03493	.00033	.00030	.00800
#3	-.00068	.00728	-.08983	.03494	-.00009	.00018	.00592
#4	.00205	.00713	.00684	.03145	.00033	.00018	.01030
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	-.00271	.00193	.00118	.00157	.00103	.26807	.00069
SDev	.00143	.00193	.00222	.00136	.00197	.46074	.00064
%RSD	52.970	100.36	188.39	86.571	191.59	171.87	92.768
#1	-.00215	.00001	-.00196	-.00039	-.00154	-.27822	-.00024
#2	-.00348	.00461	.00170	.00197	.00120	.78593	.00117
#3	-.00099	.00154	.00170	.00197	.00120	.09545	.00080
#4	-.00423	.00154	.00327	.00275	.00325	.46912	.00101
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	.00794	-.00026	.00000	.01043	-.00333	.01110	.00616
SDev	.01900	.00000	.00485	.00477	.00394	.02325	.00616
%RSD	239.41	.68959	3609000.	45.677	118.29	209.40	100.06
#1	-.01124	-.00026	-.00000	.00479	-.00483	-.02207	.00309
#2	.01521	-.00026	.00000	.01607	-.00381	.01338	.00302
#3	-.00331	-.00026	-.00594	.00893	-.00694	.02212	.00311
#4	.03109	-.00025	.00594	.01194	.00225	.03097	.01540
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	.00358	.00282	-.01959	.00029	.00007	-.00364	-.00115
SDev	.03509	.00540	.02167	.00013	.00051	.02508	.00231
%RSD	981.17	191.88	110.62	44.410	683.13	689.31	201.10
#1	.00714	.00702	-.03267	.00011	-.00044	.03258	-.00461
#2	.04526	.00141	.01178	.00032	.00015	-.01090	.00000

#3	-.04049	-.00424	-.03529	.00032	-.00015	-.02533	-.00015
#4	.00239	.00707	-.02217	.00041	.00074	-.01091	.00016

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	.00160
%RSD	250.37

#1	-.00241
#2	-.00080
#3	.00148
#4	-.00082

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW8L6

Operator: WTR

Run Time: 03/19/01 14:00:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00153	23.667	-.02184	1.0228	3.0279	.00235	H601.29
SDev	.00177	.168	.02282	.0061	.0250	.00001	3.52
%RSD	115.40	.70853	104.49	.59714	.82470	.29979	.58579
#1	-.00361	23.714	-.03016	1.0245	3.0450	.00235	597.02
#2	-.00220	23.704	.00197	1.0246	3.0350	.00234	H601.39
#3	.00050	23.428	-.00950	1.0140	2.9910	.00235	H605.64
#4	-.00083	23.821	-.04965	1.0282	3.0406	.00234	H601.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00330	.02330	.03436	.04291	43.571	31.600	.04810
SDev	.00434	.00340	.00275	.00065	.061	.460	.00066
%RSD	131.77	14.598	8.0124	1.5077	.13924	1.4544	1.3687
#1	L-.00808	.01832	.03410	.04289	43.500	31.573	.04837
#2	.00187	.02444	.03200	.04291	43.599	31.703	.04748
#3	-.00163	.02448	.03828	.04212	43.546	31.005	.04764
#4	L-.00535	.02598	.03305	.04370	43.638	32.118	.04890

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	222.46	4.9022	-.00618	S-.10498	.03609	.08785	.03304
SDev	.96	.0116	.00484	.00000	.00932	.01663	.06157
%RSD	.43118	.23649	78.408	.00000	25.814	18.932	186.38
#1	222.71	4.8851	-.00025	S-.10498	.02760	.09869	.00223
#2	222.75	4.9066	-.00617	S-.10498	.03405	.06371	.12539
#3	221.08	4.9106	-.00618	S-.10498	.03335	.09904	.00223
#4	223.30	4.9066	-.01211	S-.10498	.04938	.08997	.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	-.01669	H46.211	-.03291	4.5290	.77633	.22264	.06705
SDev	.05376	.183	.05999	.0292	.00245	.10807	.00228
%RSD	322.04	.39593	182.30	.64517	.31598	48.540	3.3955
#1	.04382	H46.265	-.09842	4.5454	.77633	.18035	.06461
#2	-.04638	H46.259	-.02729	4.5378	.77692	.19330	.06906

#3	.01062	H45.948	-.05133	4.4856	.77307	.13635	.06562
#4	-.07484	H46.373	.04541	4.5472	.77899	.38057	.06891

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	.12680
SDev	.00169
%RSD	1.3365

#1	.12753
#2	.12563
#3	.12883
#4	.12519

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L8

Operator: WTR

Run Time: 03/19/01 14:03:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00328	1.7920	-.03181	.30501	1.2230	.00022	394.17
SDev	.00249	.0106	.03326	.00203	.0038	.00007	2.81
%RSD	75.849	.59254	104.55	.66413	.31175	30.313	.71208
#1	-.00056	1.7966	-.08129	.30320	1.2215	.00016	392.26
#2	-.00602	1.8000	-.01232	.30331	1.2246	.00016	395.06
#3	-.00464	1.7764	-.02135	.30673	1.2273	.00027	391.63
#4	-.00192	1.7949	-.01228	.30680	1.2185	.00028	397.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00385	.00531	.00327	.06286	8.4414	5.0629	.02227
SDev	.00562	.00252	.00200	.00252	.0267	.2604	.00117
%RSD	145.94	47.424	61.290	4.0049	.31631	5.1436	5.2374
#1	.00084	.00530	.00065	.06109	8.4103	4.6932	.02325
#2	-.00325	.00224	.00274	.06187	8.4623	5.0669	.02252
#3	-.00109	.00530	.00483	.06659	8.4281	5.2456	.02059
#4	L-.01189	.00840	.00484	.06188	8.4650	5.2456	.02273
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	242.11	2.6084	.00259	S-.10498	.00765	.05574	.00323
SDev	.58	.0098	.00569	.00000	.00733	.03690	.09598
%RSD	.23988	.37431	219.58	.00000	95.789	66.202	2969.7
#1	241.37	2.5976	.00704	S-.10498	-.00174	.07100	L-.12000
#2	242.65	2.6150	.00111	S-.10498	.01594	.07992	.00329
#3	242.48	2.6027	-.00484	S-.10498	.00957	.00074	.11413
#4	241.94	2.6181	.00705	S-.10498	.00684	.07129	.01551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01039	9.9929	-.07956	2.3804	.04285	.12547	.00670
SDev	.04120	.0306	.00575	.0058	.00028	.10622	.00161
%RSD	396.51	.30659	7.2211	.24554	.66143	84.653	23.997
#1	.00976	9.9703	-.08204	2.3767	.04307	.23431	.00594
#2	.01945	10.038	-.07106	2.3841	.04248	.10354	.00580

#3	.00029	9.9817	-.08368	2.3865	.04278	.17622	.00911
#4	-.07106	9.9816	-.08147	2.3743	.04307	-.01217	.00595

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

Elem	ZN
Units	ppm
Avge	.06860
SDev	.00132
%RSD	1.9296

#1	.06896
#2	.06918
#3	.06665
#4	.06959

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXCMMB

Operator: WTR

Run Time: 03/19/01 14:06:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00238	.00253	-.02537	.00787	.00006	.00009	.02214
SDev	.00233	.00638	.09691	.01572	.00028	.00005	.00452
%RSD	97.790	251.67	382.05	199.79	458.40	61.113	20.425
#1	-.00339	.00037	.00682	.00001	.00016	.00016	.02706
#2	-.00205	.00388	.09434	.00001	.00009	.00006	.02059
#3	-.00478	-.00465	-.12657	.00001	-.00033	.00006	.01664
#4	.00069	.01053	-.07606	.03145	.00033	.00006	.02427
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	.00192	-.00026	.00059	.00633	.20308	.00033
SDev	.00392	.00192	.00183	.00175	.00205	.69764	.00085
%RSD	586.56	100.08	698.42	294.50	32.457	343.52	255.19
#1	-.00318	.00154	.00065	.00275	.00530	.76156	.00080
#2	-.00129	.00000	-.00092	-.00039	.00530	-.06702	.00012
#3	-.00326	.00155	-.00249	-.00118	.00530	-.66002	-.00077
#4	H.00505	.00459	.00170	.00119	.00941	.77781	.00117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00529	-.00025	.00000	.06184	-.00578	.02433	-.00309
SDev	.02559	.00000	.00485	.01075	.00614	.03176	.00715
%RSD	483.69	.74771	585610.	17.389	106.31	130.53	231.75
#1	.02580	-.00025	.00000	.06833	-.00549	.03976	-.00921
#2	-.00331	-.00026	-.00594	.05705	.00013	.03090	.00319
#3	-.02712	-.00025	.00000	.07284	-.01430	-.02205	-.00935
#4	.02580	-.00025	.00594	.04915	-.00344	.04869	.00302
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	-.00594	-.00423	-.01570	.00013	-.00037	.05046	.00115
SDev	.01959	.00003	.01915	.00004	.00061	.07214	.00231
%RSD	330.12	.59385	121.96	34.146	164.92	142.96	200.50
#1	.01193	-.00419	-.02749	.00011	-.00074	-.02543	.00461
#2	.00716	-.00424	-.03529	.00011	.00015	.11916	-.00015

#3	-.03095	-.00424	.00650	.00011	-.00104	.00352	-.00001
#4	-.01188	-.00424	-.00652	.00020	.00015	.10460	.00015

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

Elem ZN
Units ppm
Avge -.00076
SDev .00115
%RSD 151.15

#1 .00055
#2 -.00175
#3 -.00170
#4 -.00014

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXCMMC

Operator: WTR

Run Time: 03/19/01 14:09:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04764	1.9559	1.8567	.96824	1.9283	.04767	49.074
SDev	.00175	.0191	.0585	.00304	.0119	.00030	.270
%RSD	3.6632	.97741	3.1520	.31363	.61879	.63102	.55041
#1	.05007	1.9811	1.8368	.97086	1.9380	.04794	49.365
#2	.04727	1.9373	1.9433	.96531	1.9110	.04726	48.824
#3	.04730	1.9594	1.8325	.97086	1.9335	.04784	49.242
#4	.04591	1.9457	1.8143	.96592	1.9307	.04762	48.866
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05229	.48028	.18944	.24163	1.0429	49.763	.96856
SDev	.00291	.00666	.00408	.00341	.0075	.657	.00472
%RSD	5.5629	1.3867	2.1544	1.4092	.71509	1.3193	.48695
#1	.05399	.48678	.19323	.24478	1.0503	50.460	.97020
#2	.05420	.47147	.18434	.23690	1.0338	48.876	.96198
#3	.05296	.48372	.19218	.24321	1.0476	49.891	.96894
#4	.04800	.47914	.18800	.24163	1.0400	49.826	.97310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.916	.47584	.94474	49.800	.48522	.49682	.52805
SDev	.342	.00392	.00970	.343	.00396	.01319	.01419
%RSD	.68417	.82345	1.0269	.68946	.81541	2.6554	2.6877
#1	50.197	.47891	.95662	49.957	.48096	.50363	.54019
#2	49.435	.47072	.94474	49.290	.48423	.50317	.51562
#3	50.115	.47890	.93286	49.918	.49050	.47703	.51591
#4	49.919	.47481	.94474	50.035	.48519	.50343	.54049
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8280	9.8284	1.8980	.94733	.95143	1.9588	.47919
SDev	.0370	.0622	.0584	.00592	.00582	.1193	.00485
%RSD	2.0254	.63288	3.0747	.62458	.61208	6.0893	1.0122
#1	1.8685	9.9076	1.9327	.95195	.95720	2.0345	.48555
#2	1.7827	9.7661	1.9588	.93873	.94388	1.7892	.47486

678 1197

#3	1.8161	9.8454	1.8698	.95023	.95454	1.9623	.48033
#4	1.8446	9.7944	1.8307	.94842	.95010	2.0492	.47602

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	.47700
SDev	.00289
%RSD	.60650

#1	.47944
#2	.47554
#3	.47939
#4	.47363

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DW7DJ

Operator: WTR

Run Time: 03/19/01 14:13:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00214	.06041	.00559	.24229	.98474	.00019	242.70
SDev	.00176	.00765	.03757	.00071	.00396	.00005	1.02
%RSD	82.042	12.659	671.48	.29456	.40212	27.783	.41871
#1	-.00283	.06456	-.00363	.24193	.98093	.00016	242.97
#2	-.00418	.06133	-.01286	.24189	.98764	.00027	241.25
#3	-.00010	.06639	.06082	.24336	.98177	.00016	242.97
#4	-.00146	.04938	-.02195	.24200	.98865	.00016	243.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00396	.00248	.00261	.00296	9.1118	83.433	.09698
SDev	.00224	.00126	.00124	.00222	.0224	.683	.00049
%RSD	56.568	50.788	47.285	75.106	.24553	.81855	.50885
#1	L-.00582	.00402	.00170	.00296	9.1120	82.969	.09662
#2	-.00114	.00247	.00274	.00610	9.0873	84.155	.09662
#3	L-.00570	.00248	.00170	.00139	9.1065	82.742	.09699
#4	-.00317	.00094	.00432	.00139	9.1414	83.863	.09767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	78.032	.79811	.00416	S2988.1	-.00337	.05210	.00312
SDev	.251	.00349	.00767	.1	.01224	.02830	.00015
%RSD	.32210	.43700	184.26	.00381	363.49	54.315	4.9328
#1	77.736	.79683	.01307	S2988.1	.00377	.06318	.00305
#2	78.204	.79477	-.00475	S2988.2	-.01656	.07198	.00305
#3	77.913	.79785	.00119	S2987.9	.00982	.06314	.00336
#4	78.273	.80297	.00714	S2988.1	-.01051	.01011	.00304
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	-.04878	12.076	-.03810	2.4133	-.01103	.11263	.00587
SDev	.01576	.038	.03992	.0095	.00061	.10062	.00216
%RSD	32.305	.31173	104.78	.39520	5.5344	89.336	36.756
#1	-.03091	12.030	.01028	2.4039	-.01110	.09816	.00494
#2	-.05005	12.098	-.02633	2.4177	-.01169	.11297	.00911

#3	-.06904	12.064	-.08386	2.4071	-.01021	-.00291	.00464
#4	-.04511	12.115	-.05248	2.4246	-.01110	.24231	.00480

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

Elem ZN
Units ppm
Avge .02197
SDev .00113
%RSD 5.1492

#1 .02097
#2 .02359
#3 .02162
#4 .02168

Errors LC Pass
High 100.00
Low -.02000

673 1200

Method: QUANMET Sample Name: DW7DJP5

Operator: WTR

Run Time: 03/19/01 14:16:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00010	.01984	-.00468	.05943	.21353	.00014	49.912
SDev	.00132	.00954	.02091	.00144	.00258	.00006	.390
%RSD	1372.2	48.082	446.91	2.4189	1.2069	43.719	.78168
#1	-.00163	.00559	-.00912	.05784	.21680	.00018	49.474
#2	.00112	.02401	-.02774	.06133	.21411	.00005	49.731
#3	-.00024	.02577	-.00475	.05927	.21244	.00016	50.077
#4	.00113	.02400	.02289	.05926	.21076	.00016	50.365
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00178	.00218	.00013	.00159	1.9836	17.083	.02072
SDev	.00455	.00155	.00222	.00118	.0039	.293	.00058
%RSD	255.76	71.048	1713.5	74.031	.19702	1.7138	2.8167
#1	-.00148	.00294	-.00144	.00061	1.9883	17.033	.02006
#2	.00417	-.00014	-.00144	.00061	1.9836	17.049	.02059
#3	-.00301	.00295	.00013	.00218	1.9836	16.773	.02148
#4	L-.00678	.00296	.00327	.00297	1.9788	17.479	.02074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.488	.17132	.00174	198.68	-.00699	.03690	.00303
SDev	.094	.00051	.00569	3.38	.01234	.04410	.00007
%RSD	.57096	.29898	325.95	1.7011	176.42	119.50	2.3317
#1	16.604	.17107	-.00568	202.71	-.01299	.01265	.00302
#2	16.480	.17209	.00620	199.76	-.01517	.00372	.00294
#3	16.493	.17107	.00026	197.47	-.01116	.03030	.00305
#4	16.374	.17107	.00620	194.76	.01135	.10094	.00311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	2.4526	-.00301	.52175	-.00207	.03886	.00321
SDev	.02143	.0255	.01866	.00540	.00075	.11410	.00230
%RSD	7670.1	1.0385	619.06	1.0350	35.952	293.65	71.516
#1	-.02948	2.4399	.00157	.52845	-.00311	-.01179	-.00015
#2	.01338	2.4399	-.00890	.52306	-.00192	.13283	.00361

#3	.01815	2.4399	-.02459	.51983	-.00133	.13279	.00461
#4	-.00093	2.4908	.01987	.51565	-.00192	-.09840	.00477
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00439
SDev .00031
%RSD 7.0857

#1 .00456
#2 .00392
#3 .00457
#4 .00449

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW7DJS

Operator: WTR

Run Time: 03/19/01 14:19:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04601	2.0447	1.8500	1.1982	2.8174	.04514	290.60
SDev	.00208	.0120	.0311	.0186	.0136	.00017	1.82
%RSD	4.5106	.58666	1.6796	1.5491	.48321	.38165	.62569
#1	.04772	2.0549	1.8729	1.2088	2.8268	.04505	288.43
#2	.04359	2.0279	1.8042	1.1704	2.8062	.04495	290.42
#3	.04776	2.0444	1.8637	1.2075	2.8053	.04527	292.87
#4	.04497	2.0514	1.8592	1.2061	2.8314	.04530	290.69
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	.05194	.45141	.17753	.24454	10.024	136.47	1.0900
SDev	.00089	.00404	.00405	.00291	.032	.79	.0129
%RSD	1.7190	.89467	2.2832	1.1905	.31488	.57563	1.1832
#1	.05294	.45408	.17700	.24651	9.9961	137.16	1.1019
#2	.05237	.44796	.17386	.24021	9.9974	135.37	1.0842
#3	.05092	.45564	.18328	.24573	10.058	136.45	1.0746
#4	.05153	.44794	.17596	.24572	10.043	136.88	1.0993
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	126.35	1.2409	.89096	S2987.1	.44466	.51491	.53428
SDev	.44	.0050	.01015	.2	.01051	.01955	.05565
%RSD	.35161	.40112	1.1392	.00763	2.3638	3.7977	10.416
#1	126.65	1.2360	.88650	S2986.7	.43667	.49959	.56508
#2	125.74	1.2381	.88056	S2987.3	.44941	.50822	.54063
#3	126.30	1.2473	.90433	S2987.1	.43532	.54360	.45402
#4	126.72	1.2422	.89245	S2987.1	.45722	.50824	.57740
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	1.9050	H21.947	1.8444	3.3077	.89637	1.8316	.45965
SDev	.0821	.100	.0335	.0126	.00263	.1510	.00462
%RSD	4.3121	.45585	1.8141	.38072	.29354	8.2457	1.0052
#1	2.0252	H21.964	1.8242	3.3158	.89711	2.0307	.46069
#2	1.8394	H21.817	1.8085	3.2955	.89267	1.7851	.45593

#3	1.8777	H21.947	1.8656	3.2986	.89681	1.8419	.46577
#4	1.8777	H22.060	1.8792	3.3211	.89888	1.6688	.45623
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	.47561
SDev	.00372
%RSD	.78126

#1	.47074
#2	.47553
#3	.47974
#4	.47642

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7DJJD

Operator: WTR

Run Time: 03/19/01 14:22:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04246	2.0148	1.8439	1.1896	2.7764	.04460	275.88
SDev	.00206	.0181	.0634	.0034	.0204	.00017	1.87
%RSD	4.8595	.89794	3.4395	.28450	.73477	.37795	.67613
#1	.04488	2.0212	1.7632	1.1923	2.7689	.04459	277.82
#2	.04347	2.0177	1.8923	1.1886	2.7554	.04437	275.57
#3	.04075	2.0313	1.8967	1.1922	2.8038	.04473	273.44
#4	.04074	1.9891	1.8234	1.1852	2.7772	.04473	276.68
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	.04877	.43726	.17282	.24448	9.5859	133.48	1.0915
SDev	.00448	.00332	.00311	.00343	.0378	1.32	.0159
%RSD	9.1936	.75918	1.7987	1.4013	.39430	.98822	1.4586
#1	.05471	.44032	.17543	.24174	9.6314	132.96	1.0816
#2	.04464	.43729	.17230	.24173	9.5391	132.64	1.0798
#3	.04609	.43264	.16863	.24880	9.5897	135.45	1.1144
#4	.04963	.43879	.17491	.24566	9.5835	132.87	1.0903
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	122.83	1.1940	.87605	S2988.0	.43486	.46609	.52823
SDev	.55	.0054	.00747	.2	.00615	.02630	.01010
%RSD	.44858	.45390	.85295	.00703	1.4144	5.6423	1.9126
#1	122.82	1.2012	.87457	S2987.8	.43789	.45511	.51589
#2	122.17	1.1889	.88644	S2988.0	.42653	.43741	.52812
#3	123.52	1.1909	.87457	S2987.9	.44074	.49905	.52827
#4	122.82	1.1950	.86862	S2988.3	.43426	.47280	.54063
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	1.8429	H21.242	1.7777	3.2150	.88542	1.8600	.45235
SDev	.0548	.062	.0315	.0205	.00266	.1079	.00229
%RSD	2.9745	.29376	1.7728	.63720	.30091	5.8024	.50654
#1	1.7811	H21.234	1.8136	3.2099	.88556	2.0219	.45578
#2	1.8428	H21.160	1.7613	3.1931	.88201	1.8065	.45146

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#3	1.8334	H21.307	1.7927	3.2425	.88852	1.8058	.45115
#4	1.9144	H21.268	1.7431	3.2147	.88556	1.8058	.45102

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	.46431
SDev	.00228
%RSD	.49133

#1	.46689
#2	.46276
#3	.46551
#4	.46205

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7D5

Operator: WTR

Run Time: 03/19/01 14:25:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00244	.05247	-.00345	.10914	.00945	.00017	168.42
SDev	.00283	.00877	.02704	.00211	.00021	.00001	2.05
%RSD	115.99	16.715	782.97	1.9350	2.2179	3.5460	1.2151
#1	-.00072	.06300	-.03233	.11107	.00956	.00016	167.47
#2	-.00485	.04606	.02774	.10613	.00956	.00017	165.99
#3	-.00483	.04448	.00926	.10966	.00914	.00016	170.25
#4	.00065	.05632	-.01848	.10971	.00956	.00016	169.98
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00260	.00539	.01818	.00359	5.8857	92.776	.04190
SDev	.00267	.00154	.00162	.00207	.0201	1.356	.00103
%RSD	102.64	28.590	8.9338	57.615	.34144	1.4615	2.4547
#1	-.00262	.00462	.01844	.00182	5.8730	93.733	.04319
#2	.00098	.00461	.01583	.00182	5.8689	94.042	.04194
#3	L-.00545	.00770	.01948	.00576	5.8874	91.150	.04068
#4	-.00332	.00462	.01896	.00497	5.9134	92.181	.04178
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	33.003	.19691	-.00071	H537.95	-.00159	.02687	.03069
SDev	.181	.00129	.00569	8.52	.00789	.02207	.08003
%RSD	.54989	.65541	795.66	1.5847	495.65	82.140	260.79
#1	33.142	.19665	.00077	H542.81	-.00149	.03807	.15074
#2	33.164	.19563	.00671	H547.09	.00828	.03783	-.00928
#3	32.788	.19665	-.00517	H528.42	-.00213	-.00624	-.00923
#4	32.918	.19870	-.00517	H533.47	-.01102	.03781	-.00947
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	.00063	13.809	-.00830	.88577	-.00881	.05811	.00405
SDev	.04118	.024	.03104	.00614	.00044	.06275	.00190
%RSD	6494.8	.17224	374.04	.69339	5.0420	108.00	46.888
#1	.03037	13.812	-.00518	.88978	-.00844	.08720	.00582
#2	.03989	13.801	-.00846	.89137	-.00932	.11620	.00136

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#3	-.02199	13.784	-.04769	.87784	-.00903	.05805	.00452
#4	-.04573	13.840	.02815	.88409	-.00844	-.02903	.00452
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00359
SDev	.00185
%RSD	51.429

#1	.00264
#2	.00164
#3	.00422
#4	.00586

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7ED

Operator: WTR

Run Time: 03/19/01 14:28:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00267	13.313	.01173	.50073	.44914	.00085	267.74
SDev	.00296	.080	.01246	.00893	.00436	.00006	3.14
%RSD	110.65	.60328	106.22	1.7830	.96959	7.2503	1.1716
#1	-.00679	13.375	-.00481	.49185	.45347	.00091	263.74
#2	.00007	13.363	.02278	.49906	.45155	.00079	267.18
#3	-.00135	13.199	.01969	.49885	.44358	.00081	268.84
#4	-.00263	13.314	.00924	.51314	.44795	.00090	271.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00059	.00968	.01699	.02041	21.244	8.0766	.01733
SDev	.00273	.00250	.00156	.00078	.082	.2271	.00098
%RSD	459.77	25.879	9.1959	3.8187	.38748	2.8120	5.6627
#1	-.00064	.00660	.01738	.02158	21.173	8.0482	.01771
#2	-.00381	.00968	.01529	.02002	21.286	7.9426	.01703
#3	-.00080	.00968	.01633	.02001	21.179	7.9101	.01614
#4	.00288	.01273	.01895	.02003	21.340	8.4056	.01844
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	27.103	.84831	.00130	301.43	.01379	.03758	.00242
SDev	.166	.00398	.00570	4.38	.00328	.01147	.00007
%RSD	.61090	.46946	439.60	1.4532	23.797	30.511	2.8811
#1	27.266	.84471	-.00317	306.42	.00967	.03306	.00239
#2	27.171	.84781	.00279	303.52	.01266	.02429	.00238
#3	26.877	.84676	-.00317	296.64	.01601	.04209	.00252
#4	27.097	.85396	.00873	299.12	.01681	.05088	.00238
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00722	H28.514	-.01234	1.6687	.48030	.03341	.03205
SDev	.06110	.110	.02285	.0122	.00204	.05016	.00343
%RSD	846.03	.38435	185.09	.73260	.42403	150.12	10.705
#1	-.06923	H28.539	-.01105	1.6805	.48060	.01285	.03223
#2	.06929	H28.573	.00465	1.6753	.48149	.04000	.03237

#3	-.01204	H28.352	-.04503	1.6525	.47734	.09949	.02761
#4	.04087	H28.590	.00205	1.6663	.48178	-.01869	.03599
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 .04390
SDev .00251
%RSD 5.7181

#1 .04415
#2 .04735
#3 .04185
#4 .04225

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-5

Operator: WTR

Run Time: 03/19/01 14:32:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98064	51.378	5.0018	5.0404	5.0837	4.9936	48.750
SDev	.00233	.176	.1223	.0232	.0307	.0075	.170
%RSD	.23716	.34189	2.4451	.45958	.60358	.15069	.34962
#1	.97963	51.350	4.8224	5.0270	5.0784	4.9909	48.785
#2	.98371	51.156	5.0267	5.0329	5.0486	4.9845	48.866
#3	.97826	51.577	5.0877	5.0749	5.1232	5.0018	48.500
#4	.98098	51.429	5.0705	5.0269	5.0846	4.9971	48.850
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	4.9672	4.8436	4.7551	5.0854	51.428	52.818	5.2289
SDev	.0232	.0109	.0071	.0263	.031	.336	.0477
%RSD	.46632	.22434	.14863	.51634	.06092	.63654	.91202
#1	4.9855	4.8313	4.7573	5.0708	51.453	52.369	5.2123
#2	4.9871	4.8574	4.7621	5.0606	51.398	53.068	5.1759
#3	4.9395	4.8405	4.7453	5.1204	51.404	52.751	5.2894
#4	4.9568	4.8451	4.7558	5.0897	51.457	53.084	5.2378
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	51.477	4.8210	4.8575	53.060	4.8926	4.8733	4.9856
SDev	.138	.0074	.0309	.456	.0228	.0293	.0648
%RSD	.26790	.15270	.63550	.85927	.46518	.60058	1.3000
#1	51.332	4.8277	4.8901	52.893	4.8972	4.8928	4.9236
#2	51.401	4.8195	4.8723	52.556	4.8594	4.9025	4.9359
#3	51.641	4.8113	4.8486	53.637	4.9103	4.8401	5.0351
#4	51.533	4.8256	4.8189	53.156	4.9036	4.8580	5.0476
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	4.9234	5.1802	4.9909	5.0341	4.9269	9.7174	4.8610
SDev	.0954	.0092	.0513	.0236	.0108	.1195	.0023
%RSD	1.9373	.17789	1.0281	.46893	.21868	1.2297	.04739
#1	4.8425	5.1803	5.0541	5.0280	4.9251	9.5473	4.8622
#2	4.9662	5.1802	4.9966	5.0075	4.9136	9.7213	4.8606

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#3	4.8471	5.1689	4.9839	5.0645	4.9396	9.7936	4.8634
#4	5.0379	5.1915	4.9291	5.0362	4.9293	9.8073	4.8581
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	4.8670
SDev	.0099
%RSD	.20341

#1	4.8766
#2	4.8745
#3	4.8587
#4	4.8583

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB5

Operator: WTR

Run Time: 03/19/01 14:35:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01771	.02859	.02534	.00052	.00080	.01210
SDev	.00286	.00710	.08739	.01697	.00017	.00015	.00241
%RSD	23814.	40.093	305.67	66.943	32.913	19.189	19.952
#1	.00345	.02239	.00664	.03495	.00051	.00076	.01500
#2	.00069	.02069	.08499	.03494	.00033	.00065	.00982
#3	-.00066	.02063	.10795	.00001	.00075	.00076	.01314
#4	-.00342	.00713	-.08522	.03147	.00051	.00101	.01044
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	-.00006	.00192	.00013	.00177	.00770	.33102	.00083
SDev	.00169	.00262	.00104	.00099	.00119	.42226	.00060
%RSD	2857.4	136.60	796.08	55.955	15.396	127.56	71.730
#1	.00235	.00306	.00065	.00276	.00804	.46100	.00154
#2	-.00016	.00461	.00066	.00197	.00599	.62346	.00065
#3	-.00139	.00154	.00065	.00197	.00872	.53411	.00101
#4	-.00104	-.00153	-.00144	.00039	.00804	-.29447	.00012
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	.01455	.00077	.00446	.01739	-.00439	-.00218	-.00926
SDev	.00951	.00000	.00297	.00657	.00670	.00439	.01006
%RSD	65.345	.13204	66.651	37.802	152.49	201.59	108.68
#1	.02315	.00077	.00000	.01870	.00107	-.00436	-.00913
#2	.01257	.00077	.00594	.01043	-.00096	-.00429	.00304
#3	.02050	.00077	.00594	.02585	-.00367	.00441	-.02160
#4	.00198	.00077	.00594	.01457	-.01401	-.00448	-.00934
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	-.00355	.02548	-.01835	.00068	.00052	.08658	.00184
SDev	.03377	.00539	.01975	.00021	.00051	.02983	.00269
%RSD	951.54	21.149	107.64	30.281	97.590	34.460	146.25
#1	-.04523	.01844	-.03534	.00084	.00104	.06125	.00461
#2	.02622	.02970	.00132	.00041	.00044	.10466	.00015

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#3	-.01665	.02408	-.00401	.00063	.00074	.06126	.00361
#4	.02146	.02969	-.03534	.00084	-.00015	.11914	-.00101

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 -.00022
SDev .00088
%RSD 394.51

#1	-.00080
#2	.00014
#3	-.00107
#4	.00084

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW7EF

Operator: WTR

Run Time: 03/19/01 14:38:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00265	.17935	.00325	.13066	.22500	.00023	201.79
SDev	.00081	.00759	.05995	.01036	.00172	.00007	.66
%RSD	30.695	4.2298	1847.3	7.9300	.76470	31.461	.32637
#1	-.00338	.17313	.02076	.12498	.22292	.00030	201.01
#2	-.00333	.17461	.04355	.12682	.22477	.00030	202.51
#3	-.00197	.18990	.03426	.12470	.22519	.00018	201.53
#4	-.00192	.17978	-.08558	.14614	.22711	.00016	202.12
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.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	-.00294	.05016	-.00025	.00537	32.624	220.67	.10530
SDev	.00358	.00290	.00173	.00076	.125	1.90	.00162
%RSD	121.84	5.7792	680.37	14.145	.38285	.86003	1.5358
#1	.00137	.05207	.00066	.00555	32.459	218.75	.10374
#2	L-.00536	.05055	-.00143	.00478	32.657	219.74	.10426
#3	L-.00635	.04594	-.00195	.00477	32.620	221.03	.10589
#4	-.00141	.05207	.00170	.00637	32.760	223.15	.10730
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.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	55.002	2.7826	.02655	S-.10498	.03291	.04093	.00345
SDev	.275	.0089	.00569	.00000	.00666	.01966	.00007
%RSD	.49927	.31950	21.434	.00000	20.231	48.026	2.1881
#1	54.708	2.7708	.02207	S-.10498	.02322	.04767	.00338
#2	54.933	2.7841	.03398	S-.10498	.03590	.05638	.00341
#3	54.999	2.7831	.02803	S-.10498	.03430	.01210	.00344
#4	55.369	2.7923	.02211	S-.10498	.03823	.04756	.00355
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03919	13.008	-.00395	1.7575	-.00807	.02668	.00182
SDev	.00211	.066	.00966	.0115	.00028	.06318	.00224
%RSD	5.3943	.51110	244.53	.65659	3.5135	236.81	122.76
#1	-.03852	12.946	-.00266	1.7446	-.00844	-.05033	.00056
#2	-.03790	13.014	.00782	1.7553	-.00814	.09123	.00085

#3	-.03801	12.974	-.00526	1.7574	-.00784	.06293	.00070
#4	-.04234	13.099	-.01570	1.7726	-.00784	.00291	.00517
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00516
SDev	.00078
%RSD	15.196

#1	.00624
#2	.00458
#3	.00525
#4	.00458

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7EM

Operator: WTR

Run Time: 03/19/01 14:41:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00104	.01816	.03318	.00005	.00002	.00017	.02369
SDev	.00172	.00350	.04696	.00000	.00029	.00001	.00690
%RSD	165.45	19.283	141.55	7.0946	1571.5	4.2208	29.128
#1	.00069	.01907	.01593	.00004	.00033	.00018	.02834
#2	.00343	.01737	.07118	.00005	-.00009	.00018	.03047
#3	-.00068	.01390	-.02546	.00005	-.00033	.00018	.01576
#4	.00072	.02231	.07107	.00005	.00016	.00016	.02019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.00345	.00209	.00237	.02873	.62753	.00039
SDev	.00330	.00231	.00116	.00079	.00152	.32449	.00107
%RSD	10268.	66.721	55.404	33.297	5.2802	51.710	277.44
#1	.00125	.00614	.00275	.00276	.02924	.88341	-.00024
#2	-.00364	.00462	.00065	.00276	.03061	.72094	.00101
#3	-.00145	.00154	.00170	.00118	.02787	.15231	-.00077
#4	.00397	.00152	.00327	.00276	.02719	.75344	.00154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00794	.00052	.00297	.04981	-.00441	.02876	-.01236
SDev	.01471	.00051	.00343	.03356	.00478	.02437	.01845
%RSD	185.34	98.539	115.32	67.378	108.33	84.730	149.25
#1	.01786	-.00025	.00000	.07472	-.01080	.03990	.00300
#2	.01521	.00077	.00000	.08261	.00078	.05747	-.02156
#3	-.01389	.00078	.00594	.02397	-.00404	.01322	-.03389
#4	.01257	.00078	.00594	.01795	-.00359	.00444	.00302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00962	.07922	-.00789	.00012	.00000	.05733	.00123
SDev	.08806	.00712	.01729	.00029	.00051	.10513	.00236
%RSD	915.50	8.9908	219.09	239.27	415e6	183.37	191.38
#1	-.00229	.08628	-.01175	.00032	.00015	-.01135	.00001
#2	-.09757	.08062	.01430	.00041	.00015	.19100	.00000

#3	.11681	.06931	-.02759	-.00015	-.00074	.08989	.00015
#4	.02152	.08067	-.00652	-.00011	.00044	-.04021	.00477
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00048
SDev .00138
%RSD 287.57

#1 .00243
#2 -.00082
#3 .00015
#4 .00016

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW7EV

Operator: WTR

Run Time: 03/19/01 14:44:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00322	.04352	.01602	.23336	.07858	.00026	244.08
SDev	.00132	.00753	.01551	.00310	.00205	.00006	2.48
%RSD	40.924	17.300	96.821	1.3302	2.6144	21.126	1.0148

#1	-.00215	.05113	.03067	.23482	.08042	.00030	244.13
#2	-.00357	.04104	.02180	.23230	.08018	.00018	241.28
#3	-.00494	.03415	-.00570	.23675	.07749	.00028	243.59
#4	-.00222	.04777	.01730	.22959	.07623	.00028	247.30

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00727	.01570	.00734	24.013	68.833	.13476
SDev	.00180	.00193	.00243	.00227	.196	1.809	.00499
%RSD	204.32	26.607	15.474	30.959	.81724	2.6286	3.7048

#1	.00030	.00765	.01269	.00697	24.276	70.370	.13954
#2	.00033	.00458	.01478	.00773	24.042	70.200	.13791
#3	-.00350	.00766	.01740	.01008	23.908	68.209	.13310
#4	-.00066	.00919	.01792	.00457	23.827	66.552	.12849

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.094	.74480	.00611	S2993.0	.01160	.04053	.00309
SDev	.731	.00761	.00344	.4	.01076	.03757	.00012
%RSD	1.4882	1.0220	56.291	.01447	92.752	92.687	3.9660

#1	49.898	.75485	.00912	S2992.5	.02242	.00512	.00313
#2	49.464	.73944	.00315	S2992.8	.00501	.01395	.00302
#3	48.763	.73839	.00907	S2993.4	.00006	.05824	.00296
#4	48.252	.74654	.00312	S2993.4	.01893	.08480	.00324

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	-.03053	17.839	-.00626	1.2681	-.01332	.04448	.00249
SDev	.04317	.212	.02591	.0277	.00070	.06320	.00267
%RSD	141.42	1.1869	414.11	2.1880	5.2899	142.10	107.01

#1	-.03565	18.072	.02254	1.2952	-.01288	.08023	.00026
#2	.02554	17.953	-.00102	1.2860	-.01377	-.01738	.00011

678 1219

#3	-.07969	17.721	-.00627	1.2568	-.01406	.11470	.00488
#4	-.03230	17.608	-.04028	1.2345	-.01258	.00036	.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	.00418
SDev	.00165
%RSD	39.503

#1	.00270
#2	.00306
#3	.00631
#4	.00467

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7E5

Operator: WTR

Run Time: 03/19/01 14:47:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00340	2.2711	.02997	.13789	.14662	.00023	228.90
SDev	.00177	.0104	.04548	.00215	.00112	.00011	1.85
%RSD	52.198	.45640	151.77	1.5580	.76261	47.965	.80979
#1	-.00409	2.2859	.05062	.13675	.14786	.00015	227.23
#2	-.00546	2.2707	-.03675	.13968	.14727	.00015	227.36
#3	-.00269	2.2639	.04144	.13543	.14576	.00025	230.40
#4	-.00135	2.2640	.06456	.13971	.14559	.00039	230.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00365	.00634	.00758	.01694	27.354	61.585	.08112
SDev	.00294	.00341	.00371	.00099	.029	.189	.00077
%RSD	80.660	53.786	48.916	5.8680	.10575	.30624	.94573
#1	-.00228	.00442	.00431	.01595	27.319	61.581	.08113
#2	-.00015	.00288	.00483	.01674	27.343	61.776	.08218
#3	L-.00622	.00750	.00902	.01675	27.385	61.654	.08040
#4	L-.00593	.01057	.01216	.01832	27.369	61.329	.08077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.713	.46183	.00061	S2994.0	-.00228	.01587	.00300
SDev	.260	.00154	.00343	.2	.00692	.02655	.00011
%RSD	.45851	.33380	561.26	.00506	303.90	167.34	3.5568
#1	56.864	.46003	.00358	S2993.9	-.01131	.02905	.00285
#2	56.999	.46106	-.00236	S2994.0	-.00402	-.00631	.00298
#3	56.525	.46312	.00359	S2994.3	.00370	-.00618	.00307
#4	56.462	.46311	-.00236	S2994.0	.00253	.04690	.00308
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	-.02598	18.637	-.02248	1.0811	.05906	.15745	.01040
SDev	.03386	.046	.02493	.0075	.00064	.12310	.00236
%RSD	130.34	.24454	110.91	.68991	1.0828	78.185	22.665
#1	.01202	18.638	.00694	1.0875	.05995	.27725	.00932
#2	-.05460	18.700	-.01136	1.0875	.05906	.07455	.00917

#3	-.05447	18.610	-.03751	1.0751	.05847	.03047	.01394
#4	-.00687	18.598	-.04797	1.0741	.05876	.24753	.00919

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

Elem	ZN
Units	ppm
Avge	.02470
SDev	.00212
%RSD	8.5939

#1	.02185
#2	.02437
#3	.02663
#4	.02594

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXG4QB

Operator: WTR

Run Time: 03/19/01 14:51:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01437	.02055	.00004	-.00002	.00009	.05270
SDev	.00137	.01071	.01879	.00001	.00012	.00006	.01708
%RSD	11414.	74.506	91.407	21.341	499.99	73.505	32.419
#1	-.00205	.01058	-.00702	.00005	.00016	.00018	.06748
#2	.00071	.02740	.02501	.00005	-.00009	.00005	.06513
#3	.00071	.01740	.02968	.00003	-.00009	.00005	.04723
#4	.00067	.00210	.03454	.00004	-.00009	.00007	.03096
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	.00039	.00307	.00144	.00079	.02394	.56863	.00020
SDev	.00325	.00331	.00091	.00079	.00141	.24463	.00087
%RSD	841.60	107.85	63.151	99.315	5.8902	43.022	428.99
#1	-.00413	.00001	.00065	.00118	.02377	.80218	.00117
#2	.00027	.00153	.00118	.00118	.02582	.59909	.00065
#3	.00221	.00767	.00117	.00119	.02377	.64783	-.00024
#4	.00319	.00306	.00275	-.00039	.02240	.22542	-.00077
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	.01918	.00077	.00149	.12049	-.00178	-.01758	.00305
SDev	.00978	.00000	.00569	.04472	.00552	.02754	.00012
%RSD	50.991	.23825	382.17	37.119	309.56	156.67	3.9508
#1	.03109	.00077	.00000	.15254	.00581	-.03091	.00314
#2	.01257	.00078	.00594	.15780	-.00534	-.03971	.00295
#3	.02315	.00077	-.00594	.11005	-.00126	.02228	.00317
#4	.00992	.00077	.00594	.06156	-.00636	-.02199	.00295
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00127	.06083	.00263	.00055	.00030	-.00040	.00119
SDev	.00715	.00982	.01818	.00010	.00051	.08454	.00357
%RSD	564.39	16.147	691.38	18.486	173.21	21035.	298.91
#1	-.00231	.05233	-.00652	.00063	-.00044	-.09793	.00000
#2	.00723	.05803	.02747	.00054	.00044	.01763	.00361

#3	-.00707	.07501	-.01437	.00063	.00074	.10432	.00446
#4	.00722	.05796	.00394	.00041	.00044	-.02564	-.00330

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	.00043
SDev	.00074
%RSD	171.98

#1	.00144
#2	-.00012
#3	.00054
#4	-.00014

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXG4QC

Operator: WTR

Run Time: 03/19/01 14:54:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04448	1.9045	1.7780	.93121	1.8913	.04646	47.842
SDev	.00113	.0206	.0691	.02124	.0175	.00044	.088
%RSD	2.5329	1.0804	3.8889	2.2806	.92688	.95672	.18339
#1	.04448	1.8884	1.8057	.91286	1.8838	.04634	47.808
#2	.04445	1.8852	1.6769	.91286	1.8718	.04588	47.739
#3	.04588	1.9205	1.7962	.95129	1.8974	.04680	47.879
#4	.04312	1.9240	1.8330	.94783	1.9125	.04682	47.942
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	.05175	.46576	.18355	.23827	1.0092	48.598	.94791
SDev	.00262	.00403	.00163	.00175	.0091	.494	.01259
%RSD	5.0666	.86441	.88673	.73364	.90287	1.0158	1.3283
#1	.04800	.46386	.18486	.23768	1.0030	48.299	.93932
#2	.05402	.46232	.18434	.23610	1.0009	48.088	.93597
#3	.05211	.47151	.18120	.24004	1.0119	49.168	.95324
#4	.05288	.46535	.18381	.23925	1.0208	48.835	.96311
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	48.781	.46329	.92840	49.070	.46379	.49181	L.39251
SDev	.361	.00269	.00569	.477	.01740	.00443	.00025
%RSD	.74103	.58110	.61269	.97146	3.7511	.90175	.06309
#1	48.691	.46150	.93285	48.869	.46947	.49397	L.39249
#2	48.324	.46048	.92097	48.533	.48200	.49393	L.39285
#3	48.940	.46560	.93285	49.237	.44047	.49417	L.39225
#4	49.168	.46560	.92691	49.640	.46320	.48516	L.39246
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8898	9.5510	1.8825	.93011	.92590	1.8511	.46637
SDev	.0523	.0560	.0515	.00810	.00593	.0416	.00388
%RSD	2.7651	.58656	2.7377	.87056	.64017	2.2475	.83293
#1	1.9350	9.5284	1.8982	.92704	.92345	1.9054	.46649
#2	1.8445	9.5000	1.8067	.92080	.91901	1.8476	.46158

673 1225

#3	1.9351	9.5454	1.9217	.93286	.92849	1.8040	.47109
#4	1.8446	9.6302	1.9034	.93975	.93263	1.8473	.46634

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	.46392
SDev	.00357
%RSD	.77044

#1	.46752
#2	.45944
#3	.46281
#4	.46593

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DXGMH

Operator: WTR

Run Time: 03/19/01 14:57:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00004	2.5770	.04627	.04146	.08238	.00018	37.445
SDev	.00195	.0170	.02547	.00196	.00025	.00006	.450
%RSD	4410.4	.65804	55.040	4.7188	.30670	33.881	1.2028
#1	-.00279	2.5550	.02003	.04295	.08210	.00028	36.821
#2	.00133	2.5820	.06577	.03889	.08269	.00015	37.426
#3	.00134	2.5754	.02898	.04302	.08227	.00015	37.684
#4	-.00006	2.5957	.07032	.04097	.08245	.00016	37.848
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00243	.00410	.02603	.02370	2.7854	4.8415	.00461
SDev	.00217	.00262	.00131	.00039	.0185	.2160	.00066
%RSD	89.287	63.930	5.0525	1.6481	.66297	4.4611	14.395
#1	-.00060	.00294	.02472	.02429	2.7601	5.1075	.00384
#2	-.00498	.00142	.02577	.02351	2.7834	4.5795	.00457
#3	-.00065	.00755	.02786	.02351	2.7977	4.8557	.00457
#4	-.00351	.00448	.02577	.02351	2.8005	4.8232	.00546
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.0230	.19551	.00928	S2991.7	.00827	.01964	.00286
SDev	.0192	.00269	.00343	.1	.00817	.01901	.00009
%RSD	.31954	1.3776	36.954	.00309	98.825	96.824	3.1543
#1	5.9946	.19167	.01224	S2991.9	.01281	.01963	.00290
#2	6.0369	.19577	.01225	S2991.6	.00625	.02839	.00286
#3	6.0316	.19679	.00631	S2991.7	.01630	-.00675	.00295
#4	6.0290	.19781	.00631	S2991.7	-.00228	.03729	.00274
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	.02067	9.5658	-.01488	.22149	.04877	-.01682	.00749
SDev	.00006	.0518	.01659	.00056	.00051	.06714	.00239
%RSD	.28087	.54106	111.52	.25112	1.0366	399.06	31.917
#1	.02059	9.4894	-.01945	.22085	.04810	-.08147	.00612
#2	.02066	9.5913	-.03515	.22171	.04899	.03380	.00958

#3	.02070	9.5800	-.00899	.22128	.04870	.04799	.00944
#4	.02071	9.6025	.00408	.22214	.04929	-.06762	.00482
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .07539
SDev .00309
%RSD 4.0929

#1 .07301
#2 .07371
#3 .07500
#4 .07985

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXGMHP5

Operator: WTR

Run Time: 03/19/01 15:00:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00191	.50783	-.00480	.03796	.01677	.00006	7.5904
SDev	.00295	.01319	.04008	.00200	.00010	.00010	.0944
%RSD	154.65	2.5971	834.47	5.2796	.59433	178.79	1.2434
#1	-.00326	.50659	.03430	.03970	.01686	-.00007	7.4552
#2	.00219	.52344	-.05786	.03970	.01686	.00018	7.6738
#3	-.00191	.50994	.01590	.03624	.01669	.00006	7.6078
#4	-.00465	.49133	-.01156	.03622	.01669	.00006	7.6248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00333	.00113	.00419	.00499	.63551	1.0296	.00046
SDev	.00201	.00262	.00202	.00076	.00623	.2760	.00098
%RSD	60.177	230.92	48.312	15.150	.98005	26.809	211.90
#1	-.00440	-.00001	.00222	.00439	.62850	.76968	-.00024
#2	-.00117	.00458	.00694	.00597	.63397	1.4195	.00190
#3	-.00219	-.00155	.00432	.00439	.64355	.98089	.00028
#4	L-.00556	.00153	.00327	.00518	.63602	.94840	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2494	.04107	.00602	156.28	-.00408	.00833	.00299
SDev	.0231	.00098	.00485	1.22	.00550	.03855	.00006
%RSD	1.8501	2.3901	80.527	.78372	134.84	462.61	1.9783
#1	1.2243	.03979	.00008	157.03	-.00031	-.01377	.00305
#2	1.2799	.04184	.01196	154.50	-.00031	.06582	.00295
#3	1.2508	.04184	.00603	157.12	-.01197	-.00499	.00293
#4	1.2428	.04081	.00602	156.49	-.00373	-.01372	.00303
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01230	1.9349	-.01694	.04624	.00918	-.01685	.00103
SDev	.01197	.0350	.01824	.00021	.00038	.06287	.00163
%RSD	97.366	1.8077	107.65	.44602	4.1645	373.06	158.78
#1	.00436	1.8968	.00136	.04608	.00932	-.06373	.00346
#2	-.01468	1.9646	-.00387	.04608	.00962	.03735	.00032

#3	-.02418	1.9646	-.03263	.04630	.00903	-.07837	.00016
#4	-.01468	1.9137	-.03263	.04651	.00873	.03734	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01454
SDev	.00109
%RSD	7.4707

#1	.01294
#2	.01480
#3	.01522
#4	.01520

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHS

Operator: WTR

Run Time: 03/19/01 15:03:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04434	5.1444	1.8446	.96139	1.8786	.04526	83.345
SDev	.00237	.0316	.0514	.00296	.0123	.00020	.562
%RSD	5.3466	.61510	2.7845	.30799	.65473	.43217	.67467
#1	.04227	5.1174	1.8368	.96309	1.8693	.04507	82.698
#2	.04638	5.1375	1.8366	.95966	1.8804	.04518	83.240
#3	.04641	5.1324	1.7905	.95820	1.8693	.04529	84.064
#4	.04230	5.1901	1.9143	.96459	1.8953	.04552	83.377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05032	.45076	.20435	.25585	3.7082	54.670	.93487
SDev	.00353	.00539	.00291	.00243	.0183	.448	.01010
%RSD	7.0090	1.1958	1.4244	.95016	.49326	.81866	1.0804
#1	.05440	.44693	.20003	.25919	3.6818	54.562	.93228
#2	.05036	.44539	.20527	.25447	3.7112	54.148	.93309
#3	.05073	.45614	.20631	.25369	3.7160	54.741	.92509
#4	.04580	.45459	.20578	.25605	3.7236	55.228	.94903
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.677	.63396	.91093	S2991.5	.46812	.48865	.54634
SDev	.253	.00345	.01015	.1	.01324	.01823	.01225
%RSD	.47981	.54419	1.1140	.00347	2.8272	3.7311	2.2414
#1	52.409	.62883	.89756	S2991.6	.48344	.49076	.54040
#2	52.668	.63498	.92132	S2991.4	.47309	.49070	.54017
#3	52.615	.63600	.91538	S2991.3	.45248	.50871	.56471
#4	53.017	.63600	.90944	S2991.5	.46347	.46444	.54010
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	1.8554	19.919	1.8507	1.1027	.95069	1.8032	.45906
SDev	.0158	.132	.0305	.0067	.00512	.0806	.00272
%RSD	.85072	.66038	1.6481	.61097	.53873	4.4703	.59277
#1	1.8577	19.763	1.8729	1.0969	.94388	1.8795	.45641
#2	1.8578	19.871	1.8284	1.1037	.95128	1.8068	.45702

#3	1.8721	19.972	1.8207	1.0985	.95128	1.8355	.46148
#4	1.8340	H20.069	1.8807	1.1118	.95631	1.6909	.46133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.53377
SDev	.00151
%RSD	.28291

#1	.53297
#2	.53208
#3	.53471
#4	.53533

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHD

Operator: WTR

Run Time: 03/19/01 15:06:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04540	5.3661	1.8277	.96100	1.8731	.04526	84.590
SDev	.00302	.0696	.0397	.00428	.0327	.00054	.745
%RSD	6.6645	1.2967	2.1723	.44545	1.7440	1.1972	.88055
#1	.04645	5.4252	1.8294	.96191	1.8971	.04563	84.646
#2	.04232	5.4220	1.8249	.96476	1.8996	.04576	83.914
#3	.04368	5.3340	1.7796	.96248	1.8660	.04505	84.189
#4	.04913	5.2832	1.8768	.95485	1.8299	.04459	85.611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05147	.45192	.20500	.25704	3.7998	54.704	.92925
SDev	.00244	.00656	.00100	.00872	.0176	1.126	.02507
%RSD	4.7331	1.4505	.48886	3.3930	.46282	2.0585	2.6979
#1	.05450	.45610	.20369	.26314	3.8221	55.310	.94361
#2	.04899	.45305	.20474	.26471	3.8056	55.846	.94940
#3	.05226	.44233	.20578	.25447	3.7844	54.384	.93042
#4	.05012	.45619	.20579	.24584	3.7871	53.279	.89358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.798	.64522	.91242	S2991.0	.46922	.49736	.55255
SDev	.609	.00221	.00767	.2	.01133	.04815	.01432
%RSD	1.1527	.34318	.84075	.00602	2.4152	9.6805	2.5921
#1	53.245	.64728	.92134	S2990.7	.48330	.56147	.56490
#2	53.268	.64522	.90945	S2991.1	.47208	.49958	.56501
#3	52.708	.64215	.90351	S2991.0	.46493	.44631	.54023
#4	51.972	.64625	.91539	S2991.1	.45655	.48207	.54006
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	1.8735	H20.138	1.8324	1.1047	.94714	1.8921	.46112
SDev	.0262	.122	.0400	.0169	.00840	.1545	.00389
%RSD	1.3993	.60595	2.1811	1.5296	.88660	8.1635	.84428
#1	1.8962	H20.221	1.8703	1.1168	.95602	2.0941	.46624
#2	1.8533	H20.244	1.7814	1.1187	.95187	1.8920	.46133

#3	1.8961	H20.108	1.8206	1.1011	.94329	1.7190	.46003
#4	1.8485	19.978	1.8572	1.0823	.93737	1.8634	.45687

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	.53665
SDev	.00146
%RSD	.27239

#1	.53619
#2	.53875
#3	.53627
#4	.53537

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-6

Operator: WTR

Run Time: 03/19/01 15:09:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97823	50.199	4.8998	4.9303	4.9209	4.8926	49.459
SDev	.00324	.406	.0904	.0496	.0605	.0325	.337
%RSD	.33116	.80880	1.8451	1.0060	1.2304	.66345	.68037
#1	.98081	50.511	4.9725	4.9629	4.9671	4.9154	49.405
#2	.98046	49.650	4.8426	4.8643	4.8419	4.8497	49.797
#3	.97788	50.133	4.9809	4.9205	4.9050	4.8854	49.618
#4	.97379	50.502	4.8030	4.9735	4.9696	4.9201	49.015
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	5.0467	4.8409	4.7656	4.8903	51.073	50.417	4.9563
SDev	.0267	.0167	.0195	.0668	.161	.710	.0950
%RSD	.52895	.34451	.40828	1.3668	.31474	1.4080	1.9170
#1	5.0318	4.8528	4.7762	4.9324	51.288	51.289	5.0106
#2	5.0809	4.8237	4.7746	4.8065	50.899	49.688	4.8355
#3	5.0538	4.8574	4.7751	4.8679	51.059	50.021	4.9290
#4	5.0202	4.8298	4.7364	4.9544	51.047	50.671	5.0502
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	50.342	4.8107	4.8129	50.689	4.9013	4.8917	4.9212
SDev	.337	.0106	.0161	.932	.0250	.0185	.0061
%RSD	.66969	.22060	.33463	1.8384	.51053	.37851	.12379
#1	50.647	4.8235	4.8367	51.172	4.8765	4.9117	4.9239
#2	49.911	4.8061	4.8069	49.564	4.9360	4.8762	4.9243
#3	50.239	4.8143	4.8010	50.338	4.8943	4.9033	4.9120
#4	50.570	4.7989	4.8069	51.681	4.8984	4.8757	4.9245
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	4.8652	5.0665	4.9608	4.9045	4.8463	9.6220	4.8112
SDev	.0384	.0376	.0666	.0514	.0260	.0352	.0192
%RSD	.78936	.74223	1.3428	1.0478	.53554	.36549	.39857
#1	4.8992	5.0611	4.9680	4.9447	4.8719	9.5932	4.8355
#2	4.8932	5.0267	5.0518	4.8372	4.8124	9.6287	4.7886

#3	4.8175	5.0609	4.9026	4.8916	4.8411	9.6691	4.8092
#4	4.8508	5.1175	4.9209	4.9447	4.8600	9.5972	4.8116

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	4.8549
SDev	.0077
%RSD	.15788

#1	4.8557
#2	4.8623
#3	4.8574
#4	4.8442

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB6

Operator: WTR

Run Time: 03/19/01 15:13:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00171	.00674	-.02652	.03319	.00038	.00051	.00791
SDev	.00131	.00443	.03215	.00201	.00009	.00006	.00069
%RSD	76.209	65.745	121.26	6.0671	22.951	12.063	8.6789
#1	-.00342	.00043	-.04834	.03145	.00033	.00042	.00889
#2	-.00205	.00892	-.01158	.03493	.00033	.00053	.00782
#3	-.00068	.01051	.01142	.03145	.00033	.00053	.00729
#4	-.00070	.00710	-.05756	.03494	.00051	.00054	.00765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00107	.00307	.00013	.00099	.00428	.21730	.00092
SDev	.00183	.00217	.00154	.00039	.00205	.20238	.00059
%RSD	171.38	70.734	1161.0	39.850	48.055	93.133	63.582
#1	-.00085	.00154	-.00092	.00118	.00188	.29853	.00101
#2	-.00304	.00615	.00170	.00119	.00325	.38789	.00154
#3	-.00173	.00154	-.00144	.00118	.00599	.25792	.00101
#4	.00133	.00306	.00118	.00040	.00599	-.07514	.00012
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	.00529	.00051	.00446	.02791	-.00821	.02658	.00303
SDev	.00696	.00051	.00569	.00596	.00958	.02333	.00007
%RSD	131.50	99.784	127.65	21.366	116.68	87.789	2.3394
#1	.00463	-.00026	.00000	.02585	-.01328	.03978	.00302
#2	.01521	.00077	.00000	.02058	-.01546	.02225	.00295
#3	.00198	.00077	.00594	.03412	-.00985	.04860	.00303
#4	-.00066	.00077	.01188	.03111	.00574	-.00433	.00312
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	.02741	-.00284	-.02548	.00056	.00022	.00353	-.00075
SDev	.03216	.00283	.01700	.00018	.00081	.06782	.00160
%RSD	117.35	99.901	66.704	32.350	367.17	1921.8	213.37
#1	.06909	-.00424	-.02744	.00032	-.00074	.07584	-.00000
#2	-.00237	-.00424	-.00129	.00054	-.00015	-.08321	.00000

#3	.03575	.00141	-.03268	.00063	.00074	-.01094	.00015
#4	.00717	-.00428	-.04052	.00075	.00104	.03243	-.00316

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	-.00086
SDev	.00122
%RSD	142.17

#1	-.00171
#2	-.00076
#3	.00083
#4	-.00178

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXKAWB

Operator: WTR

Run Time: 03/19/01 15:22:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	.01991	.00666	.00012	.00080	.00083	.02582
SDev	.00206	.00839	.02319	.00001	.00071	.00062	.00956
%RSD	635.52	42.157	347.98	8.4398	88.626	74.855	37.024
#1	-.00341	.00897	.02979	.00011	.00033	.00030	.01709
#2	.00069	.02251	-.02554	.00012	.00009	.00030	.01802
#3	.00073	.02908	.01112	.00013	.00117	.00123	.03366
#4	.00070	.01907	.01128	.00013	.00159	.00148	.03451
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	.00115	.00065	.00197	.06122	.12794	.00126
SDev	.00053	.00316	.00260	.00144	.00660	.41458	.00109
%RSD	36.845	274.28	397.98	72.912	10.773	324.04	86.112
#1	-.00186	.00154	.00065	.00119	.05455	-.05077	.00206
#2	-.00147	-.00307	-.00301	.00040	.05661	-.32696	-.00024
#3	-.00068	.00153	.00222	.00276	.06619	.63971	.00117
#4	-.00172	.00461	.00275	.00355	.06755	.24979	.00206
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	.00595	.00104	-.00148	.04746	-.00792	.03311	-.00314
SDev	.01748	.00051	.00569	.03069	.00929	.00441	.01233
%RSD	293.69	49.401	385.10	64.662	117.22	13.328	392.89
#1	-.00331	.00078	-.00593	.01945	-.01969	.03091	-.00934
#2	-.01389	.00078	-.00593	.02397	-.01029	.03080	.01536
#3	.02315	.00079	.00595	.06419	.00187	.03973	-.00926
#4	.01786	.00181	.00001	.08224	-.00359	.03099	-.00931
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	.02640	.00284	-.00197	.00091	.00067	.02795	.00083
SDev	.04044	.00281	.01658	.00064	.00061	.06180	.00269
%RSD	153.21	99.116	841.80	70.460	91.625	221.12	324.57
#1	-.03080	.00141	-.02226	.00032	.00015	.11839	-.00015
#2	.03591	.00706	-.00647	.00041	.00015	-.01167	-.00131

#3	.03594	.00147	.00389	.00127	.00133	.01700	.00476
#4	.06453	.00141	.01696	.00162	.00104	-.01192	.00001

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	.00155
SDev	.00187
%RSD	120.69

#1	-.00075
#2	.00309
#3	.00080
#4	.00306

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXKAWC

Operator: WTR

Run Time: 03/19/01 15:26:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00069	L.01580	L-.01398	.00007	L.00046	L.00012	L.02042
SDev	.00112	.00935	.06668	.00001	.00009	.00007	.00257
%RSD	160.98	59.164	476.80	8.3110	18.667	59.098	12.605

#1	L-.00067	L.00446	L.00683	.00007	L.00051	L.00018	L.01766
#2	L.00206	L.02624	L-.07162	.00007	L.00051	L.00006	L.02329
#3	L.00070	L.01278	L-.06230	.00007	L.00051	L.00006	L.02178
#4	L.00069	L.01971	L.07115	.00006	L.00033	L.00018	L.01895

Errors	LC Low	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00180	L.00037	L-.00047	L.00118	L.03445	L.14013	.00009
SDev	.00192	.00193	.00090	.00091	.00148	.14569	.00037
%RSD	106.53	521.66	190.26	76.616	4.3067	103.97	430.39

#1	L-.00423	L-.00000	L-.00060	L.00040	L.03239	L.05483	-.00040
#2	L.00036	L-.00156	L.00045	L.00197	L.03515	L.29041	.00012
#3	L-.00119	L-.00001	L-.00008	L.00197	L.03581	L.23355	.00049
#4	L-.00215	L.00305	L-.00165	L.00040	L.03446	L-.01828	.00012

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.02117	L.00030	.93421	L.01908	L-.00814	L.01618	.47200
SDev	.00253	.00051	.00891	.00452	.00702	.02834	.05779
%RSD	11.968	171.00	.95391	23.700	86.283	175.20	12.244

#1	L-.02447	L.00004	.92678	L.01344	L-.00021	L-.00366	.49679
#2	L-.01918	L.00005	.94461	L.02171	L-.01426	L.04045	.50880
#3	L-.01918	L.00107	.93866	L.02359	L-.00425	L-.01266	L.38573
#4	L-.02183	L.00004	.92678	L.01757	L-.01383	L.04057	.49667

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01418	9.5131	1.8859	.00009	.94181	L.02837	L.00052
SDev	.01964	.0406	.0264	.00012	.00323	.02736	.00023
%RSD	138.47	.42714	1.3994	140.21	.34336	96.459	43.776

#1	L.00725	9.4608	1.8671	-.00002	.93796	L.03202	L.00033
#2	L-.03086	9.5570	1.8828	.00020	.94477	L.04644	L.00078

673 1241

#3	L-.00227	9.5061	1.9241	.00020	.94033	L-.01139	L.00063
#4	L-.03086	9.5287	1.8697	-.00002	.94418	L.04641	L.00033

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

Elem ZN
Units ppm
Avge L.00059
SDev .00165
%RSD 280.89

#1	L-.00080
#2	L.00150
#3	L-.00080
#4	L.00245

Errors	LC Low
High	.60000
Low	.40000

Method: QUANMET Sample Name: DXEVA

Operator: WTR

Run Time: 03/19/01 15:29:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00541	2.3850	-.03715	4.2332	.01917	.00016	404.14
SDev	.00259	.0744	.06322	.0457	.00054	.00006	3.92
%RSD	47.856	3.1178	170.15	1.0797	2.8246	36.040	.96914
#1	-.00712	2.4888	-.06101	4.2902	.01979	.00013	401.29
#2	-.00576	2.3754	-.11072	4.2299	.01854	.00013	401.86
#3	-.00712	2.3633	.03668	4.2343	.01896	.00013	403.57
#4	-.00165	2.3126	-.01356	4.1784	.01938	.00025	409.83
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00904	-.00078	.00105	-.00004	1.4477	481.15	.18972
SDev	.00940	.00266	.00150	.00039	.0077	11.75	.00619
%RSD	104.02	342.00	143.93	986.28	.53122	2.4415	3.2645
#1	L-.01760	-.00462	.00065	-.00024	1.4556	494.20	.19647
#2	.00147	-.00003	.00013	-.00024	1.4398	484.03	.19187
#3	L-.01633	.00002	.00013	.00055	1.4425	480.56	.18883
#4	-.00371	.00152	.00327	-.00023	1.4528	465.82	.18172
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H1109.3	.04968	.02098	S-.10498	.00057	.13705	.00314
SDev	1.7	.00132	.01029	.00000	.01994	.05608	.00020
%RSD	.15408	2.6646	49.040	.00000	3524.0	40.919	6.4742
#1	H1111.4	.05019	.01207	S-.10498	-.02756	.11700	.00286
#2	H1107.6	.04814	.01207	S-.10498	.01018	.13487	.00332
#3	H1108.2	.04917	.02989	S-.10498	.00151	.08190	.00314
#4	H1109.9	.05122	.02989	S-.10498	.01812	.21442	.00326
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01408	8.8176	-.08878	6.5179	.01303	.27046	.01436
SDev	.07324	.1846	.01514	.0641	.00900	.19320	.00026
%RSD	520.23	2.0938	17.055	.98415	69.072	71.434	1.8188
#1	-.05498	9.0652	-.06660	6.5948	.02649	.03912	.01414
#2	.02596	8.7993	-.09268	6.5263	.00814	.18385	.01413

#3	-.02643	8.7879	L-.10053	6.5120	.00814	.41507	.01458
#4	.11176	8.6182	-.09530	6.4384	.00932	.44381	.01459

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

Elem ZN
Units ppm
Avge .00404
SDev .00115
%RSD 28.618

#1 .00245
#2 .00488
#3 .00491
#4 .00391

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXEVAP5 Operator: WTR
 Run Time: 03/19/01 15:32:25
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	.46389	-.02959	.94175	.00442	.00005	91.923
SDev	.00173	.00524	.04203	.00718	.00040	.00010	.232
%RSD	58.343	1.1291	142.05	.76267	9.0802	201.73	.25227
#1	-.00330	.47110	-.04807	.93373	.00453	-.00007	91.744
#2	-.00056	.46426	-.03421	.94073	.00495	.00016	92.143
#3	-.00468	.46092	-.06635	.94133	.00411	.00006	91.702
#4	-.00330	.45927	.03028	.95120	.00411	.00005	92.102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.00191	-.00066	.00064	.42686	91.536	.03737
SDev	.00229	.00193	.00157	.00076	.00298	.813	.00056
%RSD	140.18	100.80	238.83	118.26	.69717	.88820	1.5055
#1	-.00337	-.00000	-.00197	-.00035	.42395	90.508	.03681
#2	.00057	.00152	.00117	.00123	.43079	91.726	.03697
#3	-.00383	.00154	-.00196	.00044	.42532	92.474	.03786
#4	.00011	.00460	.00013	.00123	.42737	91.434	.03786
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	276.19	.01186	-.00291	S-.10498	-.01583	.07467	.00316
SDev	1.12	.00051	.00343	.00000	.00490	.01764	.01014
%RSD	.40382	4.3074	117.69	.00000	30.950	23.622	320.51
#1	274.96	.01212	-.00589	S-.10498	-.01014	.06580	.01561
#2	276.25	.01212	.00006	S-.10498	-.01481	.10113	-.00923
#3	277.65	.01110	.00006	S-.10498	-.01634	.06583	.00314
#4	275.91	.01212	-.00588	S-.10498	-.02202	.06593	.00313
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02040	1.7200	L-.10129	1.5437	.00414	.07291	.00367
SDev	.04882	.0085	.02358	.0096	.00089	.07220	.00168
%RSD	239.35	.49377	23.279	.62089	21.429	99.024	45.828
#1	.04659	1.7327	L-.13196	1.5363	.00488	.12717	.00446
#2	.07520	1.7157	-.07454	1.5412	.00488	.02588	.00461

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#3	-.02963	1.7157	L-.10063	1.5577	.00311	.14161	.00115
#4	-.01057	1.7157	-.09802	1.5395	.00370	-.00300	.00446
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00157
SDev	.00205
%RSD	130.68

#1	.00082
#2	.00404
#3	-.00078
#4	.00218

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXEVAS

Operator: WTR

Run Time: 03/19/01 15:35:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00366	3.3067	-.07585	4.3027	.02027	.00023	414.79
SDev	.00286	.0593	.07881	.0248	.00022	.00007	2.90
%RSD	78.116	1.7925	103.90	.57595	1.0992	29.656	.69874
#1	-.00298	3.3858	.02366	4.3201	.02046	.00013	411.15
#2	-.00709	3.3166	-.16913	4.3082	.02046	.00025	414.98
#3	-.00435	3.2724	-.08131	4.3162	.02004	.00025	414.79
#4	-.00022	3.2519	-.07663	4.2663	.02012	.00030	418.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00621	.00035	.00364	-.00022	1.6147	484.29	.19115
SDev	.00346	.00252	.00334	.00000	.0046	10.34	.00592
%RSD	55.654	725.29	91.914	1.0912	.28391	2.1344	3.0983
#1	-.00251	-.00275	-.00015	-.00022	1.6153	498.35	.19987
#2	L-.00615	.00342	.00717	-.00021	1.6132	484.98	.18972
#3	L-.01084	.00037	.00194	-.00022	1.6097	479.54	.18794
#4	L-.00535	.00035	.00560	-.00022	1.6207	474.29	.18705
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H1125.2	.05146	.73688	S-.10498	-.00486	.11296	.51751
SDev	1.0	.00084	.00970	.00000	.00800	.03573	.06394
%RSD	.08483	1.6284	1.3166	.00000	164.48	31.632	12.356
#1	H1125.4	.05146	.73688	S-.10498	-.00739	.06434	.57287
#2	H1125.8	.05145	.72500	S-.10498	.00044	.10855	.46221
#3	H1123.8	.05044	.73688	S-.10498	.00252	.14398	.57291
#4	H1125.9	.05249	.74876	S-.10498	-.01501	.13499	.46206
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01636	H20.308	1.5164	6.5996	.72290	.28594	.01514
SDev	.04812	.339	.0517	.0651	.00587	.08536	.00251
%RSD	294.09	1.6680	3.4078	.98692	.81180	29.853	16.586
#1	-.01160	H20.776	1.5336	6.6884	.73104	.16673	.01398
#2	.03127	H20.312	1.5096	6.6056	.72334	.31124	.01370

#3	-.08308	H20.154	1.5729	6.5646	.71860	.29686	.01398
#4	-.00205	19.990	1.4495	6.5397	.71860	.36893	.01890

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	.00461
SDev	.00142
%RSD	30.767

#1	.00464
#2	.00329
#3	.00395
#4	.00657

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXEVAD

Operator: WTR

Run Time: 03/19/01 15:38:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00266	3.0680	-.04965	4.0500	.01923	.00014	401.82
SDev	.00342	.0046	.09127	.0269	.00032	.00010	2.32
%RSD	128.50	.15017	183.83	.66305	1.6429	70.822	.57747
#1	-.00301	3.0729	.04010	4.0108	.01896	.00002	398.39
#2	-.00710	3.0640	-.09796	4.0682	.01945	.00025	402.86
#3	.00110	3.0710	-.15326	4.0542	.01955	.00014	403.48
#4	-.00163	3.0642	.01253	4.0667	.01896	.00013	402.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00381	-.00347	.00155	.00174	1.5312	446.87	.17469
SDev	.00987	.00264	.00361	.00393	.0063	3.74	.00143
%RSD	258.95	75.976	233.68	226.44	.41017	.83609	.81762
#1	.00153	-.00425	-.00330	-.00023	1.5228	444.53	.17407
#2	L-.01371	-.00422	.00404	-.00023	1.5311	452.08	.17653
#3	L-.01035	-.00576	.00089	.00763	1.5379	443.84	.17319
#4	.00729	.00034	.00456	-.00023	1.5331	447.03	.17496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H1085.5	.04940	.73241	S-.10498	-.01541	.10634	.47433
SDev	5.1	.00118	.01485	.00000	.03189	.04355	.08103
%RSD	.47038	2.3946	2.0279	.00000	206.99	40.953	17.084
#1	H1078.3	.04836	.71311	S-.10498	L-.05069	.14392	.52360
#2	H1090.3	.04838	.74875	S-.10498	.02680	.06430	.42515
#3	H1086.5	.05042	.73093	S-.10498	-.01935	.14393	.56046
#4	H1087.0	.05042	.73687	S-.10498	-.01839	.07321	.38810
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00362	19.228	1.5365	6.2393	.70921	.32340	.01387
SDev	.08991	.120	.0771	.0321	.00260	.20177	.00038
%RSD	2482.4	.62621	5.0210	.51432	.36607	62.391	2.7522
#1	.05005	19.215	1.4446	6.2099	.70706	.26933	.01337
#2	.05484	19.402	1.6298	6.2846	.71298	.25474	.01429

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#3	-.13095	19.153	1.5546	6.2266	.70854	.15349	.01383
#4	.04055	19.141	1.5172	6.2362	.70824	.61603	.01399

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

Elem ZN
Units ppm
Avge .00558
SDev .00037
%RSD 6.6001

#1 .00506
#2 .00576
#3 .00559
#4 .00591

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8LDS/2 NA

Operator: WTR

Run Time: 03/19/01 15:41:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02119	1.0866	.87034	.55537	1.0557	.02204	143.41
SDev	.00158	.0086	.07703	.00397	.0075	.00010	.67
%RSD	7.4547	.79367	8.8509	.71507	.71043	.44065	.46684
#1	.01984	1.0921	.88176	.55743	1.0655	.02215	143.77
#2	.01980	1.0822	.84511	.54981	1.0549	.02204	142.42
#3	.02257	1.0769	.78522	.55886	1.0472	.02191	143.62
#4	.02254	1.0955	.96928	.55537	1.0551	.02204	143.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02688	.22538	.08804	.10865	.89309	27.105	.43912
SDev	.00334	.00290	.00171	.00076	.00633	.309	.00456
%RSD	12.441	1.2850	1.9422	.69447	.70891	1.1391	1.0380
#1	.02841	.22729	.09014	.10924	.90010	27.560	.44379
#2	.02208	.22118	.08595	.10845	.88505	27.032	.44112
#3	.02970	.22577	.08804	.10767	.89189	26.894	.43312
#4	.02733	.22730	.08805	.10924	.89531	26.935	.43845
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.102	.65106	.43380	189.47	.22554	.25987	.23198
SDev	.210	.00213	.00840	1.52	.00920	.01115	.06776
%RSD	.38081	.32760	1.9369	.80215	4.0797	4.2927	29.209
#1	55.388	.65362	.43974	191.34	.22997	.25787	.33362
#2	54.993	.64849	.42192	189.73	.22394	.24866	.19812
#3	54.906	.65054	.43380	187.66	.21345	.25762	.19807
#4	55.120	.65157	.43974	189.16	.23480	.27532	.19812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.90085	8.2514	.86181	2.2164	.42709	.90745	.22550
SDev	.01694	.0399	.02939	.0139	.00106	.03005	.00276
%RSD	1.8808	.48296	3.4097	.62871	.24911	3.3118	1.2229
#1	.88182	8.3094	.83804	2.2346	.42850	.91454	.22796
#2	.91512	8.2358	.88978	2.2131	.42643	.90039	.22289

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#3	.89132	8.2188	.83486	2.2009	.42613	.87131	.22780
#4	.91515	8.2414	.88455	2.2167	.42731	.94355	.22334

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

Elem	ZN
Units	ppm
Avge	.22808
SDev	.00144
%RSD	.63331

#1	.22921
#2	.22855
#3	.22861
#4	.22596

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8LDD/2 NA

Operator: WTR

Run Time: 03/19/01 15:45:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02123	1.1261	.89290	.56858	1.0933	.02285	148.76
SDev	.00111	.0047	.01218	.00594	.0087	.00009	1.28
%RSD	5.2190	.41604	1.3637	1.0446	.79449	.40657	.85927
#1	.02257	1.1206	.89071	.57082	1.0830	.02274	147.07
#2	.01986	1.1308	.87674	.57435	1.1040	.02297	148.51
#3	.02123	1.1291	.90436	.56878	1.0950	.02284	149.49
#4	.02123	1.1240	.89979	.56036	1.0914	.02284	149.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02354	.23380	.09053	.11299	.92989	28.316	.45359
SDev	.00161	.00193	.00026	.00099	.00728	.113	.00505
%RSD	6.8481	.82684	.28887	.87429	.78299	.39889	1.1145
#1	.02583	.23342	.09066	.11318	.91927	28.470	.45091
#2	.02338	.23187	.09066	.11397	.93570	28.324	.46090
#3	.02216	.23648	.09066	.11161	.93160	28.210	.45290
#4	.02277	.23341	.09014	.11318	.93296	28.259	.44965
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	57.135	.67536	.45460	199.06	.22449	.28217	.24411
SDev	.324	.00445	.00343	1.72	.01258	.01113	.05267
%RSD	.56773	.65883	.75438	.86567	5.6057	3.9458	21.577
#1	56.666	.66897	.45757	197.65	.23856	.28449	.32118
#2	57.388	.67613	.45163	201.44	.21995	.26664	.23484
#3	57.306	.67715	.45163	199.19	.22999	.28440	.21032
#4	57.182	.67920	.45757	197.96	.20945	.29314	.21011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94385	8.5046	.89321	2.3190	.43679	.97916	.23150
SDev	.00674	.0472	.00453	.0173	.00311	.06309	.00214
%RSD	.71374	.55552	.50761	.74401	.71297	6.4433	.92579
#1	.94381	8.4338	.89550	2.2973	.43235	1.0588	.22841
#2	.93910	8.5301	.89251	2.3383	.43827	.92850	.23172

#3	.93909	8.5301	.89763	2.3252	.43945	1.0008	.23287
#4	.95339	8.5244	.88718	2.3155	.43708	.92853	.23302

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

Elem	ZN
Units	ppm
Avg	.23538
SDev	.00080
%RSD	.34005

#1	.23492
#2	.23499
#3	.23658
#4	.23504

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L1/2 NA

Operator: WTR

Run Time: 03/19/01 15:48:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00199	1.3019	-.03248	.11910	.26586	.00010	46.154
SDev	.00131	.0108	.01322	.00154	.00108	.00007	.318
%RSD	65.898	.83266	40.698	1.2934	.40723	65.572	.68793
#1	-.00302	1.2871	-.02889	.11960	.26544	.00005	45.878
#2	-.00028	1.3108	-.01529	.11756	.26628	.00005	46.015
#3	-.00302	1.3006	-.04282	.12103	.26460	.00016	46.116
#4	-.00164	1.3091	-.04292	.11821	.26712	.00016	46.607
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00219	.00398	.00418	.00791	2.1493	4.0820	.00776
SDev	.00341	.00193	.00198	.00039	.0153	.4943	.00145
%RSD	155.69	48.564	47.227	4.9673	.71080	12.110	18.710
#1	-.00238	.00129	.00170	.00771	2.1370	3.6291	.00599
#2	.00262	.00435	.00484	.00771	2.1520	3.6941	.00776
#3	-.00375	.00437	.00641	.00849	2.1383	4.6120	.00776
#4	L-.00524	.00590	.00379	.00771	2.1698	4.3927	.00954
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.427	.63693	.00177	212.36	-.00049	.01842	-.00310
SDev	.084	.00378	.00297	.78	.00428	.02736	.00707
%RSD	.37392	.59408	168.09	.36610	869.19	148.54	228.02
#1	22.364	.63539	.00028	212.11	-.00352	.00289	-.00927
#2	22.451	.63437	.00028	212.94	.00034	-.00586	-.00918
#3	22.358	.63540	.00622	211.37	.00523	.05598	.00304
#4	22.536	.64256	.00028	213.02	-.00402	.02068	.00301
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04963	5.9859	-.04113	.59275	.04907	.01709	.00466
SDev	.04990	.0117	.02315	.00246	.00066	.06552	.00008
%RSD	100.54	.19485	56.295	.41531	1.3378	383.40	1.6746
#1	-.01472	5.9703	-.03788	.59126	.04840	.01730	.00462
#2	.04250	5.9873	-.07449	.59341	.04870	.00258	.00463

678 1255

#3	.10439	5.9873	-.02999	.59040	.04929	-.05502	.00478
#4	.06637	5.9986	-.02214	.59591	.04988	.10351	.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 .00778
SDev .00234
%RSD 30.046

#1 .00451
#2 .00960
#3 .00769
#4 .00933

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8L2/5 NA

Operator: WTR

Run Time: 03/19/01 15:52:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00204	.01227	-.00359	.05593	.18639	.00014	77.731
SDev	.00222	.00720	.05268	.00000	.00143	.00006	.215
%RSD	109.00	58.660	1465.5	.00630	.76497	39.381	.27717
#1	-.00204	.01898	-.03012	.05593	.18609	.00017	77.448
#2	-.00476	.00892	-.04850	.05592	.18770	.00016	77.958
#3	.00069	.01745	.07120	.05593	.18451	.00018	77.815
#4	-.00205	.00376	-.00696	.05593	.18728	.00006	77.704
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00059	.00411	-.00026	.00826	.01709	19.017	.03456
SDev	.00232	.00077	.00089	.00064	.00239	.166	.00030
%RSD	391.50	18.737	340.08	7.7726	14.012	.87291	.87427
#1	-.00290	.00450	.00013	.00826	.01828	19.136	.03482
#2	.00067	.00296	-.00040	.00826	.01418	19.080	.03482
#3	-.00215	.00450	.00065	.00905	.01965	19.080	.03430
#4	.00201	.00449	-.00144	.00748	.01623	18.771	.03430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA ✓	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05688	.00052	.00000	140.60	-.00027	.00233	.01234
SDev	.00661	.00098	.00686	1.12	.00517	.00844	.01844
%RSD	11.628	189.86	306620.	.79731	1922.4	361.81	149.42
#1	.05754	-.00025	.00594	140.51	.00210	-.00430	.00308
#2	.06548	-.00025	-.00594	141.35	.00581	.00450	.00321
#3	.05490	.00179	-.00594	139.05	-.00547	-.00424	.04000
#4	.04961	.00077	.00594	141.50	-.00351	.01337	.00308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02030	.68459	.00072	2.5274	-.00377	.02860	.00144
SDev	.03530	.00541	.01256	.0177	.00028	.06502	.00211
%RSD	173.88	.78949	1741.9	.69846	7.5092	227.34	146.37
#1	-.02615	.68601	.00657	2.5220	-.00400	.03219	.00130
#2	.05960	.68039	.00134	2.5402	-.00370	-.02557	.00446

#3	.02626	.69165	.01195	2.5048	-.00340	.11891	-.00015
#4	.02149	.68034	-.01697	2.5427	-.00400	-.01113	.00015

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

Elem	ZN
Units	ppm
Avge	.00141
SDev	.00109
%RSD	77.544

#1	.00237
#2	.00171
#3	.00172
#4	-.00016

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

673 1253

03/19/01 03:59:09 PM

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Method: QUANMET Sample Name: CCV2-7

Operator: WTR

Run Time: 03/19/01 15:56:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96861	48.012	4.7185	4.7087	4.6255	4.7106	50.553
SDev	.00239	.194	.0960	.0505	.0292	.0215	.126
%RSD	.24723	.40396	2.0348	1.0722	.63168	.45702	.24852
#1	.96772	48.191	4.7730	4.7466	4.6560	4.7309	50.639
#2	.96604	47.780	4.5749	4.6451	4.5905	4.6831	50.473
#3	.97172	47.925	4.7571	4.6912	4.6137	4.7041	50.679
#4	.96897	48.152	4.7691	4.7518	4.6418	4.7241	50.420
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	5.1398	4.8377	4.7578	4.5463	50.257	47.481	L4.4625
SDev	.0296	.0118	.0116	.0303	.170	.189	.0418
%RSD	.57507	.24307	.24316	.66652	.33839	.39840	.93719
#1	5.1627	4.8406	4.7694	4.5752	50.454	47.487	L4.4917
#2	5.1252	4.8209	4.7422	4.5107	50.038	47.251	L4.4217
#3	5.1661	4.8484	4.7626	4.5320	50.264	47.471	L4.4319
#4	5.1053	4.8408	4.7569	4.5673	50.272	47.714	4.5048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.070	4.7798	4.7652	46.186	4.9104	4.9284	4.7861
SDev	.226	.0149	.0175	.345	.0163	.0756	.0273
%RSD	.46966	.31073	.36724	.74595	.33112	1.5331	.56977
#1	48.297	4.7957	4.7653	46.445	4.9202	4.9746	4.7768
#2	47.784	4.7598	4.7474	45.763	4.9134	4.9038	4.7647
#3	48.006	4.7824	4.7593	46.049	4.9213	5.0016	4.8261
#4	48.194	4.7814	4.7890	46.488	4.8866	4.8334	4.7767
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	4.5970	4.9537	4.9294	4.6432	4.6860	9.3932	4.7126
SDev	.0705	.0260	.0933	.0256	.0171	.3256	.0168
%RSD	1.5329	.52421	1.8925	.55031	.36554	3.4666	.35711
#1	4.6345	4.9921	4.9522	4.6678	4.7055	9.4334	4.7288
#2	4.6666	4.9464	4.9287	4.6110	4.6646	9.0065	4.6891

#3	4.5053	4.9354	5.0309	4.6351	4.6824	9.7976	4.7183
#4	4.5815	4.9410	4.8058	4.6590	4.6916	9.3351	4.7144
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 4.8145
SDev .0107
%RSD .22259

#1 4.8287
#2 4.8041
#3 4.8163
#4 4.8089

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB7

Operator: WTR

Run Time: 03/19/01 15:59:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00101	.00248	.00800	.03758	-.00004	.00017	.00532
SDev	.00233	.01323	.05486	.00175	.00031	.00010	.00439
%RSD	229.41	533.58	686.02	4.6573	718.84	56.933	82.514
#1	-.00205	.00366	-.03457	.03846	.00009	.00018	.00188
#2	-.00067	.00036	.06211	.03844	-.00033	.00006	.00521
#3	.00205	.01906	.04817	.03845	.00033	.00030	.01155
#4	-.00339	-.01316	-.04372	.03495	-.00026	.00016	.00264
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	-.00195	.00308	-.00078	.00020	.01197	.31884	-.00011
SDev	.00344	.00218	.00150	.00075	.00117	.30456	.00095
%RSD	176.10	70.734	191.46	375.17	9.7693	95.522	854.44
#1	.00114	-.00000	-.00248	-.00039	.01214	-.01828	.00028
#2	.00091	.00460	-.00091	-.00039	.01077	.26604	.00065
#3	-.00497	.00308	.00118	.00118	.01351	.72094	.00012
#4	-.00489	.00462	-.00092	.00040	.01146	.30665	-.00150
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	.00265	.00077	.00446	.03477	-.00747	.03539	-.00930
SDev	.01503	.00000	.00569	.00742	.00718	.02751	.02009
%RSD	567.89	.22053	127.61	21.338	96.125	77.740	215.94
#1	-.01389	.00077	.01188	.03261	-.01794	-.00444	-.00946
#2	-.00595	.00077	.00594	.03299	-.00170	.03985	-.00924
#3	.01786	.00077	.00000	.04539	-.00570	.05749	.01535
#4	.01257	.00077	.00000	.02810	-.00455	.04865	-.03386
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	.02148	.03113	-.00265	.00000	-.00007	.02507	.00155
SDev	.01167	.03342	.00497	.00004	.00051	.02506	.00211
%RSD	54.321	107.34	187.49	1399.9	683.13	99.928	136.15
#1	.02148	.01839	.00127	.00007	.00015	.06124	.00029
#2	.03577	.01840	-.00919	-.00002	-.00015	.01785	.00130

#3	.00719	.08062	-.00386	-.00002	.00044	.00338	.00000
#4	.02147	.00712	.00117	-.00002	-.00074	.01782	.00461

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	.00052
SDev	.00043
%RSD	81.497

#1	-.00008
#2	.00053
#3	.00081
#4	.00084

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW8L5/10 NA Operator: WTR
 Run Time: 03/19/01 16:02:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.18244	.01446	.11802	1.2467	.00015	40.495
SDev	.00234	.01524	.02646	.00269	.0036	.00006	.215
%RSD	2384.8	8.3520	183.01	2.2792	.28673	40.000	.53094
#1	-.00318	.16297	.04570	.11425	1.2486	.00018	40.202
#2	-.00044	.18327	-.00972	.11859	1.2450	.00018	40.479
#3	.00093	.18329	-.00512	.12064	1.2505	.00018	40.606
#4	.00230	.20021	.02697	.11859	1.2425	.00006	40.695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00322	.00228	.00000	-.00026	1.2258	2.2684	.00141
SDev	.00312	.00251	.00116	.00000	.0057	.1542	.00068
%RSD	96.939	109.77	3189e6	1.0296	.46795	6.7977	48.467
#1	L-.00550	.00229	-.00144	-.00026	1.2181	2.0532	.00065
#2	-.00003	-.00079	.00065	-.00026	1.2250	2.4106	.00117
#3	-.00108	.00535	.00118	-.00025	1.2291	2.2725	.00154
#4	L-.00626	.00229	-.00039	-.00026	1.2311	2.3375	.00227
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.376	.19643	.00016	153.55	-.00399	.02160	-.00312
SDev	.055	.00145	.00000	.63	.00469	.03063	.01588
%RSD	.26766	.73692	.46795	.40864	117.64	141.81	509.39
#1	20.422	.19438	.00016	154.20	-.00905	-.00487	.00305
#2	20.348	.19643	.00016	153.30	-.00352	-.00499	-.00937
#3	20.422	.19745	.00016	153.92	.00216	.04815	-.02151
#4	20.313	.19745	.00016	152.80	-.00555	.04811	.01535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00266	1.2249	.00011	.37474	.00533	.00376	.00000
SDev	.04561	.0385	.02976	.00095	.00129	.11465	.00000
%RSD	1713.3	3.1412	26607.	.25438	24.216	3050.3	60.685
#1	-.03190	1.2235	-.02470	.37544	.00459	.08697	.00000
#2	-.04141	1.2404	.04324	.37415	.00459	-.11544	.00001

#3	.04436	1.1726	-.01173	.37565	.00488	-.07219	.00001
#4	.03960	1.2631	-.00636	.37371	.00725	.11570	.00000

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

Elem	ZN
Units	ppm
Avge	.00072
SDev	.00076
%RSD	105.73

#1	.00074
#2	-.00022
#3	.00165
#4	.00073

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L6/2 CA

Operator: WTR

Run Time: 03/19/01 16:05:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00418	10.901	.00523	.46698	1.4077	.00114	308.78
SDev	.00294	.126	.06294	.01521	.0228	.00010	2.20
%RSD	70.321	1.1559	1204.5	3.2567	1.6188	8.5279	.71178
#1	-.00008	10.967	.07369	.46239	1.4180	.00127	309.90
#2	-.00553	10.979	-.06912	.48958	1.4244	.00113	306.25
#3	-.00688	10.945	.03692	.45835	1.4144	.00113	311.19
#4	-.00425	10.714	-.02058	.45762	1.3741	.00103	307.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00312	.01344	.01646	.01595	21.766	13.519	.01996
SDev	.00430	.00075	.00321	.00418	.163	.701	.00068
%RSD	137.94	5.5490	19.494	26.221	.74971	5.1862	3.3851
#1	L-.00519	.01382	.01895	.01930	21.857	13.970	.02022
#2	.00333	.01380	.01947	.00985	21.786	14.141	.02074
#3	L-.00506	.01383	.01423	.01773	21.892	13.377	.01970
#4	L-.00556	.01233	.01319	.01690	21.531	12.589	.01917
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	105.95	2.4509	.00136	S1814.2	.02152	.04349	.02733
SDev	1.31	.0175	.00569	1362.4	.00736	.04376	.01423
%RSD	1.2354	.71495	417.24	75.098	34.197	100.64	52.082
#1	106.44	2.4629	.00286	H644.49	.01441	.09639	.01489
#2	106.83	2.4445	.00879	S2993.8	.03162	.05229	.03973
#3	106.52	2.4670	-.00307	S2994.4	.01836	.03461	.03958
#4	104.00	2.4291	-.00312	H624.18	.02170	-.00935	.01511
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	-.03163	H22.285	-.02688	2.1308	.39120	.04835	.03464
SDev	.03266	.221	.03728	.0313	.00279	.11920	.00271
%RSD	103.24	.99260	138.69	1.4693	.71254	246.52	7.8220
#1	.00438	H22.372	-.02105	2.1439	.39416	.02535	.03238
#2	-.03872	H22.282	-.05756	2.1540	.39298	-.06041	.03714

#3	-.01933	H22.502	.02353	2.1408	.38913	.01034	.03683
#4	-.07287	H21.982	-.05245	2.0846	.38853	.21812	.03222

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	.06106
SDev	.00124
%RSD	2.0284

#1	.06015
#2	.06243
#3	.06177
#4	.05988

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L6/10 NA Operator: WTR
 Run Time: 03/19/01 16:08:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	2.1692	.02567	.11767	.28379	.00022	65.875
SDev	.00138	.0528	.03377	.00014	.00631	.00011	.747
%RSD	378.13	2.4357	131.58	.12215	2.2225	52.589	1.1344
#1	-.00105	2.0963	.01250	.11748	.27509	.00015	64.949
#2	-.00106	2.1693	.01190	.11766	.28515	.00016	65.668
#3	-.00104	2.2200	.07585	.11783	.29018	.00016	66.698
#4	.00170	2.1910	.00241	.11769	.28473	.00039	66.187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00086	.00391	.00405	.00385	4.6547	2.5284	.00391
SDev	.00237	.00147	.00194	.00162	.0717	.6086	.00085
%RSD	275.33	37.681	47.777	42.112	1.5393	24.072	21.811
#1	.00251	.00276	.00483	.00404	4.5613	2.5649	.00368
#2	-.00255	.00430	.00274	.00169	4.6530	1.7120	.00279
#3	-.00094	.00275	.00222	.00406	4.7351	2.6543	.00457
#4	-.00247	.00583	.00641	.00563	4.6694	3.1823	.00457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.388	.52508	-.00236	120.85	.00191	.02144	.00609
SDev	.343	.00813	.00767	2.70	.01138	.03010	.00610
%RSD	1.6022	1.5493	324.76	2.2305	594.22	140.36	100.14
#1	20.940	.51432	.00060	117.10	.00596	.06342	.00303
#2	21.443	.52456	-.01127	121.90	-.00038	.01041	.00301
#3	21.774	.53379	-.00532	123.42	-.01247	-.00734	.01523
#4	21.395	.52764	.00655	120.99	.01455	.01927	.00308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00391	4.5715	-.01542	.43383	.08178	.02831	.00686
SDev	.03305	.1150	.01455	.00906	.00250	.06141	.00284
%RSD	844.98	2.5145	94.337	2.0889	3.0627	216.89	41.371
#1	-.04522	4.4315	-.01413	.42111	.07919	.09473	.00925
#2	.02654	4.5389	.00419	.43649	.08037	.05003	.00433

673 1267

#3	.01727	4.7030	-.02977	.44252	.08481	.01992	.00448
#4	.01706	4.6125	-.02197	.43520	.08274	-.05143	.00940

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

Elem	ZN
Units	ppm
Avge	.01275
SDev	.00114
%RSD	8.9288

#1	.01330
#2	.01236
#3	.01399
#4	.01137

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8L8/10 NA Operator: WTR
 Run Time: 03/19/01 16:11:58
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00121	.16342	.00347	.03792	.11335	-.00006	41.856
SDev	.00262	.00724	.01734	.00379	.00190	.00009	.502
%RSD	216.02	4.4297	499.25	9.9871	1.6723	140.95	1.1986
#1	-.00464	.15456	.00012	.03667	.11121	-.00006	41.196
#2	-.00188	.16130	.02302	.03319	.11330	.00005	41.734
#3	.00086	.16629	.00913	.04020	.11306	-.00007	42.238
#4	.00081	.17154	-.01837	.04165	.11582	-.00016	42.255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00100	.00069	.00052	.00540	.87200	.25995	.00171
SDev	.00198	.00198	.00235	.00076	.00988	.69010	.00060
%RSD	199.44	286.45	451.42	13.963	1.1333	265.48	35.112
#1	-.00161	-.00007	-.00092	.00521	.86037	-.27010	.00154
#2	-.00177	.00146	.00065	.00599	.86722	.58285	.00154
#3	.00192	.00299	.00379	.00600	.88021	1.0784	.00258
#4	-.00252	-.00161	-.00144	.00442	.88021	-.35133	.00120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.851	.27074	-.00434	150.79	-.00814	.02169	-.00312
SDev	.236	.00368	.00297	2.72	.00494	.02606	.02127
%RSD	1.0338	1.3587	68.436	1.8034	60.615	120.15	680.99
#1	22.668	.26588	-.00583	148.33	-.00440	.01280	-.03381
#2	22.784	.26997	-.00583	150.39	-.00431	.02174	.01536
#3	22.753	.27304	.00012	149.80	-.01473	.05708	.00294
#4	23.197	.27406	-.00583	154.66	-.00912	-.00487	.00302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00274	.93777	-.00516	.22460	.00503	.01687	.00076
SDev	.04801	.04268	.01936	.00381	.00051	.06915	.00419
%RSD	1751.5	4.5509	375.28	1.6986	10.189	410.04	554.52
#1	.06702	.98019	-.03013	.22079	.00429	-.06608	-.00015
#2	.00987	.90102	.01714	.22368	.00548	.09279	.00331

#3	-.04249	.90104	-.00383	.22403	.00518	-.00859	.00462
#4	-.02344	.96883	-.00383	.22989	.00518	.04934	-.00476

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

Elem	ZN
Units	ppm
Avge	.00461
SDev	.00023
%RSD	4.9424

#1	.00488
#2	.00433
#3	.00465
#4	.00460

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7DJ/5 NA

Operator: WTR

Run Time: 03/19/01 16:15:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00237	-.00294	-.01452	.05236	.16081	-.00000	49.210
SDev	.00237	.00999	.01476	.00756	.00439	.00007	1.314
%RSD	99.980	339.81	101.65	14.430	2.7323	2449.1	2.6707
#1	-.00171	.00390	.00048	.04316	.15447	-.00006	47.244
#2	-.00578	-.01311	-.02712	.05098	.16446	.00006	49.773
#3	-.00032	.00721	-.02727	.06145	.16278	-.00006	49.823
#4	-.00167	-.00976	-.00417	.05383	.16152	.00005	50.000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00171	.00374	.00118	.00078	1.7154	12.254	.01297
SDev	.00357	.00088	.00166	.00118	.0491	.603	.00076
%RSD	209.07	23.614	140.67	151.62	2.8596	4.9235	5.8555
#1	.00353	.00450	-.00092	-.00021	1.6422	11.379	.01329
#2	-.00241	.00298	.00065	.00216	1.7462	12.662	.01203
#3	-.00389	.00298	.00222	-.00020	1.7394	12.329	.01276
#4	-.00405	.00452	.00274	.00137	1.7339	12.646	.01381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.436	.15335	-.00126	141.41	-.00134	-.01147	.02772
SDev	.156	.00396	.00298	3.88	.01444	.01506	.02836
%RSD	1.1582	2.5849	236.14	2.7458	1079.1	131.30	102.32
#1	13.252	.14745	-.00573	136.01	.01091	-.03133	.00328
#2	13.622	.15566	.00023	145.11	-.02186	-.01367	.05217
#3	13.479	.15566	.00023	142.93	-.00038	.00391	.00303
#4	13.389	.15464	.00023	141.58	.00597	-.00479	.05238
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02081	2.1202	-.00098	.40393	-.00185	.08266	.00084
SDev	.02540	.0328	.01991	.01051	.00061	.04329	.00176
%RSD	122.06	1.5486	2026.0	2.6013	32.985	52.373	210.47
#1	.00754	2.0721	-.01940	.38887	-.00192	.09460	-.00015
#2	-.01595	2.1287	-.01656	.41301	-.00252	.09305	.00001

#3	-.02074	2.1457	.01983	.40836	-.00104	.02089	.00001
#4	-.05410	2.1344	.01220	.40547	-.00192	.12210	.00347

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

Elem ZN
Units ppm
Avge .00455
SDev .00108
%RSD 23.724

#1	.00423
#2	.00394
#3	.00615
#4	.00387

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7DJP25

Operator: WTR

Run Time: 03/19/01 16:18:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00129	-.00894	.00088	.01676	.02335	.00008	7.5475
SDev	.00175	.00734	.01376	.00192	.01334	.00022	4.3925
%RSD	135.64	82.139	1568.0	11.449	57.135	283.66	58.198
#1	.00072	.00200	-.00245	.01406	.00334	.00040	.95938
#2	-.00059	-.01324	-.00264	.01814	.03010	-.00007	9.7081
#3	-.00335	-.01137	.02045	.01671	.03028	-.00006	9.8301
#4	-.00195	-.01315	-.01185	.01813	.02969	.00005	9.6923
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00241	.00229	.00275	.00160	.26233	2.2705	.00182
SDev	.00328	.00385	.00365	.00101	.14399	.7368	.00065
%RSD	136.01	168.14	132.94	62.727	54.887	32.452	35.622
#1	-.00221	.00307	.00432	.00276	.04635	1.3546	.00117
#2	-.00160	.00306	.00118	.00122	.33433	2.5324	.00188
#3	L-.00687	-.00307	-.00144	.00043	.33433	2.0938	.00154
#4	.00102	.00612	.00693	.00201	.33433	3.1011	.00269
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0121	.02308	.00152	20.031	-.00370	.00661	-.00006
SDev	1.1040	.01282	.00568	11.827	.00289	.02929	.00619
%RSD	54.868	55.549	373.67	59.045	78.252	443.24	9591.2
#1	.35651	.00385	.00595	2.2957	-.00753	.00448	-.00935
#2	2.5922	.02949	.00598	26.118	-.00206	.01323	.00306
#3	2.5683	.02949	-.00590	26.187	-.00096	-.03110	.00308
#4	2.5313	.02949	.00004	25.523	-.00424	.03982	.00294
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00916	.32536	.00983	.05866	.00096	.02493	.00350
SDev	.01653	.14426	.02325	.03408	.00101	.08289	.00244
%RSD	180.41	44.340	236.41	58.090	104.72	332.51	69.583
#1	.01682	.10896	-.00396	.00756	.00222	.07512	.00477
#2	-.01086	.39750	-.01172	.07598	.00015	-.03037	.00476

#3	.00343	.39745	.01443	.07642	.00015	-.05918	-.00015
#4	.02725	.39750	.04058	.07469	.00133	.11414	.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	.00009
SDev	.00072
%RSD	764.29

#1	-.00011
#2	.00080
#3	-.00083
#4	.00052

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7DJS/5 NA Operator: WTR
 Run Time: 03/19/01 16:21:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00330	.20138	.20211	.14035	.28229	.00490	39.960
SDev	.00313	.13638	.18926	.08846	.18946	.00319	26.720
%RSD	94.759	67.721	93.640	63.027	67.114	65.001	66.868

#1	-.00068	-.00304	-.07595	.01051	.00092	.00018	.16419
#2	.00682	.26241	.24146	.17054	.33845	.00580	48.731
#3	.00284	.27224	.31457	.17095	.39375	.00682	55.302
#4	.00421	.27392	.32837	.20940	.39602	.00682	55.642

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00723	.06028	.02250	.01867	1.2333	11.659	.09011
SDev	.00340	.04147	.01740	.01271	.8213	8.372	.06049
%RSD	47.039	68.791	77.341	68.071	66.589	71.810	67.131

#1	.00607	-.00156	-.00353	-.00039	.01146	-.61940	.00012
#2	.00967	.07478	.02944	.02501	1.4928	13.280	.10921
#3	.01022	.08546	.03153	.02504	1.7118	17.219	.12679
#4	.00294	.08241	.03258	.02504	1.7173	16.756	.12431

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.264	.15760	.11304	90.973	.05414	.06535	.06714
SDev	9.472	.10546	.07189	60.918	.03773	.03500	.03778
%RSD	66.407	66.914	63.599	66.963	69.699	53.556	56.268

#1	.08136	.00077	.00594	.64764	-.00213	.01322	.01536
#2	18.186	.19040	.13684	108.05	.07812	.08555	.08864
#3	19.366	.21910	.15469	127.43	.07250	.08574	.06385
#4	19.422	.22013	.15469	127.76	.06807	.07688	.10071

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

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21350	2.5593	.24456	.34388	.10109	.19764	.05505
SDev	.15199	1.6868	.16432	.23052	.06666	.09533	.03712
%RSD	71.190	65.908	67.190	67.036	65.938	48.236	67.438

#1	-.00711	.05233	-.00125	.00145	.00192	.07572	.00014
#2	.25958	3.0742	.30998	.41272	.12211	.16831	.06460

#3	.26026	3.5270	.33076	.47975	.13987	.26606	.07773
#4	.34127	3.5836	.33875	.48160	.14046	.28046	.07773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .05876
SDev .04000
%RSD 68.072

#1 -.00013
#2 .06872
#3 .07907
#4 .08740

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW7DJD/5 NA Operator: WTR
 Run Time: 03/19/01 16:24:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00031	.11455	.13016	.08770	.16313	.00267	23.957
SDev	.01251	.15785	.14355	.09552	.18727	.00356	27.274
%RSD	4073.6	137.80	110.28	108.92	114.80	133.24	113.85
#1	.01149	.05502	.02985	.00585	-.00018	-.00094	.24247
#2	L-.01706	-.08095	-.01555	.00411	.00223	.00016	.43669
#3	-.00000	.22689	.24172	.17047	.33202	.00579	48.067
#4	.00680	.25726	.26462	.17039	.31845	.00568	47.082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00075	.03281	.00838	.00955	.72478	4.9085	.05053
SDev	.00354	.04782	.02674	.01840	.82114	11.320	.06148
%RSD	472.68	145.77	319.26	192.74	113.29	230.61	121.66
#1	L-.00583	-.01995	L-.02811	-.01142	.02311	L-8.9052	-.00493
#2	.00147	.00460	.00484	-.00039	.00461	.20918	-.00040
#3	-.00049	.07482	.02891	.02500	1.4579	13.905	.10594
#4	.00186	.07175	.02787	.02500	1.4135	14.425	.10152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.2461	.09379	.06544	51.924	.02551	.01393	.03039
SDev	9.4586	.10624	.08314	59.039	.05028	.12016	.04294
%RSD	114.70	113.28	127.03	113.70	197.10	862.39	141.30
#1	-.09062	.00281	-.01782	.85027	-.02025	L-.14626	.05234
#2	.21629	.00077	.00594	.78448	-.01533	-.00428	-.03402
#3	16.921	.18733	.13089	105.19	.07482	.12967	.05174
#4	15.937	.18425	.14277	100.87	.06280	.07660	.05151
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12972	1.5406	.14708	.19777	.06091	.11888	.02818
SDev	.17853	1.6842	.18347	.22540	.06803	.19233	.04493
%RSD	137.63	109.32	124.74	113.97	111.69	161.78	159.47
#1	-.04995	.17089	-.01157	.00148	.00607	.09034	-.02356
#2	.00240	-.00419	-.01190	.00385	-.00192	-.14107	.00477

673 1277

#3	.28329	3.0064	.29936	.40128	.12122	.24108	.06790
#4	.28315	2.9894	.31244	.38449	.11826	.28517	.06359

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

Elem	ZN
Units	ppm
Avge	.03411
SDev	.04244
%RSD	124.41

#1	-.00353
#2	-.00168
#3	.07290
#4	.06877

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7D5/2 NA

Operator: WTR

Run Time: 03/19/01 16:27:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00403	-.02833	-.00711	.01183	.00183	-.00034	16.339
SDev	.00428	.01689	.02082	.02034	.00150	.00033	32.060
%RSD	106.16	59.602	292.99	171.95	82.021	98.967	196.22
#1	-.00889	-.04205	-.03420	.00000	.00092	-.00018	.11260
#2	.00056	-.01121	.00277	.00294	.00021	-.00082	.30580
#3	-.00615	-.04360	-.01117	.00209	.00285	-.00006	.50809
#4	-.00163	-.01646	.01417	.04228	.00334	-.00030	64.428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00145	-.00576	-.00549	-.00664	.48328	2.9528	.00026
SDev	.00311	.00690	.01127	.00723	.94639	11.827	.00494
%RSD	215.03	119.89	205.38	108.95	195.83	400.54	1887.6
#1	.00069	-.00001	-.00091	-.00039	.00189	-.19699	-.00124
#2	L-.00576	-.01534	L-.02235	-.01220	.01352	L-7.4105	-.00438
#3	.00097	-.00154	.00013	-.00039	.01488	-.56254	-.00058
#4	-.00169	-.00613	.00118	-.01356	1.9028	19.981	.00724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6001	.01777	.00155	31.514	-.01195	-.04225	.00914
SDev	5.0577	.03264	.00739	61.369	.00110	.07829	.02135
%RSD	194.52	183.66	477.46	194.73	9.1734	185.31	233.63
#1	.04432	.00077	.01188	.40366	-.01095	-.00439	.00290
#2	-.02712	.00179	.00000	.94312	-.01350	L-.15498	.00300
#3	.19777	.00179	.00000	1.1435	-.01182	.02204	-.00932
#4	10.185	.06673	-.00569	123.57	-.01152	-.03166	.03997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04612	1.1315	-.01364	.05991	.00089	.08666	-.00574
SDev	.06177	2.1397	.01125	.11525	.00235	.06280	.01158
%RSD	133.92	189.10	82.526	192.35	264.58	72.461	201.85
#1	.01192	.04668	.00131	.00075	.00192	.06140	.00030
#2	-.13097	.08603	-.01176	.00215	.00281	.03263	-.02310

#3	-.01663	.05233	-.01966	.00399	.00133	.07567	.00000
#4	-.04881	4.3409	-.02444	.23277	-.00252	.17695	-.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 -.00054
SDev .00211
%RSD 392.41

#1	-.00010
#2	-.00364
#3	.00084
#4	.00075

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7EF/10 NA Operator: WTR
 Run Time: 03/19/01 16:30:59
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00502	-.01770	-.00850	.00170	.00321	-.00029	4.5507
SDev	.00795	.04191	.02519	.00220	.00632	.00024	8.1270
%RSD	158.20	236.83	296.42	129.26	196.63	82.722	178.59
#1	-.00889	-.03173	-.03887	-.00001	.00033	-.00030	.13977
#2	.00198	.01924	-.00685	.00007	-.00055	-.00061	.48757
#3	L-.01435	-.07066	-.01096	.00208	.00041	-.00006	.84179
#4	.00117	.01236	.02269	.00467	.01267	-.00018	16.734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00267	.00000	-.00523	-.00328	.59205	1.0865	-.00060
SDev	.00123	.00720	.00864	.00595	1.1566	6.7831	.00390
%RSD	45.909	300600.	165.17	181.45	195.36	624.31	655.72
#1	-.00388	.00308	-.00144	-.00039	-.00017	-.17262	-.00095
#2	-.00358	-.01074	L-.01817	-.01220	.02173	L-5.6721	-.00440
#3	-.00155	.00461	-.00039	-.00039	.01966	-.31884	-.00186
#4	-.00169	.00306	-.00092	-.00014	2.3270	10.510	.00483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94386	.05155	-.00289	16.697	-.00458	-.03108	.01544
SDev	1.7587	.10224	.00334	31.260	.00833	.04835	.02458
%RSD	186.33	198.34	115.60	187.22	181.77	155.59	159.18
#1	.03373	-.00025	-.00000	.42772	.00384	-.00430	.00320
#2	-.01654	.00179	-.00594	1.2048	-.01508	L-.10181	.05231
#3	.17925	-.00025	.00000	1.5743	-.00708	-.02190	.00308
#4	3.5790	.20491	-.00564	63.582	-.00002	.00370	.00317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00290	.28143	-.02406	.02657	.00163	.09232	-.00354
SDev	.02294	.41368	.00789	.04911	.00245	.02460	.00698
%RSD	790.07	146.99	32.808	184.84	150.66	26.645	197.22
#1	-.03097	.04668	-.03530	.00075	.00163	.10476	-.00000
#2	-.01184	.10310	-.01679	.00159	.00429	.10466	-.01402

#3	.01197	.07496	-.02221	.00372	-.00163	.10444	-.00000
#4	.01922	.90099	-.02195	.10020	.00222	.05542	-.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	-.00008
SDev	.00136
%RSD	1713.0

#1	-.00081
#2	-.00162
#3	.00083
#4	.00128

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-8

Operator: WTR

Run Time: 03/19/01 16:34:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00041	L.07095	L.00147	L.01068	L.00778	L.00864	L.30721
SDev	.01196	.12524	.05798	.02129	.01446	.01770	.36456
%RSD	2902.7	176.51	3945.1	199.32	185.94	204.83	118.67

#1	L-.01023	L-.03356	L.06234	L-.00000	L.00058	L-.00007	L.06482
#2	L.01704	L.08184	L.02480	L.00006	L.00038	L-.00051	L.10028
#3	L.00066	L-.00799	L-.00679	L.00005	L.00068	L-.00005	L.21866
#4	L-.00583	L.24354	L-.07447	L.04262	L.02946	L.03519	L.84507

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.01113	L.00916	L.00902	L.00730	L.11034	L-1.1941	L.00415
SDev	.02359	.02488	.02446	.01538	.19204	1.8841	.00953
%RSD	211.97	271.69	271.06	210.82	174.05	157.78	229.38

#1	L.00045	L.00153	L.00484	L-.00039	L.00120	L.37976	L-.00097
#2	L-.00186	L-.00922	L-.00981	L-.00040	L.01901	L-3.9093	L-.00045
#3	L-.00055	L-.00154	L-.00353	L-.00039	L.02309	L-.89560	L-.00040
#4	L.04648	L.04586	L.04459	L.03037	L.39805	L-.35133	L.01844

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.16536	L.00949	L.00744	L.74839	L.00048	L-.00421	L.00913
SDev	.26540	.01613	.01565	.45683	.01306	.03790	.04557
%RSD	160.50	169.92	210.30	61.042	2739.3	900.48	499.34

#1	L.05490	L-.00025	L.00594	L.33975	L-.00512	L.00449	L.00296
#2	L-.01389	L.00281	L-.00594	L.50140	L-.01107	L-.05763	L.06459
#3	L.06019	L.00180	L.00000	L.77358	L-.00096	L.00439	L.01532
#4	L.56023	L.03360	L.02976	L1.3788	L.01905	L.03192	L-.04636

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L-.00680	L.06515	L.02093	L.00878	L.01103	L-.01264	L.00827
SDev	.03884	.08121	.02375	.01612	.01437	.16824	.02346
%RSD	571.16	124.64	113.45	183.48	130.33	1331.2	283.49

#1	L.02621	L-.00419	L.00916	L-.00002	L.00133	L-.01091	L.00477
#2	L-.04044	L.17104	L-.00630	L.00060	L.00814	L.07575	L-.00939

#3	L-.04042	L.08623	L.03536	L.00162	L.00252	L.13340	L-.00462
#4	L.02745	L.00753	L.04550	L.03294	L.03212	L-.24879	L.04234

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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 L.00802
SDev .02037
%RSD 253.85

#1	L-.00331
#2	L-.00138
#3	L-.00176
#4	L.03855

Errors	LC Low
High	5.5000
Low	4.5000

678 1284

Analysis Report

03/19/01 04:40:32 PM

page 1

Method: QUANMET Sample Name: CCB8
 Run Time: 03/19/01 16:37:25
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Operator: WTR

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00182	H.24233	.01101	.06616	.02586	H.02764	.48408
SDev	.02822	.21426	.04323	.02054	.01320	.01388	.22940
%RSD	1546.6	88.415	392.57	31.045	51.045	50.207	47.390
#1	H.01746	H.46740	.07542	.09682	.04002	H.04159	.70089
#2	L-.04292	-.02859	-.01643	.05488	.01716	H.01947	.31923
#3	H.01579	.18584	-.00409	.05417	.01237	H.01250	.25519
#4	.00237	H.34467	-.01084	.05878	.03388	H.03698	.66100
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.04090	.03322	H.02789	.02249	H.36110	-1.5962	.01966
SDev	.01913	.02026	.02431	.01637	.19281	2.0727	.01136
%RSD	46.769	60.984	87.173	72.802	53.395	129.85	57.813
#1	H.06331	H.05346	H.05304	H.03511	H.58075	.05483	.03186
#2	H.02679	.01986	H.01482	.02167	H.22833	-1.3018	.01056
#3	H.02330	.01218	.00067	-.00036	H.17296	-4.5917	.00941
#4	H.05021	.04737	H.04303	H.03352	H.46237	-.54629	.02679
Errors	LC High	LC Pass	LC High	LC Pass	LC High	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.29500	H.03414	H.14114	.60619	.02966	.00517	.02699
SDev	.16444	.01769	.09959	.14778	.02154	.06832	.08588
%RSD	55.742	51.816	70.559	24.379	72.613	1320.7	318.14
#1	.38032	H.05418	H.27930	.72207	H.04985	.02332	H.08769
#2	.21629	H.01928	H.14855	.49614	.00236	.02248	L-.08397
#3	.10781	H.01924	H.06537	.46193	.02289	-.09238	H.10146
#4	.47557	H.04386	H.07135	.74463	H.04355	.06727	.00280
Errors	LC Pass	LC High	LC High	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	.00947	.07384	.01639	.02722	.02975	.20369	.02667
SDev	.03943	.11659	.05486	.01337	.01817	.19639	.01776
%RSD	416.30	157.89	334.75	49.124	61.068	96.419	66.609
#1	.02803	.16031	.05386	.04092	H.05018	H.44219	.04404
#2	.05551	-.09457	-.04089	.01927	.00992	.10106	.01761

#3	-.03042	.14292	-.01924	.01275	.01998	.27551	.00626
#4	-.01522	.08670	.07184	.03596	.03893	-.00401	.03877

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

Elem ZN
Units ppm
Avge H.03581
SDev .01964
%RSD 54.850

#1 H.05627
#2 H.02126
#3 .01690
#4 H.04883

Errors LC High
High .02000
Low -.02000

Method: QUANMET Sample Name: DW7EV/5 NA Operator: WTR
 Run Time: 03/19/01 16:40:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00820	-.02043	-.00218	.00197	.00260	.00261	.09920
SDev	.01389	.07982	.04472	.00147	.00269	.00217	.05297
%RSD	169.41	390.75	2055.4	74.586	103.79	83.250	53.394
#1	.00075	.05600	.01081	.00362	.00596	.00525	.16308
#2	L-.02805	-.13166	-.05181	.00207	.00031	.00126	.06269
#3	.00198	.00911	-.02057	.00005	.00053	.00046	.04926
#4	-.00746	-.01516	.05287	.00212	.00359	.00348	.12178
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00344	.00305	.00040	.00197	.03592	-1.1494	.00083
SDev	.00648	.00800	.01122	.00527	.03053	2.9834	.00377
%RSD	188.30	262.05	2834.3	266.92	84.996	259.55	453.90
#1	.00948	.00917	.01007	.00670	.07510	.85092	.00520
#2	-.00488	-.00305	-.00562	-.00040	.00528	-1.5698	-.00262
#3	.00161	-.00462	L-.01242	-.00433	.01968	L-5.2010	-.00200
#4	.00755	.01072	.00955	.00591	.04362	1.3221	.00274
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03836	.00334	.01040	.31560	-.00701	-.00652	.00913
SDev	.08292	.00379	.01318	.04682	.01221	.06153	.05082
%RSD	216.14	113.53	126.67	14.836	174.15	943.94	556.76
#1	.08929	.00795	.01783	.38298	.00486	.02229	.00299
#2	.01786	-.00127	.00594	.27509	-.01723	-.05748	-.04635
#3	-.06945	.00282	-.00594	.29802	-.01784	-.05743	.07691
#4	.11575	.00385	.02377	.30629	.00217	.06654	.00296
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00130	.02263	-.01108	.00297	.00303	.02112	-.00002
SDev	.02507	.07026	.01158	.00224	.00563	.07715	.01134
%RSD	1922.4	310.46	104.45	75.394	185.69	365.37	45554.
#1	.00262	.06375	-.00393	.00589	.00844	-.01211	.00969
#2	-.01189	-.07218	-.00148	.00126	-.00488	.00358	-.00447

#3	-.02138	.08613	-.02715	.00116	.00459	.13355	-.01401
#4	.03587	.01282	-.01177	.00359	.00400	-.04056	.00869

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

Elem	ZN
Units	ppm
Avge	.00232
SDev	.00312
%RSD	134.10

#1	.00656
#2	-.00048
#3	.00053
#4	.00269

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW7E5/5 NA Operator: WTR
 Run Time: 03/19/01 16:43:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00402	-.02164	-.01456	.04482	.00470	.00011	23.261
SDev	.00171	.00503	.03723	.00174	.00030	.00027	1.370
%RSD	42.593	23.234	255.69	3.8863	6.3428	242.52	5.8910
#1	-.00164	-.01651	-.02262	.04223	.00445	-.00017	23.393
#2	-.00434	-.02158	.01408	.04600	.00512	-.00006	25.117
#3	-.00572	-.02848	-.06398	.04557	.00453	.00028	22.580
#4	-.00437	-.01999	.01428	.04549	.00470	.00040	21.955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00019	.00153	.00026	-.00019	1.8765	2.7294	.00571
SDev	.00256	.00331	.00173	.00001	.1107	.5974	.00074
%RSD	1319.1	216.57	660.63	5.9413	5.8981	21.887	12.968
#1	-.00141	-.00307	.00013	-.00019	1.8857	1.9151	.00504
#2	-.00061	.00153	-.00196	-.00017	2.0280	2.6624	.00635
#3	.00400	.00306	.00222	-.00019	1.8160	3.0848	.00635
#4	-.00120	.00460	.00065	-.00020	1.7763	3.2554	.00510
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4527	.06238	.00322	36.033	-.00251	.00825	.00305
SDev	.2510	.00319	.00342	2.161	.01186	.03269	.00010
%RSD	7.2684	5.1215	106.27	5.9962	472.22	396.31	3.2047
#1	3.5287	.06263	.00025	36.156	-.00796	-.00514	.00298
#2	3.7642	.06676	.00027	38.999	-.01539	-.01388	.00296
#3	3.3330	.06057	.00618	34.949	.01208	.05688	.00317
#4	3.1848	.05954	.00617	34.029	.00122	-.00487	.00307
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04174	1.3649	-.00042	.07379	.00089	-.03955	.00181
SDev	.06147	.0887	.00250	.00462	.00071	.04876	.00283
%RSD	147.26	6.4994	591.14	6.2586	79.349	123.28	156.31
#1	-.10603	1.3932	.00154	.07413	.00133	-.03963	-.00115
#2	.01352	1.4781	-.00106	.08008	.00015	-.09967	.00000

#3	.00809	1.2914	-.00370	.07155	.00044	-.03866	.00477
#4	-.08255	1.2971	.00152	.06940	.00163	.01976	.00361

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

Elem	ZN
Units	ppm
Avge	.00117
SDev	.00187
%RSD	159.37

#1	-.00027
#2	.00391
#3	.00036
#4	.00068

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMH/5 NA

Operator: WTR

Run Time: 03/19/01 16:47:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01121	.07612	-.01184	.02295	.00786	.00045	18.877
SDev	.01356	.02734	.04579	.02379	.00311	.00026	9.093
%RSD	120.96	35.913	386.66	103.65	39.589	57.202	48.168
#1	-.00593	.04769	.04685	.00202	.00495	.00065	10.147
#2	-.00311	.07995	-.05967	.00271	.00596	.00053	13.927
#3	-.00432	.11204	-.03306	.04244	.00865	.00052	20.533
#4	L-.03147	.06478	-.00149	.04463	.01190	.00007	30.901
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00091	.00075	-.00209	-.00157	1.8569	1.5576	.00225
SDev	.00321	.00524	.00390	.00267	.9078	.5280	.00104
%RSD	350.92	695.65	186.61	170.36	48.887	33.894	46.038
#1	.00106	.00306	.00275	-.00028	1.0054	1.3627	.00261
#2	.00500	.00611	-.00144	-.00024	1.3563	.90778	.00201
#3	-.00281	-.00001	-.00301	-.00018	1.9932	1.8826	.00342
#4	.00042	-.00615	-.00667	-.00557	3.0726	2.0775	.00096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6094	.03424	.00618	31.269	-.00357	-.00508	.00304
SDev	1.7661	.01551	.00474	15.954	.00338	.02204	.01001
%RSD	48.929	45.292	76.656	51.022	94.651	434.34	329.62
#1	1.8910	.01945	.01201	16.109	.00071	.02180	.00294
#2	2.6795	.02567	.00612	22.585	-.00337	-.00475	.00313
#3	3.9256	.03709	.00620	33.862	-.00752	-.00515	.01530
#4	5.9416	.05477	.00040	52.521	-.00410	-.03220	-.00922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01894	1.2475	-.01025	.05737	.00444	.05457	-.00014
SDev	.02166	.5715	.03324	.02909	.00230	.03124	.00338
%RSD	114.39	45.809	324.42	50.716	51.783	57.246	2478.5
#1	.01983	.69731	.02495	.03014	.00518	.06041	.00031
#2	-.00765	.92362	-.05084	.04134	.00548	.01163	.00015

#3	.01818	1.3763	.00681	.06159	.00607	.05968	.00361
#4	.04539	1.9929	-.02191	.09640	.00104	.08656	-.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	.00124
SDev	.00200
%RSD	160.93

#1	-.00088
#2	.00137
#3	.00390
#4	.00058

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHP25

Operator: WTR

Run Time: 03/19/01 16:50:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00168	.04057	.03177	.00021	.00236	.00056	1.2525
SDev	.00540	.07094	.01131	.00013	.00146	.00006	.9461
%RSD	321.06	174.84	35.596	59.898	62.061	10.991	75.540
#1	-.00611	-.01655	.02531	.00011	.00075	.00052	.49568
#2	.00070	.01729	.03891	.00013	.00169	.00053	.63379
#3	-.00613	.01729	.04348	.00020	.00285	.00065	1.3142
#4	.00482	.14425	.01937	.00039	.00413	.00054	2.5663
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00119	.00114	-.00078	-.00038	.10502	-1.0174	-.00028
SDev	.00301	.00383	.00326	.00000	.05795	.8660	.00127
%RSD	253.28	336.64	416.23	.81978	55.178	85.114	450.66
#1	.00222	.00306	.00117	-.00038	.05798	-.32696	-.00184
#2	.00317	.00305	.00013	-.00038	.07030	-.74938	.00075
#3	.00267	.00305	.00118	-.00038	.10519	-.70876	.00075
#4	-.00329	-.00461	-.00562	-.00038	.18660	-2.2847	-.00079
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18322	.00591	.00447	9.5965	-.00371	-.00220	.02149
SDev	.09509	.00509	.00298	11.156	.01150	.04040	.01587
%RSD	51.899	86.201	66.554	116.26	310.25	1833.9	73.816
#1	.09723	.00181	.00001	1.0965	.00224	-.04848	.00314
#2	.12369	.00283	.00595	2.5220	.00626	.00451	.02773
#3	.20306	.00591	.00595	9.3268	-.01990	.04863	.01519
#4	.30889	.01309	.00597	25.440	-.00343	-.01348	.03992
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02772	.25743	-.00057	.00511	.00474	.04175	.00098
SDev	.03436	.19396	.01491	.00389	.00235	.05802	.00249
%RSD	123.93	75.344	2618.8	76.041	49.608	138.97	254.88
#1	.07879	.06936	-.01176	.00179	.00222	-.04070	.00461
#2	.00737	.17114	.00141	.00274	.00488	.07478	.00015

#3	.00748	.26733	-.01171	.00546	.00400	.08871	.00015
#4	.01726	.52191	.01977	.01046	.00784	.04421	-.00101

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

Elem	ZN
Units	ppm
Avge	.00060
SDev	.00163
%RSD	271.74

#1	.00147
#2	-.00177
#3	.00086
#4	.00184

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHS/5 NA Operator: WTR
 Run Time: 03/19/01 16:53:21
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01093	-.02675	-.01018	.00007	.00081	.00024	.49069
SDev	.01155	.04796	.04205	.00003	.00052	.00019	.27698
%RSD	105.70	179.32	412.87	53.329	63.781	78.661	56.446
#1	-.00748	-.01158	.03450	.00004	.00142	.00040	.47560
#2	-.00339	-.00478	-.05301	.00004	.00075	.00028	.22336
#3	-.00478	.00713	.01602	.00006	.00092	.00030	.38842
#4	L-.02807	-.09775	-.03825	.00012	.00016	-.00003	.87539
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00145	.00230	-.00261	-.00196	.03575	-.99917	-.00099
SDev	.00230	.00632	.00707	.00315	.01300	1.82470	.00346
%RSD	158.65	274.29	270.61	160.66	36.364	182.62	350.35
#1	.00113	.01074	.00170	-.00038	.03472	.56660	.00117
#2	-.00275	.00154	.00222	-.00039	.02173	-.14013	.00065
#3	-.00026	.00153	-.00144	-.00039	.03336	-.82249	.00039
#4	-.00392	-.00459	L-.01294	-.00668	.05317	-3.6007	-.00616
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06284	.00180	.00743	4.7250	-.00777	-.01541	-.01855
SDev	.01673	.00084	.00297	3.6330	.00188	.03985	.04423
%RSD	26.630	46.398	39.974	76.889	24.203	258.60	238.47
#1	.07871	.00180	.01189	4.5848	-.00804	.00471	-.00932
#2	.05754	.00077	.00594	1.4285	-.00628	-.04852	.00300
#3	.07342	.00282	.00595	3.0668	-.00642	.03096	.01529
#4	.04167	.00181	.00595	9.8200	-.01032	-.04880	L-.08317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01061	.09901	-.00662	.00218	.00118	.02112	.00018
SDev	.07208	.04870	.01079	.00086	.00347	.05461	.00657
%RSD	679.55	49.185	163.11	39.253	293.33	258.63	3610.7
#1	-.10232	.08633	-.01181	.00257	.00252	.06077	.00491
#2	-.00708	.03541	-.00915	.00115	.00281	.01769	.00476

#3	.07395	.13720	.00921	.00188	.00340	.06091	.00015
#4	-.00698	.13710	-.01471	.00312	-.00400	-.05491	-.00910

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

Elem ZN
Units ppm
Avge -.00051
SDev .00189
%RSD 369.56

#1	.00057
#2	.00018
#3	.00054
#4	-.00334

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXGMHD/5 NA Operator: WTR
 Run Time: 03/19/01 16:56:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00574	.04082	.02935	.01409	.02341	.00089	1.7659
SDev	.00535	.10031	.06190	.02806	.03342	.00113	2.4351
%RSD	93.188	245.76	210.91	199.13	142.71	127.25	137.90
#1	-.00754	-.02500	-.01125	.00003	.00092	.00031	.12572
#2	-.00752	-.04522	-.02037	.00004	.00075	.00006	.10928
#3	.00209	.05790	.03390	.00012	.02039	.00064	1.5542
#4	-.01000	.17558	.11510	.05617	.07159	.00255	5.2745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.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	.01415	.00693	.00592	.07239	1.4459	.00940
SDev	.00268	.02394	.01570	.01261	.08247	4.9723	.01544
%RSD	107.25	169.15	226.48	213.08	113.93	343.88	164.23
#1	.00605	-.00155	-.00143	-.00039	.01283	-.73313	-.00084
#2	-.00046	-.00154	-.00039	-.00039	.01625	-.97683	-.00087
#3	.00219	.01070	-.00092	-.00038	.07102	-1.3992	.00753
#4	.00221	.04901	.03047	.02484	.18945	8.8930	.03178
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.76858	.01178	.01486	9.4507	.00681	.04452	.00301
SDev	1.0275	.01575	.02636	13.164	.02246	.08396	.01007
%RSD	133.69	133.63	177.34	139.29	329.68	188.60	334.59
#1	.02580	.00180	.00594	.83899	-.00396	.04851	-.00929
#2	.02844	.00077	-.00594	.56305	-.00891	.05738	.00302
#3	.81422	.00999	.00595	7.8652	.00006	-.06595	.01539
#4	2.2059	.03458	.05349	28.536	.04005	.13815	.00292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07765	.37069	.02481	.01437	.01532	-.00487	.00990
SDev	.10295	.47200	.05858	.02002	.01898	.10451	.02006
%RSD	132.60	127.33	236.14	139.30	123.89	2147.1	202.63
#1	.06436	.02400	-.01966	.00084	.00192	-.08325	-.00446
#2	.00243	.07496	.00131	.00084	.00192	-.01107	-.00015

#3	.01690	.33527	.00655	.01256	.01525	-.06983	.00476
#4	.22689	1.0485	.11102	.04323	.04218	.14468	.03945

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

Elem	ZN
Units	ppm
Avge	.00979
SDev	.01542
%RSD	157.54

#1	.00146
#2	-.00332
#3	.00951
#4	.03152

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXEVAS/2 SI

Operator: WTR

Run Time: 03/19/01 16:59:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00777	.08083	.01284	.02726	.03783	.00097	2.7462
SDev	.00731	.11353	.06047	.03147	.04245	.00096	3.0274
%RSD	94.113	140.46	471.10	115.46	112.22	99.283	110.24
#1	-.00057	.13695	.02382	.05264	.04799	.00120	3.5115
#2	L-.01022	-.02671	-.01599	.00003	.00327	.00028	.27283
#3	-.00338	.00016	-.04845	.00004	.00638	.00016	.49125
#4	L-.01690	.21292	.09198	.05634	.09367	.00224	6.7094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00302	.01298	.00419	-.00037	.10594	-.14419	.01480
SDev	.00088	.01206	.00411	.00002	.10848	.42077	.01648
%RSD	29.004	92.911	98.092	6.3148	102.41	291.82	111.36
#1	.00289	.01833	.00798	-.00036	.13537	.06296	.01949
#2	.00356	.00305	.00117	-.00039	.01694	.32290	.00143
#3	.00380	.00305	.00013	-.00039	.02448	-.33509	.00217
#4	.00184	.02748	.00746	-.00034	.24695	-.62753	.03613
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.3731	.01793	.02823	15.348	.00356	.00694	.01209
SDev	1.6305	.01992	.02396	17.266	.01546	.02722	.01184
%RSD	118.74	111.10	84.871	112.49	434.64	392.47	97.926
#1	1.4862	.02331	.04160	19.573	.01391	.03136	.02747
#2	.11046	.00077	.00000	1.4145	-.01021	.02220	.01533
#3	.25862	.00385	.01783	2.3814	-.00912	.00450	.00281
#4	3.6372	.04380	.05350	38.024	.01965	-.03031	.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	.04202	.58146	.05293	.02345	.02405	.05607	.01225
SDev	.04492	.56998	.05241	.02557	.02361	.06498	.00940
%RSD	106.91	98.025	99.014	109.04	98.166	115.89	76.752
#1	.08380	.77102	.05885	.02963	.03123	.08809	.01490
#2	.07390	.08633	-.01172	.00260	.00400	.07556	.00461

#3	-.01183	.16554	.04837	.00450	.00666	-.04017	.00506
#4	.02221	1.3029	.11621	.05707	.05432	.10078	.02442

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

Elem	ZN
Units	ppm
Avge	.01609
SDev	.01630
%RSD	101.28

#1	.02008
#2	.00246
#3	.00435
#4	.03748

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: WTR

Run Time: 03/19/01 17:02:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L-.00542	L.06117	L-.04902	L.11338	L.00921	L.00025	L14.608
SDev	.00262	.11359	.05475	.17766	.01126	.00038	24.203
%RSD	48.412	185.69	111.68	156.70	122.31	156.10	165.68

#1	L-.00743	L.04742	L.00622	L.04205	L.02608	L.00073	L1.9522
#2	L-.00478	L-.02009	L-.01138	L.00003	L.00411	L.00030	L.33483
#3	L-.00748	L-.00837	L-.08522	L.03293	L.00300	L.00016	L5.3697
#4	L-.00197	L.22572	L-.10572	L.37849	L.00364	L-.00020	50.775

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L-.00125	L.00686	L.00668	L-.00038	L.07328	L7.6786	L.00622
SDev	.00416	.00291	.00727	.00001	.06886	13.870	.00527
%RSD	332.27	42.424	108.78	2.4305	93.972	180.63	84.782

#1	L-.00015	L.01070	L.00798	L-.00037	L.07581	L.86716	L.00920
#2	L-.00304	L.00460	L.00014	L-.00039	L.02037	L-.05889	L.00169
#3	L-.00578	L.00460	L.00223	L-.00039	L.02723	L1.4439	L.00185
#4	L.00395	L.00755	L.01639	L-.00037	L.16971	L28.462	L.01213

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L37.516	L.00515	L.04754	S763.07	L.00297	L.07068	L-.06210
SDev	64.736	.00544	.05157	1477.1	.01210	.07896	.07929
%RSD	172.55	105.65	108.49	193.57	407.92	111.71	127.68

#1	L.82481	L.01307	L.02377	L10.329	L.00967	L.04000	L.00296
#2	L.16602	L.00282	L.01783	L1.6961	L-.01371	L-.00427	L.00279
#3	L14.998	L.00078	L.02377	H61.930	L.00221	L.06621	L-.09568
#4	H134.08	L.00391	L.12478	S2978.3	L.01370	L.18080	L-.15848

Errors	LC Low	LC Low	LC Low	LC High	LC Low	LC Low	LC Low
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	L.10862	L.54320	L.10818	L.16482	L.02568	L-.33365	L.00669
SDev	.09261	.66915	.13820	.27820	.03053	.57378	.00535
%RSD	85.264	123.19	127.75	168.80	118.89	171.97	80.033

#1	L.16460	L.39194	L.02742	L.01601	L.01643	L.07459	L.01329
#2	L.01197	L.13720	L.03007	L.00300	L.00459	L.04663	L.00045

#3	L.05011	L.11462	L.06102	L.05973	L.01080	L-.30041	L.00521
#4	L.20777	L1.5290	L.31421	L.58053	L.07090	L-1.1554	L.00779

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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 L.00394
SDev .00470
%RSD 119.33

#1	L.01074
#2	L.00312
#3	L.00016
#4	L.00173

Errors	LC Low
High	5.5000
Low	4.5000

Analysis Report

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03/19/01 05:09:14 PM

page 1

Method: QUANMET Sample Name: CCB9

Operator: WTR

Run Time: 03/19/01 17:06:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00466	H.30153	-.00639	H.27140	.00892	H.01113	H36.928
SDev	.00023	.19329	.03880	.17101	.01542	.02250	28.285
%RSD	4.9677	64.102	607.23	63.009	172.84	202.22	76.597
#1	-.00477	H.23037	-.04573	H.34750	.00068	-.00017	H54.459
#2	-.00475	H.30729	.00422	H.47110	.00228	-.00029	H65.613
#3	-.00481	.10527	.04293	.17839	.00070	.00009	H23.870
#4	-.00432	H.56318	-.02698	.08862	.03203	H.04488	3.7690
Errors	LC Pass	LC High	LC Pass	LC High	LC Pass	LC High	LC High
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.00674	.01484	H.01126	.00693	H.30154	H22.796	.01151
SDev	.03270	.02993	.04328	.02209	.27090	18.697	.00620
%RSD	485.28	201.69	384.37	318.80	89.839	82.020	53.864
#1	L-.01852	.00146	L-.01189	.00041	H.18477	H35.164	.00947
#2	-.00465	.00140	-.00559	-.01138	H.22519	H41.248	.01475
#3	-.00468	-.00312	L-.01346	-.00039	.09640	H13.726	.00384
#4	H.05480	H.05961	H.07598	H.03906	H.69980	1.0459	.01797
Errors	LC High	LC Pass	LC High	LC Pass	LC High	LC High	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	H84.536	H.01773	H.05054	S1595.0	-.03346	-.00861	.04842
SDev	68.567	.02294	.03956	1611.6	.06588	.06650	.06049
%RSD	81.110	129.40	78.280	101.04	196.87	772.75	124.94
#1	H123.39	.00593	.02973	S2986.0	L-.11236	-.08406	.00187
#2	H157.85	.00801	H.10697	S2986.3	-.01703	.06614	H.10024
#3	H50.006	.00489	.01784	H361.86	L-.05004	-.03978	H.10106
#4	H6.8994	H.05209	H.04762	H45.654	H.04559	.02327	-.00950
Errors	LC High	LC High	LC High	LC High	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	-.09553	H1.3707	.04903	H.41852	H.06490	.11447	.01052
SDev	.05389	.9940	.11061	.30548	.02354	.40154	.03091
%RSD	56.410	72.520	225.60	72.990	36.277	350.79	293.87
#1	-.16378	H1.8741	-.03817	H.59927	H.07445	L-.31718	-.00389
#2	-.08267	H2.4398	H.20277	H.73881	H.09132	.02908	-.00192

#3	-.10213	H.99141	-.02455	H.26592	.03626	H.65265	-.00880
#4	-.03353	.17742	.05605	H.07008	H.05758	.09330	H.05668

Errors	LC Pass	LC High	LC Pass	LC High	LC High	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	.01321
SDev	.02660
%RSD	201.42

#1	.00113
#2	-.00261
#3	.00130
#4	H.05301

Errors	LC Pass
High	.02000
Low	-.02000

678 1304

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Noyle

Date of Analysis: 3-16-01

File ID: 0316HGA

Matrix: WATER

Lot Number/SDG

Method

<u>CIC140121</u>	<u>TCLP</u>	<u>1470A</u>
<u>CIC090244</u>		
<u>CIC120106</u>		
<u>CIC080271</u>		
<u>CIC150304</u>		

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William a Hoyle 3-16-01

09:01:31 16 Mar 2001

Folder: 0316HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		09:01:31 16 Mar 2001 HG		
Hg	.000	ppb	9729					
*** Standard: 2 Rep: 1				Seq: 1		09:02:59 16 Mar 2001 HG		
Hg	.200	ppb	15458		0087-147-3			
*** Standard: 3 Rep: 1				Seq: 2		09:04:25 16 Mar 2001 HG		
Hg	.500	ppb	44947		0087-147-4			
*** Standard: 4 Rep: 1				Seq: 3		09:06:01 16 Mar 2001 HG		
Hg	1.00	ppb	97343		0087-147-5			
*** Standard: 5 Rep: 1				Seq: 4		09:07:27 16 Mar 2001 HG		
Hg	5.00	ppb	478867		0087-147-6			
*** Standard: 6 Rep: 1				Seq: 5		09:09:13 16 Mar 2001 HG		
Hg	10.0	ppb	907105		0087-147-7			

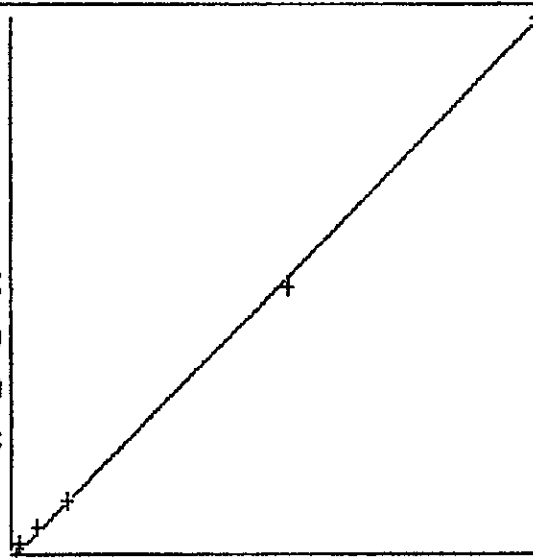
673 1306

William a Hoyle 3-16-01

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0316HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:09:31 16 Mar 2001 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAM A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted
	Conc.	Calc. Dev. ->linear
S1	.000	.048 .048 Quadratic
S2	.200	.111 -.009 Wtdlinear
S3	.500	.435 -.065
S4	1.00	1.01 .010 Accept
S5	5.00	5.20 .198
S6	10.0	9.90 -.101
A	.0000000	r .999599
B	1.09772e-5	C -5.87500e-2



	Mean	SD
S1	9729	9729
S2	15458	15458
S3	44947	44947
S4	97343	97343
S5	478867	478867
S6	907105	907105

New cal coefficients stored

678 1307

William A. Hoyle 3-16-01

09:11:46 16 Mar 2001

Folder: 0316HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:11:46 16 Mar 2001	HG		
Hg	2.59	ppb	241163	0087-147-8				
*** Sample ID: ICB1				Seq: 7	09:13:30 16 Mar 2001	HG		
Hg	.021	ppb	7245					
*** Sample ID: CCV5-1				Seq: 8	09:15:08 16 Mar 2001	HG		
Hg	5.17	ppb	475924	0087-147-9				
*** Sample ID: CCB1				Seq: 9	09:16:37 16 Mar 2001	HG		
Hg	-.003	ppb	5096					
*** Sample ID: DXFFKBT				Seq: 10	09:18:06 16 Mar 2001	HG		
Hg	.026	ppb	7732					
*** Sample ID: DXFFKCT				Seq: 11	09:19:35 16 Mar 2001	HG		
Hg	2.72	ppb	253111	0087-147-10				
*** Sample ID: DXEOGBT				Seq: 12	09:21:00 16 Mar 2001	HG		
Hg	.050	ppb	9928					
*** Sample ID: DXCTDT				Seq: 13	09:22:31 16 Mar 2001	HG		
Hg	.146	ppb	18675					
*** Sample ID: DXCTDST				Seq: 14	09:23:57 16 Mar 2001	HG		
Hg	5.25	ppb	483238					SP.REC. 102%
*** Sample ID: DXCTDDT				Seq: 15	09:25:23 16 Mar 2001	HG		
Hg	5.17	ppb	476691					SP.REC. 100%
*** Sample ID: DXCTKT				Seq: 16	09:27:03 16 Mar 2001	HG		
Hg	2.11	ppb	197878					
*** Sample ID: DXCTLT				Seq: 17	09:28:28 16 Mar 2001	HG		
Hg	.078	ppb	12455					

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09:29:55 16 Mar 2001

Folder: 0316HGA

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Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXCTNT				Seq: 18		09:29:55 16 Mar 2001	HG	
Hg	.101	ppb	14547					
*** Sample ID: DXCTPT				Seq: 19		09:31:33 16 Mar 2001	HG	
Hg	.031	ppb	8188					
*** Sample ID: CCV5-2				Seq: 20		09:33:11 16 Mar 2001	HG	
Hg	5.22	ppb	480925					
*** Sample ID: CCB2				Seq: 21		09:34:45 16 Mar 2001	HG	
Hg	.068	ppb	11557					
*** Sample ID: DXCTQT				Seq: 22		09:36:22 16 Mar 2001	HG	
Hg	.070	ppb	11753					
*** Sample ID: DXCTTT				Seq: 23		09:38:00 16 Mar 2001	HG	
Hg	.077	ppb	12337					
*** Sample ID: DXCTWT				Seq: 24		09:39:38 16 Mar 2001	HG	
Hg	2.60	ppb	242593					
*** Sample ID: DXCTOT				Seq: 25		09:41:18 16 Mar 2001	HG	
Hg	.174	ppb	21228					
*** Sample ID: DXCT1T				Seq: 26		09:42:47 16 Mar 2001	HG	
Hg	.099	ppb	14410					
*** Sample ID: DXCT2T				Seq: 27		09:44:14 16 Mar 2001	HG	
Hg	.106	ppb	15027					
*** Sample ID: DXCT5T				Seq: 28		09:45:51 16 Mar 2001	HG	
Hg	.036	ppb	8590					
*** Sample ID: DXFF9B				Seq: 29		09:47:16 16 Mar 2001	HG	
Hg	.024	ppb	7582					

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09:48:42 16 Mar 2001

Folder: 0316HGA

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Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXFF9C				Seq: 30	09:48:42 16 Mar 2001	HG		
Hg	2.67	ppb	248656	0087-147-11				
*** Sample ID: DW68N				Seq: 31	09:50:41 16 Mar 2001	HG		
Hg	.004	ppb	5753					
*** Sample ID: CCV5-3				Seq: 32	09:52:09 16 Mar 2001	HG		
Hg	5.08	ppb	467897					
*** Sample ID: CCB3				Seq: 33	09:54:04 16 Mar 2001	HG		
Hg	-.050	ppb	772					
*** Sample ID: DW68T				Seq: 34	09:55:43 16 Mar 2001	HG		
Hg	.060	ppb	10821					
*** Sample ID: DW68X				Seq: 35	09:57:34 16 Mar 2001	HG		
Hg	.135	ppb	17654					
*** Sample ID: DW680				Seq: 36	09:59:12 16 Mar 2001	HG		
Hg	-.052	ppb	588					
*** Sample ID: DW684				Seq: 37	10:00:58 16 Mar 2001	HG		
Hg	.030	ppb	8122					
*** Sample ID: DW685				Seq: 38	10:02:46 16 Mar 2001	HG		
Hg	-.158	ppb	-9072					
*** Sample ID: DW69A				Seq: 39	10:04:11 16 Mar 2001	HG		
Hg	.016	ppb	6776					
*** Sample ID: DW8V0				Seq: 40	10:05:36 16 Mar 2001	HG		
Hg	.151	ppb	19103					
*** Sample ID: DW8V0S				Seq: 41	10:07:04 16 Mar 2001	HG		
Hg	1.21	ppb	115397					

SP.REC.
106%

673 1310

10:09:20 16 Mar 2001

Folder: 0316HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DW8VOD				Seq: 42		10:09:20 16 Mar 2001	HG	
Hg	1.13	ppb	108391					SP. REC. 98%
*** Sample ID: DW8WP				Seq: 43		10:10:45 16 Mar 2001	HG	
Hg	.124	ppb	16677					
*** Sample ID: CCV5-4				Seq: 44		10:12:31 16 Mar 2001	HG	
Hg	5.11	ppb	470899					
*** Sample ID: CCB4				Seq: 45		10:14:00 16 Mar 2001	HG	
Hg	-.007	ppb	4721					
*** Sample ID: DW8WR				Seq: 46		10:15:29 16 Mar 2001	HG	
Hg	-.076	ppb	-1577					
*** Sample ID: DW8WT				Seq: 47		10:17:06 16 Mar 2001	HG	
Hg	.033	ppb	8383					
*** Sample ID: DXFGQBF				Seq: 48		10:18:38 16 Mar 2001	HG	
Hg	.060	ppb	10832					
*** Sample ID: DXFGQCF				Seq: 49		10:20:08 16 Mar 2001	HG	
Hg	2.50	ppb	232838		0087-147-12			
*** Sample ID: DW5JNF				Seq: 50		10:21:36 16 Mar 2001	HG	
Hg	-.082	ppb	-2107					
*** Sample ID: DW5JNSF				Seq: 51		10:23:21 16 Mar 2001	HG	
Hg	.992	ppb	95751					SP. REC. 99%
*** Sample ID: DW5JNDF				Seq: 52		10:24:49 16 Mar 2001	HG	
Hg	1.15	ppb	109944					SP. REC. 115%
*** Sample ID: DW5JQF				Seq: 53		10:26:15 16 Mar 2001	HG	
Hg	.021	ppb	7221					

673 1311

10:27:44 16 Mar 2001

Folder: 0316HGA
Protocol: HGMET

Page 1398

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DW5JRF				Seq: 54	10:27:44 16 Mar 2001	HG		
Hg	.083	ppb	12881					
*** Sample ID: DW5JVF				Seq: 55	10:29:21 16 Mar 2001	HG		
Hg	.010	ppb	6239					
*** Sample ID: CCV5-5				Seq: 56	10:30:58 16 Mar 2001	HG		
Hg	5.17	ppb	476278					
*** Sample ID: CCB5				Seq: 57	10:32:28 16 Mar 2001	HG		
Hg	.018	ppb	6994					
*** Sample ID: DW5JWF				Seq: 58	10:33:54 16 Mar 2001	HG		
Hg	-.045	ppb	1215					
*** Sample ID: DXG2XB				Seq: 59	10:35:43 16 Mar 2001	HG		
Hg	-.067	ppb	-770					
*** Sample ID: DXG2XC				Seq: 60	10:37:30 16 Mar 2001	HG		
Hg	2.49	ppb	232104					
*** Sample ID: DXGMH				Seq: 61	10:39:22 16 Mar 2001	HG		
Hg	.116	ppb	15893					
*** Sample ID: DXGMHS				Seq: 62	10:41:00 16 Mar 2001	HG		
Hg	1.21	ppb	115768					
*** Sample ID: DXGMHD				Seq: 63	10:42:46 16 Mar 2001	HG		
Hg	1.24	ppb	118739					
*** Sample ID: CCV5-6				Seq: 64	10:44:12 16 Mar 2001	HG		
Hg	5.13	ppb	472316					
*** Sample ID: CCB6				Seq: 65	10:46:02 16 Mar 2001	HG		
Hg	-.131	ppb	-6538					

0087-147-13

SP REC.
109%SP REC.
112%

END OF ANALYSIS

WAH
3-16-01

678 1312

William a Hoyle 3-16-01

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0316HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 07:55:37 16 Mar 2001 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	DXFFKBT	1.0000	1.0000		
6	DXFFKCT	1.0000	1.0000		
7	DXEOGBT	1.0000	1.0000		
8	DXCTDT	1.0000	1.0000		
9	DXCTDST	1.0000	1.0000		
10	DXCTDDT	1.0000	1.0000		
11	DXCTKT	1.0000	1.0000		
12	DXCTLT	1.0000	1.0000		
13	DXCTNT	1.0000	1.0000		
14	DXCTPT	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

678 1313

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0316HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	07:55:39 16 Mar 2001	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1					PgUp
cup ID	Extended id	Weight	Volume	Macro	check macros
16	CCB2	1.0000	1.0000		
17	DXCTQT	1.0000	1.0000		
18	DXCTTT	1.0000	1.0000		
19	DXCTWT	1.0000	1.0000		
20	DXCTOT	1.0000	1.0000		
21	DXCT1T	1.0000	1.0000		
22	DXCT2T	1.0000	1.0000		
23	DXCT5T	1.0000	1.0000		
24	DXFF9B	1.0000	1.0000		
25	DXFF9C	1.0000	1.0000		
26	DW68N	1.0000	1.0000		
27	CCV5-3	1.0000	1.0000		
28	CCB3	1.0000	1.0000		
29	DW68T	1.0000	1.0000		
30	DW68X	1.0000	1.0000		

PgDn

Cup 16 ID: CCB2	Cell down mode Ins to switch

678 1314

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS
RunFold: 0316HGA	Seq: 0 Batch:
Prnt: R/T On	Pump: Off
Rev: 4.2	07:55:41 16 Mar 2001 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 DW680		1.0000	1.0000		
32 DW684		1.0000	1.0000		
33 DW685		1.0000	1.0000		
34 DW69A		1.0000	1.0000		
35 DW8V0		1.0000	1.0000		
36 DW8V0S		1.0000	1.0000		
37 DW8V0D		1.0000	1.0000		
38 DW8WP		1.0000	1.0000		
39 CCV5-4		1.0000	1.0000		
40 CCB4		1.0000	1.0000		
41 DW8WR		1.0000	1.0000		
42 DW8WT		1.0000	1.0000		
43 DXFGQBF		1.0000	1.0000		
44 DXFGQCF		1.0000	1.0000		

PgDn

Cup 31 ID: DW680	Cell down mode Ins to switch

678 1315

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0316HGA Seq: 0 Batch: -
Print: R/T On Pump: Off
Rev: 4.2 08:01:57 16 Mar 2001 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2

cup ID	Extended id	Weight	Volume	Macro	check macros
1 DW5JNF		1.0000	1.0000		
2 DW5JNSF		1.0000	1.0000		
3 DW5JNDF		1.0000	1.0000		
4 DW5JQF		1.0000	1.0000		
5 DW5JRF		1.0000	1.0000		
6 DW5JVF		1.0000	1.0000		
7 CCV5-5		1.0000	1.0000		
8 CCB5		1.0000	1.0000		
9 DW5JWF		1.0000	1.0000		
10 DXG2XB		1.0000	1.0000		
11 DXG2XC		1.0000	1.0000		
12 DXGMH		1.0000	1.0000		
13 DXGMHS		1.0000	1.0000		
14 DXGMHD		1.0000	1.0000		
15 CCV5-6		1.0000	1.0000		

PgDn

Cup 1 ID: DW5JNF

Cell down mode Ins to switch

678 1316

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0316HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:01:59 16 Mar 2001	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 PgUp

cup ID	Extended id	Weight	Volume	Macro	check macros
16	CCB6	1.0000	1.0000		
17		1.0000	1.0000		
18		1.0000	1.0000		
19		1.0000	1.0000		
20		1.0000	1.0000		
21		1.0000	1.0000		
22		1.0000	1.0000		
23		1.0000	1.0000		
24		1.0000	1.0000		
25		1.0000	1.0000		
26		1.0000	1.0000		
27		1.0000	1.0000		
28		1.0000	1.0000		
29		1.0000	1.0000		
30		1.0000	1.0000		

PgDn

Cup 16 ID: CCB6	Cell down mode Ins to switch

Logbook ID: MT47

Method		Material		Start Time		Reagents		Balance #		
301DA		Water		1000		3ml Conc HNO ₃ 5ml 1:1 HCL		6623709ADS Mallinckrodt 0087-125-2		
Analyst		Date		Lot Number		Lab Lot # (book, page, line)		Balance #		
Cynthia A. [Signature]		3-16-01		C10150304		0087-081-3, 0057-124-1, 0057-123-1D		10-31-03		
Reviewed by		Date		Date		Date		Date		
[Signature]		3-16-01		3-16-01		3-16-01		3-16-01		
Digestate(s)	Date	Time	(Received)	Analyst	Location	Date	Time	(Relinquished)	Analyst	Location
All Above	3-16-01	1520		CAR Met Prep		3-16-01	1530		CAR Met Prep	
All Above	3-19-01	1000		CAR Met AG		3-19-01	1615		CAR Met AG	
All Above	3-20-01	900		CAR Met AG		3-20-01	1400		CAR Met AG	
All Above	3-20-01	300								

Sample ID	Initial Wt/gm	Final Vol/mL	Comments	Color	Clarity	Texture	Artifacts	Artifact Codes
1. DXGMH	52ml	50ml	CAR 3-16-01					S=Stones
2. DXGMHS			+0.5ml MSBIREV, MSA, MSCREV					O=Organic (plant mat)
3. DXGMHD			CAR 3-16-01					W=free H ₂ O
4. DXG4QB			+0.5ml MSBIREV, MSA, MSCREV					G=Glass
5. DXG4QC								M=Metal Pigments
6.								R=Rubber/Plastic
7.								C=Cloth
8.								P=Paper
9.								I=Insects
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								
21.								
22.								
23.								
24.								

Hot Plate/Block Temp	Correction Factor
# 12/95 °C	-0.5 °C

Color	R=Red	Y=Yellow	W=White
	BL=Blue	O=Orange	GY=Gray
	BR=Brown	V=Violet	GN=Green
	BLK=Black	P=Pink	C=Colorless

Hg Digestion Log

Serial Number **007** Log Book Number **96-MT-584** Start Time **07:30-07:45**

QUA-4169

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STDO	N/A	3-16-01	WAH	100ml	WATER	3-16-01	N/A
2. STD1							0087-147-3
3. STD2							0087-147-4
4. STD3							0087-147-5
5. STD4							0087-147-6
6. STD5							0087-147-7
7. ICV							0087-147-8
8. ICR							N/A
9. CCV							0087-147-9
10. CCR							N/A
11. DXFFKBT							0087-147-10
12. DXFEKCT							N/A
13. DXEOGBT							0087-147-11
14. DXCTDT	3-14-01						0087-147-12
15. DXCTDST							0087-147-13
16. DXCTDDT							0087-147-14
17. DXCTAT							0087-147-15
18. DXCTLT							0087-147-16
19. DXCTWR							0087-147-17
20. DXCTPT							0087-147-18
21. DXCTQT							0087-147-19
22. DXCTTT							0087-147-20
23. DXCTWT							0087-147-21
24. DXCTaT							0087-147-22
25. DXCTIT							0087-147-23
Reagents							
HNO3							
H2SO4							
KMNO4							
K2S2O4							
Extract(s)							
(Record line number from above)							

Hg Digestion Log

QUA-4169

Serial Number	038	Log Book Number	96-MT-584	Start Time	01:30 - 07:45

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DXCY2T	3-14-01	3-16-01	WAAH	100 ml	WATER	3-16-01	N/A
2. DXCTST	↓						
3. DXFFFA	N/A						
4. DXFFFC	↓						0087-147-11
5. DW68A	3-9-01						N/A
6. DW68T	↓						
7. DW68X	↓						
8. DW68O	↓						
9. DW68Y	↓						
10. DW68S	↓						
11. DW68A	↓						
12. DW8UD	3-12-01						
13. DW8VOS	↓						1ml 0087-147-1
14. DW8UD	↓						1ml 0087-147-1
15. DW8WP	↓						N/A
16. DW8WR	↓						
17. DW8WT	↓						
18. DXFGGBF	N/A						
19. DXFGRCF	↓						0087-147-12
20. DW5JHF	3-8-01						N/A
21. DW5JASF	↓						1ml 0087-147-1
22. DW5JADF	↓						1ml 0087-147-1
23. DW5JQF	↓						N/A
24. DW5JRF	↓						
25. DW5JVF	↓						

Reagents	Vol (mL)	Ref. Number	Method
HNO3	2.5 ml	MAIL/WORKBKT 6623 T09A05	7470A AUTOCLAVE 15PSI 120°C
H2SO4	5.0 ml	5257 T16A16	5257 = 0087-119-3
KMNO4	15.0 ml	0087-138-6	NaCl - NH2OH = 0087-137-7
K2S2O4	8.0 ml	0087-136-4	WAAH 3-16-01
Extract(s)	Received	Analyst	Location
Extract(s)	WAAH 3-16-01		

6781319
STL Pittsburgh

Hg Digestion Log

QUA-4169

Serial Number	Log Book Number	Start Time
009	96-MT-584	07:30 → 07:45

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DW5JWE	3-8-01	3-16-01	WAH	100ml	WATER	3-16-01	N/A
2. DWG2XB	N/A						↓
3. DWG3XS	↓						0087-147-13
4. DXGmH	3-15-01						N/A
5. DXGmHS	↓						1ml 0087-147-1
6. DXGmHD	↓						1ml 0087-147-1
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
		Ref. Number	Ref. Number	
HNO3	2.5ml	MAH/JACKRODT 6623	T09A05	7470A AUTOCCLAVE 15PSI 130°C
H2SO4	5.0ml	↓	5557	T16A16
KMNO4	15.0ml	0087-138-6		
K2S2O4	8.0ml	0087-136-4		

Extract(s)	Extract(s) Received			Extract(s) Relinquished		
	Date	Time	Analyst	Location	Date	Analyst
(Record line number from above)						
			WAH			

Serial Number	Log Book Number	Start Time
009	96-MT-584	07:30 → 07:45

678 1321

REQUESTED BY: RIZZOC

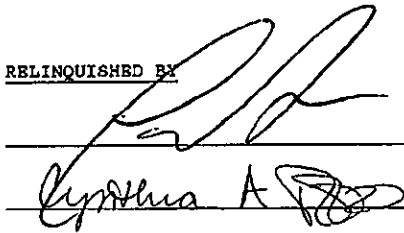
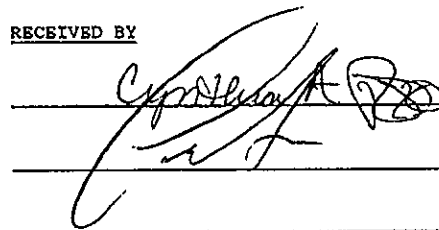
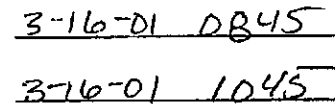
METHOD: QM Inductively Coupled Plasma (6010B Trace)

<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>	
11C CLP1	DXGMH	-----	320637	399411	I-05-QM	C1C150304	001		WATER	0	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME


Cynthia A. [illegible]
Cynthia A. [illegible]
3-16-01 0845
3-16-01 1045

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

REQUESTED BY. HOYLEW

METHOD. 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
11C CLP1	DXGMH	_____	320561	399411	I-19-08	C1C150304	001		WATER	0 13	1

RELINQUISHED BYRECEIVED BYDATE/TIMEWilliam a HoyleWilliam a Hoyle3-16-01 05:30William a HoyleWilliam a Hoyle3-16-01 06:25

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

678 1323

GENERAL CHEMISTRY DATA

678 1324

UXB INTERNATIONAL

Client Sample ID: DF/24-B/1073/IDW/003

General Chemistry

Lot-Sample #...: C1C150304-001 Work Order #...: DXGMH Matrix.....: WATER
Date Sampled...: 03/14/01 Date Received...: 03/15/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.7		No Units	SW846 9040	03/16/01	1075402
		Dilution Factor: 1		MS Run #.....: 1075209		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	03/16-03/17/01	1075182
		Dilution Factor: 1		MS Run #.... : 1075055		
Flashpoint	>201		deg F	SW846 1010	03/21/01	1080356
		Dilution Factor: 1		MS Run #..... : 1080194		
Total Sulfide	ND	1.0	mg/L	MCAWW 376.1	03/16/01	1075436
		Dilution Factor: 1		MS Run #.... : 1075235		

678 1325

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C1C150304

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Cyanide, Total	ND	Work Order #: DXG8X1AA 10.0	ug/L	MB Lot-Sample #: SW846 9012A	C1C160000-182 03/16-03/17/01	1075182
		Dilution Factor: 1				
Total Sulfide	ND	Work Order #: DXJVH1AA 1.0	mg/L	MB Lot-Sample #: MCAWW 376.1	C1C160000-436 03/16/01	1075436
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

678 1326

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1C150304

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	100	Work Order #: DXJLP1AA (85 - 115) Dilution Factor 1	LCS Lot-Sample#: C1C160000-402 SW846 9040	03/16/01	1075402
Cyanide, Total	105	Work Order #: DXG8X1AC (85 - 115) Dilution Factor: 1	LCS Lot-Sample#: C1C160000-182 SW846 9012A	03/16-03/17/01	1075182
Flashpoint	100	Work Order #: DXP071AA (85 - 115) Dilution Factor: 1	LCS Lot-Sample#: C1C210000-356 SW846 1010	03/21/01	1080356
Total Sulfide	93	Work Order #: DXJVH1AC (75 - 125) Dilution Factor: 1	LCS Lot-Sample#: C1C160000-436 MCAWW 376.1	03/16/01.	1075436

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

678 1327

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1C150304

Matrix.....: WATER

Date Sampled...: 03/13/01

Date Received...: 03/14/01

PARAMETER	PERCENT RECOVERY	RPD	PREPARATION-	PREP
	RECOVERY	LIMITS	ANALYSIS DATE	BATCH #
Cyanide, Total		WO#: DW8V01C7-MS/DW8V01C8-MSD	MS Lot-Sample #:	C1C120106-001
106	(75 - 125)	SW846 9012A	03/16-03/17/01	1075182
104	(75 - 125) 1.7 (0-20)	SW846 9012A	03/16-03/17/01	1075182
	Dilution Factor: 1			
	MS Run #.....: 1075055			
Total Sulfide		WO#: DXDX41EC-MS/DXDX41ED-MSD	MS Lot-Sample #:	C1C140252-001
111	(75 - 125)	MCAWW 376.1	03/16/01	1075436
115	(75 - 125) 3.4 (0-20)	MCAWW 376.1	03/16/01	1075436
	Dilution Factor: 1			
	MS Run #: 1075235			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

SAMPLE DUPLICATE EVALUATION REPORT

Client Lot #...: C1C150304

Work Order #...: DXGMH-SMP
DXGMH-DUP

Matrix.....: WATER

Date Sampled...: 03/14/01

Date Received..: 03/15/01

% Moisture.....:

Dilution Factor:

Initial Wgt/Vol:

PARAM	RESULT	DUPLICATE		RPD	RPD LIMIT	METHOD	PREPARATION-	PREP
		RESULT	UNITS				ANALYSIS DATE	BATCH #
Flashpoint	>201	>201	deg F	0.0	(0-20)	SD Lot-Sample #: C1C150304-001 SW846 1010	03/21/01	1080356
			Dilution Factor: 1			MS Run Number... 1080194		
pH	7.7	7.8	No Units	0.64	(0-20)	SD Lot-Sample #: C1C150304-001 SW846 9040	03/16/01	1075402
			Dilution Factor: 1			MS Run Number... 1075209		

STL Pittsburgh-Cyanide Analysis

678 1329

Analyst J. Johnson Date 03.17.01
Data File 031701A

Lot Number(s) Batch Number(s) Method

CLC100116 1073161 Total Water
CLC100117 ↓ ↓

CLC100116 1074164 Free Water
CLC100117 ↓ ↓

CLC100116 1074301 Amalgam Water
CLC100117 ↓ ↓

CLC150304 1075182 Total Water
CLC120106 ↓ ↓
CLC140252 ↓ ↓

CLC140252 1075263 Total Water

CLC150288 1075264 Total Water
CLC150296 ↓ ↓

CLC150168 1076097 Total Solid

Run Results Report

Results: C:\FLOW_4\031701A.RST

678 1330

Results completed: 14:04 March 17, 2001.

Operator: P.JOHNSON

P. Johnson 3.12.01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
----- User request: Start Data Collect -----					
09:07	0	CARRYOVER	833	0.001942	
09:08	0	CARRYOVER	152	0.000396	
		Mean & RSD:	493	0.001169	NoRSD
09:09	0	READ BASELIN	0	0.000051	BL
09:10	301	0.500 PPM ST	219750	0.498622	
09:11	301	0.500 PPM ST	218176	0.495051	
09:13	301	0.500 PPM ST	218890	0.496671	
		Mean & RSD:	218939	0.496781	.36%
09:14	302	0.400 PPM ST	175069	0.397249	
09:15	302	0.400 PPM ST	173890	0.394575	
09:16	302	0.400 PPM ST	174792	0.396621	
		Mean & RSD:	174584	0.396148	.353%
09:17	303	0.300 ppm ST	131075	0.297435	
09:18	303	0.300 ppm ST	129928	0.294832	
09:20	303	0.300 ppm ST	130940	0.297128	
		Mean & RSD:	130648	0.296465	.48%
09:21	304	0.200 PPM ST	87455	0.198469	
09:22	304	0.200 PPM ST	87572	0.198735	
09:23	304	0.200 PPM ST	88040	0.199796	
		Mean & RSD:	87689	0.199000	.353%
09:24	305	0.100 PPM ST	44133	0.100179	
09:25	305	0.100 PPM ST	44051	0.099994	
09:27	305	0.100 PPM ST	44087	0.100077	
		Mean & RSD:	44090	0.100083	.0927
09:28	306	0.050 PPM ST	22202	0.050422	
09:29	306	0.050 PPM ST	22085	0.050157	
09:30	306	0.050 PPM ST	21963	0.049881	
		Mean & RSD:	22083	0.050153	.54%
09:31	307	0.010 PPM ST	4686	0.010682	
09:32	307	0.010 PPM ST	4642	0.010583	
09:34	307	0.010 PPM ST	4624	0.010541	
		Mean & RSD:	4651	0.010602	.687%
09:35	0	0.000 PPM ST	-34	-0.000026	LO OL
09:36	0	0.000 PPM ST	-46	-0.000054	LO
09:37	0	0.000 PPM ST	-51	-0.000064	LO
		Mean & RSD:	-49	-0.000059	18.2%
09:38	0	BLANK	-68	-0.000103	LO
09:39	2	CCV 7216004	45265	0.102748	102.77.
09:41	0	CCB	-6	0.000038	
09:42	0	BASELINE	0	0.000051	BL
09:43	101	.05 7216001	21278	0.048327	92.47.
09:44	102	.40 7216002	180512	0.409598	102.49.
09:45	0	BLANK	-1	0.000049	

Page #1

Run Results Report

Run Results Report

Results: C:\FLOW_4\031701A.RST

Results completed: 14:04 March 17, 2001.

Operator: P.JOHNSON

678 1331

P. Johnson 3-17-01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
09:46	2	CCV 7216004	45410	0.103076	103.17.
09:48	0	CCB	-31	-0.000019	LO
09:49	0	BASELINE	0	0.000051	BL
09:50	103	DXCRG1ACC	73452	0.166699	104.27.
09:51	0	ICB	-5	0.000040	
09:52	0	BLANK	-4	0.000041	
09:53	2	CCV 7216004	45572	0.103445	103.47.
09:55	0	CCB	13	0.000081	
09:56	0	BASELINE	0	0.000051	BL
09:57	104	DXCRG1AAB	983	0.002281	
09:58	105	DW79J1A5	17046	0.038726	
09:59	106	DW79T1A5	70610	0.160251	
10:00	107	DW79T1DQX	72980	0.165628	3.37. R.D.
10:02	108	DW78T1DPS	114451	0.259719	99.47.
10:03	109	DW79W1AG	171	0.000439	
10:04	110	DW79X1AG	18327	0.041631	
10:05	111	DW7901AG	2485	0.005689	
10:06	0	BLANK	-57	-0.000079	LO
10:07	2	CCV 7216004	45753	0.103856	103.97.
10:09	0	CCB	-10	0.000029	
10:10	0	BASELINE	0	0.000051	BL
10:11	112	DW7911AG	1503	0.003460	
10:12	113	DW7921AG	1634	0.003759	
10:13	114	DW7931AG	32198	0.073102	
10:14	115	DW7941AG	2280	0.005225	
10:16	116	DW7961AG	46431	0.105394	
10:17	117	DW7981AG	56087	0.127302	
10:18	118	DW7991AG	84863	0.192590	
10:19	119	DW8AC1AG	240316	0.545283	HI D
10:20	0	BLANK	17	0.000089	
10:21	2	CCV 7216004	45886	0.104157	104.27.
10:23	0	CCB	29	0.000117	
10:24	0	BASELINE	0	0.000051	BL
10:25	120	DW8AD1AG	1211	0.002799	
10:26	121	DW8AF1AG	36702	0.083320	
10:27	122	DW8AG1AG	58263	0.132239	
10:28	123	DW8AH1AG	118392	0.268659	
10:30	124	DW8AJ1AG	121171	0.274964	
10:31	125	DW8AK1AG	254	0.000627	
10:32	0	BLANK	44	0.000150	
10:33	2	CCV 7216004	45570	0.103439	103.77.
10:34	0	CCB	27	0.000112	
10:35	0	BASELINE	0	0.000051	BL
10:37	126	DXEX31AAB	1647	0.003787	

Page #2

Run Results Report

Run Results Report

Results: C:\FLOW 4\031701A.RST

673 1332

Results completed: 14:04 March 17, 2001.

Operator: P.JOHNSON

P. Johnson 3.17.01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
10:38	127	DXEX31ACC	73108	0.165920	103.77.
10:39	128	DW79J1A6	2240	0.005132	
10:40	129	DW79T1A6	4685	0.010681	
10:41	130	DW79T1DRS	47240	0.107228	46.57.
10:42	131	DW79T1DTD	49333	0.111978	101.37. 4.47. RPS
10:44	132	DW79W1AH	1158	0.002677	
10:45	133	DW79X1AH	2269	0.005199	
10:46	0	BLANK	14	0.000083	
10:47	2	CCV 7216004	45600	0.103509	103.57.
10:48	0	CCB	36	0.000132	
10:49	0	BASELINE	0	0.000051	BL
10:51	134	DW7901AH	1160	0.002682	
10:52	135	DW7911AH	1171	0.002709	
10:53	136	DW7921AH	1234	0.002851	
10:54	137	DW7931AH	4044	0.009227	
10:55	138	DW7941AH	1412	0.003254	
10:56	139	DW7961AH	7751	0.017636	
10:58	140	DW7981AH	8018	0.018243	
10:59	141	DW7991AH	13487	0.030650	
11:00	0	BLANK	-32	-0.000022	LO
11:01	2	CCV 7216004	45879	0.104142	104.17.
11:02	0	CCB	-16	0.000015	
11:03	0	BASELINE	0	0.000051	BL
11:05	142	DW8AC1AH	5239	0.011938	
11:06	143	DW8AD1AH	1605	0.003692	
11:07	144	DW8AF1AH	8363	0.019024	
11:08	145	DW8AG1AH	5913	0.013466	
11:09	146	DW8AH1AH	6345	0.014446	
11:10	147	DW8AJ1AH	7699	0.017518	
11:12	148	DW8AK1AH	880	0.002046	
11:13	0	BLANK	-36	-0.000031	LO
11:14	2	CCV 7216004	45552	0.103400	103.47.
11:15	0	CCB	2	0.000055	
11:16	0	BASELINE	0	0.000051	BL
11:17	149	DXFKP1AAB	1100	0.002546	
11:19	150	DXFKP1ACC	1249	0.002884	
11:20	151	DW79J1A7	17087	0.038818	
11:21	152	DW79T1A7	78723	0.178659	
11:22	153	DW79T1DVX	80850	0.183483	
11:23	154	DW79T1DUS	79563	0.180565	
11:24	155	DW79W1AJ	485	0.001152	
11:26	156	DW79X1AJ	22419	0.050915	
11:27	0	BLANK	2	0.000056	
11:28	2	CCV 7216004	46078	0.104592	104.67.

See Amenable CN Sheet

Page #3

Run Results Report

Run Results Report

Results: C:\FLOW_4\031701A.RST

Results completed: 14:04 March 17, 2001.

Operator: P.JOHNSON

678 1333

P. Johnson 3.17.01

Time	Cup	Name	Height	Calc.	Flags
11:29	0	CCB	1	0.000052	
11:30	0	BASELINE	0	0.000051	BL
11:31	157	DW7901AJ	3327	0.007599	
11:33	158	DW7911AJ	2151	0.004930	
11:34	159	DW7921AJ	2023	0.004641	
11:35	160	DW7931AJ	31494	0.071505	
11:36	161	DW7941AJ	1741	0.004002	
11:37	162	DW7961AJ	56294	0.127771	
11:38	163	DW7981AJ	66765	0.151527	
11:40	164	DW7991AJ	99749	0.226363	
11:41	0	BLANK	46	0.000154	
11:42	2	CCV 7216004	46053	0.104535	104.5%
11:43	0	CCB	-8	0.000033	
11:44	0	BASELINE	0	0.000051	BL
~~11:45~~	~~165~~	~~DW8AC1AJ~~	~~225918~~	~~0.512615~~	~~HI D~~
11:47	166	DW8AD1AJ	3454	0.007888	
11:48	167	DW8AF1AJ	44800	0.101693	
11:49	168	DW8AG1AJ	54816	0.124419	
11:50	169	DW8AH1AJ	130260	0.295585	
11:51	170	DW8AJ1AJ	124718	0.283011	
11:52	171	DW8AK1AJ	2210	0.005066	
11:54	0	BLANK	85	0.000243	
11:55	2	CCV 7216004	46164	0.104788	104.8%
11:56	0	CCB	0	0.000052	
11:57	0	BASELINE	0	0.000051	BL
11:58	172	DXG8X1AAB	1496	0.003445	
11:59	173	DXG8X1ACC	73907	0.167733	104.8%
12:01	174	DXGMH1A7	1746	0.004013	
12:02	175	DW8V01A7	1530	0.003521	
12:03	176	DW8V01C7S	46650	0.105892	105.9%
12:04	177	DW8V01C7D	45851	0.104078	104.1%, 1.27. R3
12:05	178	DW8WP1AJ	1250	0.002886	
12:06	179	DW8WR1AJ	1019	0.002363	
12:08	0	BLANK	-27	-0.000011	LO
12:09	2	CCV 7216004	45924	0.104244	104.2%
12:10	0	CCB	-38	-0.000036	LO
12:11	0	BASELINE	0	0.000051	BL
12:12	180	DW8WT1AJ	841	0.001960	
12:13	181	DXD0F1AJ	1143	0.002643	
12:15	182	DXD4H1AJ	6917	0.015745	
12:16	183	DWD4L1AJ	1341	0.003094	
12:17	184	DWD4M1AJ	1864	0.004280	
12:18	185	DXD4N1AJ	2811	0.006429	
12:19	186	DXD4Q1AJ	1226	0.002832	

*See Amenable CN Sheet**See Amenable CN Sheet*

Page #4

Run Results Report

Run Results Report

Results: C:\FLOW 4\031701A.RST

678 1334

Results completed: 14:04 March 17, 2001.

Operator: P.JOHNSON

P. Johnson 3.17.01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
12:20	187	DXD4W1AJ	2884	0.006595	
12:22	0	BLANK	-59	-0.000083	LO
12:23	2	CCV 7216004	45863	0.104105	104.17.
12:24	0	CCB	-50	-0.000064	LO
12:25	0	BASELINE	0	0.000051	BL
12:26	188	DXDX41A7	1672	0.003845	
12:27	189	DXD0A1AJ	1701	0.003909	
12:29	190	DXD0H1AJ	1586	0.003649	
12:30	201	DXD0M1AJ	1531	0.003524	
12:31	0	BLANK	-22	0.000002	
12:32	2	CCV 7216004	45950	0.104302	104.37.
12:33	0	CCB	-15	0.000018	
12:34	0	BASELINE	0	0.000051	BL
12:36	202	DXHP81AAB	966	0.002241	
12:37	203	DXHP81ACC	75103	0.170446	104.57.
12:38	204	DXD001AJ	2062	0.004729	
12:39	205	DXD001CQS	47282	0.107325	102.37.
12:40	206	DXD001DRD	47881	0.108684	108.77. 1.37.00
12:41	207	DXD351AJ	1082	0.002506	
12:43	208	DXD4A1AJ	1119	0.002590	
12:44	209	DXD4C1AJ	1010	0.002342	
12:45	0	BLANK	-7	0.000035	
12:46	2	CCV 7216004	46004	0.104424	104.47.
12:47	0	CCB	-18	0.000011	
12:48	0	BASELINE	0	0.000051	BL
12:50	210	DXGLD1A4	967	0.002244	
12:51	0	BLANK	-26	-0.000009	LO
12:52	2	CCV 7216004	45966	0.104340	104.37.
12:53	0	CCB	-27	-0.000011	LO
12:54	0	BASELINE	0	0.000051	BL
12:55	211	DXHQK1ACC	74551	0.169194	105.87.
12:57	0	ICB	-23	-0.000001	LO
12:58	0	BLANK	8	0.000070	
12:59	2	CCV 7216004	45533	0.103357	103.47.
13:00	0	CCB	-17	0.000013	
13:01	0	BASELINE	0	0.000051	BL
13:02	212	DXHQK1AAB	1089	0.002521	
13:04	213	DXGJJ1A3	1129	0.002613	
13:05	214	DXGJV1AE	2894	0.006616	
13:06	215	DXGJ21AL	1136	0.002628	
13:07	216	DXGJ21DPX	855	0.001991	0.07.00
13:08	217	DXGJ21AMS	45435	0.103134	103.17.
13:09	218	DXGKC1AE	1005	0.002331	
13:11	219	DXGKG1AE	885	0.002058	

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Run Results Report

Run Results Report

Results: C:\FLOW_4\031701A.RST

Results completed: 14:04 March 17, 2001: . .

Operator: P.JOHNSON

678 1335

P. Johnson 3-17-01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
13:12	0	BLANK	-61	-0.000088	LO
13:13	2	CCV 7216004	45737	0.103819	103.89.
13:14	0	CCB	-29	-0.000015	LO
13:15	0	BASELINE	0	0.000051	BL
~~13:16~~	~~220~~	~~DXGKK1AE~~	~~17144~~	~~0.038947~~	
13:18	221	DXGK31A3	1099	0.002545	
13:19	0	BLANK	-33	-0.000025	LO
13:20	2	CCV 7216004	46246	0.104975	105.01.
13:21	0	CCB	-14	0.000020	
13:22	0	BASELINE	0	0.000051	BL
13:29	222	DXKAG1AAB	1280	0.147798	
13:30	223	DXKAG1ACC	84525	95.911415	mg/kg 93.19.
13:31	224	DXFFA1AW	2822	0.322622	105.19.
13:32	225	DXFFA1CWS	46297	5.254491	
13:33	226	DXFFA1CXD	48967	5.557382	mg/kg 111.19. S.L.P.R.D.
13:34	0	BLANK	15	0.000084	104.19.
13:36	2	CCV 7216004	45844	0.104063	
13:37	0	CCB	13	0.000080	
13:38	0	BASELINE	0	0.000051	BL
13:39	220	DXGKK1AE	1157	0.002675	
13:40	0	BLANK	-52	-0.000068	LO
13:41	2	CCV 7216004	45805	0.103974	104.01.
13:43	0	CCB	-28	-0.000012	LO
13:44	0	BASELINE	0	0.000051	BL
13:53	308	DW8AC1AG	46256	0.524984	
13:54	309	DW8AC1AJ	42870	0.486570	See Amenable CW Sheet
13:55	0	BLANK	18	0.000093	
13:56	2	CCV 7216004	45568	0.103436	103.49.
13:57	0	CCB	9	0.000071	
13:58	0	BASELINE	0	0.000051	BL

CYANIDE: Calibration, Peak 5-241

678 1336

File name: C:\FLOW_4\031701A.RST

Date: March 17, 2001

Operator: P.JOHNSON

P. Johnson 3.12.01

* Name	Conc	Height
* 0.500 PPM STD	0.500000	219750.296875
* 0.500 PPM STD	0.500000	218176.250000
* 0.500 PPM STD	0.500000	218890.187500
* 0.400 PPM STD	0.400000	175069.078125
* 0.400 PPM STD	0.400000	173890.390625
* 0.400 PPM STD	0.400000	174792.171875
* 0.300 ppm STD	0.300000	131075.203125
* 0.300 ppm STD	0.300000	129927.601562
* 0.300 ppm STD	0.300000	130939.710938
* 0.200 PPM STD	0.200000	87454.890625
* 0.200 PPM STD	0.200000	87572.023438
* 0.200 PPM STD	0.200000	88039.554688
* 0.100 PPM STD	0.100000	44132.710938
* 0.100 PPM STD	0.100000	44051.128906
* 0.100 PPM STD	0.100000	44087.347656
* 0.050 PPM STD	0.050000	22201.705078
* 0.050 PPM STD	0.050000	22084.812500
* 0.050 PPM STD	0.050000	21963.068359
* 0.010 PPM STD	0.010000	4686.002930
* 0.010 PPM STD	0.010000	4642.382324
* 0.010 PPM STD	0.010000	4623.744141
* 0.000 PPM STD	0.000000	-33.686436
* 0.000 PPM STD	0.000000	-46.383156
* 0.000 PPM STD	0.000000	-50.675655

Calib Coef:

y=bx+a

a: (intercept) -2.2395e+01

b: 4.4076e+05

Corr Coef: 0.999982

Carryover: 0.183%

No Drift Peaks

CYANIDE: Calibration, Peak 5-241

2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
000
-0 200
-0 400

STL Pittsburgh

Height (F+05)

678 1337

7015

0.6

0.5

0.4

0.3

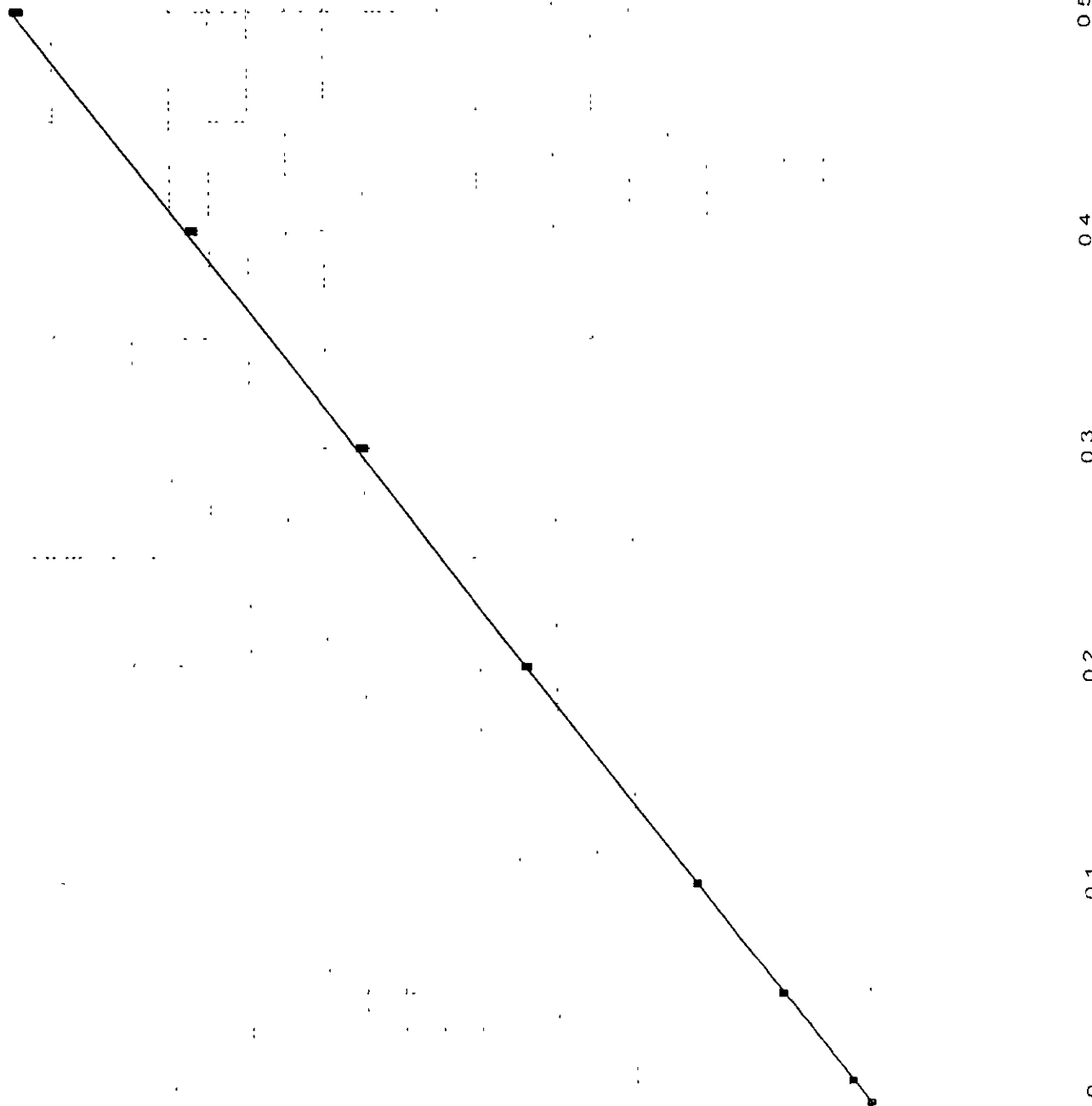
0.2

0.1

0.0

-0.1

Conc



61100116
61100112

678 1338

Total CN - NonAmenable CN = Amenable CN

Sample TJ			
mg LCS	NJ	NJ	NJ TV: 0.16 ppm 0.1667 10727
61100116.001	0.1667	NJ	
* JW795	0.0382	0.0388	NJ
61100112.001			
* JW796	0.1603	0.1787	NJ
* JW79T 001	0.1656	0.1835	NJ 001
JW79T 001			
JW79T 002	0.2597	0.1806	0.0791 79.1
JW79U 003	NJ	NJ	NJ
* JW79X 004	0.0416	0.0569	NJ
JW79V 005	NJ	NJ	NJ
JW791 006	NJ	NJ	NJ
JW792 007	NJ	NJ	NJ
JW793 008	0.0731	0.0715	NJ
JW794 009	NJ	NJ	NJ
* JW79L 010	0.1054	0.1278	NJ
* JW79B 011	0.1223	0.1515	NJ
* JW799 012	0.1926	0.2264	NJ
JW8AC 013	0.5250	0.4866	0.0384
JW8AD 014	NJ	NJ	NJ
* JW8AF 015	0.0833	0.1617	NJ
STL Pittsburgh JW8AC	0.1371	0.1274	NJ 7016

LI 100116
LI 100117

678 1339

Sample T

Total CH - NonAmenable CH = Amenable CH

5-13

P. G. Johnson 3.17.01

* LI 100117.016

JWBAH

0.2687

0.2956

NJ

* JWBAJ 017

JWBAJ

0.2750

0.2830

NJ

JWBAK 018

NJ

NJ

NJ

* Note: Pretreated Sample Value Greater Than Total Cyanoide Value.

P. G. Johnson
3.17.01

STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

U1C100116 Total 10+3161
U1C100117 water

Distilled by		Date		Reagent/Std Book ID		Sample Description (CLP Samples Only)	
J. Johnson Start 1030		3-14-01		342-192-03		342-192-11 342-1549	
Sample ID	Initial	Distillation	Final	Before Distillation	After Distillation	Expiration Date	Color
1 XUG1A	Some		Some	NA	NA	NA	R=Red
2 XUG1A				NA	NA	NA	BL=Blue
3 3331A				U	U	3-22-01	BR=Brown
4 3331A				U	U		BLK=Black
5 3331A				U	U		Y=Yellow
6 3331A				U	U		O=Orange
7 3331A				U	U		V=Violet
8 3331A				U	U		P=Pink
9 3331A				U	U		W=White
10 3331A				U	U		GY=Gray
11 3331A				U	U		GN=Green
12 3331A				U	U		C=Colorless
13 3331A				U	U		
14 3331A				U	U		
15 3331A				U	U		
16 3331A				U	U		
17 3331A				U	U		
18 3331A				U	U		
19 3331A				U	U		
20 3331A				U	U		
21 3331A				U	U		
22 3331A				U	U		
23 3331A				U	U		
24 3331A				U	U		
25							
26							

Distillate(s) Received		Distillate(s) Relinquished	
Date	Time	Date	Time
3-14-01	1145	3-14-01	1200
3-17-01	0800	3-17-01	1205

Distillate(s)		Distillate(s)	
(record line # from above)	Analyst	Analyst	Location
1-53	J. Johnson	J. Johnson	Ref 3
1-53	J. Johnson	J. Johnson	Ref 3

Comments: I will be picking up 22.15 g of sample of 72.15 g of sample of 3-14-01

STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

21000116
21000117
Time
Water

Sample ID		Distillation		Reagent/Std Book ID		Date		Sample Description (CLP Samples Only)		Expiration Date		Color	
Initial	Final	Before Distillation	After Distillation	Before Distillation	After Distillation	Before Distillation	After Distillation	Before Distillation	After Distillation	Before Distillation	After Distillation	Before Distillation	After Distillation
1	EX-11A	Some	Some									R=Red	
2	EX-11A											BL=Blue	
3	EX-11A											BR=Brown	
4	EX-11A											BLK=Black	
5	EX-11A											Y=Yellow	
6	EX-11A											O=Orange	
7	EX-11A											V=Violet	
8	EX-11A											P=Pink	
9	EX-11A											W=White	
10	EX-11A											GY=Gray	
11	EX-11A											GN=Green	
12	EX-11A											C=Colorless	
13	EX-11A												
14	EX-11A												
15	EX-11A												
16	EX-11A												
17	EX-11A												
18	EX-11A												
19	EX-11A												
20	EX-11A												
21	EX-11A												
22	EX-11A												
23	EX-11A												
24	EX-11A												
25													
26													

Distillate(s)		Distillate(s) Received		Distillate(s) Relinquished			
(record line # from above)	Date	Time	Analyst	Date	Time	Analyst	Location
1	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
2	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
3	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
4	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
5	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
6	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
7	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
8	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
9	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
10	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
11	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
12	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
13	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
14	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
15	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
16	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
17	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
18	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
19	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
20	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
21	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
22	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
23	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
24	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
25	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3
26	2/15/01	1855	P. Johnson	2/15/01	1213	P. Johnson	Lab 3

22	00	11	9	Amesbury	100	301
22	00	01	7	Worcester		

CYANIDE PICTURES - TIAN WORKS

[illegible]

Logbook ID: WC37

STL - Pittsburgh CYANIDE DISTILLATION WORKSHEET

STL - Pittsburgh

[illegible]

Total 3253

STL Pittsburgh

Reagent/Std Book ID		Date		Sample Description (CLP Samples Only)		Color	
Reagent	Std Book ID	Date	Sample Description	CLP	Samples Only	Color	Color
1	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
2	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
3	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
4	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
5	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
6	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
7	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
8	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
9	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
10	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
11	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
12	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
13	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
14	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
15	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
16	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
17	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
18	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
19	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
20	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
21	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
22	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
23	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
24	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
25	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01
26	XXHBIAB	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01	3.16.01

Comments

Comments	LCS-16 ppm 72 58 12 Reviewed by [Signature] Date: 3 - 16 - 90	To Source of Sampled

CYANIDE DISTILLATION WORKSHEET

STL - Pittsburgh

U 130280
U 130290
Total 107524

U 130285
U 130296
U 130296
Total 33046
CYANIDE DIS

— 94 —

Sample ID	Distillation		Final	Before Distillation		After Distillation		Expiration Date	Color
	Initial								
1. X HOKIAAB	Some	Some		AA	AA	AA	AA	NA	R=Red
2. X HOKIAAB				AA	AA	AA	AA	NA	BL=Blue
3. X GJIAAB				UU	UU	UU	UU	3.27.01	BR=Brown
4. X GJIAAB				UU	UU	UU	UU		BLK=Black
5. X GJIAAB				UU	UU	UU	UU		Y=Yellow
6. X GJIAAB				UU	UU	UU	UU		O=Orange
7. X GJIAAB				UU	UU	UU	UU		V=Violet
8. X GJIAAB				UU	UU	UU	UU		P=Pink
9. X GJIAAB				UU	UU	UU	UU		W=White
10. X GJIAAB				UU	UU	UU	UU		GY=Gray
11. X GJIAAB				UU	UU	UU	UU		GN=Green
12. X GJIAAB				UU	UU	UU	UU	3.27.01	C=Colorless
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
21.									
22.									
23.									
24.									
25.									
26.									

Reagent/Std Book ID: 34219203

Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

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Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

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Sample Description (CLP Samples Only): 34219203

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Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

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Date: 3.16.01

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Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

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Reagent/Std Book ID: 34219203

Date: 3.16.01

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Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

Sample Description (CLP Samples Only): 34219203

Location: 3421549

Reagent/Std Book ID: 34219203

Date: 3.16.01

Comments:
Reviewed by: [Signature]
Date: 3-16-01

C1C136168 Total 1672097

STL Pittsburgh

STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

Distilled by		Date		Reagent/Std Book ID		
P. Johnson		3-17-01		342-192403		
Sample ID	Initial	Final	Before Distillation	After Distillation	Expiration Date	Color
1 X X A G I A A B	1.000	Sand			NA	R=Red
2 X X A G I A A C	0.100				NA	BL=Blue
3 X X F F A I A A	1.000				3-28-01	BR=Brown
4 X X F F A I A B	1.000				3-28-01	BLK=Black
5 X X F F A I A C	1.000				3-28-01	Y=Yellow
6						O=Orange
7						V=Violet
8						P=Pink
9						W=White
10						GY=Gray
11						GN=Green
12						C=Colorless
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						

Distillate(s) Received		Distillate(s) Relinquished	
Date	Time	Date	Time
3-17-01	1120	3-17-01	1350
P. Johnson		P. Johnson	

Distillate(s)		Distillate(s)	
(record line # from above)	Location	Analyst	Location
1-5	WOL		

Comments: 103ing kg 7216005/MS/MSS sample o sample 7215915 To 200g of sample

Reviewed by: Michael T. Wadsworth

Date: 3-17-01

Printed on 05-Feb-01 10:59:50 AM

Page 40 of 100

REQUESTED BY JOHNSONP

METHOD OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED			CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
		CNTR#											
8A, CLP1	DW79J-1-A5	___	___	___	319869	097631	I-06-OU C1C100116	001			WATER	7	1
8A, CLP1	DW79T-1-A5	___	___	___	319870	097631	I-06-OU C1C100117	001			WATER	7	1
8A, CLP1	DW79W-1-AG	___	___	___	319871	097631	I-06-OU C1C100117	002			WATER	7	1
8A, CLP1	DW79X-1-AG	___	___	___	319872	097631	I-06-OU C1C100117	003			WATER	7	1
8A, CLP1	DW790-1-AG	___	___	___	319873	097631	I-06-OU C1C100117	004			WATER	7	1
8A, CLP1	DW791-1-AG	___	___	___	319874	097631	I-06-OU C1C100117	005			WATER	7	1
8A, CLP1	DW792-1-AG	___	___	___	319875	097631	I-06-OU C1C100117	006			WATER	7	1
8A, CLP1	DW793-1-AG	___	___	___	319876	097631	I-06-OU C1C100117	007			WATER	7	1
8A, CLP1	DW794-1-AG	___	___	___	319877	097631	I-06-OU C1C100117	008			WATER	7	1
8A, CLP1	DW796-1-AG	___	___	___	319878	097631	I-06-OU C1C100117	009			WATER	7	1
8A, CLP1	DW798-1-AG	___	___	___	319879	097631	I-06-OU C1C100117	010			WATER	7	1
8A, CLP1	DW799-1-AG	___	___	___	319880	097631	I-06-OU C1C100117	011			WATER	7	1
8A, CLP1	DW8AC-1-AG	___	___	___	319881	097631	I-06-OU C1C100117	012			WATER	7	1
8A, CLP1	DW8AD-1-AG	___	___	___	319882	097631	I-06-OU C1C100117	013			WATER	7	1
8A, CLP1	DW8AF-1-AG	___	___	___	319883	097631	I-06-OU C1C100117	014			WATER	7	1
8A, CLP1	DW8AG-1-AG	___	___	___	319884	097631	I-06-OU C1C100117	015			WATER	7	1
8A, CLP1	DW8AH-1-AG	___	___	___	319885	097631	I-06-OU C1C100117	016			WATER	7	1
8A, CLP1	DW8AJ-1-AG	___	___	___	319886	097631	I-06-OU C1C100117	017			WATER	7	1
8A, CLP1	DW8AK-1-AG	___	___	___	319887	097631	I-06-OU C1C100117	018			WATER	7	1

678 1543

PSR024 3/14/01 5:37 44 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY JOHNSONP

METHOD OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BYRECEIVED BYDATE/TIME

P. Johnson
P. Johnson

P. Johnson
P. Johnson

3-14-01/0750
3-14-01/1500

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

STL Pittsburgh

7026

REQUESTED BY JOHNSONP

METHOD HF Cyanide, Free (4500CN-I)

STORAGE LOCATION	WORK ORDER #	PICKED			CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#										RCVD	REQD
8A, CLP1	DW79J-1-A6	___	___	___	320355	097631	I-06-HF	C1C100116	001		WATER	7	1
8A, CLP1	DW79T-1-A6	___	___	___	320356	097631	I-06-HF	C1C100117	001		WATER	7	1
8A, CLP1	DW79W-1-AH	___	___	___	320357	097631	I-06-HF	C1C100117	002		WATER	7	1
8A, CLP1	DW79X-1-AH	___	___	___	320358	097631	I-06-HF	C1C100117	003		WATER	7	1
8A, CLP1	DW790-1-AH	___	___	___	320359	097631	I-06-HF	C1C100117	004		WATER	7	1
8A, CLP1	DW791-1-AH	___	___	___	320360	097631	I-06-HF	C1C100117	005		WATER	7	1
8A, CLP1	DW792-1-AH	___	___	___	320361	097631	I-06-HF	C1C100117	006		WATER	7	1
8A, CLP1	DW793-1-AH	___	___	___	320362	097631	I-06-HF	C1C100117	007		WATER	7	1
8A, CLP1	DW794-1-AH	___	___	___	320363	097631	I-06-HF	C1C100117	008		WATER	7	1
8A, CLP1	DW796-1-AH	___	___	___	320364	097631	I-06-HF	C1C100117	009		WATER	7	1
8A, CLP1	DW798-1-AH	___	___	___	320365	097631	I-06-HF	C1C100117	010		WATER	7	1
8A, CLP1	DW799-1-AH	___	___	___	320366	097631	I-06-HF	C1C100117	011		WATER	7	1
8A, CLP1	DW8AC-1-AH	___	___	___	320367	097631	I-06-HF	C1C100117	012		WATER	7	1
8A, CLP1	DW8AD-1-AH	___	___	___	320368	097631	I-06-HF	C1C100117	013		WATER	7	1
8A, CLP1	DW8AF-1-AH	___	___	___	320369	097631	I-06-HF	C1C100117	014		WATER	7	1
8A, CLP1	DW8AG-1-AH	___	___	___	320370	097631	I-06-HF	C1C100117	015		WATER	7	1
8A, CLP1	DW8AH-1-AH	___	___	___	320371	097631	I-06-HF	C1C100117	016		WATER	7	1
8A, CLP1	DW8AJ-1-AH	___	___	___	320372	097631	I-06-HF	C1C100117	017		WATER	7	1
8A, CLP1	DW8AK-1-AH	___	___	___	320373	097631	I-06-HF	C1C100117	018		WATER	7	1

678 1350

PSR024 3/15/01 6 12 30 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY JOHNSONP

METHOD HP Cyanide, Free (4500CN-I)

<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

P. Johnson
P. Johnson

P. Johnson
P. Johnson

3-15-01/0830
3-15-01/1400

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

REQUESTED BY JOHNSONP

METHOD N4 Cyanide, Amenable (9012)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION		
8A, CLP1	DW79J-1-A7	___	320510	097631	I-06-N4	C1C100116	001		WATER	7	1
8A, CLP1	DW79T-1-A7	___	320511	097631	I-06-N4	C1C100117	001		WATER	7	1
8A, CLP1	DW79W-1-AJ	___	320512	097631	I-06-N4	C1C100117	002		WATER	7	1
8A, CLP1	DW79X-1-AJ	___	320513	097631	I-06-N4	C1C100117	003		WATER	7	1
8A, CLP1	DW790-1-AJ	___	320514	097631	I-06-N4	C1C100117	004		WATER	7	1
8A, CLP1	DW791-1-AJ	___	320515	097631	I-06-N4	C1C100117	005		WATER	7	1
8A, CLP1	DW792-1-AJ	___	320516	097631	I-06-N4	C1C100117	006		WATER	7	1
8A, CLP1	DW793-1-AJ	___	320517	097631	I-06-N4	C1C100117	007		WATER	7	1
8A, CLP1	DW794-1-AJ	___	320518	097631	I-06-N4	C1C100117	008		WATER	7	1
8A, CLP1	DW796-1-AJ	___	320519	097631	I-06-N4	C1C100117	009		WATER	7	1
8A, CLP1	DW798-1-AJ	___	320520	097631	I-06-N4	C1C100117	010		WATER	7	1
8A, CLP1	DW799-1-AJ	___	320521	097631	I-06-N4	C1C100117	011		WATER	7	1
8A, CLP1	DW8AC-1-AJ	___	320522	097631	I-06-N4	C1C100117	012		WATER	7	1
8A, CLP1	DW8AD-1-AJ	___	320523	097631	I-06-N4	C1C100117	013		WATER	7	1
8A, CLP1	DW8AF-1-AJ	___	320524	097631	I-06-N4	C1C100117	014		WATER	7	1
8A, CLP1	DW8AG-1-AJ	___	320525	097631	I-06-N4	C1C100117	015		WATER	7	1
8A, CLP1	DW8AH-1-AJ	___	320526	097631	I-06-N4	C1C100117	016		WATER	7	1
8A, CLP1	DW8AJ-1-AJ	___	320527	097631	I-06-N4	C1C100117	017		WATER	7	1
8A, CLP1	DW8AK-1-AJ	___	320528	097631	I-06-N4	C1C100117	018		WATER	7	1

678 1352

PSR024 3/15/01 10 46 23 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY JOHNSONP

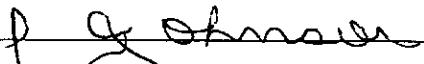
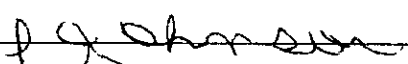
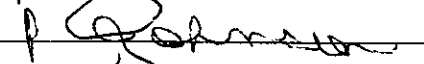
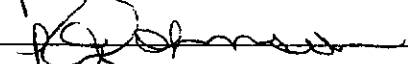
METHOD N4 Cyanide, Amenable (9012)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		3.15.01/1250
		3.15.01/1400

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

REQUESTED BY: JOHNSONP

METHOD: QP Cyanide, Total

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
10B 10C CLP1	DXDX4-1-AJ	___	320670	125954	I-06-QP	C1C140252	001		WATER	15	1
10B 10C CLP1	DXD0A-1-AJ	___	320671	125954	I-06-QP	C1C140252	002		WATER	15	1
10B 10C CLP1	DXD0F-1-AJ	___	320672	125954	I-06-QP	C1C140252	003		WATER	15	1
10B 10C CLP1	DXD0H-1-AJ	___	320673	125954	I-06-QP	C1C140252	004		WATER	15	1
10B 10C CLP1	DXD0M-1-AJ	___	320674	125954	I-06-QP	C1C140252	006		WATER	17	1
10B 10C CLP1	DXD00-1-AJ	___	320675	125954	I-06-QP	C1C140252	007		WATER	17	1
10B 10C CLP1	DXD35-1-AJ	___	320676	125954	I-06-QP	C1C140252	008		WATER	15	1
10B 10C CLP1	DXD4A-1-AJ	___	320677	125954	I-06-QP	C1C140252	009		WATER	15	1
10B 10C CLP1	DXD4C-1-AJ	___	320678	125954	I-06-QP	C1C140252	010		WATER	14	1
10B 10C CLP1	DXD4H-1-AJ	___	320679	125954	I-06-QP	C1C140252	011		WATER	15	1
10B 10C CLP1	DXD4L-1-AJ	___	320680	125954	I-06-QP	C1C140252	012		WATER	17	1
10B 10C CLP1	DXD4M-1-AJ	___	320681	125954	I-06-QP	C1C140252	013		WATER	17	1
10B 10C CLP1	DXD4N-1-AJ	___	320682	125954	I-06-QP	C1C140252	014		WATER	17	1
10B 10C CLP1	DXD4Q-1-AJ	___	320683	125954	I-06-QP	C1C140252	015		WATER	15	1
10B 10C CLP1	DXD4W-1-AJ	___	320684	125954	I-06-QP	C1C140252	016		WATER	15	1
11C CLP1	DXGMH-1-AJ	___	320686	399411	I-06-QP	C1C150304	001		WATER	13	1
11D, CLP1	DXGLD-1-A4	___	320685	016580	I-06-QP	C1C150298	001		WATER	4	1
8D CLP1	DW8V0-1-AJ	___	320666	125954	I-06-QP	C1C120106	001		WATER	45	1
8D CLP1	DW8WP-1-AJ	___	320667	125954	I-06-QP	C1C120106	002		WATER	15	1
8D CLP1	DW8WR-1-AJ	___	320668	125954	I-06-QP	C1C120106	003		WATER	15	1
8D CLP1	DW8WT-1-AJ	___	320669	125954	I-06-QP	C1C120106	004		WATER	15	1

678 1354

PSR024 3/16/01 6 13.09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 005

REQUESTED BY JOHNSONP

METHOD QP Cyanide, Total

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BYRECEIVED BYDATE/TIME

P. J. Johnson
P. J. Johnson

P. J. Johnson
P. J. Johnson

3-16-01/0815
3-16-01/1400

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

REQUESTED BY: JOHNSONP

METHOD OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
11D	DXGJJ-1-A3	___	320734	016580	I-06-OU	C1C150288	001		WATER	2	1
11D	DXGJV-1-AE	___	320735	016580	I-06-OU	C1C150288	002		WATER	2	1
11D	DXGJ2-1-AL	___	320736	016580	I-06-OU	C1C150288	003		WATER	6	1
11D	DXGKC-1-AE	___	320737	016580	I-06-OU	C1C150288	004		WATER	2	1
11D	DXGKG-1-AE	___	320738	016580	I-06-OU	C1C150288	005		WATER	2	1
11D	DXGKK-1-AE	___	320739	016580	I-06-OU	C1C150288	006		WATER	2	1
11D	DXGK3-1-A3	___	320740	016580	I-06-OU	C1C150296	001		WATER	2	1

RELINQUISHED BYRECEIVED BYDATE/TIME

P. Johnson
P. Johnson

P. Johnson
P. Johnson

3-16-01/0845
3-16-01/1400

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

678 1356

PSR024 3/17/01 7.14.13 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY JOHNSONP

METHOD CG Cyanide, Total (335.2)

<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>
11A	DXFFA-1-AW	— — —	320989	416188	A-06-CG	C1C150168	002		SOLID	3	1

RELINQUISHED BYRECEIVED BYDATE/TIME

[Signature]
[Signature]

[Signature]
[Signature]

3-17-01/0915
3-17-01/1000

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

678 1357

Start Time: 08:00 16:15

**STL Pittsburgh
pH LOG SHEET**

Lot No.

Batch No.

SDG No.

Analyst:

Date:

Start Time:

pH Meter Calibration

Reading

Buffer

~~Manf.~~
~~Lot No.~~

Rec'd

Expire

LCS ID No.:

Range = $\pm .05$ pH units

Relative Percent Difference =

$$\frac{\left| \frac{X_1}{2} - \frac{X_2}{2} \right|}{\left(\frac{X_1 + X_2}{2} \right)} \times 100$$

~~X₁ = Original Result~~

~~X₂ = Duplicate~~

pH Liquid

Sample ID	pH Reading
LCS	7.05
CIC 160175-026	7.55 2 RP
-026 X	7.58 1.4
LCS	7.05
P6 1650 3'	

pH Solid

Sample ID	pH Reading
pk 16.2	

CCC/Sample Request

Project Name

Site

Lot Number/Sample Number

Analysis

Matrix

Q1C150304

pH

$$\underline{H_2O}$$

BM
03/10/01

Raw Relinquished by

Raw Received by

Date	Time	Analyst	Location	Date	Time	Analyst	Location
03/16/01	07:50	Dr. J. M. Smith	SR	03/16/01	07:50	Dr. J. M. Smith	WC
03/16/01	9:00	Dr. J. M. Smith	WC	3-16-01	9:00	Dr. J. M. Smith	SR

STL Pittsburgh

7037

678 1360

PSR024 3/16/01 12:56:00 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVER

OD AJ pH - Aqueous (150.1)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
SENT OUT	DXHWH-1-AL	___	320799	060960	I-88-AJ	C1C160175	010		WATER	2	1
SENT OUT	DXHWK-1-AW	___	320800	060960	I-88-AJ	C1C160175	011		WATER	2	1
12A	DXHQW-1-AA	___	320791	060960	I-88-AJ	C1C160175	001		WATER	5	1
12A	DXHRF-1-AA	___	320792	060960	I-88-AJ	C1C160175	002		WATER	7	1
12A	DXHTD-1-AL	___	320793	060960	I-88-AJ	C1C160175	003		WATER	5	1
12A	DXHTK-1-AX	___	320794	060960	I-88-AJ	C1C160175	004		WATER	5	1
12A	DXHTP-1-A9	___	320795	060960	I-88-AJ	C1C160175	005		WATER	5	1
12A	DXHT3-1-AL	___	320796	060960	I-88-AJ	C1C160175	006		WATER	5	1
12A	DXHT7-1-AA	___	320797	060960	I-88-AJ	C1C160175	007		WATER	3	1
12A	DXHVC-1-AK	___	320798	060960	I-88-AJ	C1C160175	008		WATER	3	1
12A	DXHWL-1-AA	___	320801	060960	I-88-AJ	C1C160175	012		WATER	5	1
12A	DXHWW-1-AM	___	320802	060960	I-88-AJ	C1C160175	013		WATER	5	1
12A	DXHWX-1-AL	___	320803	060960	I-88-AJ	C1C160175	014		WATER	5	1
12A	DXHW0-1-AX	___	320804	060960	I-88-AJ	C1C160175	015		WATER	5	1
12A	DXHW1-1-A9	___	320805	060960	I-88-AJ	C1C160175	016		WATER	5	1
12A	DXHW5-1-AL	___	320806	060960	I-88-AJ	C1C160175	017		WATER	5	1
12A	DXHW9-1-AX	___	320807	060960	I-88-AJ	C1C160175	018		WATER	5	1
12A	DXHXC-1-A9	___	320808	060960	I-88-AJ	C1C160175	019		WATER	5	1
12A	DXHXP-1-AL	___	320809	060960	I-88-AJ	C1C160175	020		WATER	5	1
12A	DXHXH-1-AX	___	320810	060960	I-88-AJ	C1C160175	021		WATER	5	1
12A	DXHXK-1-A9	___	320811	060960	I-88-AJ	C1C160175	022		WATER	5	1
12A	DXHXM-1-AL	___	320812	060960	I-88-AJ	C1C160175	023		WATER	5	1
12A	DXHXV-1-AX	___	320813	060960	I-88-AJ	C1C160175	024		WATER	5	1
	DXHXX-1-A9	___	320814	060960	I-88-AJ	C1C160175	025		WATER	5	1
12A	DXHX1-1-AA	___	320815	060960	I-88-AJ	C1C160175	026		WATER	5	1

REQUESTED BY. **GROVER**

DD AJ pH - Aqueous (150.1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-16-01 16:00

3-16-01 17:15

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

678 1362

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

Lot No. Batch No. SDG No.

C1C140252 → 1075436
C1C150304Analyst: Brendy MuenichDate: 03/16/01Start Time: 15:00Stock Std. ID No 647-025-06True Value 1000.00 Days Actual Value 1011.15
Prep 03/16/01 Exp 03/23/01ICV/LCS 4.825 mL of 1011.15 ppm (ID No. 647-025-06) = 50.56 ppm Range ±15%
CCV 4.825 mL of 1011.15 ppm Range ±10%

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20 \text{ mL of Iodine} \times N \text{ Iodine}) - (X \text{ mL Na}_2\text{S}_2\text{O}_3 \times N \text{ Na}_2\text{S}_2\text{O}_3)]}{\text{mL Sample}} \times 16,000$$

Iodine Standardization ID No.: 647-025-02

$$0.0230 \text{ N Iodine} = \frac{((8.8) \text{ mL Na}_2\text{S}_2\text{O}_3)(0.0245) \text{ N of Na}_2\text{S}_2\text{O}_3}{20.0 \text{ mL of Iodine Solution}}$$

Relative Percent Difference =

$$\frac{C1C140252 - 001}{C1C140252} = 34\%$$

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100 \quad \begin{array}{l} X_1 = \text{Original Result} \\ X_2 = \text{Duplicate} \end{array}$$

Sodium Thiosulfate Standardization = ID No. 647-024-04

Titration	mLs	Normality	(10 mL of $\text{KH}(\text{IO}_3)_2$) (0.025N $\text{KH}(\text{IO}_3)_2$)
1	<u>10.3</u>	<u>0.0243</u>	mL of $\text{Na}_2\text{S}_2\text{O}_3$
2	<u>10.1</u>	<u>0.0248</u>	
Avg. = <u>0.0245</u> N			

Concentration of Sample in Spike:

Sample ID: C1C140252-001

Orig. Smp. Conc.

ND

$$\left(\frac{\text{Vol of Smp. in Spike}}{\text{Orig. Smp. Vol.}} \right) = \frac{50}{50} = \underline{ND}$$

MS Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS} - \text{Conc. of Smp. in Spike}}{\text{True Spike Conc.}} \right) = \frac{22.54 - ND}{20.22} = \underline{111.5\%}$$

Sample ID: C1C140252-001 MS

MSD Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS} - \text{Conc. of Smp. in Spike}}{\text{True Spike Conc.}} \right) = \frac{23.33 - ND}{20.22} = \underline{115.2\%}$$

Sample ID C1C140252-001 MSD

678 1363

True Value LCS/ICV = 50.56 ppm

True Value MS/MSD = 20.22 ppm

3.4%

STL - Pittsburgh

SULFIDE DISTILLATION WORKSHEET

Logbook ID: WC1

Sample ID		Reagent/Std Book ID	Date	Actual Stock Value (ppm)	True Value
1. ICV		342-173-6	03/16/01	1011.15	1000 ppm
2. ICB					
3. PB					
4. LCS					
5. C16140252-001					
6. -001MS					
7. -001MSD					
8. -002					
9. -003					
10. -004					
11. -004					
12. -007					
13. -008					
14. -009					
15. -010					
16. -011					
17. -012					
18. -013					
19. -014					
20. -015					
21. -016					
22. C16150304-001					
23.					
24.					
25.					
26.					

Distillation	Initial	Final	Expiration Date
1. ICV	50 mL	50 mL	
2. ICB			
3. PB			
4. LCS			
5. C16140252-001			03/20/01
6. -001MS			03/19/01
7. -001MSD			03/20/01
8. -002			
9. -003			
10. -004			
11. -004			
12. -007			
13. -008			
14. -009			
15. -010			
16. -011			
17. -012			
18. -013			
19. -014			
20. -015			
21. -016			
22. C16150304-001			03/19/01
23.			
24.			
25.			
26.			

Distillate(s) Received	Date	Time	Analyst	Location
1-22	03/16/01	08:40	Pymer	WC

Distillate(s) Relinquished	Date	Time	Analyst	Location
	03/16/01	18:00	Pymer	DISPOSAL

Comments

ICV/LCS = 2.5 mL of 647-025-06 TO 50 mL DI H₂O. MS/MSD = 1.0 mL of 647-025-06 TO 50 mL Samples

Reviewed by

E. L. McNamee

Date

3/16/01

678 1365

REQUESTED BY: MLECHICB

OD. CT Sulfide (376.1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
10B 10C CLP1	DXDX4-1-A6	---	320715	125954	I-88-CT	C1C140252	001		WATER	15	1
10B 10C CLP1	DXDOA-1-AH	---	320716	125954	I-88-CT	C1C140252	002		WATER	15	1
10B 10C CLP1	DXDOF-1-AH	---	320717	125954	I-88-CT	C1C140252	003		WATER	15	1
10B 10C CLP1	DXDOH-1-AH	---	320718	125954	I-88-CT	C1C140252	004		WATER	15	1
10B 10C CLP1	DXDOM-1-AH	---	320719	125954	I-88-CT	C1C140252	006		WATER	17	1
10B 10C CLP1	DXD00-1-AH	---	320720	125954	I-88-CT	C1C140252	007		WATER	17	1
10B 10C CLP1	DXD35-1-AH	---	320721	125954	I-88-CT	C1C140252	008		WATER	15	1
10B 10C CLP1	DXD4A-1-AH	---	320722	125954	I-88-CT	C1C140252	009		WATER	15	1
10B 10C CLP1	DXD4C-1-AH	---	320723	125954	I-88-CT	C1C140252	010		WATER	14	1
10B 10C CLP1	DXD4H-1-AH	---	320724	125954	I-88-CT	C1C140252	011		WATER	15	1
10C CLP1	DXD4L-1-AH	---	320725	125954	I-88-CT	C1C140252	012		WATER	17	1
10B 10C CLP1	DXD4M-1-AH	---	320726	125954	I-88-CT	C1C140252	013		WATER	17	1
10B 10C CLP1	DXD4N-1-AH	---	320727	125954	I-88-CT	C1C140252	014		WATER	17	1
10B 10C CLP1	DXD4Q-1-AH	---	320728	125954	I-88-CT	C1C140252	015		WATER	15	1
10B 10C CLP1	DXD4W-1-AH	---	320729	125954	I-88-CT	C1C140252	016		WATER	15	1
11C CLP1	DXGMH-1-A9	---	320730	399411	I-88-CT	C1C150304	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>Eric T. Wawel</i>	<i>Symantec</i>	03/16/01 08:30
<i>Symantec</i>	<i>Eric T. Wawel</i>	03/16/01 17:30

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

678 1366

Barometric Pressure
740.4

Ignitability

Method: FLASH POINT (1010 Closed Cup)

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: <i>[Signature]</i>	DATE: 3-21-01
BATCH: 1080356	TIME: 13:30

SAMPLE ID	RESULT	CORRECTED RESULT
P-xylene	80°F	81.2
CIC150304-001	>200°F	>201.2
CIC150304-001 DUP	>200°F	>201.2
HIC200237-001	>200°F	>201.2
P-xylene	80°F	81.2
CIC210184-001	>200°F	>201.2
P-xylene	80°F	81.2

[Large diagonal line across the table]

[Signature] 3-21-01

Reviewed by *[Signature]*

Date

3/21/01

WC-00-0060

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REQUESTED BY: GROVEP

METHOD: AB Flash Point (1010, Closed Cup)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
SUB, 5M1, 3R4	DXMSB-1-AM	___	321891	367970	I-88-AE	H1C200237	001		WATER	6	1
11C CLP1	DXGMH-1-A8	___	321890	399411	I-88-AE	C1C150304	001		WATER	13	1

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DATE/TIME

3-21-01 10:00

3-21-01 15:00

678 1368

PSR024 3/21/01 13 08:00 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY GROVER

METHOD AB Flash Point (1010, Closed Cup)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
14A, CLP1	DXPK3-1-A8	___	322063	399411	I-88-AB	C1C210184	001		WATER	13	1

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3-21-01 15:40

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE