

	Basalt		Basalt		Basalt		Basalt		alt. Basalt		Basalt		Overall Rating.
	3	12	14	20	23	24	32	37	41	46	63	65	
Ba	99	97 ✓	323	331 ✓	44300	45100 ✓	1770	1870 ✓	5510	5570 ✓	727	648 x	Usable ± 10%
Cr	193	193 ✓	192	198 ✓	192	189 ✓	235	220 ~	172	169 ✓	79	73 ~	Good ± 1%
Cu	39	37 ✓	48	50 ✓	57	54 ✓	17	13 ~	55	44 x	30	31 ✓	Usable ± 15%
Ni	72	73 ✓	76	77 ✓	80	81 ✓	86	85 ✓	60	60 ✓	52	49 ✓	Good ± 5%
Pb	34	30 ✓	29	24 ~	30	32 ✓	53	46 ~	39	36 ✓	40	30 x	Usable ± 25%
Sr	113	114 ✓	92	87 ✓	53	51 ✓	77	77 ✓	100	100 ✓	124	126 ✓	"Good" (^{most} ± 3% (but one way out))
Zn	81	80 ✓	84	87 ✓	78	77 ✓	170	166 ✓	81	79 ✓	89	90 ✓	Good ± 4%

896222
Chu Chua
92P/8

ANALYSIS OF
PLASMA EMISSION SPEC
RESULTS

(1) AFTER WRITING REMOVE GREEN SHEET AND FORWARD THE BALANCE OF THE SET (INTACT)
(2) WHEN REPLYING AFTER WRITING YOUR REPLY KEEP THE PINK SHEET FOR YOUR FILE, FORWARD WHITE SHEET

TO

Bob Johnson

FROM

Paul Kuhlman

SUBJECT

Results of Rock Digests

DATE

25 Jan '80

For Your Information

Please O.K. and Return

Please Discuss With Me

Per Your Request

For Your Signature

Please Process

Return With More Details

Investigate and Report

Please Answer

For Your File

Enclosed are the results for your rock digests plus the element drift report you sent me. Please note the following regarding the data:

1). "-" means "<".

2). Some interelement effects have not been fully eliminated.

As most of the samples produced overrange responses for the major elements, the software corrections could not compensate entirely. Trace elements such as As, Sb, Se and Sn will be most affected.

3). Si and B values are ~~probably~~ meaningless due to contamination of glassware, loss during digestion, etc. etc.

4). We have noted some problems with Ba results for samples 29, 32, 37, 42 → 55, 60, 61, 63, 65.

We will be checking these samples further in the near future, as our ICP isn't set up specifically for these concentrations of major elements. We'll let you know what we find.

DATE OF REPLY

SIGNATURE

Paul

WRITE YOUR REPLY AND RETURN THIS SHEET.

EVERGREEN PRESS LIMITED - CARBON READY SETS
SALES OFFICE: 959 HOMER STREET, VANCOUVER, B.C. V6B 2W4 602-7722

MEMOGRAM

PLASMA EMISSION
SPEC DATA

B no good Si ignore

attack aqua regia followed by HF 1
(2-3 treatments) down to perchloric fume
made up to 3% by vol in " acid

	A1	As	B	Ba	Be	Ca	Cd	Co	Cr
12	68300	<12	85	97	<1	70100	<1	114	193
66	56300	100	91	92	<1	66900	<1	102	190
67	52400	77	118	94	<1	68600	<1	122	192
68	55200	92	116	88	<1	65700	<1	103	192
69	54400	99	105	89	<1	66300	<1	101	191
70	53700	96	97	85	<1	66900	<1	99	191
				91±6					192±2
under D4)				(99)					(193)
J6-1	54500		6	460				6.4	53
71	54500	83	62	415	2	14500	1	15	56
1633		1.1		2700				40	130
72	92200	159	110	1760	11	33900	2	85	120
NIMG			8	110	7			2.5	14
73	49200	41	56	92	7	4940	<1	<10	4
Sy-2		18	86	460	23			10	10
74	50100	40	65	386	21	51200	<1	41	10
NimL				460	20			6	14
75	48000	57	82	333	26	18300	<1	33	16
Nim N				100	1			60	34
76	57300	32	106	95	<1	68000	<1	72	22
Sy-3		20	100	440	19			12	8
77	47800	49	100	361	21	51800	<1	98	7
NimD			4	10				210	2900
78	554	18	204	50	<1	1800	1	211	(344)
NHG I		1	5	55	1			87	420
80	36300	<5	207	42	<1	95700	2	177	302
		x	x	Diag	✓		x	x	conditional ✓
				✓	✓				✓
					all work ∴ useless				
	Plotted			∅	∅				∅

	Cu	Fe	Ga	In	Mg	Mn	Mo	Nb	Ni
12	37	78100	<50	70	35700	1340	19	13	73
66	41	72800	25	41	36100	1280	26	11	66
67	31	71800	<50	<100	32400	1330	24	19	82
68	37	72200	23	42	36200	1280	25	11	67
69	35	72300	20	26	36800	1290	25	11	66
70	43	72300	21	39	36500	1280	26	11	67
	37±6								69.5±3.5
Hidden dep	(39)								(72)
6-1	4		15				2		8
71	<1	14300	17	<20	4230	474	34	13	11
633									98
72	117	60100	43	30	11900	480	58	52	91
lim-G	12		26				3	52	8
73	3	13100	31	<20	181	126	19	53	6
84-2	4		26					25	10
74	<1	41500	38	<20	15200	2390	18	29	14
lim-L	14		55				5	920	6
75	21	61100	62	22	1300	5180	20	1050	15
lim-N	11		16				3	2	120
76	<1	56300	27	43	33300	1310	19	8	119
84-3	17		28					145	18
77	17	40900	135	44	14600	2350	23	245	15
Nim-D	10		1				4		2100
78	8	109000	12	<20	253000	1580	<5	<5	1830
MRS-1	135							20	200
80	115	113000	<50	23	79800	1220	3	26	203
	Dicy ✓		Dicy	x			x	conditional ✓	✓✓
	✓								
6									6

	P	Pb	Sb	Se	Si	Sn	Sr	Te	Ti
12	737	30	<50	33	<1000	16	114	<20	10300
16	736	27	<50	13	1940	21	111	<20	9760
57	833	(56)	<50	20	2330	(30)	(88)	(94)	9840
68	704	24	<50	12	363	20	108	<20	9710
69	728	23	<50	11	1030	19	111	<20	9830
70	697	21	<50	21	852	27	109	<20	9730
		25 ± 5 (20%)							
		(34)					(113)		
6-1		26		0.1		4	185		
71	369	35	24	<10	<1000	20	171	<20	1400
1633		70		7			1400		
72	1000	55	<50	143	1120	28	1130	<20	6650
VIM G		39				4	10		
73	<50	35	<10	<10	296	8	10	<20	481
57-2		86	0.2			5	270		
74	1550	75	<10	<10	429	19	235	<20	730
VIM L		42	0.3			7	4600		
75	205	217	23	10	115	22	3710	<20	2480
VIM N		6					260		
76	66	14	20	<10	8810	16	203	<20	1020
57-3		130	0.3			6	300		
77	1900	169	13	<10	1330	21	263	<20	822
VIM D		<10				2	3		
78	<50	11	11	24	6470	13	5	99	47
ARGI			0.5			3	260		
80	172	<10	23	<10	1820	21	226	<20	20800
		✓ conditional	x	x	?x	x	conditional ✓	x	
		φ					✓		
							φ		

✓

	TL	✓	Zn.						
12	89	306	80						
66	70	306	78						
67	<100	292	84						
68	62	299	81						
69	53	303	80						
70	60	298	79						
			81 ± 3						
			(81)						
81		24	40						
71	<20	21	40						
833			210						
72	49	200	206						
kmG		26	53						
73	<20	<1	52						
4-2		50	250						
74	49	44	252						
mmL		7	360						
75	30	67	378						
mmX		210	62						
76	57	186	61						
4-3		51	250						
77	227	40	239						
mm.D		41	91						
78	<20	9	79						
RS 1		520	185						
80	<20	444	174						
		conditional ✓	✓						
			✓						
			0						

ELEMENT	RESULTS (UG/G)			
	SPL # 1	SPL # 2	SPL # 3	SPL # 4
AL	68800	70100	74300	63200
AS	-25	-25	-25	-25
B	51	59	54	50
BA	53	36	99	131
BE	-1	-1	-1	-1
CA	81300	76700	73100	62200
CD	1	-1	-1	-1
CO	126	120	116	110
CR	197	198	193	187
CU	62	51	39	55
FE	85400	86100	79400	73200
GA	-50	-50	-50	-50
IN	97	88	82	73
MG	36500	38200	36800	34900
MN	1380	1410	1360	1430
MO	25	23	13	19
NR	14	13	13	10
NI	70	81	72	75
P	791	746	769	713
PB	41	37	34	26
SB	65	-50	-50	-50
SE	35	53	30	33
SI	438	972	1160	1280
SN	26	24	24	19
SR	228	155	113	71
TE	47	21	-20	-20
TI	10300	10600	10400	9820
TL	126	116	113	103
V	338	325	318	286
ZN	85	88	81	74

MINISTRY OF
THE ENVIRONMENT

JAN 25 '80

ENVIRONMENTAL
LABORATORY

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

PAGE 2

ELEMENT	RESULTS (UG/G)			
	SPL # 5	SPL # 6	SPL # 7	SPL # 8
AL	78400	72400	66600	22800
AS	-25	-25	-25	44
B	71	64	81	193
BA	877	540	61000	1470
BE	-1	-1	-1	-1
CA	74600	74300	48800	6490
CD	1	-1	1	3
CO	122	118	115	63
CR	209	192	198	87
CU	52	59	51	12400
FE	85400	80900	79200	126000
GA	-50	-50	-50	50
IN	90	85	406	46
MS	42300	38400	52100	35800
MN	1490	1440	1260	330
MO	12	16	29	21
NB	14	12	13	4
NI	80	79	90	29
P	762	708	648	596
PR	38	36	37	11
SB	-50	-50	-50	14
SE	40	31	25	24
SI	1410	1310	1900	133
SN	28	24	24	40
SR	158	143	118	21
TE	19	-20	-20	202
TI	10800	10200	10100	1350
TL	107	113	194	-20
V	323	309	292	60
ZN	89	80	80	389

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ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

PAGE 3

ELEMENT	RESULTS (UG/G)			
	SPL # 9	SPL # 10	SPL # 11	SPL # 12
AL	66400	59500	63700	68300
AS	-25	-25	-25	-25
B	65	80	75	85
BA	-1000	2050	1120	97
BE	1	-1	-1	-1
CA	57100	65400	58000	70100
CD	-1	-1	-1	-1
CO	109	94	107	114
CR	186	182	193	193
CU	72	48	44	37
FE	73400	76400	77100	78100
GA	-50	-50	51	-50
IN	247	84	71	70
MG	41200	37400	41100	35700
MN	1300	1470	1890	1340
MO	21	26	16	19
NR	11	10	10	13
NI	72	79	83	73
P	688	644	657	737
PB	26	24	25	30
SB	-50	-50	-50	-50
SE	37	19	24	33
SI	1020	1460	1190	-1000
SN	19	17	17	16
SR	65	61	70	114
TE	-20	-20	-20	-20
TI	9960	9360	8840	10300
TL	140	-100	88	89
V	295	284	280	306
ZN	101	76	70	80

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PROJECT P9034 - ICP/AES ANALYSES

PAGE 4

ELEMENT	RESULTS (UG/G)			
	SPL # 13	SPL # 14	SPL # 15	SPL # 16
AL	70800	69300	70600	68000
AS	-25	-25	-25	-25
B	106	82	99	94
BA	127	323	684	44900
BE	-1	-1	-1	-1
CA	83700	72000	62400	52800
CD	1	-1	1	1
CO	118	108	86	82
CR	199	192	204	179
CU	58	48	55	47
FE	81700	76100	82400	77000
GA	-50	-50	-50	-50
IN	76	60	76	362
MG	38100	33100	37400	36900
MN	1460	1280	1420	1080
MO	13	11	16	13
NR	14	10	13	10
NI	77	76	77	74
P	740	677	723	663
PR	33	29	39	27
SR	-50	-50	-50	-50
SE	28	26	37	21
ST	1170	1650	1830	702
SN	24	16	17	15
SR	149	92	136	79
TE	-20	-20	-20	-20
TI	10600	9540	10400	9360
TL	111	91	104	155
V	321	300	322	291
ZN	85	84	98	77

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ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

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ELEMENT

RESULTS (UG/G)

SPL # 17

SPL # 18

SPL # 19

SPL # 20

ELEMENT	SPL # 17	SPL # 18	SPL # 19	SPL # 20
AL	2380	64600	62600	62800
AS	9	-25	-25	-25
B	76	144	124	104
BA	39	41400	530	331
BE	-1	-1	-1	-1
CA	473	47900	74300	65100
CD	-1	-1	-1	-1
CO	36	82	98	99
CR	9	177	174	198
CU	-1	32	44	50
FE	29200	76800	75900	76000
GA	-10	-50	-50	-50
IN	-20	342	62	55
MG	180000	37300	30100	32800
MN	59	1190	1320	1280
MO	-5	14	21	22
NB	-5	10	10	10
NI	96	72	64	77
P	-50	707	689	705
PB	-10	21	22	24
SB	12	-50	-50	-50
SE	9	23	21	35
SI	1560	1940	1080	569
SN	9	14	12	18
SR	1	44	79	87
TE	-20	-20	-20	-20
TI	287	9440	9310	9570
TL	-20	103	79	78
V	29	282	275	297
ZN	108	76	74	87

MINISTRY OF
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ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

PAGE 6

ELEMENT	RESULTS (UG/G)			
	SPL # 21	SPL # 22	SPL # 23	SPL # 24
AL	66700	71200	67300	67000
AS	-25	-25	-25	-25
B	91	94	79	69
BA	737	5680	44300	45100
BE	-1	-1	-1	-1
CA	63500	50900	36900	35500
CD	1	1	-1	-1
CO	119	103	114	115
CR	207	199	192	189
CU	58	56	57	54
FE	86700	86100	73300	71900
GA	-50	-50	-50	-50
IN	63	93	352	362
MG	41900	40900	38600	38400
MN	1530	1560	1310	1290
MO	28	19	21	19
NB	14	13	11	12
NI	84	80	80	81
P	767	725	773	748
PB	37	32	30	32
SB	55	-50	-50	-50
SE	55	43	35	51
SI	527	1260	521	535
SN	19	16	14	13
SR	121	90	53	51
TE	-20	-20	-20	-20
TI	10600	10200	10100	9990
TL	84	86	148	156
V	333	315	302	307
ZN	89	86	78	77

MINISTRY OF
THE ENVIRONMENT

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ENVIRONMENTAL
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SPRINTERS - MOORE BUSINESS FORMS

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

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ELEMENT	RESULTS (UG/G) ✓			
	SPL # 25	SPL # 26	SPL # 27	SPL # 28
AL	66000	65700	63000	74000
AS	-25	-25	-25	-25
B	91	70	71	81
BA	2780	43600	80200	6990
BE	-1	-1	-1	-1
CA	48900	53600	34200	69100
CD	-1	-1	-1	-1
CO	113	91	94	104
CR	209	174	176	200
CU	34	51	77	48
FE	87500	66200	75100	82700
GA	-50	-50	-50	-50
IN	87	331	400	127
MG	39400	33100	37600	38600
MN	1410	1140	1160	1430
MO	20	12	16	16
NB	13	9	10	14
NI	82	71	76	79
P	733	671	663	778
PB	31	22	26	37
SB	-50	48	49	-50
SE	43	32	24	64
SI	688	244	729	1160
SN	13	9	9	21
SR	70	165	75	117
TE	26	-20	-20	19
TI	10700	9420	9320	10700
TL	81	151	130	108
V	328	275	283	324
ZN	103	129	90	95

MINISTRY OF
THE ENVIRONMENT

JAN 25 '80

ENVIRONMENTAL
LABORATORY

SPENCER - MOORE BUSINESS FORMS - 1

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

PAGE 8

ELEMENT	RESULTS (UG/G)			
	SPL # 29	SPL # 30	SPL # 31	SPL # 32
AL	76600	72300	74900	80800
AS	-25	-25	-25	-25
B	90	86	62	162
BA	1620	7690	2950	1770
BE	-1	-1	-1	-1
CA	66600	78800	87100	26900
CD	-1	1	-1	4
CO	102	99	87	111
CR	207	201	194	235
CU	56	57	45	17
FF	88200	81300	81500	130000
GA	-50	-50	-50	-50
IN	78	-100	-100	-100
MG	42200	38900	36800	60200
MN	1530	1460	1460	1650
MO	14	18	12	14
NE	14	13	13	18
NI	80	82	71	86
P	754	715	689	774
PE	35	36	38	53
SB	-50	-50	-50	-50
SE	40	52	35	-50
SI	1740	1460	1210	1400
SM	21	14	24	36
SR	135	164	186	77
TE	-20	-20	56	-100
TI	11000	10700	10400	12000
TL	83	99	-100	103
V	324	318	305	332
ZN	89	83	82	170

MINISTRY OF
THE ENVIRONMENT

JAN 25 '80

ENVIRONMENTAL
LABORATORY

PREFERRED - MOORE BUSINESS FORMS

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

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ELEMENT	RESULTS (UG/G)			
	SPL # (33)	SPL # (34)	SPL # (35)	SPL # (36)
AL	44300	14500	79000	85400
AS	-5	9	-25	-25
B	34	25	51	36
BA	57100	78	2450	6230
BE	1	-1	-1	-1
CA	4510	576	52600	56600
CD	-1	-1	-1	-1
CO	32	16	63	62
CR	110	16	198	195
CU	71	-1	54	51
FF	35700	31700	76600	72600
GA	-50	11	-50	-50
IN	383	-20	97	-100
MG	17300	15600	37800	37600
MN	339	58	1400	1230
MO	-5	6	-5	-5
NB	7	4	12	11
NI	23	31	65	64
P	500	201	607	616
PR	11	9	39	41
SB	21	13	-50	-50
SE	-10	-10	39	49
SI	175	25	424	369
SN	12	20	22	-25
SR	25	2	129	120
TE	-20	-20	34	50
TI	2690	591	8660	8530
TL	-100	-20	99	-100
V	65	153	274	269
ZN	67	42	76	75

MINISTRY OF
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ENVIRONMENTAL
LABORATORY

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

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ELEMENT

RESULTS (UG/G)

SPL # 37

SPL # 38

SPL # 39

SPL # 40

AL	83500	34300	49200	63500
AS	-25	21	25	-25
B	143	41	24	47
BA	1870	37200	13900	6080
BE	-1	-1	1	-1
CA	27500	1420	13200	61400
CD	4	-1	-1	-1
CO	80	35	54	56
CR	220	31	175	172
CU	13	1510	60	36
FE	132000	52800	24600	77300
GA	-50	32	39	-50
IN	-100	58	-100	-100
MG	59700	1690	6880	39700
MN	1650	72	2190	1270
MO	5	12	-5	14
NE	17	6	11	11
NI	85	28	22	60
P	796	160	1170	647
PR	46	-10	21	37
SB	-50	14	17	-50
SE	-50	-10	-10	31
SI	826	79	92	411
SN	-25	17	13	18
SR	77	2	24	88
TE	-100	-20	-20	68
TI	11700	1680	3070	8870
TL	92	50	104	-100
V	318	42	84	269
ZN	166	47	53	83

MINISTRY OF
THE ENVIRONMENT

JUN 25 '80

ENVIRONMENTAL
LABORATORY

ENVIRONMENTAL LABORATORY

PROJECT P9034 - ICP/AES ANALYSES

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ELEMENT

RESULTS (UG/G)

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SPL # 41

SPL # 42

SPL # 43

SPL # 44

AL	73900	78500	17400	70000
AS	-25	-25	-25	-25
B	56	96	71	82
BA	5510	817	30	209
BE	-1	-1	-1	-1
CA	61700	76900	597	45000
CD	-1	-1	-1	-1
CO	65	106	42	60
CR	172	182	24	31
CU	55	49	3060	67
EE	76800	70900	43800	80400
GA	-50	-50	16	-50
IN	-100	99	-20	79
MG	38300	35800	5970	30500
MN	1380	1280	1290	1250
MO	8	8	78	14
NR	13	11	3	14
NI	60	67	27	35
P	647	668	-50	838
PB	39	25	10	35
SB	-50	47	10	-50
SE	35	40	-10	32
SI	917	3550	580	565
SN	24	17	14	24
SR	100	202	2	63
TE	45	34	-20	31
TI	9260	9150	808	10800
TL	-100	107	19	97
V	291	287	38	307
ZN	81	77	483	85

41 46 agreement

Cr	172	169	good
Ni	60	60	good
Zn	81	79	good
BA	5510	5570	ok
Pb	39	36	good
Cu	55	44	poor
Sr	100	100	good

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ELEMENT

RESULTS (UG/G)

SPL # 45

SPL # 46

SPL # 47

SPL # 48

ELEMENT	SPL # 45	SPL # 46	SPL # 47	SPL # 48
AL	69800	76400	78900	67700
AS	-25	-25	-25	-25
B	70	68	83	116
BA	350	5570	54	65
BE	-1	-1	-1	-1
CA	-1000	62000	62300	73700
CD	-1	-1	1	-1
CO	60	62	62	-50
CR	125	169	210	198
CU	59	44	62	52
FE	73700	78900	87400	81000
GA	54	-50	-50	-50
IN	86	-100	102	-100
MG	35800	38800	39000	41200
MN	1350	1410	1410	1470
MO	12	-5	-5	10
NR	12	12	15	15
NI	57	60	84	78
P	609	641	746	730
PB	35	36	42	39
SB	-50	-50	-50	-50
SE	43	27	39	28
SI	682	719	1450	1510
SN	25	24	22	24
SR	90	100	159	91
TE	27	28	62	91
TI	9300	9310	11100	10400
TL	-100	-100	-100	-100
V	285	284	322	329
ZN	75	79	95	85

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ELEMENT

RESULTS (UG/G)

	SPL # 49	SPL # 50	SPL # 51	SPL # 52
AL	78400	77000	74900	79400
AS	-25	-25	-25	-25
B	125	117	111	118
BA	76	87	89	54
BE	-1	-1	-1	-1
CA	75300	78800	73300	83600
CD	-1	1	1	-1
CO	-50	-50	83	86
CR	203	197	194	192
CU	53	52	64	57
FE	82400	84100	84600	81900
GA	-50	-50	-50	-50
IN	-100	-100	96	100
MG	40300	38900	39500	42700
MN	1490	1400	1440	1460
MO	-5	-5	6	11
NE	15	14	14	12
NI	87	75	84	81
P	707	722	726	687
PB	42	41	40	25
SB	-50	-50	-50	46
SE	34	42	45	30
SI	3760	1170	647	4040
SN	23	22	24	23
SR	76	133	135	168
TE	92	63	46	29
TI	10700	10800	10700	10500
TL	-100	-100	-100	-100
V	322	312	320	311
ZN	92	85	92	83

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ELEMENT	RESULTS (UG/G)			
	SPL # 53	SPL # 54	SPL # 55	SPL # 56
AL	73000	77100	77500	73400
AS	-25	-25	-25	-25
B	123	120	134	135
BA	112	767	1080	106
BE	-1	-1	-1	-1
CA	97800	78800	73000	77800
CD	-1	-1	1	1
CO	92	99	103	104
CR	180	191	205	191
CU	46	51	64	55
FE	76000	79000	84000	84800
GA	-50	-50	-50	-50
IN	-100	-100	-100	87
MG	30000	37400	41700	39300
MN	1330	1390	1490	1420
MO	23	10	13	19
NR	14	14	13	13
NI	75	70	85	76
P	665	682	685	708
PR	37	37	37	36
SB	-50	-50	-50	48
SE	29	50	61	43
SI	4250	1280	1680	861
SN	25	26	25	21
SR	106	150	117	146
TE	58	50	49	36
TI	10300	10900	11000	11000
TL	-100	-100	-100	98
V	301	310	314	317
ZN	66	80	84	85

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ELEMENT	RESULTS (UG/G)			
	SPL # 57	SPL # 58	SPL # 59	SPL # 60
AL	16000	1090	28800	57700
AS	11	22	-5	-25
B	65	358	109	105
BA	2790	4410	4910	7810
BE	-1	-1	-1	2
CA	2510	829	5130	1130
CD	-1	8	-1	-1
CO	34	42	30	38
CR	64	27	56	137
CU	362	99	2	6
FE	24300	187000	28800	48700
GA	12	78	23	34
IN	34	128	55	26
MG	171000	119000	10200	17800
MN	159	306	374	515
MO	11	16	6	11
NR	7	5	6	9
NI	127	51	32	44
P	195	57	842	277
PB	19	32	-10	16
SB	26	37	-10	32
SE	29	47	-10	28
SI	1510	1720	541	4030
SN	17	24	7	14
SR	28	19	26	8
TE	63	-100	-20	-20
TI	1210	19	1810	2410
TL	21	-20	36	41
V	104	50	61	137
ZN	58	116	117	62

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ELEMENT	RESULTS (UG/G)			
	SPL # 61	SPL # 62	SPL # 63	SPL # 64
AL	23500	62000	59900	59200
AS	-5	88	62	53
B	3	39	96	57
BA	424	10800	727	567
BE	-1	-1	-1	-1
CA	4220	63800	49400	49200
CD	-1	-1	-1	-1
CO	29	100	125	79
CR	26	122	79	30
CU	109	50	30	47
FE	14600	74000	76200	62700
GA	-10	-50	-50	37
IN	-20	93	114	-20
MG	7560	40000	30600	24900
MN	1560	1440	2240	1300
MO	-1	21	15	16
NB	1	13	17	9
NI	17	57	52	30
P	222	691	956	658
PB	89	34	40	20
SB	-10	-50	-50	48
SE	-10	35	23	22
SI	2	1300	9370	1730
SN	-5	23	19	15
SR	16	188	124	194
TE	-20	-20	50	-20
TI	768	9050	10800	8210
TL	-20	-100	98	47
V	36	285	325	250
ZN	64	75	89	67

63/65 Cr 79 73 ok
 Ni 52 49 good
 Zn 89 40 good
 Ba 72 640 poor
 Pb 40 30 poor
 Cu 30 31 good
 Sr 124 126 good

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ELEMENT	RESULTS (UG/G)			
	SPL # 65	SPL # 66	SPL # 67	SPL # 68
AL	57900	56300	52400	55200
AS	60	100	77	92
B	93	91	118	116
BA	648	92	94	88
BE	-1	-1	-1	-1
CA	50500	66900	68600	65700
CD	-1	-1	-1	1
CO	117	102	122	103
CR	73	190	192	192
CU	31	41	31	37
FE	77000	72800	71800	72200
GA	-50	25	-50	23
IN	81	41	-100	42
MG	32200	36100	32400	36200
MN	2250	1280	1330	1280
MO	19	26	24	25
NB	15	11	19	11
NI	49	66	82	67
P	947	736	833	704
PB	30	27	56	24
SB	44	-50	-50	-50
SE	-10	13	20	12
SI	9290	1940	2330	363
SN	19	21	30	20
SR	126	111	88	108
TE	-20	-20	94	-20
TI	10600	9760	9840	9710
TL	-100	70	-100	62
V	319	306	292	299
ZN	90	78	84	81

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ELEMENT	RESULTS (UG/G)			
	SPL # 69	SPL # 70	SPL # 71	SPL # 72
AL	54400	53700	54500	92200
AS	99	96	83	159
B	105	97	62	110
BA	89	85	415	1760
BE	-1	-1	2	11
CA	66300	66900	14500	33900
CD	-1	-1	1	2
CO	101	99	15	85
CR	191	191	56	120
CU	35	43	-1	117
FE	72300	72300	14300	60100
GA	20	21	17	43
IN	26	39	-20	30
MG	36800	36500	4230	11900
MN	1290	1280	474	480
MO	25	26	34	58
NB	11	11	13	52
NI	66	67	11	91
P	728	697	369	1000
PB	23	21	33	55
SB	-50	-50	24	-50
SE	11	21	-10	143
SI	1030	852	-1000	1120
SN	19	27	20	28
SR	111	109	171	1130
TE	-20	-20	-20	-20
TI	9830	9730	1400	6650
TL	53	60	-20	49
V	303	298	21	200
ZN	80	79	40	206

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ELEMENT	RESULTS (UG/G)			
	SPL # 73	SPL # 74	SPL # 75	SPL # 76
AL	49200	50100	48000	57300
AS	41	40	57	32
B	56	65	82	106
BA	92	386	333	95
BE	7	21	26	-1
CA	4940	51200	18300	68000
CD	-1	-1	-1	-1
CO	-10	41	33	72
CR	4	10	16	22
CU	3	-1	21	-1
FE	13100	41500	61100	56300
GA	31	38	62	27
IN	-20	-20	22	43
MG	181	15200	1300	33300
MN	126	2390	5180	1310
MO	19	18	20	19
NB	53	29	1050	8
NI	6	14	15	119
P	-50	1550	205	66
PB	35	75	217	14
SB	-10	-10	23	20
SE	-10	-10	10	-10
SI	296	429	115	8810
SN	8	19	22	16
SR	10	235	3710	203
TE	-20	-20	-20	-20
TI	481	730	2480	1020
TL	-20	49	30	57
V	-1	44	67	186
ZN	52	252	378	61

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return to Lab was

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finished.

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3 = 12 32 = 37
14 = 20
23 = 24

ELEMENT	RESULTS (UG/G)			
	SPL # 77	SPL # 78	SPL # 79	SPL # 80
AL	47800	554		36300
AS	49	18		-5
B	100	204		207
BA	361	50		42
BE	21	-1		-1
CA	51800	1800		95700
CD	-1	1		2
CO	98	211		177
CR	7	344		302
CU	17	8		115
FE	40900	109000		113000
GA	135	12		-50
IN	49	-20		23
MG	14600	253000		79800
MN	2350	1580		1220
MO	23	-5		3
NE	245	-5		26
NI	15	1830		203
P	1900	-50		172
PR	169	11		-10
SE	13	11		23
SE	-10	24		-10
SI	1330	6470		1820
SN	21	13		21
SR	263	5		226
TE	-20	99		-20
TI	822	47		20800
TL	227	-20		-20
V	40	9		444
ZN	239	79		174

Hydride Generation

BI

Hg cold AA

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