DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN FILE REPORT
76-825
TABLE 3A
SHEET 13 OF 31

TABLE 3A--ANALYSES OF ROCK SAMPLES, CH-SERIES, CRYSTAL HILL AREA
EASTERN SAN JUAN MOUNTAINS; SAGUACHE COUNTY, COLORADO

Semiquantitative spectrographic methods (ppm)

Sample	Ti	Zn	Mn	V	Zr	La	Ni	Cu	Cd	Pb	B	Y	Mo	Sn	Co	Ag	Be	Bi	Ga	As	Sb	W	Sc	Cr	Ba	Sr
CH-1	1000	1000	>5000	30	100	30	30	70	<20	2000	50	<10	2	<20	10	150	2	<10	10	700	<100	<50	7	15	300	300
2	500	200	1000	<10	70	20	7	10		200	50		<2	<20	<5	3	2		10	<200	<100		<5	<5	500	<100
3	1500	700	>5000	30	100	20	20	30		500	50		<2	<20	5	70	1.5		<10		<100		7	20	700	200
4	1000	<200	>5000	30	70	30	30	500		100	50	↓	30	<20	7	200	2		<10		150		5	30	2000	1500
5	2000	200	1500	30	150	30	5	10		20	50	10	2	<20	5	.7	2		15		<100		5	<5	1000	200
6	2000	<200	5000	100	150	30	5	10		50	50	10	2		<5	5	1.5		15				5	<5	1500	100
7	2000	<200	5000	30	150	30	7	7		20	30	10	2		<5	3	1.5		10				5	<5	1500	200
8	2000	<200	100	20	150	50	7	5		15	30	10	<2		<5	<.5	1.5		15				5	<5	1000	200
9A	2000	300	700	15	150	50	5	7		20	15	10	<2		<5	20	1.5		15				<5	<5	700	<100
9BA	1500	2000	>5000	50	150	50	10	300		5000	<10	10	20		5	200	1		<10		↓		5	70	1000	700
9BB	30	5000	>5000	150	<10	150	20	200		20,000	<10	>200	200		5	300	2		<10		100		<5	200	150	1000
9	1500	<200	3000	70	150	30	7	30		150	10	<10	<2		<5	20	1		10		<100		5	<5	2000	150
10	2000	<200	300	30	150	50	<5	15		15	10		2		<5	<.5	1.5		10				5	<5	2000	200
12A	2000	<200	150	30	150	30	7	7		15	30		<2		<5	<.5	1		10	↓			5	7	700	100
12B	1500	1000	>5000	70	100	30	15	300		1500	10		50		5	700	1.5		<10	500			7	15	1000	1000
12C	1000	500	2000	20	150	30	7	5		100	<10		<2		<5	7	5		<10	200			<5	<5	1000	100
12D	2000	2000	>5000	100	100	30	15	200		5000	10		30		5	200	3		15	200			7	20	1500	700
14A	5000	<200	700	100	150	30	5	10		200	30		<2		<5	5	1.5		10	<200			7	30	200	<100
14B	1500	<200	3000	20	100	30	10	7	↓	70	30	↓	<2	↓	<5	1	2		10	<200			5	10	700	<100
14C	7000	<200	500	150	150	30	7	2	<20	50	30	<10	<2	<20	<5	.5	1		10	<200	↓		10	70	700	<100
15	1000	1000	3000	30	150	100	7	30		1500	100	20	3	<10	5	20	1.5		20	<200	200		5	<10	5000	<200
16	1500	300	2000	30	150	100	10	7		300	100	20	<2	<10	<5	3	7		20	<200	<100		7	<10	500	<200
17A	5000	<200	>5000	70	150	150	20	10		100	100	30	3	<10	20	2	5		30	200	<100		10	10	3000	300
17B	150	<200	>5000	10	<10	<50	<5	2		<10	<10	<10	<2	15	<5	3	7		<10	<200	<100		<5	<10	500	10,000
18	7000	<200	700	100	200	150	5	10		20	70	30	<2	<10	<5	<.5	5		30	<200	<100		10	<10	2000	500
19A	2000	700	700	30	150	50	5	50		1500	70	20	5	<10	<5	500	5		20	300	200		10	<10	1000	<200
19B	2000	5000	>5000	20	150	<50	5	300		5000	50	20	50	<10	5	1500	10		30	1000	500		10	15	500	200
20	100	1000	5000	20	<10	<50	5	7		1000	20	<10	<2	<10	<5	15	5		<10	200	300		<5	<10	1000	<200
21	2000	<200	700	100	200	<50	7	20		70	20	10	30	<10	<5	20	1.5		20	200	<100		10	20	1500	<200
22	7000	<200	1000	150	150	50	30	20		30	50	30	<2	<10	15	1	3		30	<200	<100		15	20	1000	<200
23	5000	<200	300	30	200	70	7	10		30	30	30	<2	10	<5	.5	1.5		20	<200	<100		5	<10	2000	500
24	7000	<200	700	50	200	50	5	10		30	50	20	<2	<10	<5	.5	2		20	<200	<100		7	<10	2000	500
25	150	5000	>5000	50	<10	<50	20	500		>20,000	10	50	300	150	150	5000	5		50	<200	<100		<5	300	1500	5000
26A	7000	<200	1500	50	200	50	<5	7		30	30	20	<2	<10	<5	10	2		30	<200	<100		5	<10	1000	200
26B	7000	<200	500	30	300	50	<5	7		30	20	20	<2	<10	<5	1.5	2		30	<200	<100		5	<10	5000	300
27	7000	300	>5000	150	200	50	30	100		150	30	20	30	<10	10	20	2		15	500	<100		10	70	3000	200
28	7000	500	>5000	50	200	50	7	70	↓	1500	30	30	30	<10	<5	30	2	↓	15	700	<100	↓	5	30	2000	1500
29	2000	<200	700	10	300	70	<5	15	<20	20	50	10	<20	<10	<5	<.5	2	<10	30	<200	<100	<50	<5	<10	2000	<200
30A	1500	300	>5000	<10	150	30	<5	7		200	30	10	<2	<10	<5	7	2		<10	200	<100	<50	<5	<10	300	<200
30B	1000	300	>5000	<10	150	50	<5	10		50	30	15	<2	<10	<5	.7	2		15	200	<100	<50	<5	<10	700	<200
30C	1500	<200	3000	<10	200	50	<5	7		50	30	10	<2	<10	<5	.7	1.5		10	200	<100	<50	<5	<10	700	<200
31	1500	<200	300	<10	150	30	<5	<2		10	<10	10	<2	<10	<5	<.5	1		15	<200	<100	<50	<5	<10	700	200
32A	1000	<200	150	10	150	50	<5	7		20	<10	10	<2	<10	<5	<.5	1		15	<200	<100		7	<10	700	300
32B	3000	<200	100	20	150	70	5	7		30	30	20	2	<10	<5	<.5	1.5		15	<200	<100		10	<10	1500	700
32C	5000	<200	500	30	150	70	5	7		20	20	30	3	<10	<5	<.5	1.5		20	<200	<100		15	<10	1000	300
33	1000	1000	>5000	<10	100	20	5	10	↓	30	20	10	5	<10	<5	1.5	2	↓	<10	1500	150	↓	7	<10	2000	200
34A	1500	<200	>5000	20	150	50	<5	7	<20	20	30	<10	30	<10	<5	1.5	2	<10	10	300	<100	<50	7	<10	200	<200

Atomic absorption (ppm)

Sample	Au
CH-1	<.1
2	
3	
4	
5	
6	
7	
8	
9A	↓
9BA	.4
9BB	.1
9	.1
10	<.1
12A	<.1
12B	.2
12C	<.1
12D	8.8
14A	<.1
14B	
14C	
15	
16	
17A	
17B	
18	↓
19A	.4
19B	<.1
20	1.4
21	<.1
22	<.1
23	<.1
24	<.1
25	.2
26A	<.1
26B	<.1
27	<.1
28	2.2
29	.2
30A	<.1
30B	<.1
30C	<.1
31	.9
32A	<.1
32B	<.1
32C	<.1
33	<.1
34A	.1

percent

Sample	Fe	Mg	Ca
CH-1	2	.5	.7
2	.7	.5	.07
3	1	.3	.2
4	5	.5	1
5	5	.3	.5
6	2	.2	.3
7	2	.2	.3
8	1	.5	.3
9A	1	.5	.1
9BA	3	.15	.5
9BB	2	.05	.5
9	2	.1	.02
10	2	.3	.15
12A	1.5	.2	.1
12B	7	.2	.15
12C	5	.2	.1
12D	5	.3	.2
14A	5	.2	.1
14B	1	.3	.03
14C	1	.3	.05
15	1	.7	1
16	1	.7	.2
17A	2	.7	1.5
17B	1.5	1	>20
18	2	1	2
19A	3	.2	.2
19B	15	.15	.1
20	2	.03	.07
21	2	.2	.07
22	5	.7	.5
23	3	.5	.5
24	3	.7	.7
25	3	.1	1
26A	3	.7	.2
26B	2	.7	.2
27	3	.5	.2
28	3	.3	1
29	1	.7	.05
30A	1	.3	.2
30B	1	.3	2
30C	2	.3	.07
31	1	.3	.07
32A	.5	.1	.05
32B	1	.2	.1
32C	1.5	.7	.7
33	2	.15	.2
34A	1	.3	.1

Sample locations shown on Map 3