UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
102 Old Mint Building
San Francisco 3, California

May 23, 1951

Subject: DMA-969, Baxter Fluorspar Mine, Mineral Co., Nevada

Mr. E. J. Matson
U. S. Bureau of Mines
P. O. Box 1551
Reno, Nevada

Dear Ed:

Enclosed is a copy of my part of the Baxter Fluorspar report, and a tracing of the 400-foot level of the mine. You will note that in calculating ore reserves I have reduced the average grade of the ore, sampled by the applicant over only a portion of the entire thickness of the ore shoot, to conform to the grade of the ore across the entire thickness of the ore shoot. Actually I think that we can arrive only at an approximate grade of the bulk ore, considering that we could not sample the entire thickness of the ore shoot. If the results of your sampling differ markedly from those of the applicant's, please return the report and I will recalculate the reserves to conform to the results of your sampling.

The enclosed tracing shows the limits of the two ore shoots on the 400-foot level. The average thickness along a given length of an ore shoot is shown by numbers with corresponding brackets. I assume that you are preparing an assay map, and believe it would be a good idea to transfer the data from the enclosed tracing to your map.

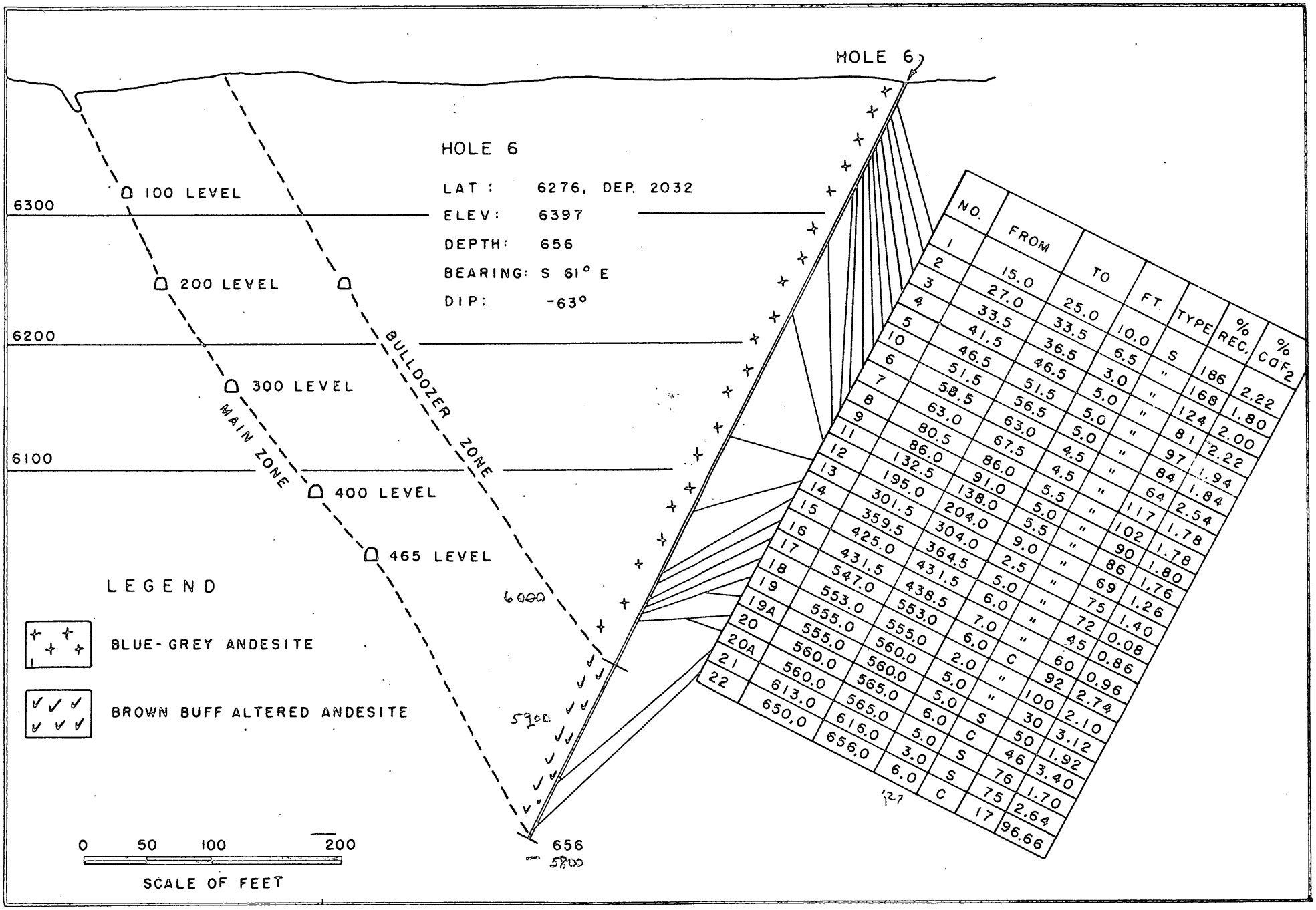
Thanks again for your generous hospitality while I was in Reno. Please give my very best regards to Mrs. Matson.

Sincerely yours,

William P. Irwin

Enclosures (2)

CC: H. C. Miller

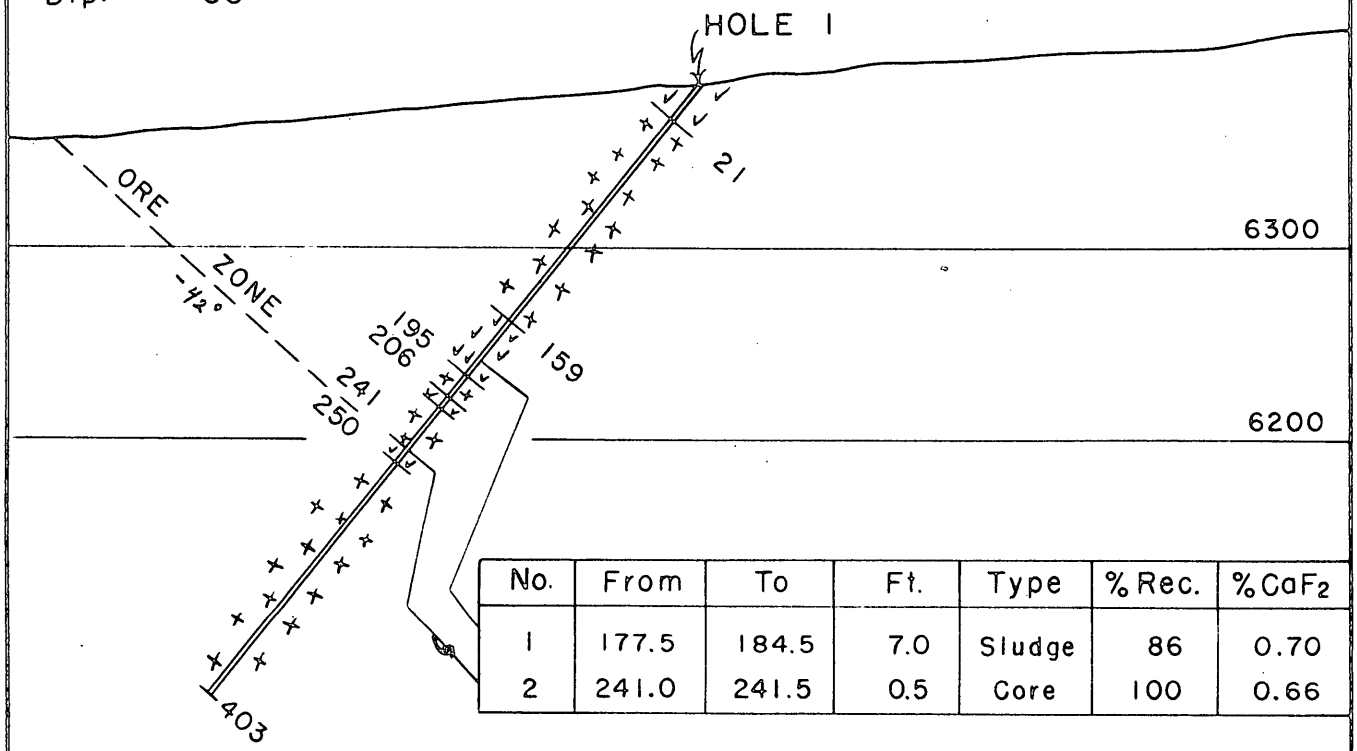


NO.	FROM	TO	FT.	TYPE	% REC.	% CaF_2
1	15.0	25.0	10.0	S	186	2.22
2	27.0	33.5	6.5	"	168	1.80
3	33.5	36.5	3.0	"	124	2.00
4	41.5	46.5	5.0	"	81	2.22
5	46.5	51.5	5.0	"	97	1.94
10	51.5	56.5	5.0	"	84	1.84
6	58.5	63.0	4.5	"	64	2.54
7	63.0	67.5	4.5	"	117	1.78
8	80.5	86.0	5.5	"	102	1.78
9	86.0	91.0	5.0	"	90	1.80
11	132.5	138.0	5.5	"	86	1.76
12	195.0	204.0	9.0	"	69	1.26
13	301.5	304.0	2.5	"	75	1.40
14	359.5	364.5	5.0	"	72	0.08
15	425.0	431.5	6.0	"	45	0.86
16	431.5	438.5	7.0	"	60	0.96
17	547.0	553.0	6.0	C	92	2.74
18	553.0	555.0	2.0	"	100	2.10
19	555.0	560.0	5.0	"	30	3.12
19A	555.0	560.0	5.0	S	50	1.92
20	560.0	565.0	6.0	C	46	3.40
20A	560.0	565.0	5.0	S	76	1.70
21	613.0	616.0	3.0	S	75	2.64
22	650.0	656.0	6.0	C	17	96.66

Figure 12, - Cross section through drill hole 6.

HOLE NO. 1.

Lat.: 5628, Dep. 1928
Elev.: 6382
Depth: 403
Bearing: S 43° E
Dip: -50°



No.	From	To	Ft.	Type	% Rec.	% CaF_2
1	177.5	184.5	7.0	Sludge	86	0.70
2	241.0	241.5	0.5	Core	100	0.66

LEGEND

BLUE-GRAY ANDESITE

BROWN (BUFF) ALTERED ANDESITE

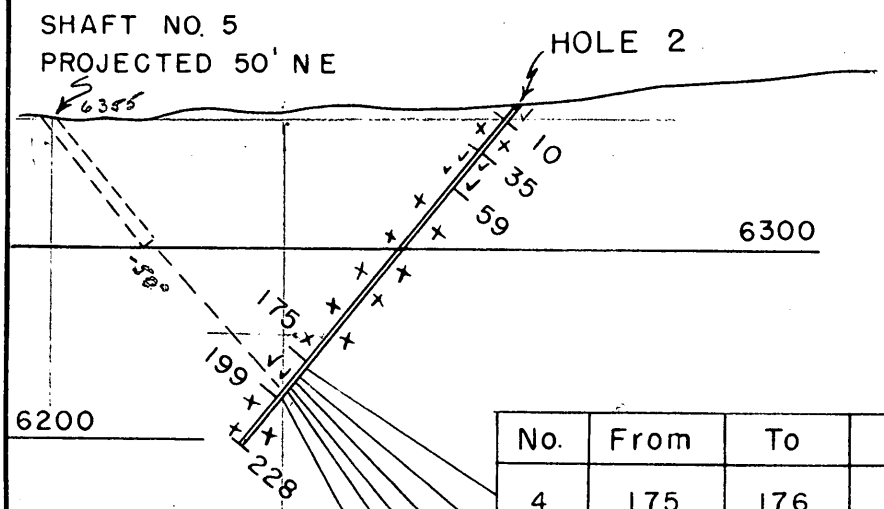
0 100 200

Scale of feet

Figure 7.- Cross section through D.D. hole 1

HOLE 2

Lat.: 5660, Dep. 1928
Elev.: 6373
Depth: 228
Bearing: S 63° E
Dip: -50°



No.	From	To	Ft.	Type	% Rec.	% CaF_2
4	175	176	1.0	CORE	90	0.16
5	179	183	4.0	"	88	.24
6	183	185	2.0	"	100	.04
7	189 5	192	2.5	"	100	.36
8	192	198	6.0	"	23	7.72
9	192	198	6.0	SLUDGE	79	43.80
10	198	199	1.0	CORE	90	5.58

LEGEND

BLUE-GRAY ANDESITE

BROWN BUFF ALTERED ANDESITE

0 100 200

SCALE OF FEET

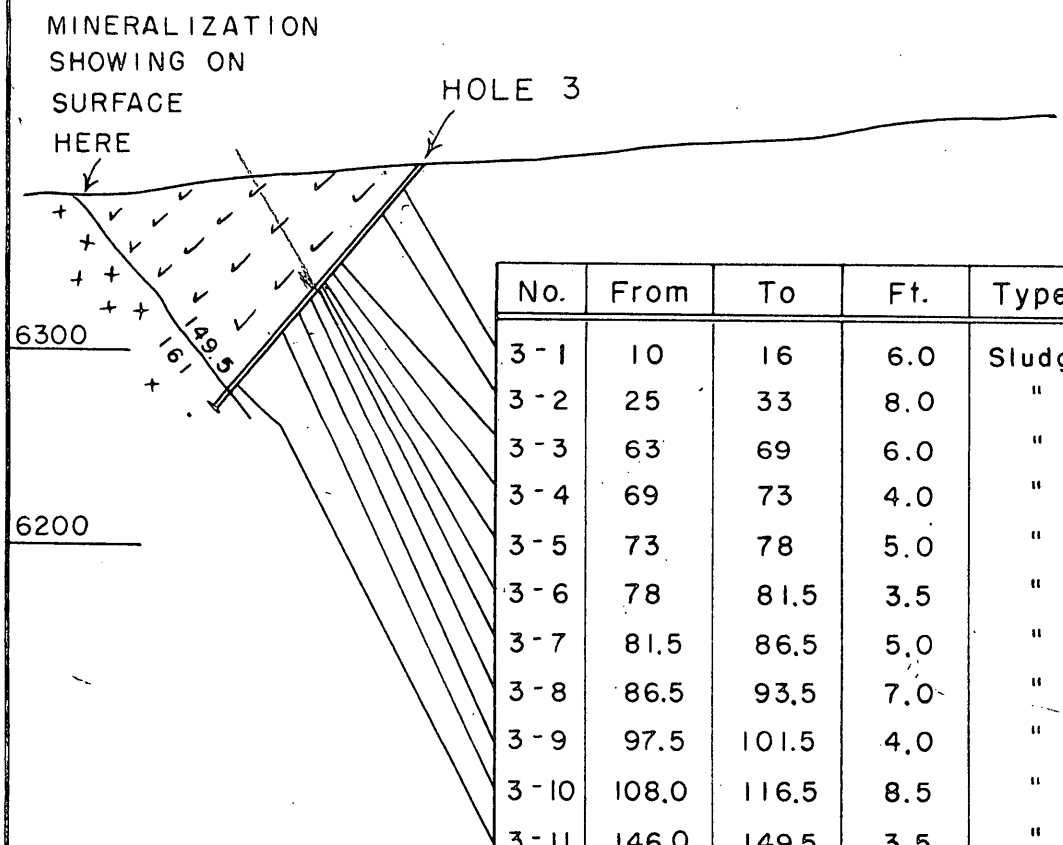
Figure 8.- Cross section through D.D. hole 2.

HOLE NO. 3

Lat: 5765, Dep. 1837
Elev: 6392
Depth: 161
Bearing: S 51° E
Dip: -50°

BROWN (BUFF) ALTERED ANDESITE

BLUE-GREY ANDESITE

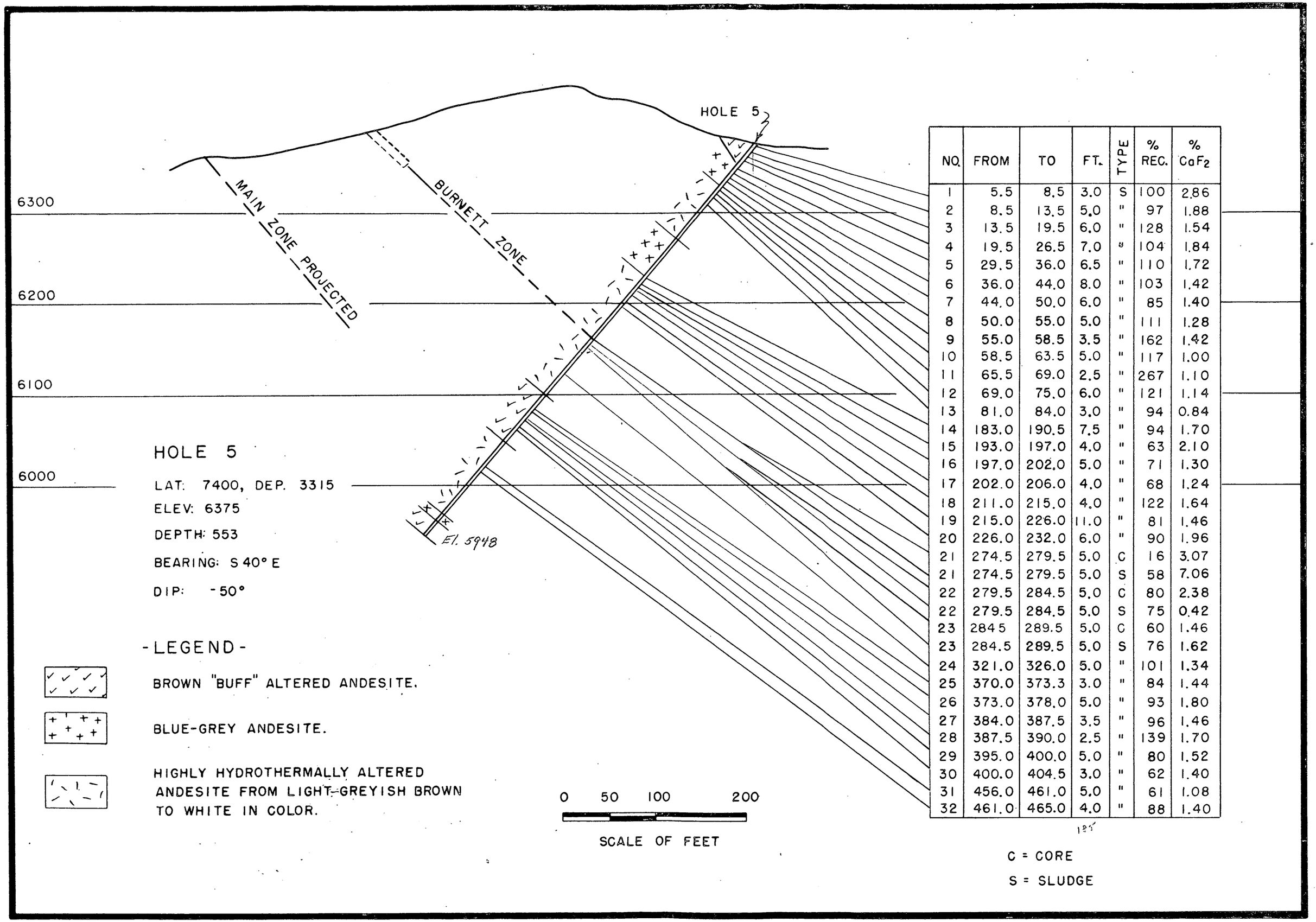


No.	From	To	Ft.	Type	% Rec.	%CaF_2
3-1	10	16	6.0	Sludge	103	0.1
3-2	25	33	8.0	"	55	0.7
3-3	63	69	6.0	"	99	0.6
3-4	69	73	4.0	"	90	2.4
3-5	73	78	5.0	"	124	0.7
3-6	78	81.5	3.5	"	127	10.0
3-7	81.5	86.5	5.0	"	121	7.9
3-8	86.5	93.5	7.0	"	100	3.3
3-9	97.5	101.5	4.0	"	85	4.1
3-10	108.0	116.5	8.5	"	98	3.3
3-11	146.0	149.5	3.5	"	102	2.9

0 100 200

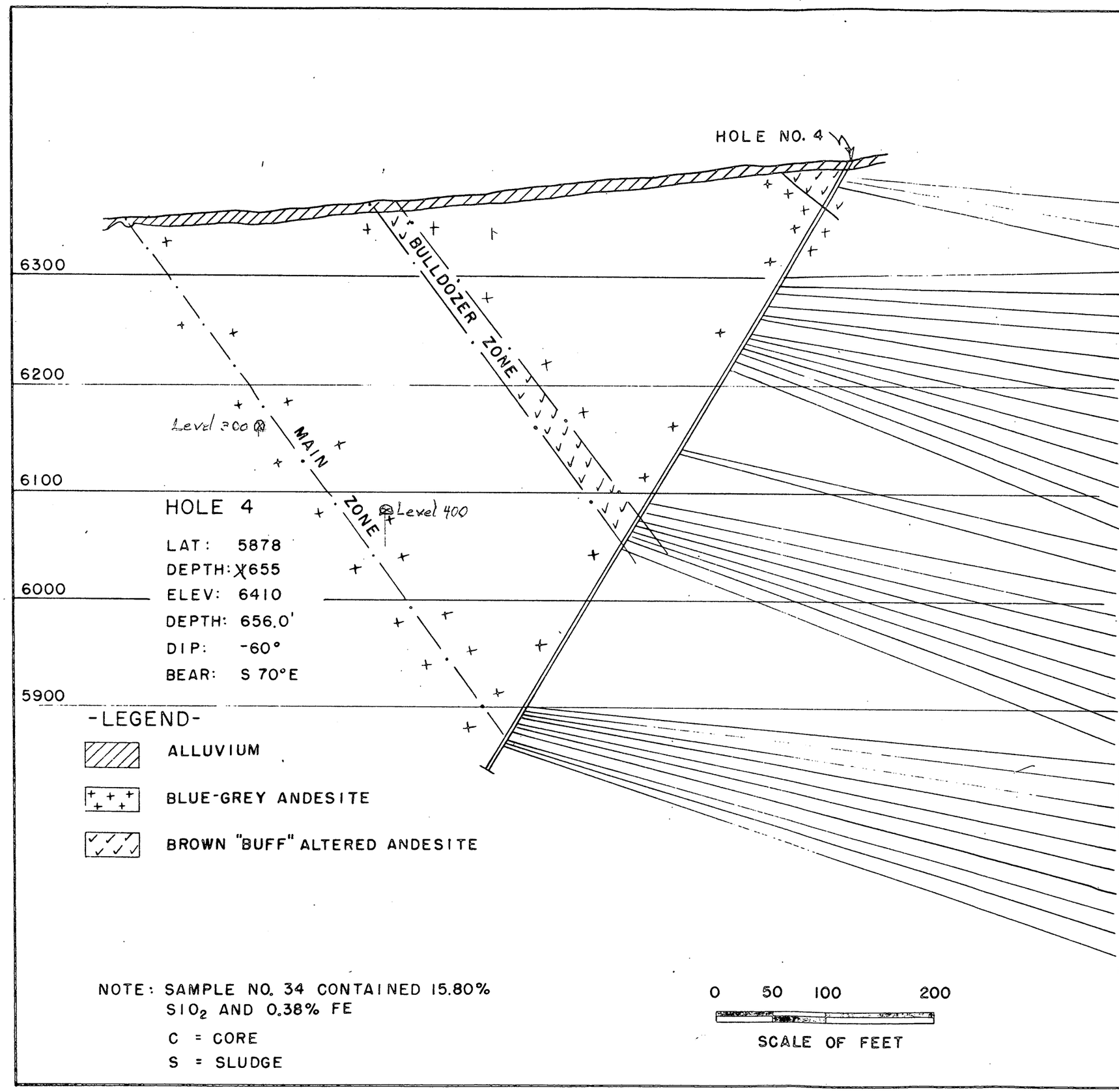
Scale of feet

Figure 9.- Cross section through hole 3.



NO.	FROM	TO	FT.	TYPE	% REC.	% CaF_2
1	5.5	8.5	3.0	S	100	2.86
2	8.5	13.5	5.0	"	97	1.88
3	13.5	19.5	6.0	"	128	1.54
4	19.5	26.5	7.0	"	104	1.84
5	29.5	36.0	6.5	"	110	1.72
6	36.0	44.0	8.0	"	103	1.42
7	44.0	50.0	6.0	"	85	1.40
8	50.0	55.0	5.0	"	111	1.28
9	55.0	58.5	3.5	"	162	1.42
10	58.5	63.5	5.0	"	117	1.00
11	65.5	69.0	2.5	"	267	1.10
12	69.0	75.0	6.0	"	121	1.14
13	81.0	84.0	3.0	"	94	0.84
14	183.0	190.5	7.5	"	94	1.70
15	193.0	197.0	4.0	"	63	2.10
16	197.0	202.0	5.0	"	71	1.30
17	202.0	206.0	4.0	"	68	1.24
18	211.0	215.0	4.0	"	122	1.64
19	215.0	226.0	11.0	"	81	1.46
20	226.0	232.0	6.0	"	90	1.96
21	274.5	279.5	5.0	C	16	3.07
21	274.5	279.5	5.0	S	58	7.06
22	279.5	284.5	5.0	C	80	2.38
22	279.5	284.5	5.0	S	75	0.42
23	284.5	289.5	5.0	C	60	1.46
23	284.5	289.5	5.0	S	76	1.62
24	321.0	326.0	5.0	"	101	1.34
25	370.0	373.3	3.0	"	84	1.44
26	373.0	378.0	5.0	"	93	1.80
27	384.0	387.5	3.5	"	96	1.46
28	387.5	390.0	2.5	"	139	1.70
29	395.0	400.0	5.0	"	80	1.52
30	400.0	404.5	3.0	"	62	1.40
31	456.0	461.0	5.0	"	61	1.08
32	461.0	465.0	4.0	"	88	1.40

Figure 11.- Cross section through drill hole 5.



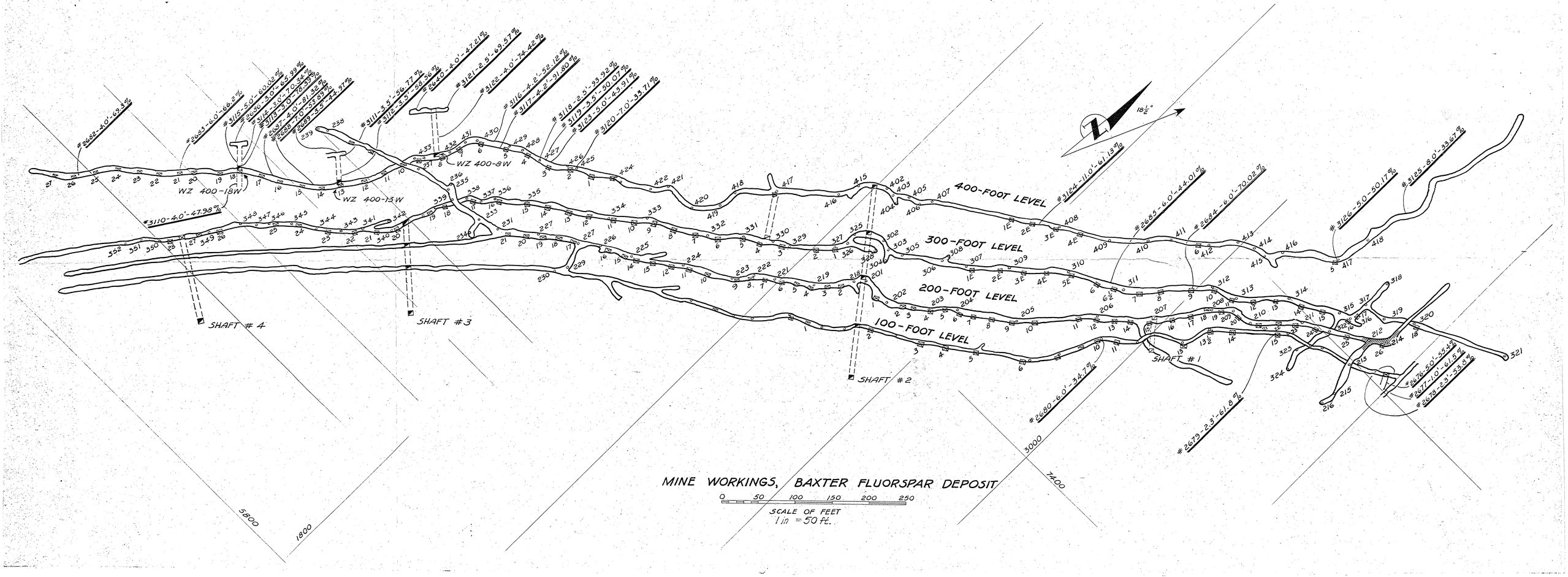
NO.	FROM	TO	FT.	TYPE	% REC.	% CaF_2
1	10.5	19.0	8.5	S	76	3.50
2	19.0	22.0	3.0	"	131	3.68
3	22.0	31.0	9.0	"	112	3.04
4	119.5	127.0	7.5	"	98	2.48
5	132.0	141.0	9.0	"	102	1.88
6	141.0	146.0	5.0	"	96	1.82
7	152.0	161.0	9.0	"	88	2.08
8	161.0	165.5	4.5	"	88	1.98
9	165.5	168.0	2.5	"	124	2.50
10	180.0	186.0	6.0	"	103	2.14
11	186.0	191.0	5.0	"	94	2.78
12	193.0	198.5	5.5	"	150	2.08
13	198.5	203.0	4.5	"	117	1.84
14	206.0	211.0	5.0	"	140	2.16
15	216.0	220.0	4.0	"	70	2.16
16	220.0	225.0	5.0	"	101	1.74
17	305.0	312.0	7.0	"	85	2.60
18	312.0	316.0	4.0	"	99	2.78
19	362.5	372.5	10.0	"	49	2.04
20	372.5	380.0	7.5	"	89	1.80
21	380.0	390.0	10.0	"	68	1.92
22	390.0	395.0	5.0	"	98	2.30
23	395.0	400.0	5.0	"	134	2.14
24	400.0	402.0	2.0	"	162	2.50
25	402.0	406.0	4.0	"	79	3.08
26	410.0	415.0	5.0	"	90	3.74
27	584.5	590.0	5.5	"	52	1.98
28	590.0	592.0	2.0	"	150	1.24
29	592.0	597.0	5.0	"	93	0.88
30	597.0	602.0	5.0	"	101	4.86
31	604.0	609.0	5.0	"	119	4.66
32	609.0	612.5	3.5	"	132	1.92
33	615.7	616.0	0.3	C	100	1.72
34	623.5	624.2	0.7	"	100	79.06
35	626.0	629.0	3.0	S	60	2.00
36	629.0	631.5	2.5	"	90	1.86

NOTE: SAMPLE NO. 34 CONTAINED 15.80% SiO_2 AND 0.38% FE

C = CORE

S = SLUDGE

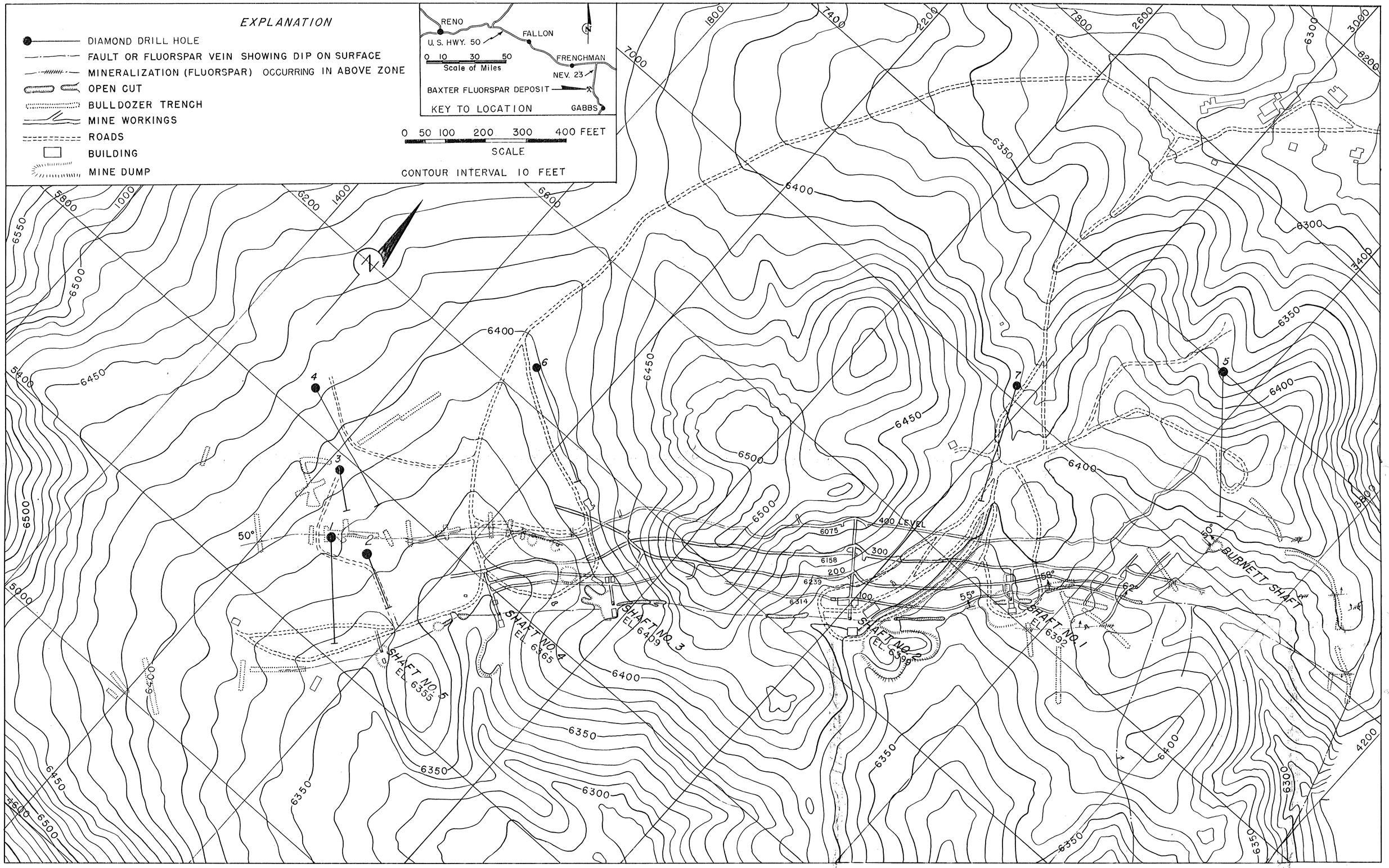
Figure 10.- Cross section through drill hole 4.



MINE WORKINGS, BAXTER FLUORSPAR DEPOSIT

0 50 100 150 200 250

SCALE OF FEET
1 in = 50 ft.



Adapted from U. S. G. S. and mining company maps.

Fig 1. - Plan map - Baxter fluorspar deposit