

BUCHANS MINING CO., LTD. DIAMOND DRILL HOLE RECORD

Sheet No. 1

Location Surface northwest of Lucky Strike
 Direction Down Dip -90° at 0'; -89° at 600'; -87° at 1260'
 Started Sept. 13, 1948 Finished November 5, 1948

COORDINATES

N 6000.71 E 2248.53
 Elevation 915.83

Hole No. 816
 Depth 1323

DESCRIPTION				CORE							SLUDGE								
General	Section		Core Rec. %	Economic	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu	% Pb	% Zn	% Fe
	From	To																	
0-19 Overburden																			
19-84 Grey-green, fine grained, andesite lava flow; amygdular with quartz fillings.	19	24	80	19-340 Barren.															
	24	31	95																
	31	37	100																
	37	47	90																
	47	57	100																
	57	65	85																
	65	75	60																
	75	84	45																
84-112 Grey-green with some orange staining; fine grained with some reddish feldspar phenocrysts from 84-90; intermediate lava flow and flow breccia. Some amygdules filled with calcite, chlorite and quartz.	84	90	50																
	90	95	40																
	95	101	30																
	101	107	45																
	107	112	70																
112-119 Dark olive-green, fine grained diabase sill. Somewhat fractured.	112	114	75																
	114	116	100																
	116	119	80																
119-188 Reddish-flecked grey & grey-green, silicified, veined with quartz and epidote, coarse acid-intermediate agglomerate and tuff. Large, prominent quartz and feldspar grains.	119	124	88																
	124	136	100																
	136	145	95																
	145	151	100																
	151	167	90																
	167	187	95																
188-230 Somewhat similar to 119-188, coarse acid-intermediate agglomerate; not reddish-flecked; some development of chlorite in the matrix; many prominent quartz grains.	187	192	100																
	192	205	80																
	205	215	100																
	215	224	100																
	224	230	60																
230-340 Grey-green, acid-intermediate gritty tuff; small feldspar and quartz grains; no prominent quartz; somewhat sheared with considerable development of chlorite and sericite; not schistose; crushed from 325-330.	230	239	90																
	239	248	95																
	248	258	75																
	258	265	70																
	265	276	85																
	276	286	100																
	286	310	100																
	310	320	100																

SIZE OF CORE
 1-1/8" From 19 To 408
 1 1/2" From To
 3/4" From 408 To 1323
 From To

REMARKS Water flow encountered at 1145'

Examined by

Approved by

G. G. Thomas
 BY
 GEO. G. THOMAS

Engineer

Manager

BUCHANS MINING CO., LTD. DIAMOND DRILL HOLE RECORD

Sheet No. 2

Location Surface northwest of Lucky Strike
 Direction Down Dip -90° at 0'; -89° at 600'; -87° at 1260'
 Started September 13, 1948 Finished November 5, 1948

COORDINATES
 N 6000.71 E 2248.53
 Elevation 915.83

Hole No. 816
 Depth 1323

DESCRIPTION				CORE							SLUDGE								
General	Section		Core Rec. %	Economic	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu	% Pb	% Zn	% Fe
	From	To																	
	320	330	95																
	330	340	80																
<u>340-346</u> Dark grey-green, intermediate-andesite flow breccia.	340	346	80	<u>340-617</u> Barren.															
<u>346-387</u> Massive, dark purplish-grey, porphyritic intermediate-andesite	346	352	90																
lava flow; no amygdules;	352	355	100																
has about 15% greenish-white	355	362	35																
feldspar phenocrysts in fine	362	370	55																
grained matrix.	370	375	50																
	375	378	50																
	378	385	75																
<u>387-453</u> Olive-green, acid-intermediate agglomerate; some mixture of	385	390	100																
fragments of porphyritic	390	394	50																
intermediate-andesite lava.	394	403	85																
Some shearing in the matrix.	403	413	70																
	413	419	30																
	419	425	35																
	425	434	70																
	434	441	70																
	441	454	95																
<u>453-485</u> Dark grey-green, amygdular, andesite agglomerate; calcite	454	464	100																
fillings in amygdules. Some porphyritic	464	475	95																
intermediate lava fragments	475	485	95																
near the top.																			
<u>485-544</u> Massive, dark green, amygdular, porphyritic, andesite lava	485	496	100																
flow; has 20% greenish-white	496	506	95																
feldspar phenocrysts; some flow	506	514	80																
breccia zones.	514	524	100																
	524	534	80																
	534	543	40																
<u>544-570</u> Olive-green, hard, acid-intermediate agglomerate; fine	543	549	45																
grained fragments; some gritty tuff	549	559	100																
from 552-556. Some amygdular	559	568	60																
intermediate fragments.	568	573	95																
<u>570-617</u> Grey-green, hard, siliceous	573	575	60																
	575	578	100																

SIZE OF CORE
 1-1/8" From 19 To 408
 1 1/2" From To
 3" From 408 To 1323
 From To

REMARKS

Examined by

Approved by

ORIGINAL SIGNED
 BY
 GEO. G. THOMAS

Engineer

Manager

BUCHANS MINING CO., LTD. DIAMOND DRILL HOLE RECORD

Sheet No. 3

Location Surface northwest of Lucky Strike
 Direction Down Dip -90° at 0'; -89° at 600'; -87° at 1260'
 Started September 13, 1948 Finished November 5, 1948

COORDINATES

N 6000.71 E 2248.53
 Elevation 915.83

Hole No. 816
 Depth 1323

DESCRIPTION

CORE

SLUDGE

General	Section		Core Rec. %	Economic	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe
	From	To																	
fine grained, acid-intermediate flow, with flow breccia from 600-617. Small feldspar phenocrysts.	578	586	80																
	586	596	100																
	596	602	45																
	602	610	70																
	610	617	30																
617-625 Darker grey-green, chloritic, acid-intermediate gritty tuff. Small grains of feldspar and quartz.	617	626	90	617-1229 Barren.															
625-638 Grey-siliceous, acid-intermediate flow, as 570-617.	626	631	75																
638-650 Massive, dark green, fine grained, amygdular, diabase sill.	631	641	100																
	641	652	95																
650-871 Grey-green and olive-green, acid-intermediate agglomerate with some zones of flow breccia. Fairly hard and siliceous. Fine grained with 15-20% small grains of feldspar and tiny quartz.	652	662	100																
	662	672	100																
	672	692	100																
	692	698	70																
	698	718	100																
	718	724	70																
	724	775	100																
	775	793	100																
	793	804	95																
	804	814	70																
	814	841	95																
	841	850	95																
	850	871	90																
871-909 Massive, dark green to dark grey-black, fine grained, diabase sill. Some amygdular.	871	891	100																
	891	911	100																
909-918 Grey-green, hard, siliceous, acid-intermediate agglomerate.	911	921	100																
918-1229 Dark green, massive, medium grained, diabase-dolerite sill. No internal chilled contacts. Contact at 918' is 50° to core; contact at 1229' is 50-60° to core.	921	933	80																
	933	964	100																
	964	974	85																
	974	1078	100																
	1078	1085	80																
	1085	1111	100																
	1111	1115	30																

SIZE OF CORE
 1-1/8" From 19 To 408
 1 1/2" From To
 7" From 408 To 1323
 From To

REMARKS

Examined by

Approved by

W. Maclean
 ORIGINAL SIGNED
 BY
 GEO. G. THOMAS

Engineer

Manager

BUCHANS MINING CO., LTD. DIAMOND DRILL HOLE RECORD

Sheet No. 4

Location Surface northwest of Lucky Strike
 Direction Down Dip -90° at 0'; -89° at 600'; -87° at 1260'
 Started September 13, 1948 Finished November 5, 1948

COORDINATES
 N 6000.71 E 2248.53
 Elevation 915.83

Hole No. 816
 Depth 1323

DESCRIPTION				CORE								SLUDGE								
General	Section		Core Rec. %	Economic	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu	% Pb	% Zn	% Fe	
	From	To																		
	1115	1155	95																	
	1155	1170	80																	
	1170	1174	50																	
	1174	1196	100																	
	1196	1214	65																	
	1214	1230	100																	
1229-1260.2 Gray-green and yellowish-green, acid-intermediate agglomerate and gritty tuff; hard and siliceous from 1229-1241; some shearing and development of chlorite and sericite in the matrix from 1241-1260.2	1230	1239	60	1229-1230 Barren. Sample 1230-1231.5 Fairly massive, grey barite with disseminated Pb-Zn. 1231.5-1254 Barren.	334625	.05	2.2	0.2	3.0	5.8	5.9		1215-1220 335068	N	N	N	N	N	17.9	
Massive barite replacement 1230-1231.5.	1239	1240	100										1220-1225	9	N	N	N	N	25.7	
Disseminated baritic replacement from 1258.5-1260.2	1240	1248	100										1225-1235	70	N	0.1	N	N	24.5	
Somewhat bedded 1253-1254 and 1257.5-1258.5	1248	1258	100	Sample 1254-1258.5 Agglomerate with narrow bands of Pb-Zn ore at 1255.3-1255.5 and 1255.8-1256.2; also some disseminated Pb-Zn barite.	6	.01	0.4	N	2.1	3.2	1.7		1235-1240	1	N	N	N	N	10.8	
	1258	1263	100	Sample 1258.5-1260.2 About 60% replaced by coarse grey barite with lightly disseminated Pb-Zn. Some unreplaced tuff 1259.4-1260.2.	7	.02	1.4	N	1.8	2.0	2.8		1250-1260	2	.01	0.1	N	N	1.7	28.3
1260.2-1265 Coarse grey barite with some unreplaced rock fragments from 1260.2-1262.	1263	1269	100	Sample 1260.2-1265 Coarse grey barite with low grade disseminated Pb-Zn ore and some unreplaced rock fragments from 1260.2-1262.	8	.04	1.7	0.2	2.4	3.5	4.3	1260-1265	3	.02	1.8	N	N	2.1	20.5	
1265-1271 Massive ore; fractured from 1268-1270. Calcite vein filling 1269.6-1270.	1269	1274	100	Sample 1265-1269 High grade Cu-Pb-Zn ore. Sample 1269-1271 ditto.	9	1.06	4.7	2.9	8.1	18.3	8.4	1265-1270	4	.06	4.2	1.8	8.4	19.3	11.0	
1271-1273.5 Good grade ore with some unreplaced rock fragments.				Sample 1271-1273.5 Good grade baritic Pb-Zn ore with some unreplaced rock fragments.	30	.06	3.9	1.9	9.1	19.3	5.2	1270-1275	5	.04	3.7	1.4	6.9	13.9	8.0	
1273.5-1279 Sheared, yellowish-green, acid-intermediate gritty tuff; considerable sericite and chlorite developed in the matrix. Quartz and feldspar grains and small lava chips.	1274	1281	100	Sample 1273.5-1279 Barren.	2	N	N	N	0.2	0.7	2.5									

SIZE OF CORE
 1-1/8" From 19 To 408
 1 1/2" From To
 2" From 408 To 1323'
 From To

REMARKS

Examined by

Approved by

ORIGINAL SIGNED
 BY
 GEO. G. THOMAS

Engineer

Manager

Location Surface northwest of Lucky Strike
Direction Down Dip -90° at 0'; -89° at 600'; -87° at 1260'
Started September 13, 1948 Finished November 5, 1948

COORDINATES:

N 6000.71 E 2248.53
Elevation 915.83

Hole No. 816
Depth 1323

[illegible]

20

SIZE OF CORE

1/8" From 19 To 408

1 1/4" From	To
1 1/4"	1 1/2"
1 1/2"	1 3/4"
1 3/4"	2"
2"	2 1/4"
2 1/4"	2 1/2"
2 1/2"	2 3/4"
2 3/4"	3"
3"	3 1/4"
3 1/4"	3 1/2"
3 1/2"	3 3/4"
3 3/4"	4"
4"	4 1/4"
4 1/4"	4 1/2"
4 1/2"	4 3/4"
4 3/4"	5"
5"	5 1/4"
5 1/4"	5 1/2"
5 1/2"	5 3/4"
5 3/4"	6"
6"	6 1/4"
6 1/4"	6 1/2"
6 1/2"	6 3/4"
6 3/4"	7"
7"	7 1/4"
7 1/4"	7 1/2"
7 1/2"	7 3/4"
7 3/4"	8"
8"	8 1/4"
8 1/4"	8 1/2"
8 1/2"	8 3/4"
8 3/4"	9"
9"	9 1/4"
9 1/4"	9 1/2"
9 1/2"	9 3/4"
9 3/4"	10"
10"	10 1/4"
10 1/4"	10 1/2"
10 1/2"	10 3/4"
10 3/4"	11"
11"	11 1/4"
11 1/4"	11 1/2"
11 1/2"	11 3/4"
11 3/4"	12"
12"	12 1/4"
12 1/4"	12 1/2"
12 1/2"	12 3/4"
12 3/4"	13"
13"	13 1/4"
13 1/4"	13 1/2"
13 1/2"	13 3/4"
13 3/4"	14"
14"	14 1/4"
14 1/4"	14 1/2"
14 1/2"	14 3/4"
14 3/4"	15"
15"	15 1/4"
15 1/4"	15 1/2"
15 1/2"	15 3/4"
15 3/4"	16"
16"	16 1/4"
16 1/4"	16 1/2"
16 1/2"	16 3/4"
16 3/4"	17"
17"	17 1/4"
17 1/4"	17 1/2"
17 1/2"	17 3/4"
17 3/4"	18"
18"	18 1/4"
18 1/4"	18 1/2"
18 1/2"	18 3/4"
18 3/4"	19"
19"	19 1/4"
19 1/4"	19 1/2"
19 1/2"	19 3/4"
19 3/4"	20"
20"	20 1/4"
20 1/4"	20 1/2"
20 1/2"	20 3/4"
20 3/4"	21"
21"	21 1/4"
21 1/4"	21 1/2"
21 1/2"	21 3/4"
21 3/4"	22"
22"	22 1/4"
22 1/4"	22 1/2"
22 1/2"	22 3/4"
22 3/4"	23"
23"	23 1/4"
23 1/4"	23 1/2"
23 1/2"	23 3/4"
23 3/4"	24"
24"	24 1/4"
24 1/4"	24 1/2"
24 1/2"	24 3/4"
24 3/4"	25"
25"	25 1/4"
25 1/4"	25 1/2"
25 1/2"	25 3/4"
25 3/4"	26"
26"	26 1/4"
26 1/4"	26 1/2"
26 1/2"	26 3/4"
26 3/4"	27"
27"	27 1/4"
27 1/4"	27 1/2"
27 1/2"	27 3/4"
27 3/4"	28"
28"	28 1/4"
28 1/4"	28 1/2"
28 1/2"	28 3/4"
28 3/4"	29"
29"	29 1/4"
29 1/4"	29 1/2"
29 1/2"	29 3/4"
29 3/4"	30"
30"	30 1/4"
30 1/4"	30 1/2"
30 1/2"	30 3/4"
30 3/4"	31"
31"	31 1/4"
31 1/4"	31 1/2"
31 1/2"	31 3/4"
31 3/4"	32"
32"	32 1/4"
32 1/4"	32 1/2"
32 1/2"	32 3/4"
32 3/4"	33"
33"	33 1/4"
33 1/4"	33 1/2"
33 1/2"	33 3/4"
33 3/4"	34"
34"	34 1/4"
34 1/4"	34 1/2"
34 1/2"	34 3/4"
34 3/4"	35"
35"	35 1/4"
35 1/4"	35 1/2"
35 1/2"	35 3/4"
35 3/4"	36"
36"	36 1/4"
36 1/4"	36 1/2"
36 1/2"	36 3/4"

From 108 To 1323

From To

REMARKS

Examined by _____

Approved by _____

ORIGINAL SIGNED
BY
GEO. G. THOMAS

Engineer.

Manager.

BUCHANS MINING CO., LTD.
DIAMOND DRILL HOLE RECORD

Sheet No 6

Location Surface northwest of Lucky Strike
Direction Down Dip Vertical; see foot note.
Started February 16, 1949 Finished March 26, 1949

COORDINATES
N 5994.74 E 2245.96
Elevation 915.71

Hole No. 816
Depth 1717
Deepened from 1328'

DESCRIPTION				CORE							SLUDGE								
General	Section		Core Rec. %	Economic	Sample No.	Oz. Au.	Oz. Ag.	% Cu.	% Pb	% Zn	% Fe	Sludge Sect.	Sample No.	Oz. Au.	Oz. Ag.	% Cu	% Pb	% Zn	% Fe
	From	To																	
1328-1635 Fine grained, grey, hard, bedded siltstone with some grit bands. Numerous 1/8" quartz veinlets cutting at 30-40° to core from 1450-1475. Bedding 80° to 90° to core. Some of coarse grit from 1620-1635.	1328	1331	35	1328-1635 Faint traces of pyrite.															
	1331	1342	87																
	1342	1352	26																
	1352	1364	73																
	1364	1372	90																
	1372	1386	70																
	1386	1406	100																
	1406	1419	86																
	1419	1441	93																
	1441	1471	95																
	1471	1512	97																
	1512	1522	100																
	1522	1533	60																
	1533	1554	90																
	1554	1565	87																
1635-1658 Pale greenish-grey, bleached, fine grained, intermediate-andesite flow.	1565	1572	53																
	1572	1597	95																
	1597	1610	90																
	1610	1636	80																
1635-1658 Pale greenish-grey, bleached, fine grained, intermediate-andesite flow.	1636	1644	90	1635-1658 Traces of pyrite. One-quarter inch veinlet of Pb-Zn at 1635'.															
	1644	1649	48																
	1649	1654	60																
	1654	1659	54																
1658-1717 Grey-green andesite agglomerate. Some chlorite filled amygdulae. Quartz and epidote veining.	1659	1669	97	1658-1717 Barren.															
	1669	1676	96																
	1676	1687	96																
	1687	1697	100																
	1697	1707	100																
1717' end of hole.	1707	1717	88																

SIZE OF CORE

From	To
1 1/4" From	To
7/8" From 1328	To 1717
From	To

REMARKS From Trotter-Pajari tests: At 0', -90°; at 500', dip -89° and direction N22°E; at 750', dip -88°; at 1000', dip -88° and direction N55°E; at 1250', dip -87° and direction N51°E.

Examined by _____ Original signed by H.J. MacLean
BY _____
GEO. G. THOMAS
Approved by _____

Engineer

Manager