

**J. TUACH GEOLOGICAL CONSULTANTS, INC.
DIAMOND DRILL CORE LOG**

Sheet No. 1

LATITUDE _____	Tests _____	Dip _____	Magnetic _____	Corrected _____	Project No. _____	Hole No. <u>549</u>
DEPARTURE <u>6.700N 13.800E</u>	Depth _____	_____	Bearing _____	_____	Property <u>Buchans - Middle Branch</u>	
ELEVATION <u>3737.80</u>	_____	_____	_____	_____	NTS _____	Grid Name <u>Mine grid</u>
DIP AT COLLAR <u>-90°</u>	_____	_____	_____	_____	Date started <u>Fall, 1944</u>	Completed _____
BEARING _____	_____	_____	_____	_____	Contractor _____	
TOTAL DEPTH <u>539'</u> CORE SIZE _____	_____	_____	_____	_____		
REMARKS _____	_____	_____	_____	_____	Logged by <u>J. Harris</u>	<u>1996</u>

Depth & Lithology	Description	Alteration	Mineralization
0 - 90'	- Overburden		
90 - 381'	- Interbedded mafic and intermediate tuffs (possible flows locally) - Dark green to grey green - 98 - 113' - Mainly amygdoidal mafic volcanic - 113 - 260' - Mainly feldspar "porphyritic" dacitic tuffs - some more mafic andesitic zones - fragmental locally - 264 - 295' - Fine grained mafic tuff - 295 - 348' - Andesitic tuff or flow - feldspar (Plag.) porphyritic locally foliated or layered at $\approx 45 - 55^\circ$ to the core - 348 - 381' - Pale grey green mafic to intermediate tuff - Tiny feldspar, chlorite and sericitic shards and a few quartz grains in a fine matrix. Flattening of crystals and shards defines a layering @ $\approx 50^\circ$ to the core - may be due to shearing. - Some shearing between 370 and 382' (thrust?) (quite a bit of lost core)	weak sericitic and chloritic alteration 119 - 120' strong sericitic and silicic alteration Patchy fine grained silica epidote alteration throughout	minor disseminated py. $\approx 1 - 3\%$ dissem. py. 371 - 381' core split from 373 - 406' Assays from old log - <u>best</u> 0.4% Pb and 0.6% Zn from 371 - 376' Doesn't seen to match min. in core
381 - 406'	- Difficult to log due to rubbly nature of split core - Altered felsic fragmental - strongly altered tuff - white to yellowish - Small gouge @ 381' - 393 - 406' - Looks darker more mafic	Strong quartz - sericitic alteration	3 - 5% fine py. dissem. minor ZnS - appears to be associated with quartz stringers - some dissem.

HOLE NO. 549

J. TUACH GEOLOGICAL CONSULTANTS, INC.
DIAMOND DRILL CORE LOG

Sheet No. 2

Depth & Lithology	Description	Alteration	Mineralization
406 - 409'	- Arkose and mafic tuff - Pink to orange and green - Layered at $\approx 70^\circ$ to the core	Silicified and sericitic	(Resampled - 512 - 518' not a lot of mineralization previous samples likely mixed up)
409 - 415'	- Mafic tuff - Medium to light green, locally amygdoidal - Some calcite fracture infill	Some quartz and epidote alteration, especially 410 - 412'	
415 - 477'	- Lithic Arkose - conglomerate - Orange colour - some large clasts of porphyritic rhyolite - 474 - 477 - only 2" core.		
477 - 518'	- Agglomerate to breccia - upper part appears to have dacitic tuff matrix - Hetroolithic breccia? - may be altered tuff - Appears to grade down into underlying Arkose - one granitic cobble at contact area	Silicified and sericitic alteration	Flecks of ZnS and PbS Best min. appears to be around 500' Doesn't match assays
518 - 539'	- Arkose - conglomerate - Orange to pink - various clast types - Minor jasper fragments at top - Some large maroon Rhy. - porphyry boulders		

HOLE NO. 549

BUCHANS MINING CO., LTD. DIAMOND DRILL HOLE RECORD

Sheet 1

Location Surface east of OrientalDirection DownDip VerticalStarted September 8, 1944 Finished October 21, 1944.

COORDINATES

N 6700 E 13,600Hole No. 549Depth 539'Elevation 737.0

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																	
0-98 Overburden.																			
98-113 Dark grey-green amygdular andesite lava; only scattered amygdules. Fine grained; no phenocrysts. Fairly hard and massive.	98	101	90	98-295 Barren.									125-130	271473	N11	N11	N11	N11	8.7
	101	104	70										130-135	271474	N11	N11	N11	N11	12.8
	104	108	55										135-140	5	N11	N11	N11	N11	9.5
	108	113	90										140-145	6	N11	N11	N11	N11	11.3
113-264 Dark grey-green, porphyritic andesite lava flow; has large feldspar phenocrysts in a fine grained matrix. Fairly massive. A few amygdules.	113	117	60										145-150	7	N11	N11	N11	N11	8.6
	117	130	85										150-155	8	N11	N11	N11	N11	9.7
	130	139	65										155-160	9	N11	N11	N11	N11	7.8
	139	151	100										160-165	271480	N11	N11	N11	N11	7.0
	151	160	80										165-170	1	N11	N11	N11	N11	7.4
	160	172	70										170-175	2	N11	N11	N11	N11	4.4
	172	180	60										175-180	3	N11	N11	N11	N11	5.6
	180	191	50										180-185	4	N11	N11	N11	N11	4.3
	191	200	70										185-190	5	N11	N11	N11	N11	4.4
	200	210	40										190-195	6	N11	N11	N11	N11	4.4
	210	221	60										195-200	7	N11	N11	N11	N11	4.2
	221	230	80										200-205	8	N11	N11	N11	N11	4.7
	230	240	85										205-210	9	N11	N11	N11	N11	3.9
	240	250	85										215-220	271490	N11	N11	N11	N11	5.0
	250	260	55										220-225	1	N11	N11	N11	N11	5.3
	260	264	45										225-230	2	N11	N11	N11	N11	5.0
264-295 Andesite tuff; dark green; fine grained.	264	268	40										230-235	3	N11	N11	N11	N11	4.8
	268	275	25										235-240	4	N11	N11	N11	N11	5.5
	275	279	25										240-245	5	N11	N11	N11	N11	5.5
	279	285	15										245-250	6	N11	N11	N11	N11	6.3
	285	290	90										250-255	271530	N11	N11	N11	N11	7.3
	290	297	45										255-260	1	N11	N11	N11	N11	5.4
													260-265	2	N11	N11	N11	N11	6.5
													265-270	3	N11	N11	N11	N11	7.0
													270-275	271837	N11	N11	N11	N11	7.8
													275-280	4	N11	N11	N11	N11	6.4
													280-285	9	N11	N11	N11	N11	10.4
													285-290	271840	N11	N11	N11	N11	10.3
													290-295	1	N11	N11	N11	N11	11.4
													295-300	2	N11	N11	N11	N11	10.7
295-381 Dark grey-green, andesite lava flow; some amygdules and small white feldspar phenocrysts in a fine grained matrix. Sheared 371-373 and 375-381.	297	301	70	295-371 Barren.									300-305	3	N11	N11	N11	N11	10.2
	301	308	85										305-310	4	N11	N11	N11	N11	11.8
	308	311	50										310-315	5	N11	N11	N11	N11	11.2
	311	322	80										315-320	6	N11	N11	N11	N11	11.0

SIZE OF CORE

REMARKS

From To

14" From To

8" From 98 To 539

From To

Examined by H. Maclean

ORIGINAL SIGNATURE

BY

Engineer

Approved by

DEPT. S. THQ

Manager

Manager

BUCHANS MINING CO., LTD.
DIAMOND DRILL HOLE RECORD

Sheet 3

Location Surface east of Oriental.Direction Down Dip VerticalStarted September 8, 1944 Finished October 21, 1944.COORDINATES
N 6700 E 13,800
Elevation 737.8Hole No. 549
Depth 539'

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																		
477-518 Pale grey and greenish grey, hard and siliceous, intermediate agglomerate. Composed of intermediate porphyritic lava fragments with some gritty tuff matrix. Some development of chlorite. No shearing.	455	461	55									455-460	272500	N11	N11	N11	N11	N11	7.6	
	461	464	80									460-465	1	N11	N11	N11	N11	N11	8.7	
	464	469	50									465-470	2	N11	N11	N11	N11	N11	7.6	
	469	477	15									470-475	3	N11	N11	0.2	N11	N11	8.0	
	477	482	90	Sample 477-482	Traces disseminated pyrite.	272784	N11	N11	N11	N11	N11	4.0	475-480	4	N11	N11	N11	N11	N11	9.3
	482	484	95	Sample 482-487	ditto	5	N11	N11	N11	N11	N11	2.9	480-485	5	N11	N11	N11	8.6	1.2	10.3
	484	491	70	Sample 487-492	ditto	6	Tr.	2.0	N11	N11	N11	5.7	485-490	6	N11	N11	N11	N11	N11	11.8
	491	498	85	Sample 492-497	ditto	7	N11	N11	N11	N11	N11	5.7	490-495	7	N11	N11	N11	N11	N11	6.6
	498	504	90	Sample 497-502	Trace Pb-Zn and pyrite.	8	N11	N11	N11	Tr.	N11	5.9	495-500	8	N11	N11	N11	N11	N11	10.4
	504	507	50	Sample 502-507	Traces pyrite.	9	N11	N11	N11	N11	N11	4.6	500-505	9	N11	N11	N11	N11	N11	9.7
518-539 Hard, reddish flecked, "arkose" type grit with porphyritic rhyolite lava chips. "Lower Arkose" horizon.	507	511	50	Sample 507-512	Trace Pb-Zn and pyrite.	272790	N11	N11	N11	Tr.	N11	4.5	505-510	272310	N11	N11	N11	N11	N11	10.8
	511	519	80	Sample 512-518	ditto	1	N11	N11	N11	1.0	1.8	4.7	510-515	1	N11	N11	N11	N11	N11	6.2
	519	523	100	518-539	Barren								515-520	2	N11	N11	N11	N11	N11	8.2
	523	525	100										520-525	3	N11	N11	N11	N11	N11	8.3
	525	529	100										525-530	4	N11	N11	N11	0.6	1.0	7.5
539 End of hole.	529	532	90										530-535	5	N11	N11	N11	N11	N11	8.0
	532	537	90																	
	537	539	70																	

539 End of hole.

SIZE OF CORE

From To

1 1/2" From To

7" From 98 To 539

From To

REMARKS

Examined by

H. J. Maclean

Approved by

ORIGINAL SIGNED
BY
H. J. Maclean

Engineer

Manager