WINTER 2000
SUMMARY REPORT
ON THE
SILVERTIP PROPERTY,
BRITISH COLUMBIA

Physical Work and
Diamond Drilling

BULL 16, 23

Liard Mining Division

59° 55' N, 130° 20' W
NTS 104-O/16W

Owner: Silvertip Mining Corporation
Operator: Silvertip Mining Corporation,
Suite 420 - 355 Burrard Street,
Vancouver, B.C. V6C 2G8

Submitted May 5, 2000

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SUMMARY

Silvertip is a blind, high grade, silver-lead-zinc carbonate replacement deposit, situated in the Cassiar Mountains just south of the British Columbia-Yukon border. Since 1996, it has been owned and operated by Silvertip Mining Corporation (SMC), a wholly owned subsidiary of Imperial Metals Corporation. The deposit is at the advanced exploration stage, and has undergone extensive surface and underground drilling programs and geophysical surveys since the early 1980s. The estimated geological resource (in-house calculation, January 1998) stands at 2.57 million tonnes grading 325 g/t silver, 6.4% lead, 8.8% zinc and 0.63 g/t gold. Project feasibility largely depends on the discovery of more tonnage.

Mineralization is hosted by middle Paleozoic carbonates, and consists of stratigraphically and structurally controlled bodies or 'mantos' of pyrite-sphalerite-galena-sulphosalt massive sulphide. Most of the resource consists of mantos at or near the limestone's upper, unconformable contact with overlying argillaceous clastics. Recent exploration has been aimed at finding larger tonnage bodies or 'chimneys' deeper in the limestone.

The Winter 2000 underground drilling program, and the preceding rehabilitation of the workings in late 1999, were financed by Peruvian Gold Limited under the terms of an option agreement with SMC. The total expenditure between October 1, 1999 and May 2000 was approximately $1.45M.

The underground drilling totalled 3,210 metres in 22 holes, and was all done from E-drift, in the Silver Creek South area or marginal to it. The main objective was to trace the extent of thick, feeder-style mineralization found in hole SSD-99-65 during the summer 1999 surface program, which was drilled to test a low-resistivity CSAMT anomaly. Most of the drilling (19 holes) was done in four fans of drill holes inclined towards the WSW. Significant, complex and heterogeneous mineralization was intersected in the two middle fans, concentrated in a 5 to 20-metre thick band about 25 metres below the unconformity. The thickness and textures of the sulphides strongly suggest a manto-shaped feeder in this location, but probably not a chimney, as had been speculated. This zone, known as the '65 Zone', is open to the east and notably to the west towards the Camp Creek fault, which could conceivably host the 'root' of the postulated feeder.

Three other, step-out holes were drilled, and most intersected mineralization typical of their general location. The depth of some mantos, 100 metres below the unconformity, is encouraging and indicates the potential vertical range of mineralization in the limestone, which is still open to depth. The silver-lead-zinc assay values obtained are very typical of the deposit, confirming the consistently high grade character of the mineralization.

The results support the interpretation that the Silvertip deposit, as far as it has been defined to date, lies in the more distal part of a much larger replacement system. High tonnage 'chimney' mineralization may exist at depth directly beneath the present deposit, but perhaps more likely occurs at some distance away in the more proximal part of the system, closer to the fluid source. Future exploration is recommended to determine the size and geometry of the overall system, through both regional geological, geochemical and geophysical exploration, and subsequent

surface and underground drilling and development. Vectoring towards the thermal source of the mineralization is the best way to improve tonnage potential, and advance the project towards feasibility.

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1.0 INTRODUCTION

1.1 LOCATION AND ACCESS

The Silvertip property is situated in northern British Columbia, just south of the Yukon border, approximately 90 km by air west-southwest of Watson Lake, Yukon (Fig. 1.1). It lies within NTS map sheet 104-O/16W, in the Liard Mining Division. The property is accessible via a 25-km gravel road starting from Mile 701 (kilometre 1128) of the Alaska Highway, about 15 km east of Rancheria, Yukon.

1.2 PHYSIOGRAPHY

The property lies on the northeastern flank of the Cassiar Mountains. The terrain is moderately mountainous, with generally rounded peaks and ridges separated by U-shaped valleys. The highest peaks are about 1950 metres; topographic relief is typically about 300 to 500 metres. Roughly 35% of the property is above tree line, which is at approximately 1450 metres.

1.3 LAND TENURE

The Silvertip property is owned and operated by Silvertip Mining Corporation (SMC), a wholly owned subsidiary of Imperial Metals Corporation of Vancouver. The property currently comprises 887 units in 63 claims and 26 fractional claims, covering an area of approximately 200 square kilometres (Fig. 1.1, Map 1). The claims and their current status, pending acceptance of this report, are listed in Table 1.1.

1.4 STATUS OF PROJECT

Silvertip (formerly Midway) is an epigenetic massive sulphide deposit, formed by carbonate replacement in limestone. A blind deposit, it is characterized by high grade silver-lead-zinc mineralization. The project is at the pre-feasibility stage, accompanied by advanced exploration. Currently, the total geological resource stands at 2.57 million tonnes grading 325 grams per tonne silver, 6.4% lead, 8.8% zinc, and 0.63 grams per tonne gold (Appendix E in Silvertip Mining Corporation, 1998).

In April 1999, SMC entered into an option agreement with Peruvian Gold Limited of Vancouver, which allows Peruvian the option to earn a 60% interest in the Silvertip property by spending $5.0

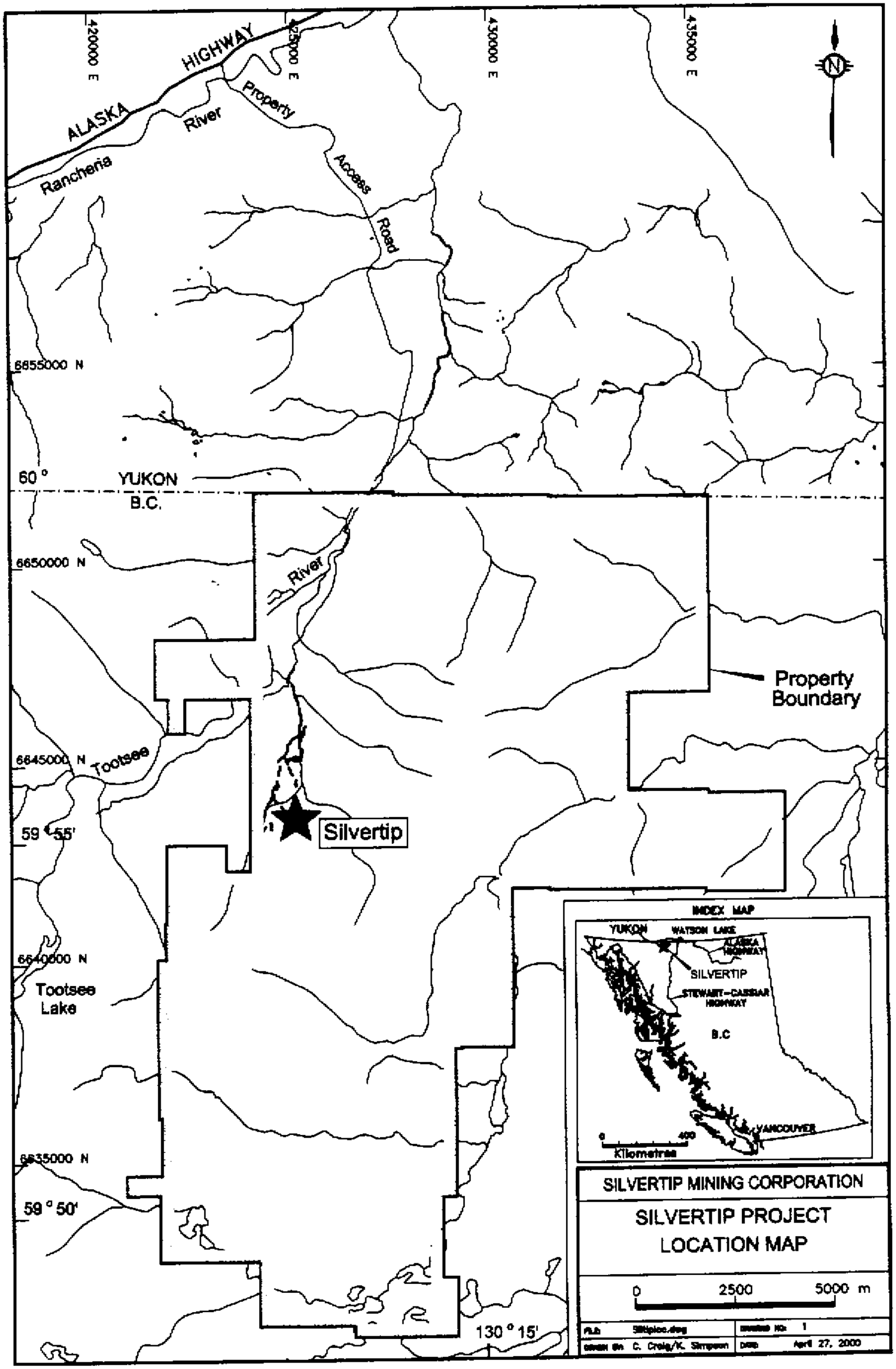

Fig. 1.1: Property location map

Table 1.1: List of claims on Silvertip property

TITLE NAME	TITLE #	UNITS	RECORD DATE	EXPIRY DATE	REQ'D EXP.
TOOTS 4	221837	20	July 6, 1979	October 15, 2010	4,000.00
RENEE 1	221908	12	November 2, 1979	October 15, 2010	2,400.00
BETH 1	222004	12	August 8, 1980	October 15, 2010	2,400.00
BETH 2	222005	20	August 8, 1980	October 15, 2010	4,000.00
BETH 3	222006	20	August 8, 1980	October 15, 2010	4,000.00
BETH 4	222007	18	August 8, 1980	October 15, 2010	3,600.00
WAY # 1	222040	20	October 20, 1980	October 15, 2010	4,000.00
WAY # 2	222041	20	October 20, 1980	October 15, 2010	4,000.00
WAY # 3	222042	20	October 20, 1980	October 15, 2010	4,000.00
WAY # 4	222043	20	October 20, 1980	October 15, 2010	4,000.00
WAY # 5	222044	20	October 20, 1980	October 15, 2010	4,000.00
BULL #1	222049	12	November 12, 1980	October 15, 2010	2,400.00
BULL #2	222050	20	November 12, 1980	October 15, 2010	4,000.00
POST 1	222051	4	November 12, 1980	October 15, 2010	800.00
CLIMAX # 2	222052	20	November 12, 1980	October 15, 2010	4,000.00
CLIMAX # 3	222053	20	November 12, 1980	October 15, 2010	4,000.00
CLIMAX # 1	222055	8	November 26, 1980	October 15, 2010	1,600.00
CLIMAX # 4	222056	20	November 26, 1980	October 15, 2010	4,000.00
CLIMAX # 5	222057	20	November 26, 1980	October 15, 2010	4,000.00
CLIMAX # 6	222058	15	November 26, 1980	October 15, 2010	3,000.00
CLIMAX # 7	222059	15	November 26, 1980	October 15, 2010	3,000.00
CLIMAX # 8	222060	15	November 26, 1980	October 15, 2010	3,000.00
CLIMAX # 9	222061	15	November 26, 1980	October 15, 2010	3,000.00
CLIMAX #10	222062	20	November 26, 1980	October 15, 2010	4,000.00
CLIMAX #11	222063	6	November 26, 1980	October 15, 2010	1,200.00
BULL #4 FR	222064	1	November 26, 1980	October 15, 2010	200.00
WAY # 6	222065	20	November 26, 1980	October 15, 2010	4,000.00
WAY # 7	222066	20	November 26, 1980	October 15, 2010	4,000.00
WAY # 8	222067	20	November 26, 1980	October 15, 2010	4,000.00
WAY # 9	222068	15	November 26, 1980	October 15, 2010	3,000.00
WAY #10	222069	20	November 26, 1980	October 15, 2010	4,000.00
WAY #11	222070	20	November 26, 1980	October 15, 2010	4,000.00
WAY #12	222071	15	November 26, 1980	October 15, 2010	3,000.00
WAY #16	222072	20	November 26, 1980	October 15, 2010	4,000.00
WAY #17	222073	20	November 26, 1980	October 15, 2010	4,000.00
WAY #18	222074	15	November 26, 1980	October 15, 2010	3,000.00
WAY #19	222075	20	November 26, 1980	October 15, 2010	4,000.00
WAY #20	222076	20	November 26, 1980	October 15, 2010	4,000.00
WAY #21	222077	20	November 26, 1980	October 15, 2010	4,000.00
WAY #22	222078	10	November 26, 1980	October 15, 2010	2,000.00
WAY #23	222079	18	November 26, 1980	October 15, 2010	3,600.00
BULL #5	222110	12	July 21, 1981	October 15, 2010	2,400.00
POST 2	222155	9	April 20, 1982	October 15, 2010	1,800.00
POST 3	222156	20	April 20, 1982	October 15, 2010	4,000.00
CLIMAX #12	222183	12	August 24, 1982	October 15, 2010	2,400.00
POST 11	222184	10	August 24, 1982	October 15, 2010	2,000.00
POST 12	222185	15	August 24, 1982	October 15, 2010	3,000.00
POST 13	222186	18	August 24, 1982	October 15, 2010	3,600.00
BULL 7	222187	18	August 24, 1982	October 15, 2010	3,600.00
CLIMAX #13	222233	1	October 20, 1982	October 15, 2010	200.00
CLIMAX #14 FR	222234	1	October 20, 1982	October 15, 2010	200.00
POST 14	222235	2	October 20, 1982	October 15, 2010	400.00
BULL 8	222244	15	January 18, 1983	October 15, 2010	3,000.00
BULL 10	222245	2	January 18, 1983	October 15, 2010	400.00
BULL 11 FR	222246	1	January 18, 1983	October 15, 2010	200.00
BULL 12 FR	222247	1	January 18, 1983	October 15, 2010	200.00
WAY 24 FR	222260	1	June 14, 1983	October 15, 2010	200.00
WAY 25 FR	222261	1	June 14, 1983	October 15, 2010	200.00

Table 1.1 (cont'd.): List of claims on Silvertip property

WAY 26 FR	222262	1	June 14, 1983	October 15, 2010	200.00
WAY 27 FR	222263	1	June 14, 1983	October 15, 2010	200.00
WAY 29 FR	222264	1	June 14, 1983	October 15, 2010	200.00
WAY 30 FR	222265	1	June 14, 1983	October 15, 2010	200.00
WAY 31 FR	222266	1	June 14, 1983	October 15, 2010	200.00
WAY 32 FR	222267	1	June 14, 1983	October 15, 2010	200.00
WAY 33 FR	222268	1	June 14, 1983	October 15, 2010	200.00
WAY 34 FR	222269	1	June 14, 1983	October 15, 2010	200.00
WAY 35 FR	222270	1	June 14, 1983	October 15, 2010	200.00
STAR 2 FR	222271	1	June 14, 1983	October 15, 2010	200.00
BULL 15 FR	222272	1	June 14, 1983	October 15, 2010	200.00
BULL 16	222273	2	June 14, 1983	October 15, 2010	400.00
BULL 17	222274	2	June 14, 1983	October 15, 2010	400.00
BULL 18	222275	2	June 14, 1983	October 15, 2010	400.00
BULL 19	222276	2	June 14, 1983	October 15, 2010	400.00
BULL 20	222277	2	June 14, 1983	October 15, 2010	400.00
BULL 21	222278	2	June 14, 1983	October 15, 2010	400.00
BULL 22	222279	2	June 14, 1983	October 15, 2010	400.00
BULL 23	222280	2	June 14, 1983	October 15, 2010	400.00
BULL 24 FR	222281	1	June 14, 1983	October 15, 2010	200.00
BULL 25 FR	222282	1	June 14, 1983	October 15, 2010	200.00
BULL 26 FR	222283	1	June 14, 1983	October 15, 2010	200.00
POST 4 FR	222284	1	June 20, 1983	October 15, 2010	200.00
POST 5 FR	222285	1	June 20, 1983	October 15, 2010	200.00
STAR 3	222299	4	July 6, 1983	October 15, 2010	800.00
POST 15	222332	20	September 19, 1983	October 15, 2010	4,000.00
BULL 27 FR	222333	1	September 19, 1983	October 15, 2010	200.00
POST 16	222336	2	October 3, 1983	October 15, 2010	400.00
CLIMAX #15 FR	222345	1	October 17, 1983	October 15, 2010	200.00
CLIMAX #16 FR	222346	1	October 17, 1983	October 15, 2010	200.00
BULL 28 FR	306683	1	October 14, 1986	October 15, 2010	200.00

million (Cdn) over 3 years. Upon completion, SMC can then earn back 20% (to 60%) by spending $2.0 million (Cdn) during the 18 months following Peruvian's earn-in. SMC remains the operator throughout the agreement. The 1999 summer program called for a minimum commitment of $450,000 to be spent on a detailed geophysical survey (CSAMT), followed by a limited diamond drilling program to test the best targets for chimney mineralization. As a result of the success of this work (reported in Silvertip Mining Corporation, 1999b), the existing underground workings were re-opened and de-watered in the fall of 1999 in preparation for a program of underground drilling. This drilling, which was conducted between January 4 and February 7, 2000, is the main subject of this report. Twenty-two holes were drilled, totalling 3,210 metres. Drill core assay samples numbered 480. The claims worked were Bull 16 and 23 (see Fig. 4.1).

In this report, the geology and mineralization of the Silvertip property is summarized in Chapter 2, as background and a framework for the interpretation of the drilling results, given in Chapter 4. The drill logs are in Appendix A and the assay results are in Appendix B.

1.5 PROPERTY HISTORY

The property history of Silvertip is summarized in Table 1.2, and a detailed account is in Silvertip Mining Corporation (1998, Appendix I). A brief outline and update follows.

Galena-rich float was discovered by prospectors on Silvertip Hill in 1955. In late 1956 and 1957, Conwest Exploration Company explored gossanous zones in the McDame Group limestone by drilling and surface and underground workings. Zones of galena and silver-rich values were found but most of the sulphides were thoroughly oxidized.

In 1958, drilling was continued by a joint venture between Noranda Mines Limited, Canex Aerial Exploration Limited and Bralorne Mines Limited. A number of other companies optioned the property between 1960 and 1966, conducting AFMAG and IP surveys over Silvertip Hill to identify drill targets. Other work included photo- and geological mapping, rock and soil sampling, and trenching and stripping. Some good anomalies were found, but follow-up drilling found only deeply oxidized mineralization with generally uneconomic silver grades.

Silverknife Mines Limited owned the Silvertip claims from 1966 until the claims lapsed in the early 1970s. During this time, four rotary holes were drilled (1966) to test IP anomalies, and two diamond drill holes were done on EM survey targets (1967). Two diamond drill holes tested geophysical anomalies in 1968. By this time, the idea that silver-lead mineralization was related to replacement of limestone at its contact with overlying 'shale' was the dominant exploration model for the Silvertip Hill area. However, results were still not encouraging due to various drilling problems, weak mineralization, or deep oxidation.

Very little work was done in the 1970s. The main phase of exploration began in 1980 when Cordilleran Engineering, on behalf of property owner Regional Resources Limited, were conducting regional reconnaissance in search of shale-hosted, lead-zinc sedex deposits. The property was then known as Midway. They found base metal anomalies in soils and stream sediments about 1500 metres northeast of Silvertip Hill, which led to the discovery of baritic and siliceous gossans of exhalite origin within the Earn Group. Regional mapping, soil and EM surveys followed in 1981, with six diamond drill holes around the exhalite showings. Four of these unexpectedly intersected massive sulphide below the base of the Earn Group, at the top of the McDame Group limestone, and by the end of 1982 the exploration focus had again shifted back to limestone-hosted replacement mineralization.

Table 1.2: Summary of Silvertip Property History

Year	Work	Amount/Type	Surface Drilling – Diamond Holes	Surface Drilling – Diamond Metres	Surface Drilling – Other Holes	Surface Drilling – Other Metres	Underground – Development	Underground – Diamond Drilling Holes	Underground – Diamond Drilling Metres	Mineral Resource Calculation – Size (mt)	Ag (g/t)	Pb (%)	Zn (%)	Au (g/t)
1955	Discovery Claim Staking							9						
1956	Claim Staking													
1957	Trenching Mapping Drilling						Upper adit 155 m Lower adit 393 m	6	204					
1958	Drilling							3	972					
1960	AFMAG													
1961/62	IP Survey Drilling	8.3 km	4	495										
1963	Geochemistry (THM) Mapping Photogeology Trenching Drilling Mercury Vapour Test	1650 samples 80 samples	1	51										
1966	Drilling	Rotary			4	684								
1967	Airborne EM Drilling		2	152						1.8	2778	50.3	1.22	
1968	Gravity Drilling		2	388										
1973	Claim Staking													
1980	Geochemistry Claim Staking													
1981	Drilling Geochemistry Line Cutting PEM, Gravity Trenches Claim Staking	 8000 samples 435 km 8.5 km, 8 9 km 19	6	857										
1982	Drilling Geochemistry Geophysics		15	5,283						3.6	452	6.7	12.5	
1983	Drilling Petrography, Mineralogy, Metallurgy		32	11,733						4.7	350	5.1	12.3	
1984/85	Drilling Geophysics Development		50	10,981			Main adit 1,453 m	170	12,383	5.4	390	6.4	12.3	0.54
1986	Drilling PEM Downhole PEM Magnetometer Geochemistry	RC 74.8 km 2,340 m 182.7 km 166.2 km	14	2,660	9	984 Drilling				1.19	410	7	9.6	
1989	Explor. Development						765 m							
1990	Drilling							68	9620	1.74	352	6.4	10	
1997	Drilling Seismic Mapping	7 km, 12 lines	63	8594	4	844				2.57	325	6.4	8.8	0.63
1998	ARD Geochemistry CSAMT Geophysics Geotechnical Drilling Environmental	3.8 km, 5 lines			4	92 35								
1999	CSAMT Geophysics Drilling	5.35 km, 10 lines	3	1,285										
2000	Drilling							22	3210					

An aggressive surface drill program was conducted between 1982 and 1984, along with geophysics and petrographic and metallurgical research. Two main, blind areas of mineralization were outlined, Silver Creek and Discovery, and a manto-type deposit model was formulated. Encouraged by the apparent size of the mineralized area and the good grade and thickness of sulphides, the company began underground exploration development in the Silver Creek area (1984), followed by 12,383 metres of underground drilling over 170 holes, in fans spaced 20 metres apart. The results showed that the mineralization was more erratic and discontinuous than had been modelled from the widely spaced surface drill pattern, leading to a reduced estimate of the size of the resource.

A new underground development initiative was carried out between 1989 and 1991 by operator Strathcona Mineral Services, with the opening of a decline to the east towards the Discovery area, and completion of 9,620 metres of underground drilling.

In 1996, Imperial Metals Corporation of Vancouver acquired Regional Resources and renamed the company Silvertip Mining Corporation (SMC). A large exploration program in 1997 comprising diamond drilling, seismic surveying, and surface geological mapping resulted in the discovery of a new zone, the Silver Creek Extension. This added significantly to the total geological resource, which was subsequently recalculated (see Silvertip Mining Corporation, 1998) at 2.57 million tonnes grading 325 g/t Ag, 6.4% Pb, 8.8% Zn and 0.63 g/t Au. In 1998, SMC entered the Environmental Assessment review process with the provincial government for project certification. That year, various environmental baseline studies were done and monitoring procedures instigated, along with a reconnaissance CSAMT survey. This survey revealed a large, vertically oriented low-resistivity anomaly between the Silver Creek South area and the Camp Creek fault, suspected of indicating a sulphide chimney.

A more detailed, follow-up CSAMT survey was done in 1999, and the best geophysical targets were drilled. One hole (99-65) intersected thick, feeder-style mineralization. The existing underground workings were re-opened and de-watered in the fall of 1999. This was followed by 3,210 metres of underground diamond drilling in January-February, 2000, centred around hole 99-65 (this report).

1.6 ACKNOWLEDGEMENTS

The drilling program was supervised by Steve Robertson (project manager), and implemented with the assistance of geologists Chris Rees, Chris Akelaitis and Linda Lewis. Drill core was logged by CA, LL and CR. Pat McAndless (Vice President, Exploration, IMC) and Clay Craig (geological engineer, IMC) helped to design the drill plan with SR and CR, and continue to contribute support and interpretive insights. David Henstridge (President, Peruvian Gold Limited) and John Nebocat (Peruvian Gold Limited) are thanked for their constructive input with respect to program planning and direction.

2.0 GEOLOGY

The regional and property geology pertaining to the Silvertip project was given in some detail in the 1997 summary report (Silvertip Mining Corporation, 1998). Other good sources of information are Cordilleran Engineering (1985), Curtis (1986), and Bradford (1988). This chapter is a summary, taken from the 1998 project report (Silvertip Mining Corporation, 1999a), with minor modifications.

2.1 REGIONAL GEOLOGY

The Silvertip property is situated in the northern Omineca Belt of the Canadian Cordillera (Fig. 2.1). The most important element of this region is the Cassiar terrane, composed of Upper Proterozoic through Middle Devonian carbonate and clastic sedimentary rocks formed on a marine platform on the ancient continental margin of western North America (Cassiar Platform), and overlying Devono-Mississippian rift-related clastics (Earn Assemblage). Structurally overlying the Cassiar terrane is a tectonic assemblage of marginal basin and island arc sediments and igneous rocks of the Upper Paleozoic Sylvester allochthon (Fig. 2.2).

The region was moderately deformed by folding and thrust faulting in the Jurassic, and later by extensional and dextral transcurrent faulting in the Late Cretaceous to early Tertiary (Fig. 2.3). The Cassiar Batholith, a large, granite to granodiorite intrusion of mid-Cretaceous age, lies west of the property. Small intrusions and related hydrothermal alteration of possibly Late Cretaceous age are minor but important features of the region.

The main mineral deposits are syngenetic barite +/- lead, zinc prospects in Paleozoic sediments, and skarn and replacement deposits related to Cretaceous intrusive and hydrothermal activity. An account of mineralization in the Rancheria district, including the Silvertip area, is given by Abbott (1983).

The principal sources of regional geology data are Gabrielse (1963), Nelson and Bradford (1993), and Nelson and Bradford's (1987) open file map of the Tootsee Lake area, from which Fig. 2.3 is adapted. The regional stratigraphy is shown in the stratigraphic column in Fig. 2.4.

2.2 PROPERTY GEOLOGY

2.2.1 Stratigraphy

The geology of part of the Silvertip property around where the work was done is shown in Fig. 2.5, and the stratigraphic column in Fig. 2.6. Essentially, the area comprises easterly to southeasterly dipping Tapioca sandstone and McDame Group, overlain by the Earn Group. All

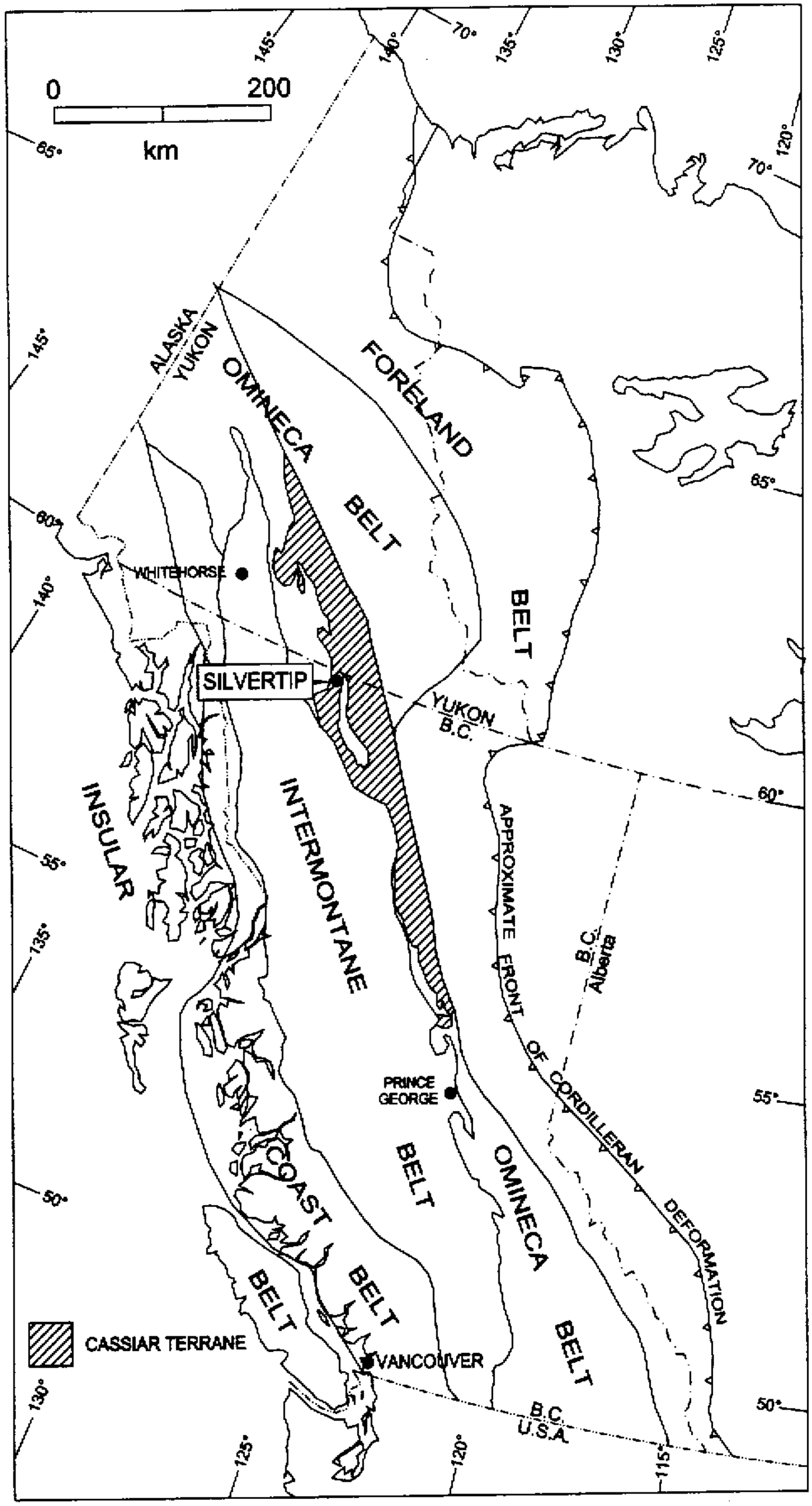

Fig. 2.1: Location of Silvertip with respect to Cassiar terrane and morphogeological belts of the Canadian Cordillera.

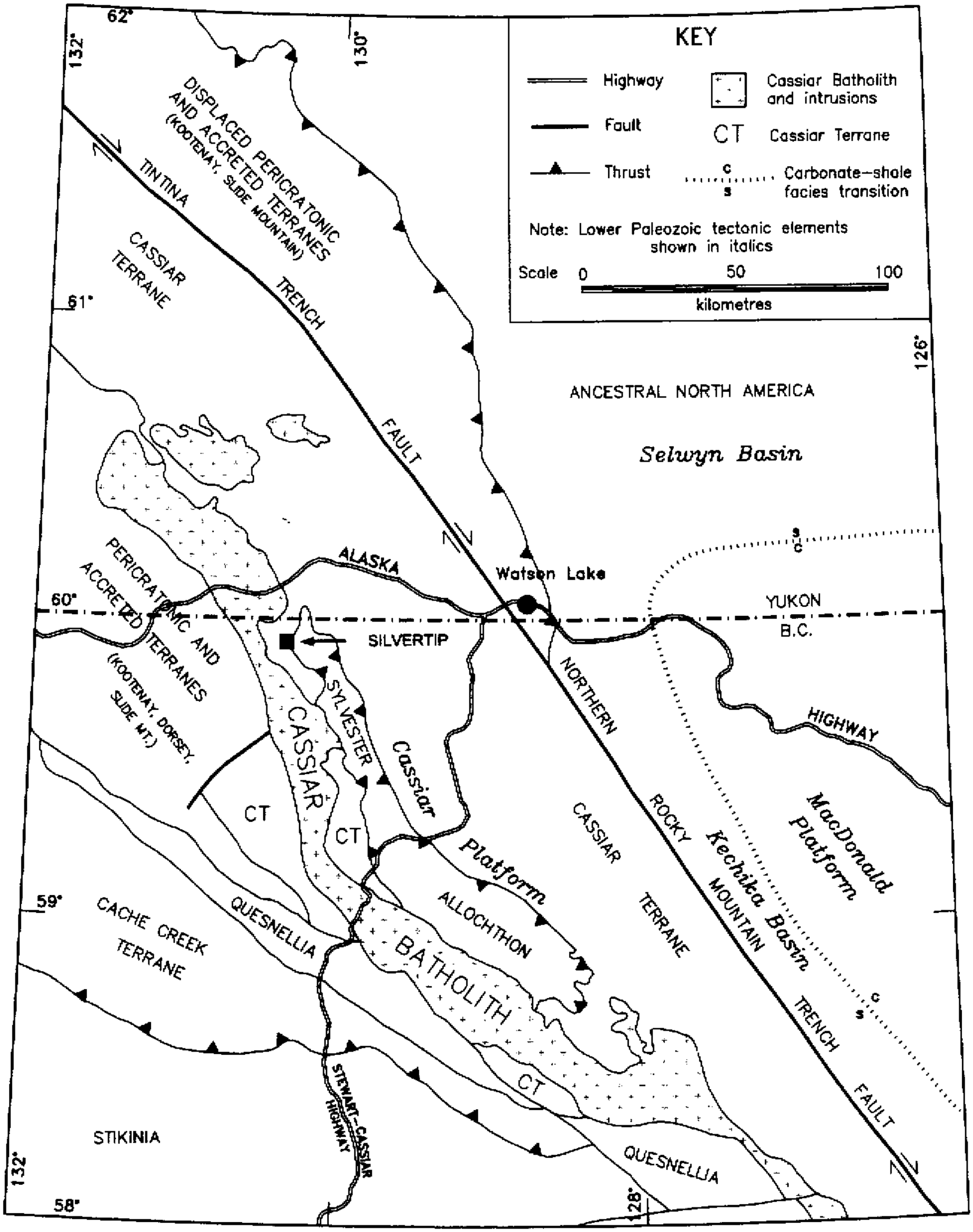

Fig. 2.2: Main tectonic elements of northern British Columbia and southern Yukon showing regional setting of Silvertip.

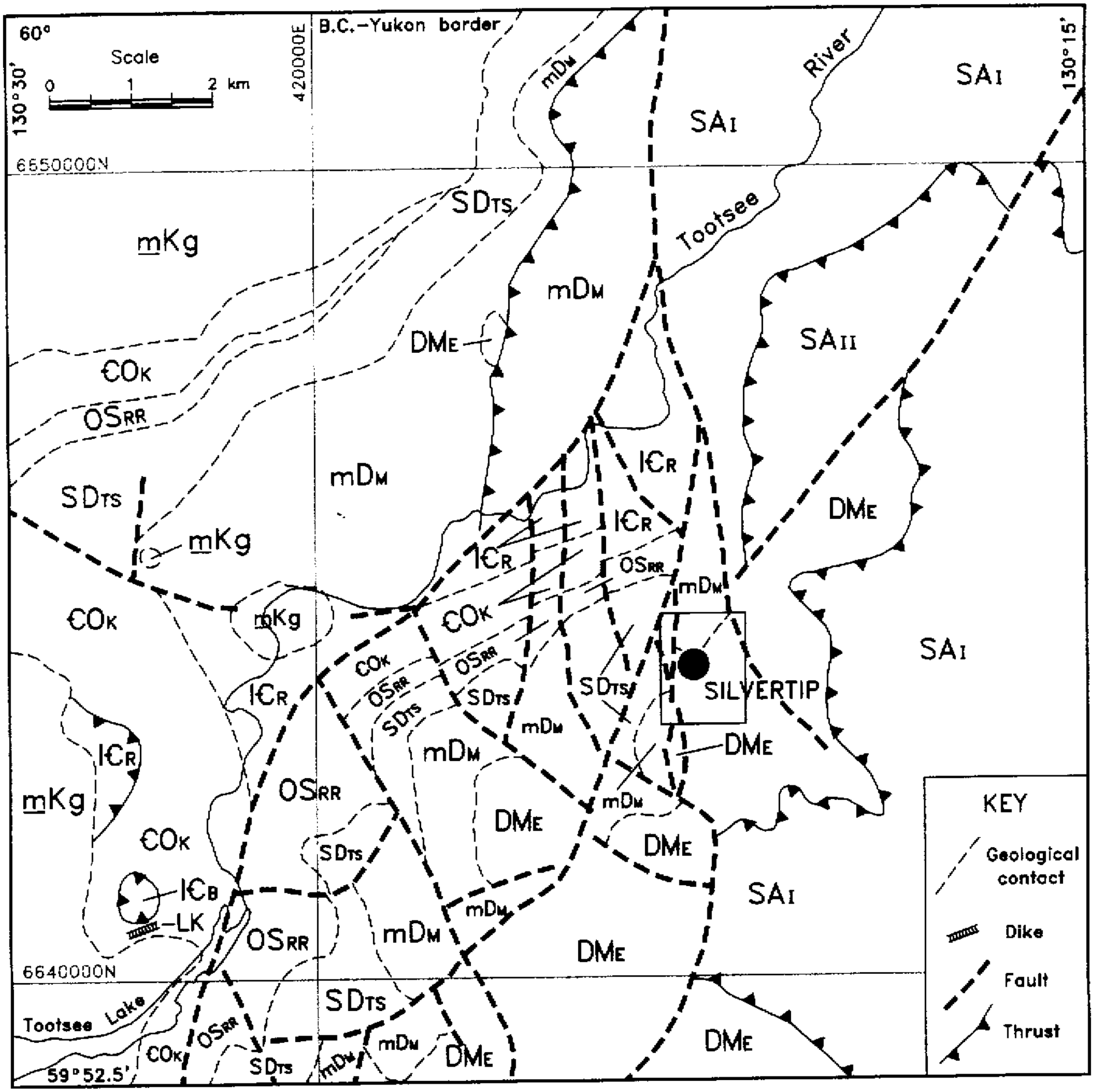

Fig. 2.3: Regional geological setting, showing location of Silvertip with respect to stratigraphic units of the Cassiar Platform, the eastern margin of the Cassiar Batholith, and the western margin of the Sylvester allochthon. Adapted from Nelson and Bradford (1987). Geology differs slightly from that in Fig. 2.5 (outlined). Array of faults are part of Tootsee River fault system. For Legend, see Fig. 2.4.

Intrusive Rocks	Late Cretaceous		LK	felsic dikes
Intrusive Rocks	mid-Cretaceous	CASSIAR BATHOLITH	mKg	granite, granodiorite
	Lower Mississippian to Upper Permian and Upper Triassic	SYLVESTER ALLOCHTHON	SAII	Division II: basalt, gabbro, serpentinite, chert
			SAI	Division I: argillite, chert, slate, greenstone
	Upper Devonian to Lower Mississippian	EARN GROUP	DME	sandstone, conglomerate siltstone, shale carbonaceous argillite
	Middle (to Upper?) Devonian	McDAME GROUP	mDM	fossiliferous limestone, dolostone
	Silurian to Lower Devonian	TAPIOCA SANDSTONE (informal)	SDTS	dolostone, quartzite dolomitic siltstone, sandstone
	Ordovician to Silurian	*ROAD RIVER GROUP*	OSRR	carbonaceous, partly calcareous slate, siltstone, black limestone
	Middle? or Upper Cambrian to Lower Ordovician	KECHIKA GROUP	€OK	argillaceous limestone, calcareous slate, siltstone
	Lower Cambrian	ATAN GROUP: Rosella Formation	l€R	limestone, dolomitized limestone Archeocyathid-bearing
		ATAN GROUP: Boya Formation	l€B	Quartzite, argillite

Fig. 2.4: Regional geology stratigraphic column.

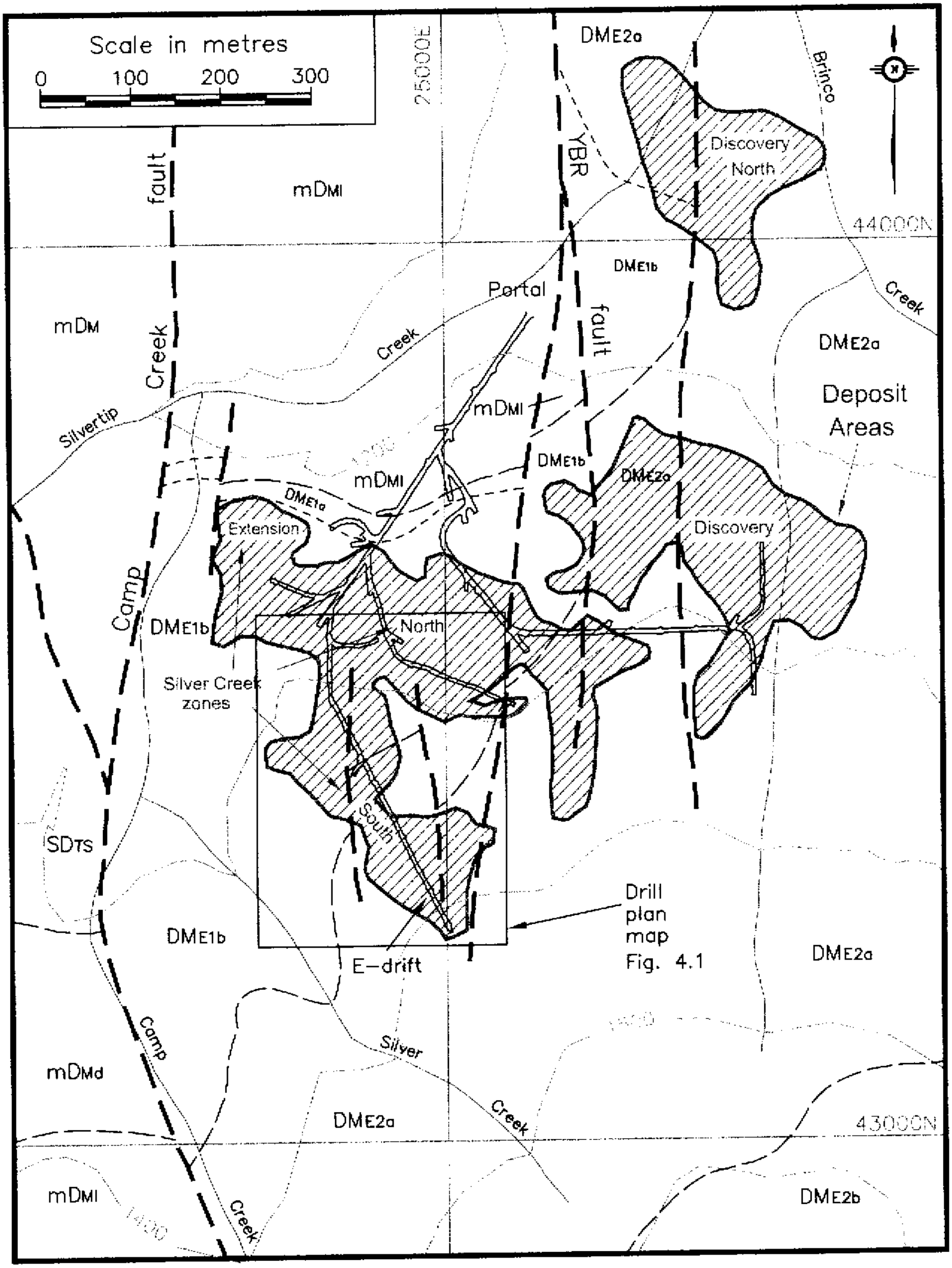

Fig. 2.5: Geological map of the main Silvertip deposit showing the areas of mineralization, and plan of the underground workings. For regional location of map, see Fig. 2.3. Drilling was done from southern part of E-drift (see Fig. 4.1 for details).

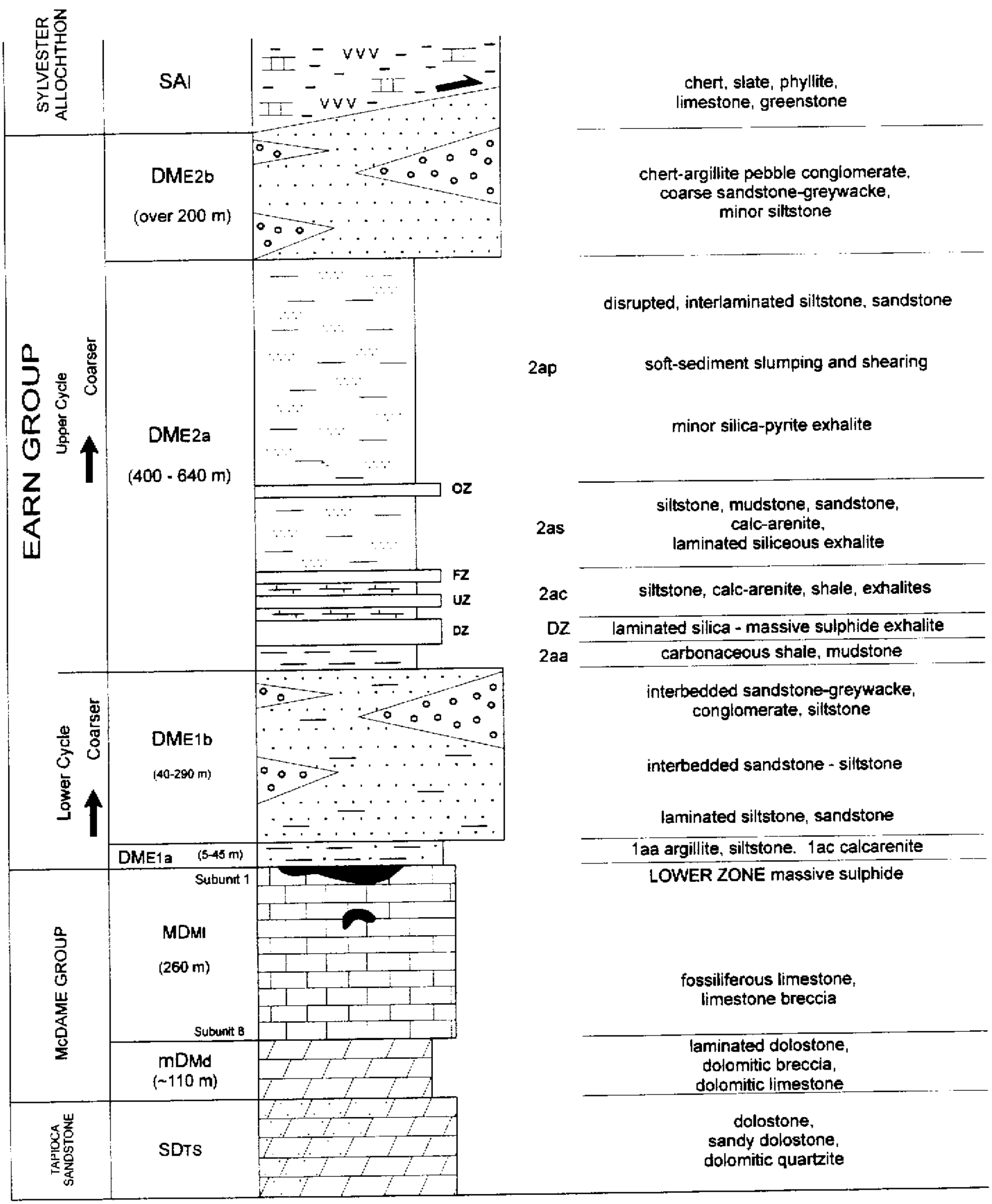

Fig. 2.6: Stratigraphic column of the Silvertip area.

these rocks are deformed by generally north-trending faults related to the Tootsee River fault system (Nelson and Bradford, 1993), the most important of which is the Camp Creek fault.

Tapioca Sandstone

This is an informal unit, partly equivalent to the (formal) Sandpile Group. The Tapioca is Silurian to Lower Devonian in age, and roughly 475 metres thick. It consists of pale buff-grey dolomitic sandstone to quartzite, silty dolostone and dolostone. The characteristic texture is well-rounded sand grains in a dolomitic cement. Good cross-bedding is present locally.

McDame Group

This carbonate unit hosts the massive sulphide mineralization at Silvertip. It consists of a lower dolomitic unit, about 100 metres thick, and an upper limestone unit up to 260 metres thick. The McDame is Middle Devonian, but may extend into the Upper Devonian.

The lower dolomitic unit consists of pale to dark buff-grey or blue-grey, very fine grained dolostone and silty dolostone, grading upwards into dolomitic limestone. The rocks are fairly well bedded, and locally have fine cryptalgal laminations. In contrast to the overlying limestone unit, this unit has a uniform, non-bioclastic texture. It is distinguished from the underlying Tapioca sandstone by the absence of sand grains or siliceous component, and by its colour and less blocky weathering.

The main, upper part of the McDame Group is composed of distinctive bioclastic limestone, noted for its rich fauna of stromatoporoids, corals and brachiopods. The limestone is pale to dark bluish-grey, and fine to medium grained with a crystalline texture. It is moderately to thickly bedded (up to 1 or 2 metres). Parts of the limestone have been hydrothermally altered to a buff-grey, medium-grained dolostone, or to a pink or white, crystalline 'marble'.

The stromatoporoid Amphipora is characteristic of the limestone, as are several forms of massive stromatoporoids. The stratigraphic distribution of these fossils and of solitary and colonial corals and thick- and thin-shelled brachiopods has been used to construct a detailed biostratigraphy of the McDame, resulting in its subdivision into 8 subunits (cf. Fig. 2.5). This scheme is the principal tool used in drill core logging and the subsurface reconstruction of the McDame, although the bioclastic facies are generally not recognizable in surface outcrops because of weathering.

Brecciation is another important feature of the McDame limestone, again most conspicuous in drill core. Some of these are primary depositional breccias related to karst erosion (see below), and others were formed much later by solution collapse processes due to hydrothermal activity accompanying mineralization.

Earn Group

In the Late Devonian, the carbonate platform emerged above sea level for a time, and the McDame limestone was karst eroded. This episode ended with crustal extension, re-submergence, and the deposition of the succeeding Earn Group siliciclastics in the Late Devonian through Early Mississippian. The basal Earn was deposited disconformably on the McDame with little or no angular discordance, but stratigraphic relief due to dissection at the unconformity is up to 165 metres. The top of the Earn is not preserved; the known thickness in the area ranges between 600 and 1000 metres.

The Earn comprises two coarsening-upward cycles (1 and 2) of distal to proximal turbiditic siliciclastics. In each sequence, the lower part is characterized by carbonaceous, siltstone-mudstone and lesser sandstone or greywacke (1A and 2A), and the coarser, upper part by sandstone-greywacke and chert-pebble conglomerate (1B and 2B). The rocks were deposited as intertonguing turbidite fans in extensional basins or half-grabens with restricted circulation.

Unit 1A

The basal Earn Group consists of very carbonaceous mudstone to siltstone (1AA), deposited directly on top of the McDame limestone, or in cavities at some depth below the unconformity, due to the muddy sediment infiltrating the karst features. These inclusions of Earn in the McDame are termed 'enclaves'. The rocks are fine grained and finely laminated, and indicate low energy deposition under euxinic conditions. Syngenetic or diagenetic pyrite is present, generally less than 2%. The bottom few metres of 1A are commonly calcareous (1AC). Total thickness is up to 45 metres.

Unit 1B

The upper, coarser part of the lower cycle begins with interlaminated siltstone and sandstone, which becomes predominantly medium- to thickly bedded sandstone up-section. The sandstone is grey, medium- to coarse-grained greywacke, characterized by chert-rich detritus. Sandstone beds are generally centimetres to decimetres thick, separated by beds of siltstone or interlaminated sandstone-siltstone. These lithologies may be somewhat calcareous in places. Pyrite, mainly syngenetic or diagenetic, typically varies between 1 and 3 %, and is more prominent in the more argillaceous beds or laminae than in the sandstones. Graded beds of chert-argillite pebble conglomerate are common; they may be two metres thick in the upper part of the unit.

The higher energy conditions implied by unit 1B suggest increasingly active, fault-controlled block uplifts and erosion in the basin. This mode of formation probably contributes to the wide variation in the thickness of unit 1B, which ranges from as little as 60 metres to 200 to 300 metres.

Unit 2A

This is the lower, finer grained part of the upper cycle, and is the thickest and most inhomogeneous unit in the Earn Group. It is between 200 and 640 metres thick. Subunit 2AA at the base is recessive, dark grey to black carbonaceous mudstone to siltstone. Above it is the lowest and generally thickest and most important of the several exhalite subunits that are diagnostic of Unit 2A: the D-zone exhalite. It consists of pale grey to buff, fine-grained, siliceous and pyritic, laminated exhalite. Above the D-zone is 2AC, a calcareous interval comprising interlaminated siltstone, calc-arenite and locally impure limestone; it is 5 to 80 metres thick. This is followed by a more siliceous subunit up to 100 metres thick, 2AS, consisting of thinly laminated siliceous siltstone, slate and fine sandstone. In addition to the D-zone, several other minor exhalites occur within subunits 2AC and 2AS. They are typically no more than a few metres thick, and some are probably not very laterally continuous. It is not clear if they occur consistently at the same stratigraphic horizons from place to place.

The thickest (up to 450 metres) and most characteristic subunit of unit 2A is 2AP, which is composed of thinly to thickly interbedded and finely laminated slaty siltstone and fine- to medium-grained sandstone. The main feature of 2AP is the disrupted structure of the sandstone laminae which have been broken into discrete, sheared and rotated lenses millimetres to centimetres in size, due to slumping and soft-sediment deformation of a semi-consolidated turbidite sequence.

Unit 2B

The highest unit of the Earn is 2B, which is marked by the abrupt appearance of coarse, chert- and argillite pebble conglomerates above subunit 2AP. It represents the upper coarse-grained component of the second cycle. These polymictic conglomerates are thickly bedded, and commonly contain subunits of very well bedded greywacke-sandstone. They are typically matrix supported, and the clasts are rounded to subrounded. Unit 2B is at least 200 metres thick. It is quite similar to unit 1B, but is distinguished by its coarser components, thicker bedding, and a lower amount of siltstone.

2.2.2 Structure

The basic structure of the Silvertip area is not complicated. Like the rest of the immediate region, it is dominated by faulting rather than folding. Strata generally strike north to northeast and dip gently to moderately east to southeast. There are no fold closures affecting the local map pattern, which is characterized by a general younging of units eastwards, broken up by faults.

The main regional ductile deformation resulted from crustal shortening in the Jurassic, when the Sylvester allochthon was tectonically emplaced onto the Cassiar stratigraphy and all units were subjected to folding, thrusting and foliation development, accompanied by very low grade metamorphism. The main foliation is generally parallel to bedding. A prominent extension lineation, trending north-northwest, is represented by elongated clasts in the Earn conglomerates, and is kinematically related to the foliation. A north-northwest-striking, moderately dipping crenulation of this foliation is discernible in argillaceous laminae and locally on foliation surfaces. Drilling and mapping in the main Silvertip deposit area indicates that no significant folds are present here, but minor thrusts do occur and larger thrusts have been mapped farther west towards the Cassiar Batholith and elsewhere in the Cassiar terrane.

Faults related to the Tootsee River fault system are Late Cretaceous through early Tertiary in age. The faults are mainly extensional with dominantly dip slip to oblique slip, east-side-down displacement. They strike predominantly north, ranging between northwest and northeast, and dip steeply. The most important fault in the deposit area is the Camp Creek fault, which in cross-section has a vertical separation in the order of several hundred metres, down to the east. Several other faults with the same general geometry are known in the area from drill hole information and surface mapping, but have much smaller, down-to-the-east displacements, in the range of metres to tens of metres.

The main area of mineralization is known in more detail because of the large amount of drilling. Here, reconstruction of the unconformity surface between the Earn and McDame groups shows that it dips gently to the south, but appears to undulate around gently southeast-plunging axes. It is not clear how much of this undulation is due to buckling and how much is the effect of block faulting or even pre-Earn dissection of the McDame.

2.2.3 Mineralization and Alteration

The Silvertip mineralization consists of silver-lead-zinc massive sulphide, formed by hydrothermal replacement processes in McDame Group limestone. In Silvertip terminology it is known as "Lower Zone" (Fig. 2.6). The main mineralized zones are not exposed, lying between about 50 and several hundred metres beneath the surface, and covered by the Earn Group. These zones are mainly north of Silvertip Mountain and east of Camp Creek (Fig. 2.5). The 'Silver Creek' area is in the west and northwest; the 'Discovery' area lies farther east and at greater depth. To the north, the 'Discovery North' area has received relatively little attention to date, but is likely continuous with the other zones.

(Another type of lead-zinc sulphide mineralization is present on the property, namely Early Mississippian syngenetic 'sedex' deposits associated with siliceous to baritic exhalite subunits in unit 2A of the Earn Group (see section 2.2.1, above). These were the original exploration target on the property in 1980, but they are not considered economic, although they are of interest because they contain a sulphide overprint that may be related to the much younger hydrothermal event that mineralized the McDame carbonates structurally below.)

The main sulphide deposits formed by the interaction of hot, magmatically derived, metal-enriched hydrothermal fluids with McDame carbonate rocks. The source of the fluids has not been found, but an area of quartz-sericite-pyrite alteration on the surface south and southeast of Silvertip Mountain might indicate a buried intrusion below. This alteration has a fluorine signature, and has been dated at around 70 Ma (Late Cretaceous), the same age as felsic intrusions exposed elsewhere in the region. On this basis, the mineralization event is assumed to be Late Cretaceous, although it may be slightly older.

Most of the mineralization so far defined occurs at the top of the McDame limestone, at or near the unconformable contact with the Earn Group, although significant sulphides are also present much deeper in the McDame. The massive sulphides are in the form of gently plunging tubes, or mantos, up to about 20 metres thick and 30 metres wide, and in places extend for at least 200 metres. Narrower and thicker bodies of massive sulphide, between 20 and 30 metres thick, have been intersected locally by past drilling, and are probably discordant, vertically oriented (minor) chimneys connecting mantos at different levels. Sulphide intersections deeper in the McDame are much less well defined; most are probably also mantos, but some might be parts of structurally hosted chimneys (no scale implied) or connections between stacked mantos.

Contacts between the massive sulphides and the host limestone can be remarkably sharp, but transitional zones of alteration (silicification, dolomitization), and recrystallization and brecciation are common. (Not all the dolomitization is related to the mineralization event – some is much older.) The mineralization consists of early-formed pyrite, pyrrhotite and sphalerite and lesser galena, and a slightly younger, higher temperature, sulphosalt-sulphide suite of minerals. The latter contain the main silver-bearing phases including pyrargyrite-proustite, boulangerite-jamesonite and tetrahedrite (freibergite), as well as silver-rich galena. Quartz and calcite are the main gangue minerals and locally fill late-stage vugs and cavities. Brecciation of sulphides, mixed with limestone and vein quartz and calcite, attest to multiple phases of fluid infusion and intra-mineral, solution collapse processes. Unmineralized, crackle- or rubble brecciated limestone is common, as are tectonic stylolites. Some rubble and matrix breccias are of Late Devonian paleokarst origin, although they too may be infiltrated by sulphide replacement, as they represent suitable 'ground preparation'. Paleokarst is probably only an indirect controlling factor with respect to mineralization, however.

The main control on the mineralization in the deposit area is the Earn unconformity which formed a relatively impermeable cap to the upwelling fluids, concentrating the development of mantos at or near the top of the McDame. The Silvertip mantos are believed to have been fed from depth, at some point in the system, by structurally controlled chimney feeders. These feeders were possibly channelled in faults such as the Camp Creek fault and numerous subsidiary fractures, or along other faults such as those in the Discovery area where the unconformity steps down to the east. Many intra-limestone mantos, which occur 100 metres or more vertically below the unconformity, probably formed by lateral fluid flow branching off from the feeders, and were controlled by a combination of structural and stratigraphic permeability contrasts. The main zone of chimney development, if it exists, has not yet been discovered, and is believed to occur closer to the thermal source of the system.

3.0 PHYSICAL WORK

Introduction

Several kinds of physical work had to be carried out in order to implement the underground drilling program. This consisted of the dewatering and rehabilitation (where necessary) of those parts of the workings required for access, i.e. the main decline (or A-drift) and E-drift, a distance of 785 metres. All drilling was done from E-drift. All the side drifts drained by gravity (except sumps), and no work was done in them.

The on-site work was initiated on October 19, 1999, and is summarized as follows.

Dewatering

First, the surface water-treatment (lime) plant was set up for the neutralization of the first water emitted from the drainage of the mine. Once the water pressure behind the 0.5-metre thick concrete dam at the portal was reduced, the dam was breached at the top to allow a small pump to be placed behind it, which pumped the retained water to the surface lime plant.

After the water level had dropped to the sill, the rest of the concrete dam was blasted away, exposing the main decline. Thereafter, the main dewatering was done by a larger pump mounted on a floating raft which descended down the decline as the water level receded. Once the middle, inclined section of the main drift was drained, the raft and pump were physically moved up to the final decline section (the lower part of E-drift), where dewatering resumed. The actual dewatering took 19 days in total (October 29 through November 16).

The pump remained at the bottom of E-drift until the end of the drilling in order to pump out mine recharge and drilling run-off.

The recharge water drained into a section of the workings, the Discovery decline, which was not dewatered. A small underground lime plant was set up at the entrance of the Discovery decline to treat this water. It was removed at the end of the program.

Infrastructure

During and following dewatering, new pipe was installed where necessary, along with vent tubing and electrical cable. The vent tubing and cable were removed at the conclusion of the program.

A mine air heater was installed, which was also removed eventually.

Rehabilitation

Most of E-drift is in Earn Group rocks, which here comprise thinly interbedded carbonaceous argillite, siltstone and greywacke. These rocks, particularly immediately above the limestone or mineralization, are friable and incompetent, and required considerable ground support when the development was done in 1984. Due to the deterioration of this support in the interim, the rock bolts, straps and screen were replaced in order to make the ground secure for the drill crews. In addition, timbering was necessary along the most unstable portions, immediately above the Earn-McDame unconformity. None of the development in the limestone needed remedial ground support in this program.

The rehabilitation work, done by contract miners, proceeded with the removal of the most degraded straps and screen, followed by the application of new rock bolts, straps and screen all along E-drift from the unconformity down to the last planned drill station. The bolts were drilled on a 4-foot (1.3 m) pattern, and the straps were applied every 6 feet (1.8 m).

Generally, ground conditions improved down the drift (*ca.* southwards), as the drift cuts through higher, more competent Earn stratigraphy (the Earn dips more steeply than the drift).

4.0 DIAMOND DRILLING

4.1 BACKGROUND AND OBJECTIVES

In the previous program in the summer of 1999 (see Silvertip Mining Corporation, 1999b), a detailed CSAMT survey was done over the Silver Creek South area of the Silvertip deposit. The best low-resistivity targets were subsequently drilled. One of the holes, SSD-99-65, intersected *the largest aggregate thickness of mineralization ever encountered on the property*, namely 31.4 metres grading 318.4 g/t Ag, 5.52% Pb and 8.65% Zn. The nature of this mineralization also implied a complex paragenesis involving several phases of fluid infusion, intra-mineralization solution and brecciation. These are strong indicators of feeder activity, and were considered adequate to justify another drill program to test the extension of this zone (this report).

On this basis, the existing underground workings were re-opened in the fall of 1999, and de-watered and rehabilitated (see Chapter 3) in order to conduct a program of underground drilling.

The main objective was to determine the size and orientation of the 99-65 zone by drilling fans of inclined holes around it from the nearest part of the underground workings. In addition, several holes were planned to test extensions of other, previously drilled mineralized zones. Part of the objective of the program was to test as much of the vertical depth of the McDame limestone as was feasible in each situation, rather than concentrate on the Earn-McDame unconformity.

The program budget called for the drilling of between 3000 and 3500 metres. The actual drilling totalled 3,210 metres, over 22 holes.

The drill core logs and assay results are given in Appendix A and B, respectively.

4.2 DRILL PLAN

Drill access and pattern

All drilling was done from the southern part of E-drift, near the southern limit and deepest part of the underground development. This is entirely in Earn Group clastics, but is only about 50 metres above the McDame Group unconformity. This represents a considerable saving in terms of minimizing the cost and difficulty of drilling through the Earn Group, compared to what is necessitated by drilling this area from surface.

A map showing the 22 drill holes in the program is given in Fig. 4.1. The full identity of each drill hole is SUD-00-XX (Silvertip/Underground/Diamond-year-number), although only the hole number is indicated. The principal target, i.e. around hole (SSD-) 99-65, is also shown in the figure. Most of the drilling (19 holes) was done in four parallel fans below and west of the drift, oriented along azimuth 250° (or in one case, 070°). From the north, the fans are named 65-N,

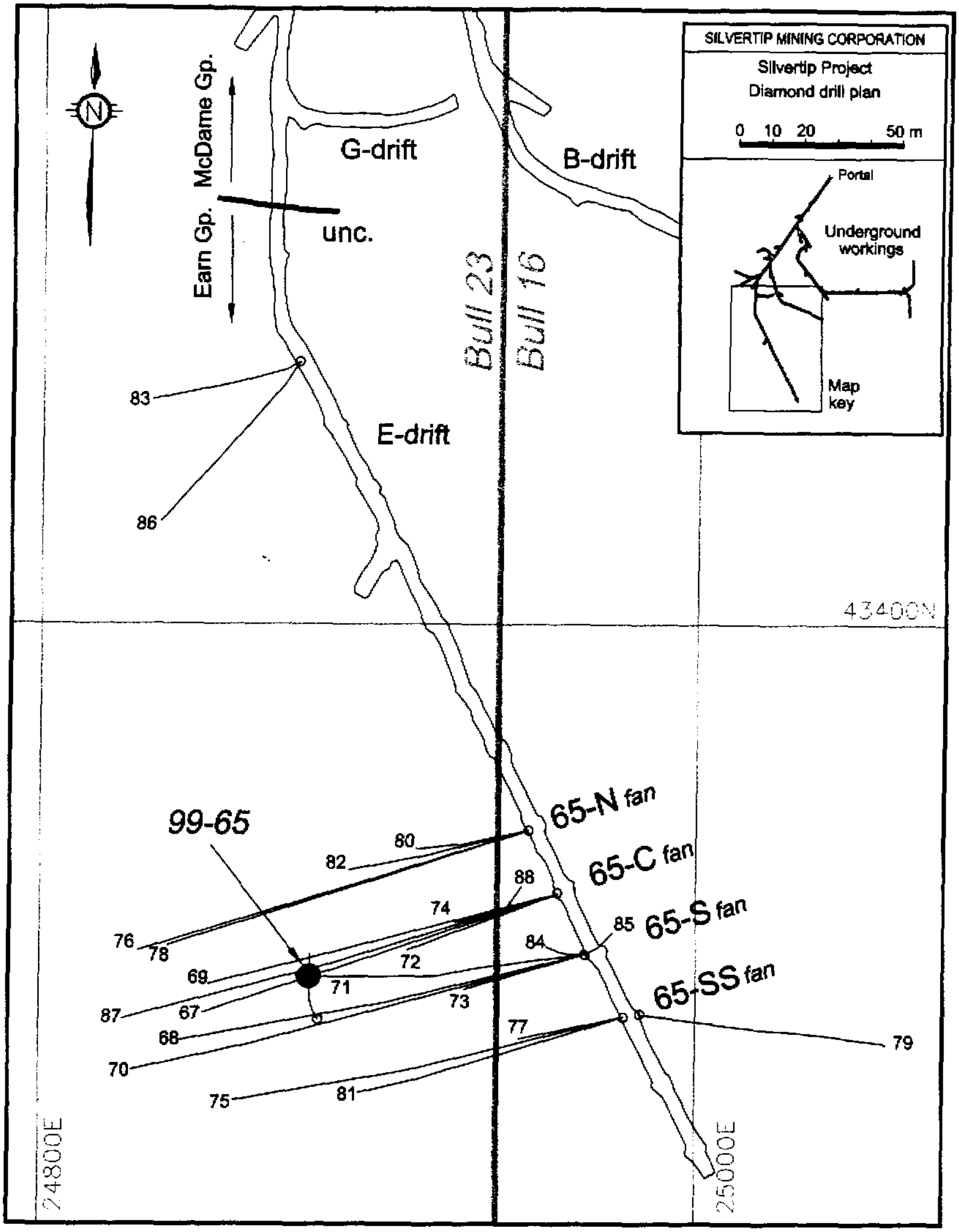

Fig. 4.1: Plan map of 2000 drill holes (00-67 through 00-88), the target hole 99-65, and underground access. Claims worked (Bull 16, 23) are also shown. See Table 4.1 for drill hole attributes. See Fig. 2.5 for geological setting.

65-C, 65-S and 65-SS. Fan 65-C contains the target zone of hole 99-65. The fans are spaced 20 metres apart. The spacing and inclinations of the holes were deemed appropriate to track the known mineralization. Details of the collar coordinates (see next section on collar location), inclination and length of holes etc. are given in Table 4.1.

The only significant change to the drill plan that emerged during the program was the decision to add an extra fan, 65-SS, due to the encouraging results from fan 65-S. To compensate for this extra drilling, some long, exploratory holes under Silvertip Mountain from the end of E-drift were eliminated from the original plan.

Three other holes were drilled, not related to the 99-65 target. Hole SUD-00-79 was drilled through an area east of E-drift known to contain sporadic but locally strong and thick, intra-limestone mineralization, the characteristics of which also indicate feeder activity. This area has been drilled quite heavily by previous operators; hole 79 targeted the ground about 30 metres to the east of the past drilling and somewhat deeper. The other two holes, SUD-00-83 and 86, were drilled in a gap within past drilling in order to test the possible extension of thick, high grade mineralization in holes 84-77, 85-254 and 85-236.

4.3 IMPLEMENTATION – DRILLING AND LOGGING PROCEDURES

Drilling

Advanced Drilling Ltd. of Surrey, B.C. was contracted to complete the drilling, which was done between January 6 and February 7, 2000. Two electrically powered, ADL 150 Superdrills were used, one tractor-mounted and one skid-mounted. Each drill was worked by day and night crews. Core diameter was HQ (2.5 inches) throughout, as HQ provides for better sampling and core conservation. Bentonite mud and polymer were used to maintain the integrity of the hole.

Ground conditions encountered were similar to past experience. Loss of circulation in the limestone occurred, but did not hinder the drilling performance nor production. Recovery was very good other than in a few isolated intervals.

Drill hole location and surveying

All drilling was done from existing cut-outs in E-drift. None of the drill collars were surveyed in, either before or after drilling. Before drilling, they were tied in from old survey hubs using a transit and EDM. As such, the coordinates given in Table 4.1 should not be presumed to be exact.

Downhole surveys were done using a 'Reflex EZ-Shot' instrument provided by Reflex Instrument Canada. The instrument measured magnetic azimuth (subsequently corrected to grid north), inclination, temperature and total magnetic field. Readings were taken at approximately 30-metre intervals. Drill holes were found to deviate towards the north and to become steeper with depth. The amount of steepening was found to depend on the initial dip of the hole, with shallow holes steepening more than steep holes. Typically, shallow holes would steepen by 3 or 4°, whereas steep holes (e.g. –80°) would steepen by approximately 1°. Longer holes deviated towards the north by approximately 4 or 5°. Survey readings for individual drill holes are listed on the front page of each drill log in Appendix A.

Following drilling, the collar locations were marked with wooden stakes. If the drill holes leaked water, they were plugged using Margo Plugs.

Table 4.1: 2000 SILVERTIP DIAMOND DRILL SUMMARY

DDH number	Collar Coordinates Easting	Northing	Elevation	Start Date	Completion Date	Azimuth	Dip (collar)	Lower Zone Mineralization	Drilled Depth (m)
SUD-00-67	24958	43318	1133	7-Jan	10-Jan	250°	-51°	55.1 - 60.0, 95.9 - 107.4	185.9
SUD-00-68	24966	43300	1129	6-Jan	10-Jan	250°	-51°	51.6-52.6, 56.2-57.7, 95.4-101.5 126.0-127.1, 169.5-180.4, 183.8-187.4	212.8
SUD-00-69	24958	43318	1133	10-Jan	12-Jan	250°	-43°	71.3 - 73.7, 99.4 - 105.2 111.8 -126.0	157.0
SUD-00-70	24966	43300	1129	10-Jan	13-Jan	250°	-43°	111.9-113.4, 121.5-122.8, 175.5-175.9 191.3 - 192.3, 196.5 - 196.6	203.6
SUD-00-71	24966	43300	1129	14-Jan	16-Jan	250°	-60°	68.7 - 90.0, 127.1 - 127.7 131.3 - 132.9	183.8
SUD-00-72	24958	43318	1133	15-Jan	17-Jan	250°	-60°	48.8 - 52.1, 81.1 - 85.2	95.4
SUD-00-73	24966	43300	1129	17-Jan	18-Jan	250°	-60°	69.9 - 82.8, 95.8 - 96.1	112.2
SUD-00-74	24958	43318	1133	17-Jan	18-Jan	250°	-69°	60.1 - 72.1	92.4
SUD-00-75	24979	43281	1125	18-Jan	21-Jan	250°	-52°	180.5 - 181.0, 182.2 - 183.3	193.5
SUD-00-76	24949	43337	1136	19-Jan	21-Jan	250°	-41°	115.1 - 115.6	156.4
SUD-00-77	24979	43281	1125	21-Jan	22-Jan	250°	-66°	N/A	92.4
SUD-00-78	24949	43337	1136	23-Jan	26-Jan	250°	-51°	78.3 - 78.6	200.6
SUD-00-79	24983	43282	1125	23-Jan	27-Jan	098°	-67°	104.8 - 107.4, 114.0 - 114.5	200.3
SUD-00-80	24949	43337	1136	26-Jan	27-Jan	250°	-69°	48.2 - 55.1, 69.4 - 69.6	113.7
SUD-00-81	24979	43281	1125	27-Jan	29-Jan	250°	-41°	N/A	121.3
SUD-00-82	24949	43337	1136	28-Jan	29-Jan	250°	-60°	54.6 - 55.1	116.7
SUD-00-83	24878	43479	1160	30-Jan	1-Feb	240°	-72°	47.2 - 49.2	150.3
SUD-00-84	24966	43300	1129	30-Jan	31-Jan	250°	-80°	67.4 - 75.2	95.4
SUD-00-85	24966	43300	1129	1-Feb	2-Feb	70°	-85°	88.5 - 89.8, 101.6 - 102.4	107.6
SUD-00-86	24878	43479	1160	1-Feb	3-Feb	212°	-65°	38.1 - 38.4, 100.9 - 101.2, 139.4 - 140.6 148.2 - 150.7, 153.0 - 157.0	162.5
SUD-00-87	24958	43318	1133	3-Feb	5-Feb	250°	-36°	100.1 - 103.3, 106.9 - 110.3, 120.6 - 135.3 139.7 - 141.4, 158.4 - 164.3, 165.9 - 169.9	176.2
SUD-00-88	24958	43318	1133	6-Feb	7-Feb	250°	-80°	63.4 - 63.8	80.2

Core Logging

At the rig, the core tube was emptied into HQ core boxes, with wood blocks to indicate the footage at the top of each core run. Core boxes were secured and transported by tractor to the surface and to the core shack area where they were stacked. Due to the winter conditions, the core was logged and sampled indoors. When logging, all core boxes for the hole were laid out. Footage marked on the wood blocks was converted to metric, and the top and bottom depths of the core in the box were measured. These numbers were written on the core box with a felt pen for identification in photographs. Aluminum tape embossed with the hole number, box number, and depth interval were stapled to the end of each core box, for identification when it is stacked in racks.

Core was then logged (geological and geotechnical) and photographed. After logging, the relevant boxes were set aside for sampling (see section 4.4, below). Finally, all core was transported to the core racks on site for long-term storage. Core racks built on the Silvertip property are of superior design and stability, constructed with high quality material. Suitable weather resistant roofing is in place to keep the core and core boxes dry, to facilitate long-term preservation of the core.

During and following logging, the hand written drill logs were entered into the Surpac DrillPad computer program.

Geotechnical Core Logging

Initially, from hole SUD-00-67 to hole SUD-00-72, geotechnical core logs were recorded for every alternate hole drilled within a fan. However, due to time restrictions, from drill hole SUD-00-73 to hole SUD-00-88, geotechnical core logs were recorded for mineralized zones only, plus 3 metres above and below. A summary of the geotechnical information collected ("RQD") is in Table 4.2. Geotechnical core logs consist of the following data: recovery, rock quality designation, degree of hardness, degree of weathering, joint description (angle, number and surface type) and bedding planes (angle and number).

4.4 SAMPLE PROCEDURES AND ANALYSIS

4.4.1 General Sampling Procedures

Sample Marking

Sample numbers and intervals were marked on the core boxes and the core itself with a grease pencil. Sample tags (water resistant paper) were prepared before sampling, to prevent errors in sample sequencing. These tags were prepared in triplicate; 1-office copy, 2-field copy, 3-lab. copy. The sample numbers were recorded in the DrillPad program as the logs were entered.

Samples were collected one at a time to avoid confusion, contamination or mis-numbering. Aluminum tape with the sample number was stapled onto the core box edge or divider at the beginning and end of each sample length. Samples were double-bagged to minimize contamination should the bags break during transport. The sample number was written in felt pen on both of the bags, and the sample tag was placed between the two bags to reduce degradation of the tag. Sample bags were sealed with zip-lock fasteners as soon as the sample was collected.

Table 4.2: List of drill holes and Geotechnical Core Logging completed.

Hole No.	Full RQD Log	Partial RQD Log	Intervals (m)
SUD-00-67	X		0.0 – 185.9
SUD-00-68	X		0.0 – 212.8
SUD-00-69			No RQD completed
SUD-00-70			No RQD completed
SUD-00-71			No RQD completed
SUD-00-72	X		0.0 – 95.4
SUD-00-73		X	64.9 – 87.8
SUD-00-74			No RQD completed
SUD-00-75		X	0.0 – 25.3, 177.7 – 186.8
SUD-00-76			No RQD completed
SUD-00-77			No RQD completed
SUD-00-78		X	74.1 – 81.7
SUD-00-79			No RQD completed
SUD-00-80		X	45.1- 57.3, 66.4 – 72.5
SUD-00-81			No RQD completed
SUD-00-82		X	52.7 – 57.3
SUD-00-83		X	43.6 – 51.2
SUD-00-84		X	63.4 – 78.6
SUD-00-85		X	86.3 – 107.6
SUD-00-86		X	145.7 – 159.4
SUD-00-87		X	96.9 – 176.2
SUD-00-88			No RQD completed

Core Splitting

Samples consisting of poor quality core or unconsolidated material were halved using a putty knife, and half removed from the core box with a spoon; both tools were stainless steel.

Intact and competent core was cut with a rock saw. Attention was paid to the orientation of the core to maintain a common orientation within a sample, where possible. Heterogeneous mineralization was sawed in a way that minimized compositional bias. The sample area was cleaned after the collection of each sample.

Sample Packaging

Samples were kept in numbered order while being packaged. Tamper proof plastic pails (20-litre) were used for transport of the samples. A tally of samples in each pail was kept in order to cross check the number of samples on the invoice to the number of samples actually being shipped. The invoice was not filled out until a shipment was to be sent. Pails were filled at the completion of sampling of a hole and sealed immediately prior to transport.

Transportation

The frequency of sample shipments was one or more shipment per week. Transportation off the property and to the expediter in Watson Lake (Yukon) depended on the schedule of SMC staff. Otherwise, an expediter would come to the property and pick up the samples. From Watson Lake, the samples were trucked by a trucking firm (Byers) to the Bondar Clegg laboratory in North Vancouver, British Columbia.

'Chain of Custody' is an assurance that the geological samples have been transported in such a manner as to be secure and completely traceable from field to laboratory. From the time the samples left the Silvertip property to the time that the Company received final analysis, the Chain of Custody is in effect. Progress through the assay labs. in North Vancouver is also traceable.

4.4.2 Laboratory Analysis

General

Intertek Testing Services (Bondar Clegg) of North Vancouver was contracted to analyze the core samples. All samples were pulverized to meet 90%, -150 mesh specifications, using an LM-2 (or equivalent) pulverizer, capable of accommodating a 1-kg charge. The fineness of the samples was required to maximize digestion for the best results.

Samples from diamond drill holes SUD-00-87 and 88 were analyzed using modified techniques from those used to analyze the bulk of the samples, from drill holes SUD-00-67 through 86. These modifications were made in order to improve digestion and to increase the accuracy of the final reported values. The analytical techniques used are summarized immediately below.

Analysis

Drill Holes SUD-00-67 through 86

ICP (Inductively Coupled Plasma) analyses of 34 elements were performed on all samples to determine the trace element suite. Aqua Regia (3HCl:HNO3) digestion was used. Gold was done by wet geochemical analysis only. Special instructions applied for silver, lead and zinc, as follows:

- If ICP Pb and Zn were greater than 0.1% (1000 ppm), a 0.5 g sample would be treated with 4-acid digestion.
- If ICP Pb and Zn were greater than 15%, titration would be implemented.
- If Ag was greater than 50 g/t, it would be analyzed by fire assay with a gravimetric finish.

Drill Holes SUD-00-87 and 88

ICP analyses of 35 elements, using a 4 acid (HF, HNO3, HCLO4, HCL) digestion, were performed on all samples. Gold was done by wet geochemical analysis with an atomic absorption finish. Special instructions applied for silver, lead and zinc, as follows:

- If ICP Pb were greater than 15%, a wet chemical titration would be implemented.
- If ICP Zn were greater than 15 %, reanalysis was done on the same solution by atomic absorption, using a high scale calibration.
- If Ag was greater than 500 ppm, it would be analyzed by fire assay with a gravimetric finish.

4.4.3 Quality Control

General

SMC implemented a comprehensive Quality Control program during the program to monitor and reduce errors occurring in the collection and analysis of samples. Errors resulting from poor handling of the samples can occur in the field (i.e. at the drill or in the core shack), during transport, or within the laboratory. A combination of blank and duplicate samples, introduced into the sample suite from the field and by the laboratory, can indicate the problems. Blank samples are used to detect sample preparation errors (contamination) in the lab., and the duplicates test reproducibility and detect inadvertent sampling bias in the field. Blank or duplicate samples were taken at approximately every tenth sample interval.

In addition, a small sample suite consisting of 35 samples, randomly picked from drill holes SUD-00-70 to 73 and SUD-00-75, were sent to Acme Analytical Laboratories of Vancouver for analysis as an independent check on the results received by SMC from Intertek Testing Services (Bondar Clegg) of North Vancouver (see below under Independent Assay Checks).

Duplicate Samples

Two types of duplicate sampling techniques were utilized to check the reproducibility of assays.

Field duplicates were introduced during sampling in the core shack. Core loggers indicated with grease pencil the location of duplicated samples. The core was halved, and one half was then quartered, using the rock saw. The other half was kept in the box, as usual. The two quarters were put into separate sample bags with two separate sample numbers, with no indication of 'duplicate' in order to keep the samples blind. Aluminum tags were used to mark the duplicated sample intervals in the core box.

Laboratory duplicates were required to be performed by the laboratory. There are two types of laboratory duplicates. Preparation duplicates are splits from the coarse crush from the jaw crusher which have been prepared as two pulps and are indicative of the errors introduced in the analysis of the separate samples. Pulp duplicates are two weightings from the same pulp, and contains only the variation introduced during analysis.

By incorporating all duplicate types, the overall precision and the source of greatest uncertainty in the sampling and analytical process can be quantified by the use of recently developed statistical procedures.

Blank Samples

Blank samples were introduced into the sample stream from the field, and made to be indiscernible to the lab. Blank sample material consisted of barren limestone core, which was obtained from unmineralized drill holes and manually crushed to such a size as to imitate 'normal' assay samples. Blanks were numbered and treated exactly as if they were part of the regular sample suite.

4.4.4 Independent Assay Checks

SMC selected 35 samples from drill holes SUD-00-70, 71, 72, 73 and 75, and sent them to Acme Analytical Laboratories of Vancouver as an independent check of the assay and geochemical values determined by Intertek Testing Services (Bondar Clegg) of North Vancouver. The Acme laboratory ran tests analogous to those performed by Bondar Clegg. Comparisons of the values reported by Acme and Bondar Clegg for the elements silver, lead, zinc and gold are reported here. A comparison of trace elements is not given here, because they are present in such low concentrations that a meaningful statistical comparison is not possible.

Silver

Silver (Ag) was initially analyzed by ICP analysis. If Ag within a given sample was greater than 50 g/t it was analyzed by fire assay with a gravimetric finish. The mean difference between the Acme and Bondar Clegg values is 20.31%. This value is skewed towards larger values by a single large discrepancy between Bondar Clegg and Acme. As a result, the median difference of 11.6% is more representative of the average percentage difference between the values reported by Bondar Clegg and Acme.

A direct comparison of the Ag values reported by Acme and Bondar Clegg is presented in Fig. 4.2. This figure shows that the Ag values reported by Acme Labs are consistently and systematically higher than those obtained by Bondar Clegg. In addition, this plot shows that there are two samples in which the Acme value is anomalously higher than the Bondar Clegg value. The Acme values for these two samples are 720.5 g/t and 2704 g/t. The corresponding Bondar Clegg values are 198 g/t and 2341.2 g/t. With the exception of these two samples, there is a strong correlation between the Acme and Bondar Ag values, and the median percentage difference is within acceptable limits. This suggests that overall the Ag values reported by Bondar Clegg are accurate within reasonable limits.

Lead

Lead (Pb) was initially analyzed by ICP analysis. If the Pb values within a given sample were greater than 0.1% (1000 ppm), a 0.5 g sample was treated with a 4-acid digestion. Following the 4-acid digestion, any samples with greater than 15% Pb were sent for titration. The mean

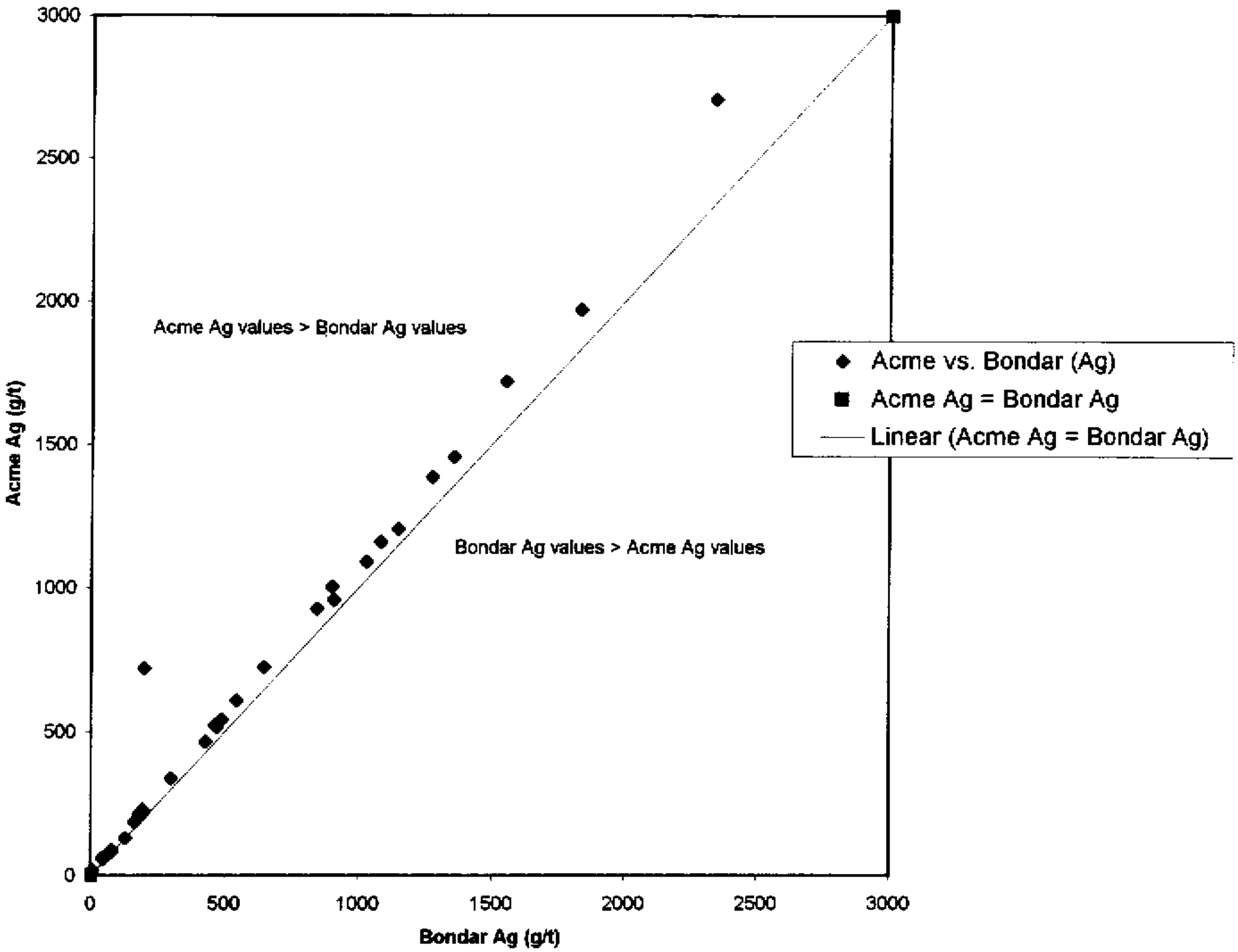

Figure 4.2: Comparison of Silver values reported by Bondar Clegg and Acme Laboratories.

percentage difference between the Pb values reported by Acme and those reported by Bondar Clegg is 4.44% with a median difference of 4.39%.

A direct comparison of the Pb values reported by Acme and Bondar Clegg shows a very strong correlation between the two laboratories (Fig. 4.3). This suggests that the Pb values provided by Bondar Clegg are accurate within reasonable limits.

Zinc

Zinc (Zn) was initially analyzed by ICP analysis. If the Zn values within a given sample were greater than 0.1% (1000 ppm), a 0.5 g sample was treated with a 4-acid digestion. Following the 4-acid digestion, any samples with greater than 15% Zn were sent for titration. The mean percentage difference between the Zn values reported by Acme and those reported by Bondar Clegg is 3.82% with a median percentage difference of 3.41%.

A direct comparison of the Zn values reported by Acme and Bondar Clegg shows a strong correlation between the laboratories (Fig. 4.4). This suggests that the Zn values provided by Bondar Clegg are accurate within reasonable limits.

Gold

Gold (Au) was analyzed by wet geochemical techniques and reported in g/t. The mean difference between the Acme and Bondar Clegg values is 2,842%. This result is skewed towards larger values by one very large discrepancy between Bondar Clegg and Acme. As a result, the median difference of 1028% is more representative of the average percentage difference between the labs.

A direct comparison of the Au values reported by Acme and Bondar Clegg shows that Acme consistently reports gold values which are significantly higher than those of Bondar Clegg (Fig. 4.5). The Acme values show an expected and normal range in Au values from near 0.0025 g/t to 0.69 g/t. However, the Au values obtained by Bondar Clegg show very little variation and are clustered about the lower detection limit of 0.0025 g/t. This indicates that there is a problem with the analytical technique used by Bondar Clegg and that their Au values are unreliable. SMC is working with Bondar Clegg to resolve this problem.

4.5 DRILLING RESULTS

For descriptive purposes, mineralization that occurs at or close to the Earn-McDame unconformity is distinguished from that which occurs substantially below, within the limestone. The possible validity and significance of this distinction is discussed briefly in a later section (section 4.6).

As noted previously, the full prefix of the drill holes is SUD-00-XX, but in the following sections, the numbers might be simplified to the last two digits only.

The results from fans 65-C and 65-S are described first and in more detail than the rest, as they contain the main target mineralization. For convenience, relevant excerpts from Table 4.1 are given for each fan.

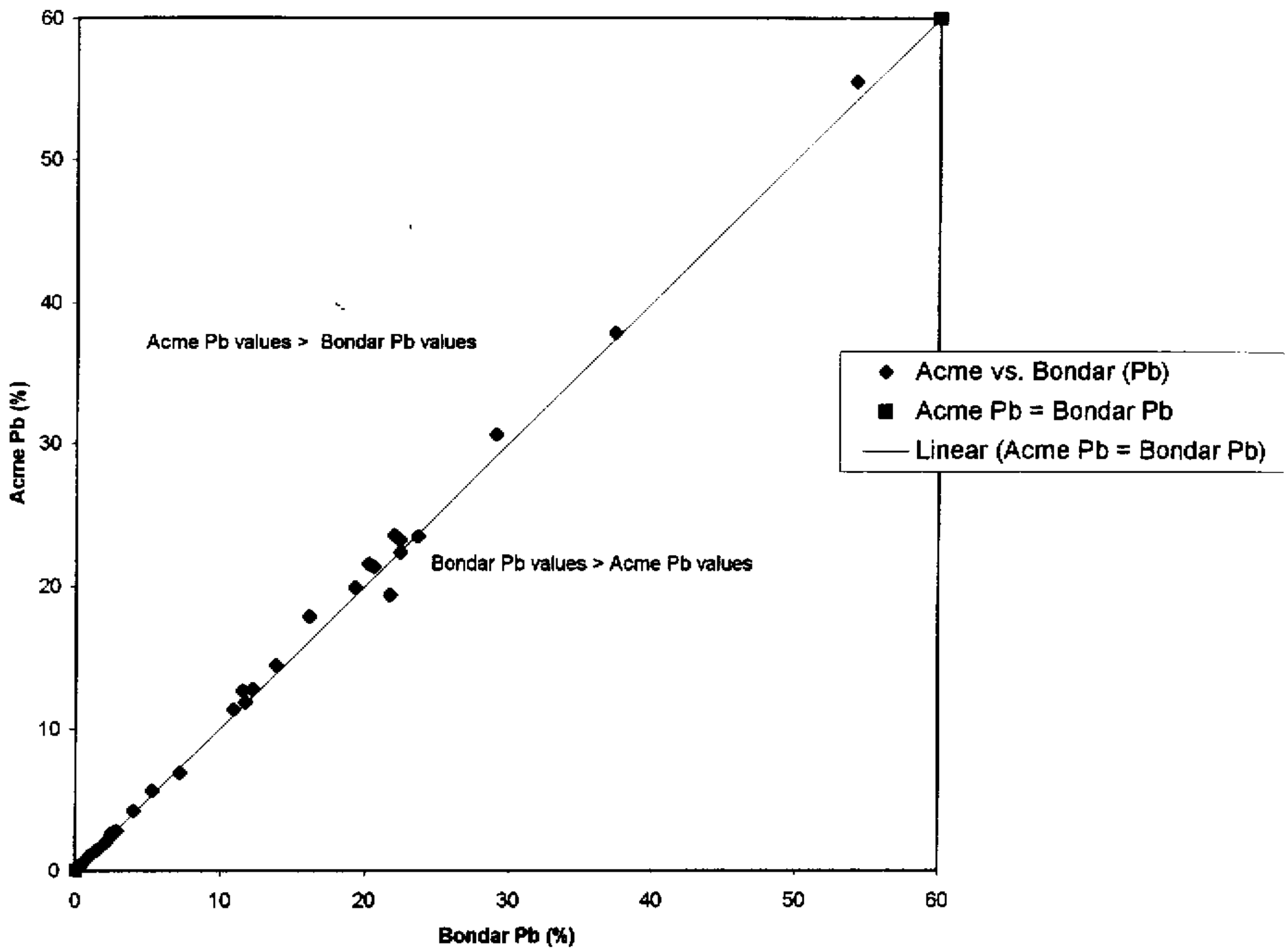

Figure 4.3: Comparison of Lead values Reported by Bondar Clegg and Acme Laboratories.

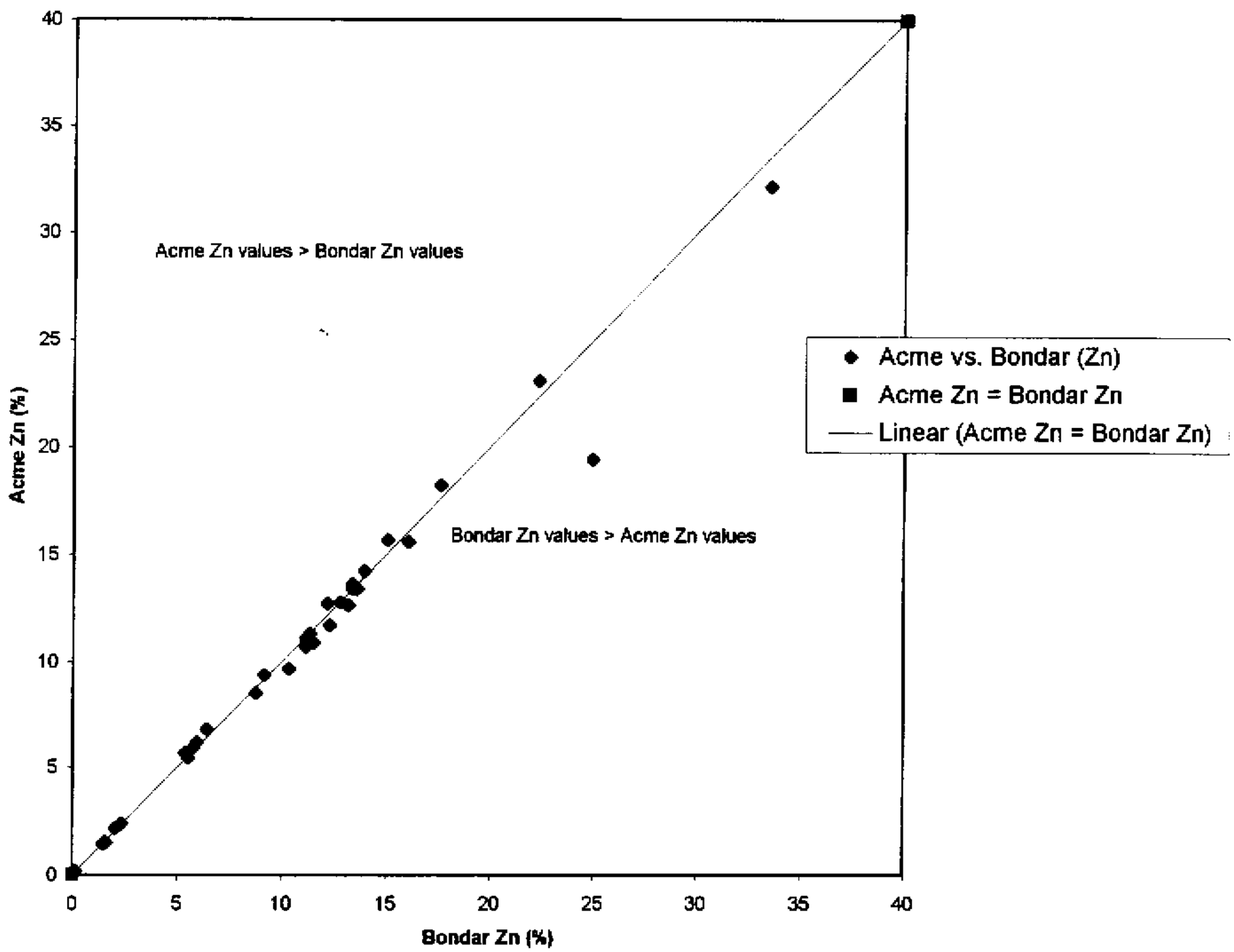

Figure 4.4: Comparison of Zinc values reported by Bondar Clegg and Acme Laboratories.

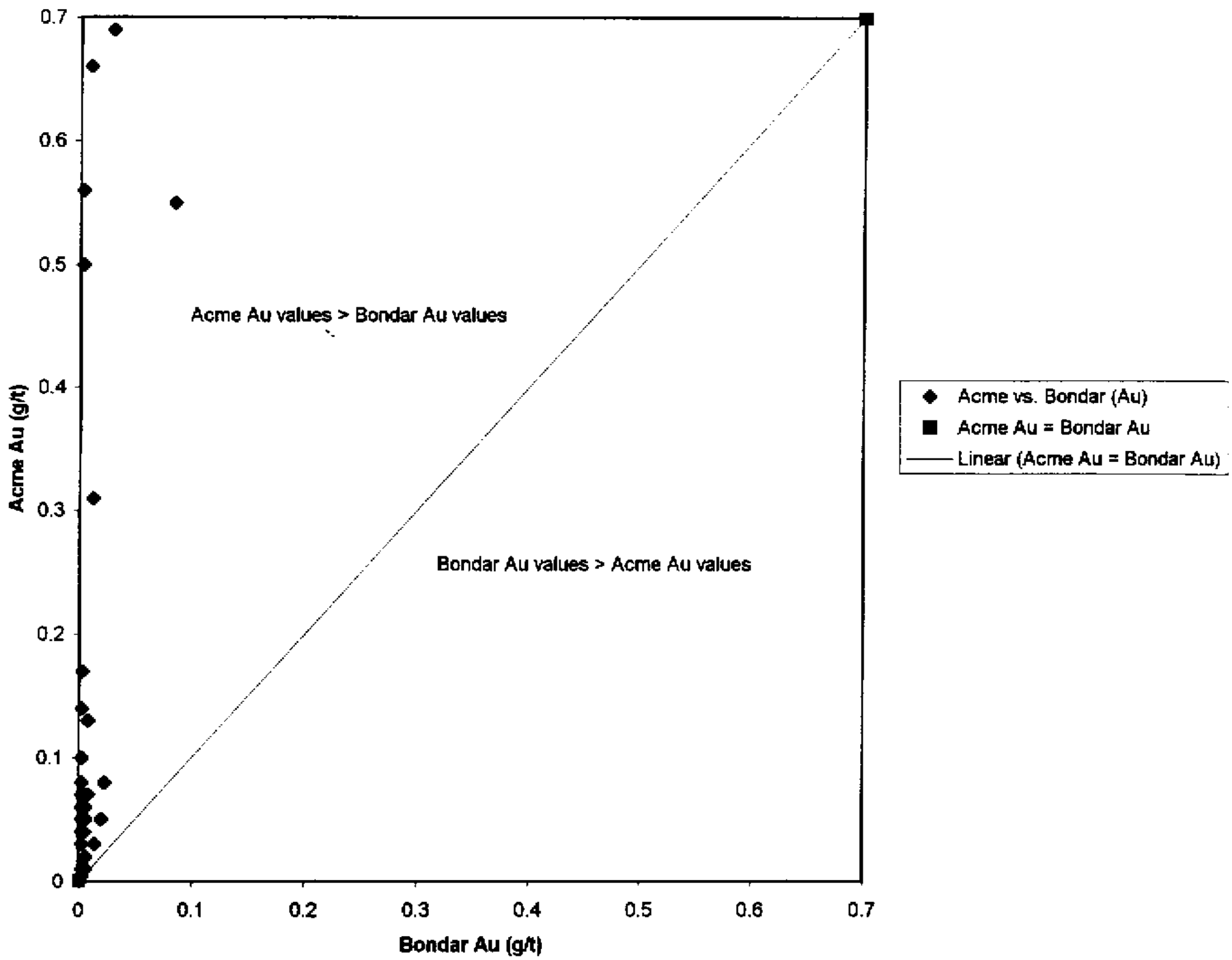

Figure 4.5: Comparison of Gold values reported by Bondar Clegg and Acme Laboratories.

4.5.1 Fan 65-C

Fan 65-C was drilled to investigate the dimensions and character of the feeder-style mineralization intersected in drill hole SSD-99-65. Six diamond drill holes, totalling 786.2 m, were drilled along azimuth 250° at various dips (Fig. 4.6; Table 4.5.1).

Table 4.5.1: Fan 65-C

Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-67	24958	43318	1133	250°	- 51°	185.9
SUD-00-69	24958	43318	1133	250°	- 43°	157.0
SUD-00-72	24958	43318	1133	250°	- 60°	94.5
SUD-00-74	24958	43318	1133	250°	- 69°	92.4
SUD-00-87	24958	43318	1133	250°	- 36°	176.2
SUD-00-88	24958	43318	1133	250°	- 80°	80.2

Unconformity Related Mineralization: (Holes 00-67, 69, 72 and 87)

Four out of the six drill holes in fan 65-C intersected Lower Zone mineralization associated with the unconformity, ranging in thickness from 2.4 m to 4.85 m. Typically, the style of this mineralization is relatively 'passive' and simple, and consists of fine-grained pyrite, pyrrhotite and sphalerite with lesser galena. Textural features include: fairly massive fine-grained pyrite and sphalerite with remnant limestone fragments (holes 67, 87); strongly silicified pyrite and sphalerite massive sulphide with vague compositional banding (hole 69); early pyrrhotite and pyrite massive sulphide with minor sphalerite and quartz filling open space (hole 72). Each zone of unconformity related mineralization appears to have had at least two phases of sulphide replacement.

Sub-Unconformity Lower Zone Mineralization: (Holes 00-67, 69, 72, 74, 87 and 88)

All six holes in fan 65-C intersected sub-unconformity sulphide mineralization, and holes 69, 74 and 87 intersected multiple zones. The strongest and most continuous mineralization forms a band at least 90 m long, about 25 metres below the unconformity (Fig. 4.6). The apparent thickness of the intercepts ranges from 0.4 m (hole 88) to 14.7 m (hole 87). Sub-unconformity mineralization is highly variable. Some is homogeneous massive sulphide with sharp contacts against unaltered limestone (holes 72, 88), whereas other zones are heterogeneous and complex, and are characterized by stronger brecciation (hole 87). Mineralization varies in detail from place to place, and may be rich in pyrite, pyrrhotite, sphalerite or galena. Commonly, early fine-grained pyrite and pyrrhotite is overprinted by later, coarser grained sphalerite, galena, and pyrite. Textural features include: variably and vaguely banded sphalerite, pyrite and galena massive sulphide with remnant limestone; rubble and mosaic brecciated massive sulphide, with clasts of limestone and Earn argillite (holes 67, 69 and 87); brecciated limestone replaced by sphalerite, pyrite, galena, pyrrhotite and silica (holes 74, 87); unbrecciated, massive sphalerite, galena and pyrite in sharp contact with unaltered limestone (holes 72, 88).

Hole 87 is perhaps the most significant hole in fan 65-C. It was drilled to test both the western extension of the unconformity mineralization in hole SSD-99-65, and the deeper sub-unconformity, feeder-style mineralization in that hole. Seven mineralized zones were intersected, most displaying fairly typical 'passive' replacement. However, the mineralization from 120.6 to 135.3 m is different, and is characterized by the heterogeneous and brecciated texture found in the lower part of hole 99-65. Thus, hole 87 indicates the extension of feeder-style mineralization for at least 25 m west of 99-65, and it remains open to the west.

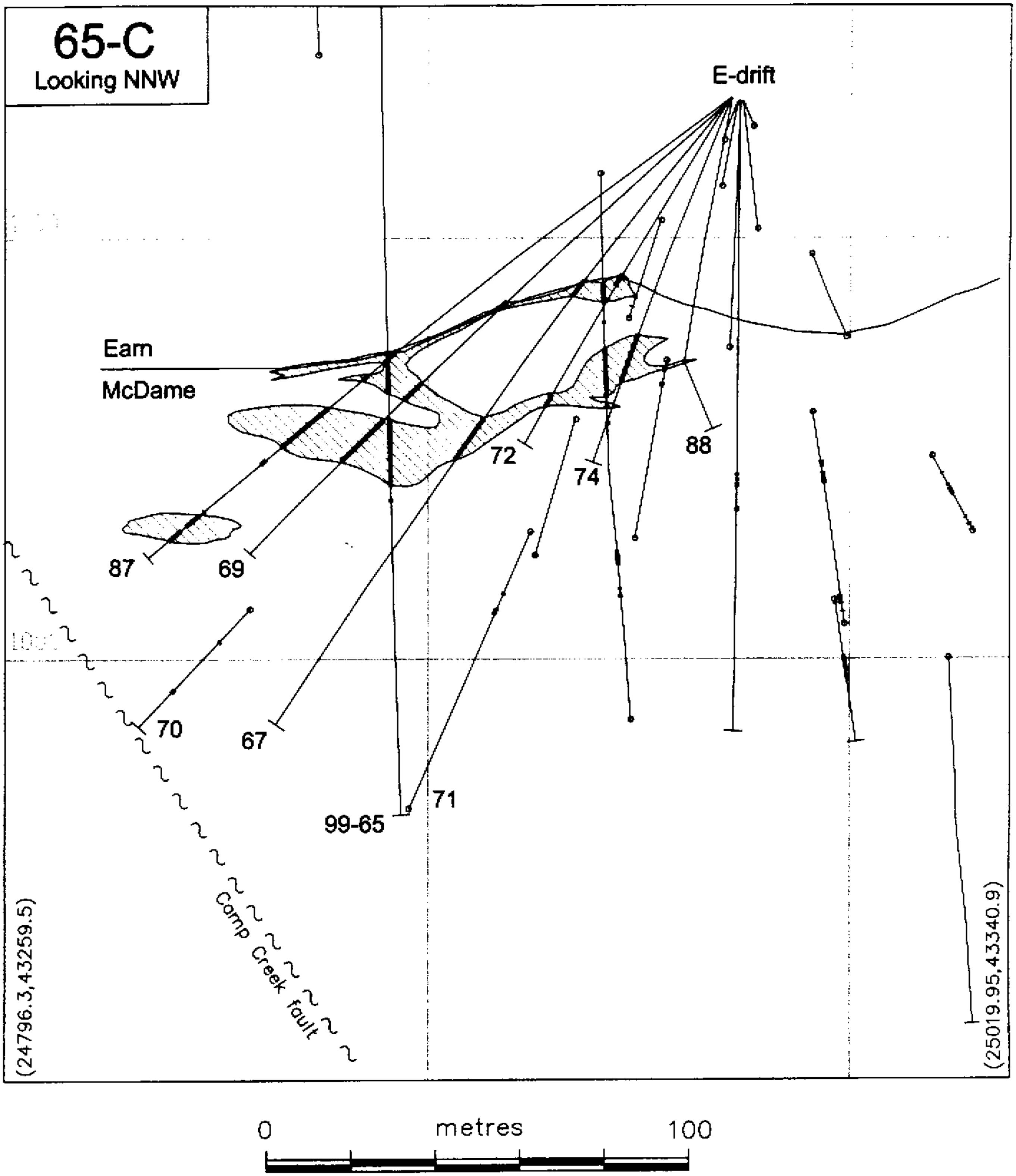

Fig. 4.6: Fan 65-C drill section, looking NNW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered except for 99-65. Search distance normal to plane of section is 10 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Interpretation of mineralization (hatched) is applied to new information only. Topographic surface (not shown) is at approximately 1370 metres elevation. Camp Creek fault is approximate.

Interpretive Comments

Apart from hole SUD-00-87, Lower Zone mineralization in the drill holes of fan 65-C generally displays characteristics more typical of 'passive', lateral fluid-flow and replacement than 'active' feeder-style processes which involve significant intra-mineral solution and brecciation. However, the mineralization in hole 87 is highly variable and ranges from simple replacement to heterogeneous, brecciated sulphide and limestone. In addition, the limestone in hole 87 has been disrupted and altered to a greater degree than that in the other holes. Some drill holes in the fan, such as 69 and 74, display a combination of 'simple' and complex mineralization, but overall not as much as hole 87. All this implies that the ground on the western half of fan 65-C, represented by holes 99-65 and 00-87 especially, experienced more fluid activity and reworking than the ground to the east. In as far as a feeder can be invoked from these observations, the western part of the fan, closest to the Camp Creek fault would appear to be more proximal to such a hydrothermal conduit.

4.5.2 Fan 65-S

Fan 65-S was drilled mainly to test the southern extension of feeder-style mineralization in drill hole SSD-99-65. Five holes were drilled at an azimuth of 250° and at various dips (Fig. 4.7; Table 4.5.2). A sixth hole (SUD-00-85), marking the eastern limit of the fan, was drilled at –85° along azimuth 070°.

Table 4.5.2: Fan 65-S

Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-68	24966	43300	1129	250°	- 51°	212.8
SUD-00-70	24966	43300	1129	250°	- 43°	203.6
SUD-00-71	24966	43300	1129	250°	- 60°	183.8
SUD-00-73	24966	43300	1129	250°	- 68°	112.2
SUD-00-84	24966	43300	1129	250°	- 80°	95.4
SUD-00-85	24966	43300	1129	070°	-85°	107.6

Unconformity Related Mineralization: (Hole 00-68)

Of the six holes in fan 65-S only hole 68 intersected unconformity related Lower Zone mineralization. The intercept is 0.99 m thick and consists of silicified pyrite and sphalerite massive sulphide with lesser galena and pyrrhotite, and 5% remnant limestone. The interval is in sharp contact with both the overlying Earn Group and underlying McDame limestone. It averages 87.3 g/t Ag, 0.3% Pb, and 6.3% Zn. The mineralogy and texture are typical of unconformity-related mantos elsewhere in the deposit.

Sub-Unconformity Lower Zone Mineralization: (Holes 00-68, 70, 71, 73, 84 and 85)

All six holes in fan 65-S intersected some sub-unconformity Lower Zone mineralization, and all except hole 84 intersected multiple zones. The vertical depth of mineralization below the unconformity ranges from 15 to 85 m. The longest intersection was 21.3 m (hole 71) and the thinnest was 0.1 m thick (hole 70). The majority of the zones are typical of 'passive' manto mineralization, characterized by homogeneous pyrite (+/- pyrrhotite), sphalerite and galena rich massive sulphide. The mineral paragenesis suggests at least two phases of mineralization. The zones frequently contain intact remnant limestone and lack significant widths of brecciation.

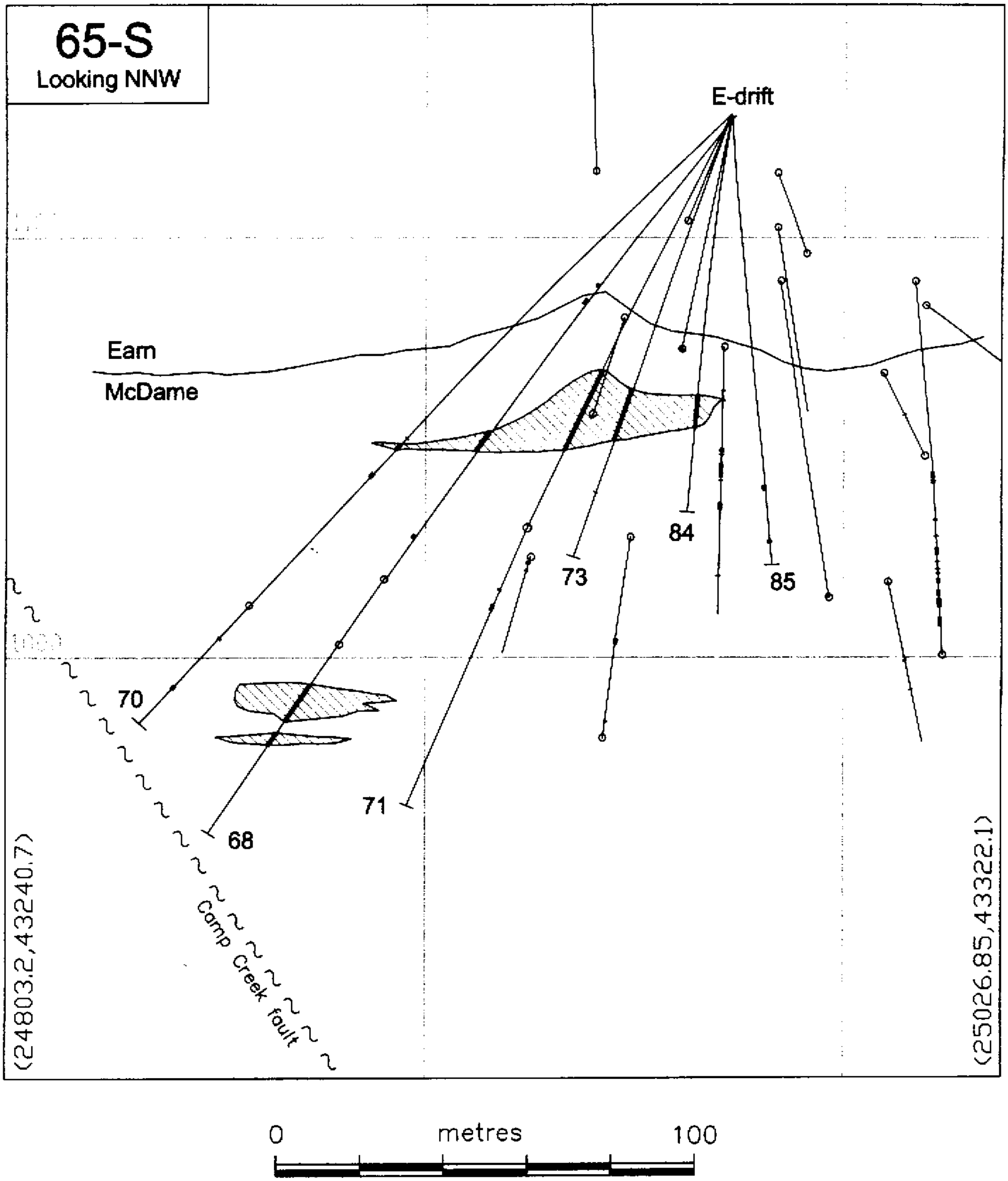

Fig. 4.7: Fan 65-S drill section, looking NNW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 10 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Interpretation of mineralization (hatched) is applied to new information only. Topographic surface (not shown) is at approximately 1375 metres elevation. Camp Creek fault is approximate.

Sulphide compositional banding is another common feature of this mineralization, as are sharp contacts with the bounding host limestone.

The 21.3 m long mineralized intercept in hole 71 is the largest single zone in this drilling program. Along with the 12.6 m-thick zone in the adjacent hole 73, 12 m to the east, these zones display many features which set them apart from the majority of the sub-unconformity mineralization in fan 65-S. They are complex and heterogeneous, and contain various amounts of silicified, early fine-grained pyrite and pyrrhotite mineralization, and coarse-grained sphalerite, pyrite and galena. They also feature silicified limestone rubble breccias, partially replaced by sphalerite, pyrite and galena. The heterogeneity and brecciation imply that these zones sustained multiple stages of fluid infiltration, with associated solution and reworking. In this respect, the zones are very similar to, though not quite as well developed, as the sub-unconformity mineralization in drill holes SSD-99-65 and SUD-00-87.

Deep, Pyrrhotite-rich Mineralization

An important feature of hole 00-68 is the occurrence of thick massive sulphide mineralization at 170 metres down the hole, beginning about 75 metres vertically below the unconformity. Two discrete zones are present. First, a 10.9-m long intercept of homogeneous, pyrrhotite and pyrite rich mineralization with minor relict limestone. This interval is noteworthy for the amount of magnetic pyrrhotite (roughly 40% overall), the paucity of sphalerite and negligible galena, and the presence of minor but still significant chalcopyrite (up to 1%), which rims (and replaces?) pyrite and pyrrhotite. Little or no syn-mineral brecciation is indicated, and the zone appears to reflect passive manto replacement, with sharp limestone contacts. This amount of pyrrhotite is unusual.

The second zone, which follows after 3.4 metres of weakly mineralized limestone, is 3.6 m thick and quite different. It lacks pyrrhotite, although galena is still in only trace amounts. The zone is dominated by fine to coarse-grained pyrite and sphalerite, and averages 16.5% zinc. Considering its proximity to the overlying pyrrhotite-rich zone, the differences in its mineralogy and grade are intriguing. If these mantos have the same source or feeder, the two zones were probably fed at separate times by different mineral fluids. Alternatively, they have quite different sources.

Interpretive Comments

The majority of the sub-unconformity mineralization intersected in fan 65-S is more typical of passive manto replacement than of feeder activity. However, the relatively complex and heterogeneous mineralization in holes 71 and 73 suggests that they are closer to a hydrothermal fluid conduit or feeder, which may be a continuation of that tentatively identified in fan 65-C to the north (see section 4.5.1, above). Thus, the overall mineralized body comprises a combination of active and passive styles of mineralization. This could mean that feeder activity was superimposed on an earlier 'simple' manto, or that passive replacement extended outwards ('bled') around a central feeder, or perhaps each model applies in different places.

The relative paucity of unconformity related mineralization in fan 65-S is interesting. It suggests that the enhanced permeability conducive to mineralization is potentially just as well developed away from this permeability barrier. However, the fundamental reason or control for the sub-unconformity mineralization in fans 65-C and 65-S is not known at this time. It may be structural or stratigraphic, or both.

4.5.3 Fan 65-N

Fan 65-N, 20 m north of fan 65-C, was drilled in order to investigate the northward projection of feeder-style mineralization in hole SSD-99-65. Four holes, totalling 587.4 m, were drilled at an azimuth of 250° at various dips (Fig. 4.8; Table 4.5.3). The results are described under three categories:

Unconformity Related Mineralization
Sub-unconformity mineralization
Brecciation

Table 4.5.3: Fan 65-N						
Drill Hole	Easting(m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-76	24949	43337	1136	250°	- 41°	156.4
SUD-00-78	24949	43337	1136	250°	- 51°	200.6
SUD-00-80	24949	43337	1136	250°	- 69°	113.7
SUD-00-82	24949	43337	1136	250°	- 60°	116.7

Unconformity Related Mineralization: (Holes 00-80 and 82)

Mineralization at the unconformity was intersected in holes 82 and 80, ranging from 0.5 to 6.9 m thick, respectively. The thinner intercept in hole 82 is low grade and pyrite rich with lesser sphalerite. It appears to be the result of sulphide replacement of rubble brecciated McDame limestone. The 6.9 m thick zone in hole 80 is characterized by pyrite, sphalerite and galena mineralization alternating with either intact or brecciated McDame limestone. At least some sulphides post-date brecciation of the limestone.

Sub-unconformity Lower Zone Mineralization: (Holes 00-76, 78 and 80)

Three out of the four drill holes in fan 65-N intersected sub-unconformity mineralization, but all are very thin, ranging from 0.2 to 0.5 m thick. Texturally, these intercepts are typical of passive replacement, with sharp contacts with adjacent host limestone. Much of the limestone was brecciated to a varying degree prior to replacement.

Brecciation: (Holes 00-76, 78, 80 and 82)

Only one hole in fan 65-N, 00-80, intersected significant mineralization. However, an important feature of this and the other holes in the fan is the amount of brecciation. Breccia zones are up to 35.5 m thick (in hole 80) and are highly variable, ranging from limestone rubble breccias, to tightly packed, Earn enclave rubble breccias, to heterolithic breccias with a mixture of limestone, argillite, and rare sulphide clasts. Minor pyrite, sphalerite and galena are found throughout these breccias, replacing limestone fragments and matrix. This implies that the breccias are pre- to syn-mineral. The degree of sulphide replacement within the breccias is highly variable but overall very low.

Interpretive Comments

No feeder-type mineralization was intersected in the drill holes of fan 65-N. However, the extensive brecciation present (generally not mineralized) indicates "vigorous hydrothermal karsting during mineralization" (Megaw, 2000). For the most part, the fluids responsible for this solution were evidently not metal-enriched, but the permeability that they represent may well be connected with the sub-unconformity mineralized zones in fans 65-C and 65-S.

The length of the Earn-rich rubble breccia in hole 00-80 is remarkable. It is tentatively interpreted as representing a deep solution fissure in the limestone which was filled with rubble derived from roof collapse higher in the 'cave' system (Fig. 4.9). The solution and caving was almost certainly

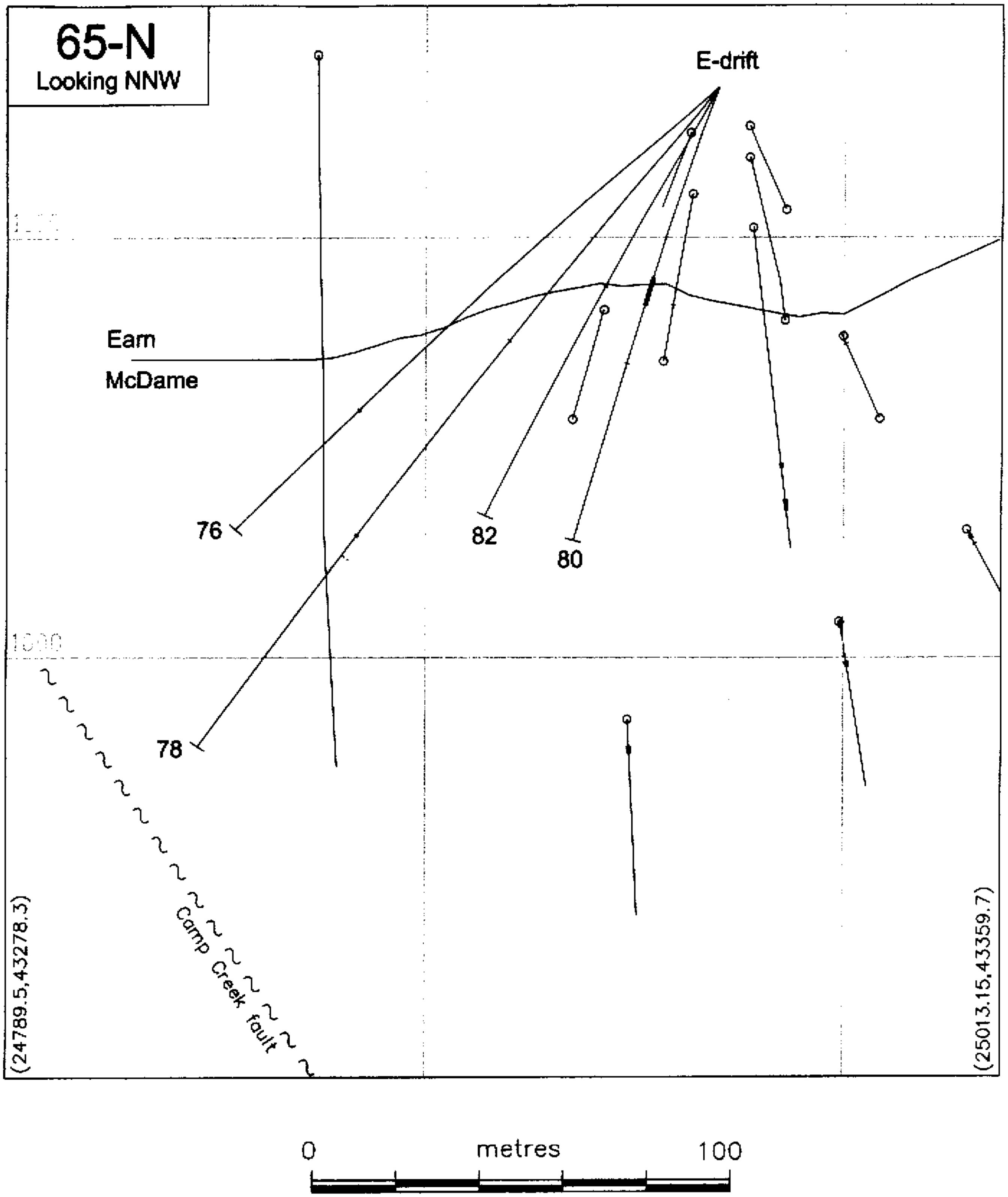

Fig. 4.8: Fan 65-N drill section, looking NNW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 10 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Topographic surface (not shown) is at approximately 1365 metres elevation.

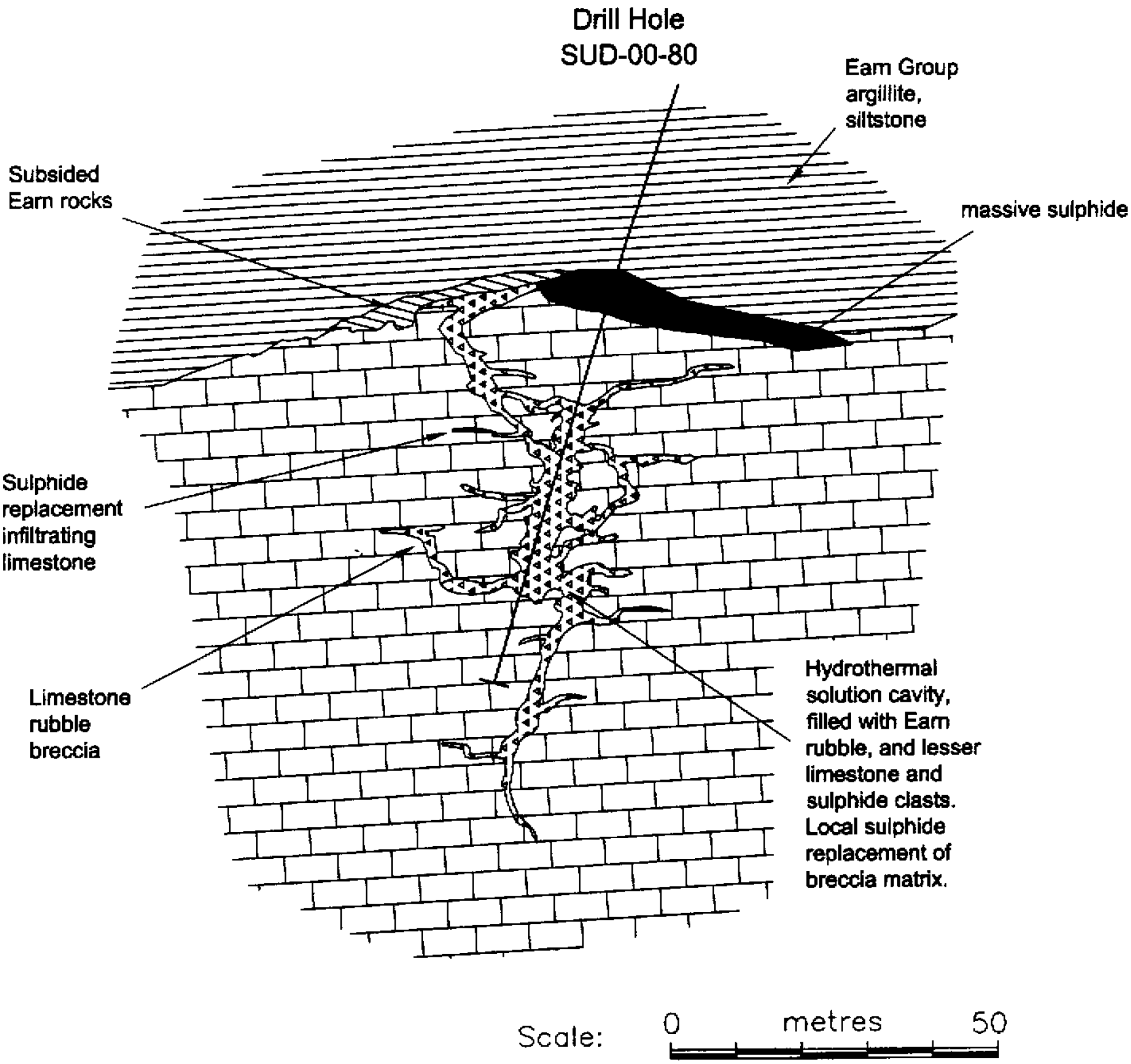

Fig. 4.9: Interpretive sketch of possible formation of rubble breccia in hole SUD-00-80 (cf. Fig. 4.8). This hole contains over 30 metres of heterolithic breccia well below the McDame unconformity. Most of the fragments and matrix are derived from lower Earn Group argillite and siltstone, with lesser limestone and rare sulphide clasts. The breccia fills open space created by hydrothermal solutions before, during or after mineralization. Earn fragments fill the fissure due to roof collapse higher in the 'cave' system, ultimately from the unconformity where the basal Earn is disoriented due to subsidence. Local sulphide replacement of the matrix indicates late stage infiltration by mineral solutions.

not paleokarst (Late Devonian), but much younger and produced by hydrothermal solutions, because the Earn clasts are fully lithified and foliated, and there are also sulphide fragments in the breccia.

4.5.4 Fan 65-SS

Fan 65-SS, 20 m to the south of fan 65-S, was drilled in an attempt to extend the deep sphalerite, pyrite and pyrrhotite mineralization found in hole SUD-00-80, and similarly to test the southern continuation of the mineralization and brecciation encountered in holes 71 and 73. Three holes, totalling 407.2 metres, were drilled along azimuth of 250° degrees at moderate dips (Fig. 4.10; Table 4.5.4).

Table 4.5.4: Fan 65-SS						
Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-75	24979	43281	1125	250°	- 52°	193.5
SUD-00-77	24979	43281	1125	250°	- 66°	92.4
SUD-00-81	24979	43281	1125	250°	- 41°	121.3

Lower zone mineralization was intersected only in drill hole 75. It occurs approximately 80 vertical metres below the unconformity and consists of two zones of massive sulphide, 0.5 and 1.1 m thick, separated by 1.2 m of recrystallized and brecciated limestone. The mineralization contains remnant limestone and ranges from pyrite and sphalerite-rich to sphalerite and galena-rich. The sulphides and texture are typical of passive manto replacement. This interval occurs at approximately the same stratigraphic depth as the deep mineralization in hole 68 on fan 65-S to the north; however, there are differences between them which casts doubt on a direct relationship.

The absence of mineralization in hole 77 implies that the thick zones in holes 71 and 73 in fan 65-S close off to the south along the plane of drilling.

4.5.5 Drill Hole SUD-00-79

The Silver Creek South area has been drilled quite well in the past, particularly below and east of E-drift. It is characterized by sporadic and locally very high grade sulphide mineralization, and by significant brecciation, alteration and recrystallization of limestone. The latter features are strong indicators of abundant hot fluids, and so this area may be close to or above a particularly active part of the system which deserves more investigation.

Hole 79 was drilled as a step-out to the east of Silver Creek South, to further test this area and explore for feeder-style mineralization deeper in the limestone (Fig. 4.11).

Table 4.5.5: Drill hole SUD-00-79						
Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-79	24983	43282	1125	098°	- 67°	200.3

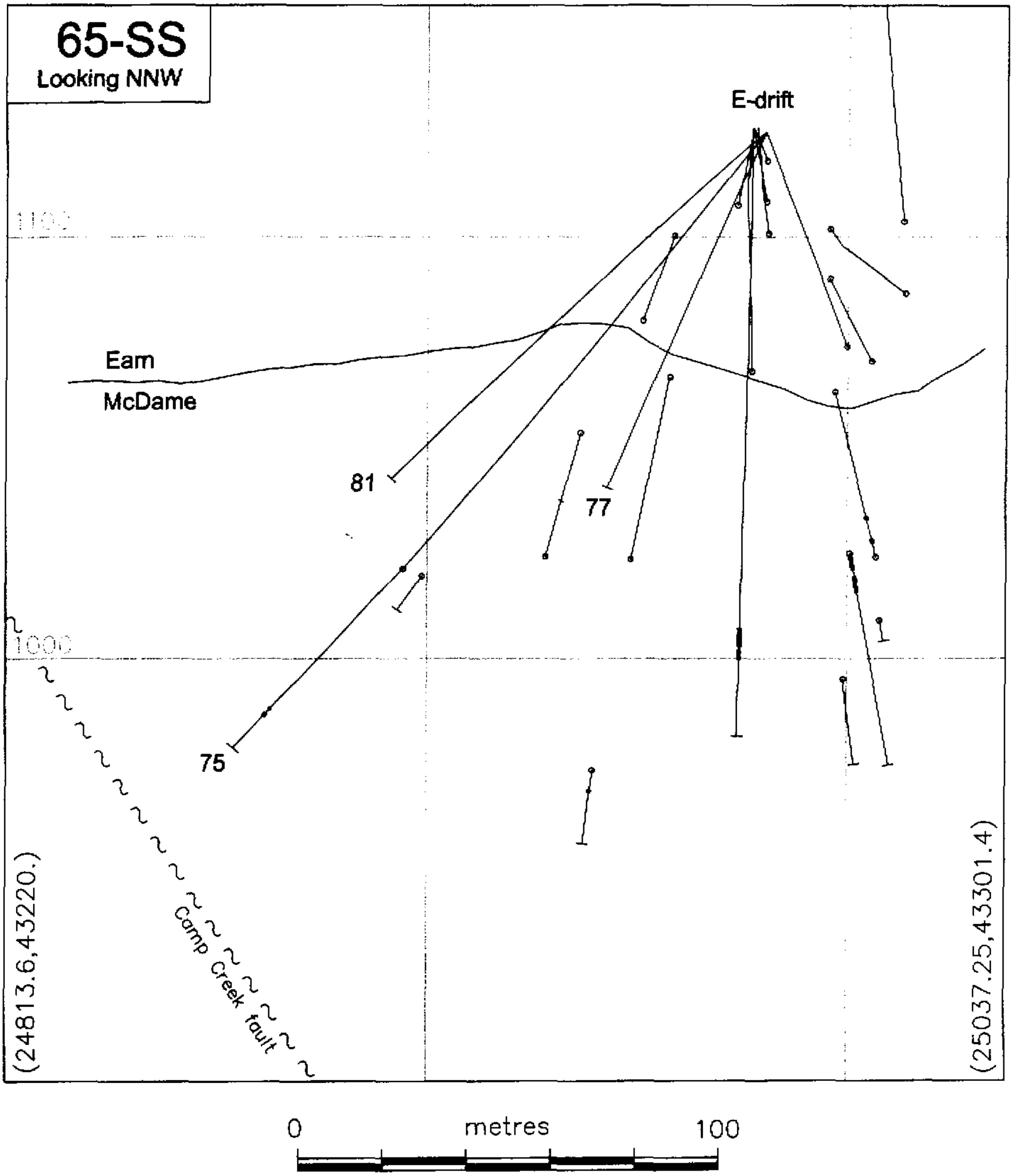

Fig. 4.10: Fan 65-SS drill section, looking NNW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 10 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Topographic surface (not shown) is at approximately 1390 metres elevation.

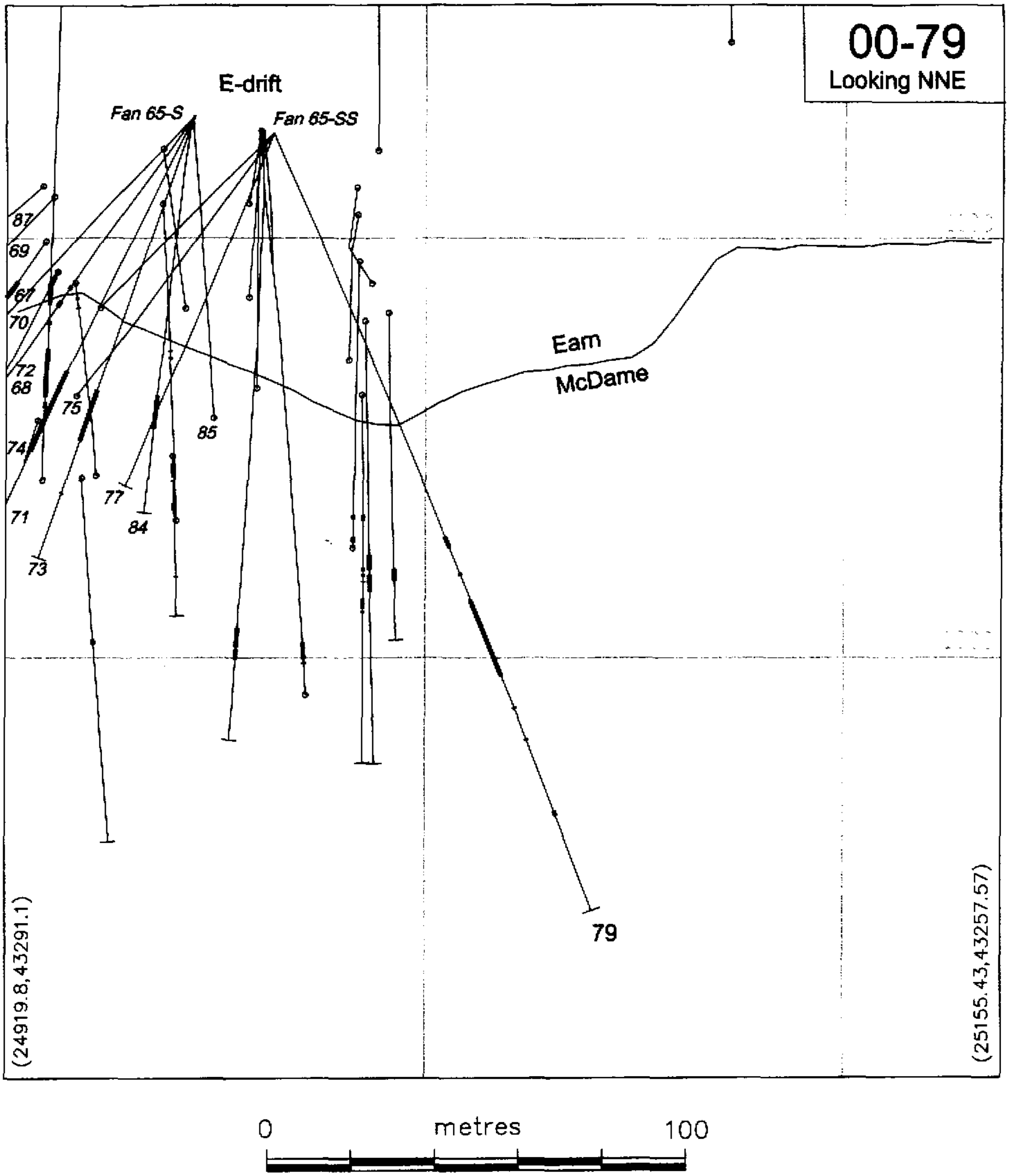

Fig. 4.11: Hole 00-79 drill section, looking NNE. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 20 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Topographic surface (not shown) is at approximately 1400 metres elevation.

The results are typical of the eastern part of Silver Creek South. Numerous zones of passive, manto-style mineralization occur well below the unconformity, ranging from 0.5 to 3.1 m in thickness, separated by strongly recrystallized (marmorized) and mineralized limestone. Sulphide compositions vary from pyrite to sphalerite to galena rich, and remnant, recrystallized limestone is common. Sulphide compositional banding was observed in some intervals.

Interpretive Comments

The strong recrystallization of limestone and the numerous Lower Zone intercepts in hole 79 (and other holes in the eastern part of Silver Creek South) imply that this area has been infiltrated by multiple phases of high temperature, metal bearing fluids. None of the mineralized zones themselves are particularly thick, and so they may still be quite distal (in relative terms) from the source of the fluids.

4.5.6 Drill Holes SUD-00-83 and 86

This area is well to the north of the main area of exploration in the program, and is closer to Silver Creek North than South. Two holes were drilled into thinly tested ground northwest of holes 84-77, 85-246 and 254, where good mineralization has been found in the past. There is a possibility that this area contains a link between Silver Creek South and the Silver Creek Extension to the north.

Table 4.5.6: Drill Holes SUD-00-83 and 86

Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Length (m)
SUD-00-83	24878	43479	1160	240°	- 72°	150.3
SUD-00-86	24878	43479	1160	212°	- 65°	162.5

Drill hole SUD-00-83 intersected one small (2 m) intercept of sub-unconformity Lower Zone mineralization (Fig. 4.12). It consists of pyrite and sphalerite varying from massive to vaguely banded. The mineralization is developed in a zone of rubble brecciated limestone and contains remnant clasts of silicified limestone. The mineralogy and texture are typical of passive manto mineralization.

Better results came from drill hole 86 which intersected a 0.3 m wide unconformity-related mineralized zone, followed at depth by four intercepts of sub-unconformity mineralization ranging in width from 0.3 to 4 m (Fig. 4.13). The unconformity zone, 2.9 m into the McDame, is massive, fine-grained pyrite with sharp contacts with unaltered limestone. Sub-unconformity mineralization is variably rich in pyrite and sphalerite, or pyrite, sphalerite and galena, and contains up to 50% remnant limestone. These intercepts are typical replacement mantos and are developed in unaltered limestone as well as in brecciated limestone. The variable mineralogy within these zones suggests that they have been infiltrated by several phases of mineralizing fluids.

Interpretive Comments

No textures suggestive of feeder mineralization were recognized in holes 83 or 86. However, mineralization was found in a previously untested area. In particular, the depth of the deepest zones (90 m below the unconformity) in hole 86 is important in expanding the vertical limits of the known mineral system, in this area at least.

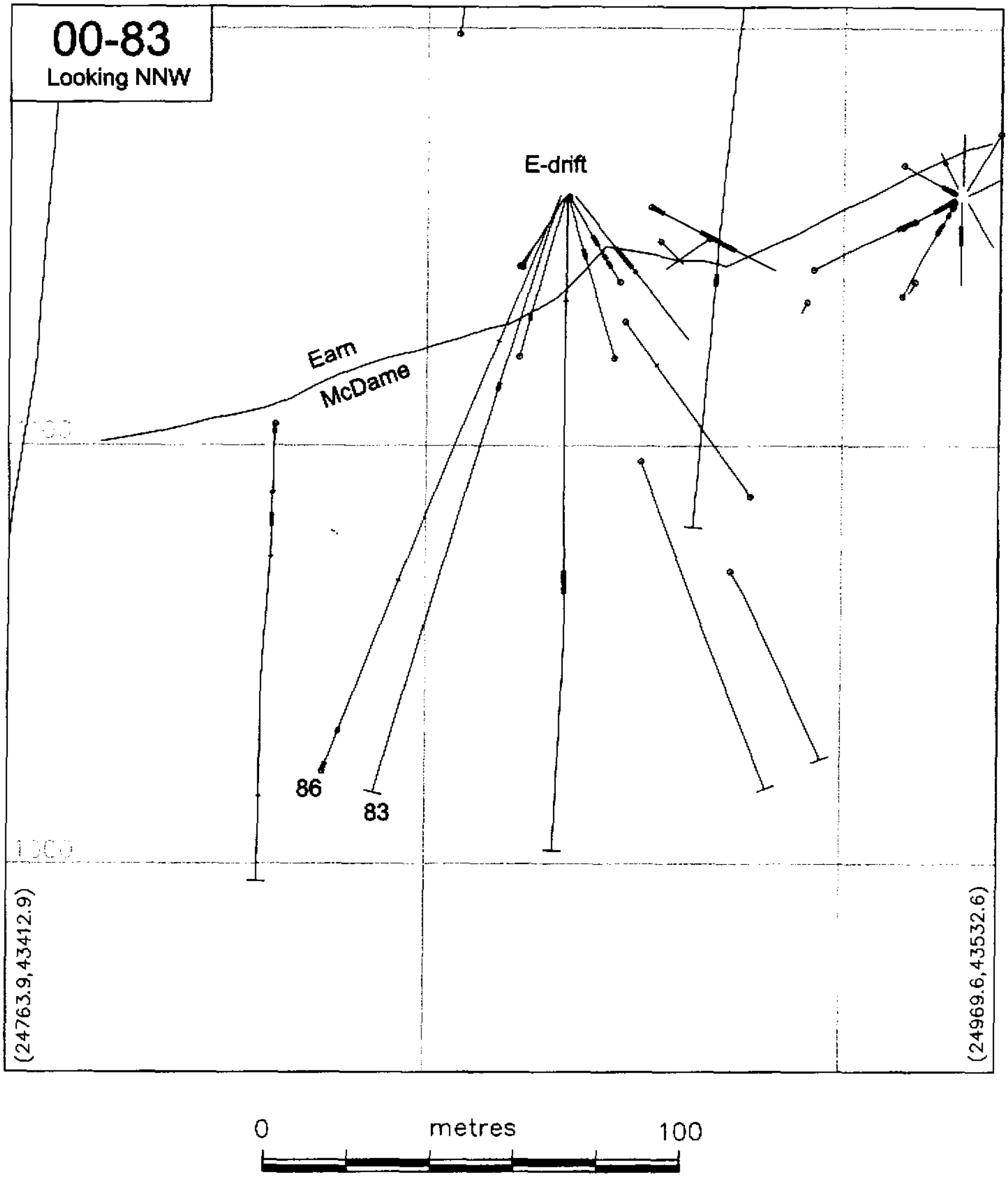

Fig. 4.12: Hole 00-83 drill section, looking NNW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 20 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Topographic surface (not shown) is at approximately 1315 metres elevation.

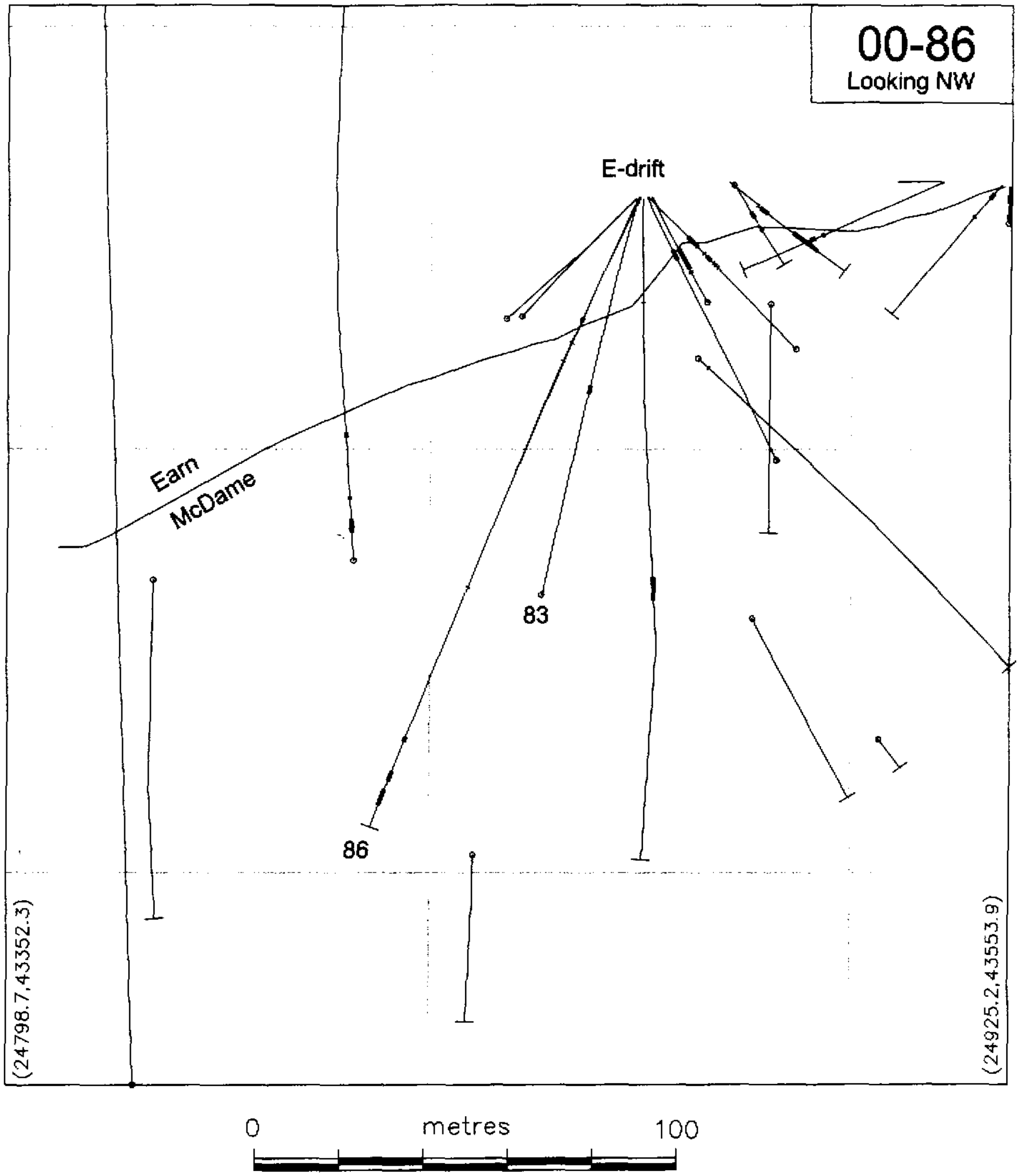

Fig. 4.13: Hole 00-86 drill section, looking NW. Numbers refer to holes drilled in Winter 2000 program; previous holes are not numbered. Search distance normal to plane of section is 20 metres; drill hole pierce points are indicated by small circle symbols. Lower Zone or mineralized limestone intercepts are indicated by thick segments on drill holes. Topographic surface (not shown) is at approximately 1325 metres elevation.

4.6 CONCLUDING REMARKS

The main conclusions are:

- The drilling completed in this program was successful in extending the significant sub-unconformity mineralization discovered during the summer of 1999 in hole SSD-99-65. This zone of mineralization, called the '65 Zone', is characterized, though not necessarily dominated, by complexity and overprinting. This is shown by textures implying several phases of fluid input, producing a combination of intra-mineral replacement, hydrothermal solution, and brecciation. These features are typical of large and well developed carbonate replacement deposits (Megaw, 2000).

- The strength and heterogeneity of the mineralizing activity in the '65 Zone' strongly suggests it lies on a part of the network of fluid pathways that was exploited repeatedly by mineral solutions, i.e. a feeder. Other parts of the zone, however, consist of a simpler paragenesis typical of more passive replacement by one or two sulphide 'events' (the latter description also fits unconformity-related mineralization above the '65 Zone').

- The '65 Zone' is confined to the 'middle' drill fans of 65-C and 65-S. Thus, it has an E-W or ENE, apparently stratabound trend, conforming to a depth of about 25 metres below the unconformity. The '65 Zone' is open to the west. It is not clear how, or if, the zone connects to the east with the rest of the mineralization in Silver Creek South.

- The geometry and textural characteristics suggest the '65 Zone' is a manto-shaped feeder. It is probably not chimney-shaped, because it could not be traced downwards. However, this does not preclude the possibility that it bends or 'chimneys' down beyond the region tested. In this regard, the zone is open to the west towards the Camp Creek fault, which might represent an excellent structural conduit for the 'root' of the '65 zone'.

- It is still not known if the '65 Zone' is exclusively the source of the low resistivity CSAMT anomaly that led to this and the previous (summer 1999) drilling programs.

- The distinction between unconformity-related and sub-unconformity mineralization is useful, although its genetic significance is debatable. In general, unconformity mineralization appears to the product of more passive replacement by one or two mineralizing events, whereas some sub-unconformity mineralization indicates far more dynamic, multiphase, hydrothermal and mineralizing activity and reworking. The latter implies a feeder or proximity to a feeder. Perhaps all this means is that feeders are more likely to develop within the limestone than at the top of the limestone, i.e. at the unconformity, which in detail is probably a very irregular contact and not necessarily disposed to accommodate sequential pulses of fluids along the same path each time.

- The presence of mineralization up to 100 metres vertically below the unconformity is encouraging (especially holes 68, 75 and 86). These deeper zones are quite variable, some being base-metal rich, and others characterized by pyrrhotite and chalcopyrite. They do not display the 'dynamics' shown by the '65 Zone', and are probably not feeders. They are more likely lateral branches or 'bleeders' from more deeply rooted feeders or chimneys. Their variety suggests that they formed at different times.

- Although the program was not successful in finding a significant sulphide chimney, as was postulated based on earlier geophysical and drilling results, the likely reason for this does have positive implications. That is, it appears that this part of the deposit is still in the relatively distal part of the system which is dominated by irregular mantos, and is still outside the medial to proximal domain where high tonnage chimneys tend to be developed (Megaw, 2000). This implies that we have only begun to tap into one, marginal part of the overall deposit, and that potentially substantial increases in resource tonnage can be accrued by tracing the manto mineralization back through the system to the major chimneys that fed them. This has historically been the experience in such deposits as Santa Eulalia and Naica in northern Mexico.

- Exploration and research should proceed with the principal aim of identifying the basic geometry and scale of the Silvertip hydrothermal system, and following it from the already identified distal region back towards the magmatic source. Finding evidence of the source intrusion or proximal skarn mineralization would indicate the dominant vector of the hydrothermal plumbing system, and hence optimize future exploration strategies.

5.0 RECOMMENDATIONS

The recommendations proposed here are aimed towards significantly advancing the Silvertip project. A two-phase approach is envisioned:

PHASE 1

Regional or property-scale geological and geophysical exploration and laboratory research, in order to

- Improve understanding of the scale, morphology and genesis of the overall system,
- To provide a 'vectoring' tool to guide exploration strategies, and
- To avoid overlooking other parts of the system that might offer presently unrecognized potential.

PHASE 2

Underground and surface diamond drilling to investigate specific targets or ideas emerging from Phase 1. This phase would utilize and expand on the existing mine infrastructure, and strive to trace the known mineralization to depth.

- Underground exploration development (1 to 1.2 km) from existing workings,
- Underground geophysics (*potentially*: seismic, radar, mise-à-la-masse, AMT, EM, borehole EM),
- Underground drilling, mainly from new development, and surface drilling of new targets, and possibly stepping-out from previous, thinly tested areas.

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PROJECT STATEMENTS

List of Personnel On-Site

	Position	Date in	Date out	Rate	Days
Staff					
Steve Robertson	Manager/Geologist	Dec 2	Dec 6	$335	50
		Jan 3	Feb 16		
Chris Rees	Geologist	Jan 3	Feb 11	$295	61
		Nov 16	Dec 6		
Linda Lewis	Geologist	Jan 2	Feb 12	$295	42
Chris Akelaitis	Geologist	Jan 3	Feb 16	$166	66
		Nov 16	Dec 6		
Al Boon	Interim Mgr./Shifter	Oct 4	Dec 16	$485	117
		Jan 3	Feb 15		
Richard Ney	Core Splitter	Jan 3	Feb 15	$145	44
Rhonda Anderson	Bull Cook	Jan 5	Feb 15	$145	44
Ivor Saunders	Camp Manager	Oct 1	Nov 10	$185	41
Don Lange	Watchman	Feb 11	Apr 30	$200	80
Bogart Cross	Camp Helper	Nov 11	Dec 3	$155	22
Bert Parrent	Miner/Shifter	Oct 19	Dec 16	$365	59
Tom Colbourne	Shifter	Oct 23	Nov 25	$485	29
Harry O'Connor	Miner	Oct 19	Dec 16	$295	59
Bob Fisher	Miner	Oct 19	Jan 4	$295	78
John Nesgard	Miner	Oct 19	Jan 4	$295	78
Graeme Ennis	Miner	Oct 19	Dec 1	$365	43
Mike Sanderson	Miner	Oct 19	Dec 1	$365	43
Terry Bergeron	Miner	Nov 25	Dec 16	$295	21
Jim Wilson	Miner	Nov 25	Dec 16	$295	21
Contractors					
Norm Beebee	Mechanic	Nov 11	Nov		20
Ray Olafson	Electrician	Dec 1	Dec 16		56
		Jan 3	Feb 11		
Lyle Dennis	Electrician	Oct 19	Dec 1		43
Kel Sax	Surveyor	Jan 3	Jan 7		4
Gunther Geisler	Carpenter	Oct 29	Nov 15		18
Mathias Geisler	Carpenter	Oct 29	Nov 15		18
1984 Inc.					
Lise Tompson	Cook / First Aid	Oct 19	Dec 16		59
Lorraine Pizzey	Cook / First Aid	Jan 3	Feb 15		44
Advanced Drilling					
Dale McDonald	Mechanic	Jan 3	Jan 12		9
Derrick McDonald	Mechanic	Jan 3	Feb 9		38
Malcolm McLean	Driller	Jan 3	Feb 9		38
Lorne Lloyd	Driller	Jan 3	Feb 4		33
Joe McKeown	Driller	Jan 3	Feb 9		38
Rod Yaworski	Driller	Jan 3	Feb 4		33
Brian Wolfe	Helper	Jan 3	Feb 6		35
Ron Williams	Helper	Jan 3	Feb 9		38
Blake Oakford	Helper	Jan 3	Feb 4		33
Lorin Berisoff	Helper	Jan 3	Feb 4		33

Statement of Expenditures

Salaries				$225,758
Contract Services				$119,246
Food	1846 person/days	@ $22/day		$40,612
Accommodation	1588 person/days	@ $20/day		$31,760
Transportation				
	Trucks (3), 190 days	@$65/day	$37,050	
	Shipping		$29,623	
	Fuel		$77,000	
	Airfares		$20,543	
				$164,216
Diamond Drilling	3210 metres (22 holes)	@ $85/metre		$272,850
Assays	480 core samples	@ $33/ sample		$15,840
Ground Support	Bolts, Screen, Straps, Timber			$43,973
Camp and General Support	Including supplies, repair, maintenance			$75,676
Communications	Satellite phone, radio phone, Long distance			$9,580
Equipment Rental				$156,214
Snow Clearing and Road Work				$32,000
Water Sampling				$16,500
Courier				$1,647
Report Writing and Drafting				$35,000
Filing Fees				$13,150
Subtotal				$1,254,022
Overhead Fee (12%)				$150,483
Total Cost				**$1,404,505**

STATEMENT OF QUALIFICATIONS

I, Christopher John Rees, currently of Imperial Metals Corporation, Suite 420-355 Burrard Street, Vancouver, British Columbia, certify that

- I hold degrees in geology from Carleton University (Ph.D. 1987), University of Regina (M.Sc. 1980) and University College of Wales (B.Sc. 1976).
- I have been engaged in geological mapping and mineral exploration services in Canada since 1976.
- I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia.

Signed this 5th day of May, 2000

C.J. Rees, P.Geo.

PROFESSIONAL
PROVINCE OF
C. J. REES
GEOSCIENTIST

Christopher A. Akelaitis

Statement of Qualifications

I, Christopher Akelaitis, of 1956 Haro St, Vancouver, British Columbia, hereby certify that:

- I am a geologist, employed by Imperial Metals Corporation.
- I am a 1999 graduate of the University of British Columbia in Vancouver, with a Bachelor of Science degree in Geology.
- I have been employed in mineral exploration since 1997 and have continuously practiced my profession since June of 1999.
- This report is based on the information gained during the 1999-2000 field season and a review of private and public reports.

Signed at Vancouver, British Columbia, this 5th day of May, 2000.

Christopher Akelaitis

Christopher Akelaitis

Stephen B. Robertson, P.Geo.

Statement of Qualifications

I, Stephen Robertson, of 1969-B Lower Road, Roberts Creek, British Columbia, hereby certify that:

- I am a geologist, employed by Imperial Metals Corporation.
- I am a 1989 graduate of the University of Alberta in Edmonton, with a Bachelor of Science degree in Geology.
- I have been employed in mining since 1988 and have continuously practiced my profession since 1989.
- I am a Professional Geoscientist, registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- I personally supervised, and was involved in the planning and implementation, of the programs described in this report.
- This report is based on the information gained during the 1999-2000 field season and a review of private and public reports.
- This report may be used for development of the property or raising of funds, provided that no portion of it is used out of context, or in such a manner as to convey a meaning different from that set out in the whole.

Signed at Vancouver, British Columbia, this 4 day of May, 2000.

Stephen Robertson, P.Geo.

APPENDIX A

Diamond Drill Logs

HOLE NO: SUD-00-67 SECTION:65C GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43317.50mN	24957.50mE	1133.00RL

Pre-collar depth: Final depth: 185.90

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 55.1-59.95 M, 95.85-104.5 M, 105.16-107.5 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-51.00
30.48	254.50	-51.80
60.96	256.90	-53.60
91.44	258.00	-54.20
121.92	256.50	-55.50
152.40	255.00	-55.90
182.88	256.30	-56.50

*** SUMMARY LOG ***

0.00	44.20	1B SILTSTONE / SANDSTONE
44.20	48.20	1AA CARBONACEOUS ARGILLITE
48.20	51.40	FAULT ZONE 1AA CARBONACEOUS ARGILLITE
51.40	55.10	1AC CALCAREOUS ARGILLITE
55.10	59.95	LOWER ZONE MASSIVE SULPHIDE
59.95	82.30	MCDAME LIMESTONE UNIT 1
82.30	95.85	MCDAME LIMESTONE UNIT 2
95.85	104.50	LOWER ZONE MASSIVE SULPHIDE
104.50	105.16	LOST CORE
105.16	107.50	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 185.90 HQ
Drill contractor:	ADVANCE DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	7/1/00
Date finished:	10/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	RICHARD NEY

Material left in hole: NONE
Base of complete oxidation –
Top of fresh rock: O.O
Water first encountered: NONE
Water inflow estimate: 0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
54.10	60.95	6.85	104.78	0.85	3.97
94.75	104.50	9.75	309.50	4.87	13.88
105.16	108.50	3.34	225.69	3.91	5.01

Checked and signed:________________ Date:________

HOLE NO: SUD-00-67	SECTION:65C	GRID:SILVER CK S

107.50	124.50	MCDAME LIMESTONE UNIT 2 RUBBLE BRECCIA
124.50	126.30	MCDAME LIMESTONE UNIT 4
126.30	135.30	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA
135.30	138.70	MOSAIC BRECCIA RECRYSTALLIZED LIMESTONE
138.70	140.90	CRACKLE BRECCIA DOLOMITIZED LIMESTONE
140.90	155.50	STYLOLITIC BRECCIA RECRYSTALLIZED LIMESTONE
155.50	164.20	LIMESTONE
164.20	185.90	CRACKLE BRECCIA DOLOMITIZED LIMESTONE
185.90		END OF HOLE

Checked and signed:__________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	44.20	1B SILTSTONE / SANDSTONE General Description: Interbedded, medium grey, fine to coarse grained sandstone and laminated to thinly bedded, dark grey siltstone, with minor black, fine grained mudstone. Fining upward sequences range from 15cm - 150cm. Bedding ~45 to core axis, occasionally warped, contorted and gradually steepens down section to ~60 to core axis. Sandstone beds decrease in size and abundance with depth. Trace - 2% quartz-carbonate stringers (@5, 20 & 50 degrees to core axis); 1-5% pyrite (increases down hole) as disseminations and clots in stringers; trace sphalerite associated with pyrite in quartz-carbonate stringers & veinletts. Conformable lower contact. 16.94-17.24 GOUGE Carbonaceous gouge with upper and lower contact @ 60 to core axis. 23.40-24.00 CALCAREOUS SILTSTONE Contorted laminae and bedding; 2% pyrite blebs within quartz-carbonate stringers. 26.00-44.20 SILTSTONE / SANDSTONE Decrease in width and abundance of sandstone beds, now medium to fine grained sandstone layers are mm to several centimetres thick, accompanied by increased pyrite (average 5%), as disseminations throughout both lithologies and as cross-cutting fracture fillings with quartz-carbonate and pyrite bands to 2 centimetres. Rare sporadic calcareous beds. Core in areas of deformation (contorted bedding) are brittle & often rubbly. S2 axial plane of folds is at 60 to core axis. From 30.2 - 30.7m: Sulphide veining consisting of two pyrite-sphalerite-quartz-carbonaceous veins, 1 and 3 centimetres wide, @ 20 and 40 to core axis.	1B							
44.20	48.20	1AA CARBONACEOUS ARGILLITE Dark grey to black, rubbly, carbonaceous argillite, massive to thinly laminated. Rubbly due to brittle fracture of predominantly contorted laminae. 5% pyrite, as disseminations and clots in quartz-carbonate veinlets, 30 to core axis. Broken lower contact with rubbly fault zone	1AA							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		below.								
48.20	51.40	FAULT ZONE 1AA CARBONACEOUS ARGILLITE 50% carbonaceous gouge, 40% argillite rubble, 10% bull white quartz veining to 10 centimetres wide. 4% pyrite disseminations and clots. Quartz-veined lower contact.	FZ							
51.40	55.10	1AC CALCAREOUS ARGILLITE Medium to dark grey, fine grained, finely laminated calcareous argillite with abundant crackle breccia. Towards the base of the unit, breccia intensity increases (both stylolitic and rubble breccia), healed with coarse grained calcite. 4% pyrite, 6% calcite, 2% quartz. Irregular lower contact appears to be a later stage calcareous fine grained, finely laminated sediment infill ??, 13 centimetres wide. 54.10-55.10 CALCAREOUS ARGILLITE Hanging wall sample. Stylolitic to rubble breccia as described above; lower 13 centimetres is finely laminated calcareous argillite (karst in-fill?). 5% pyrite, 10% calcite, 2% quartz.	1AC	199401	54.10	55.10	0.00	1.80	0.01	0.25
55.10	59.95	LOWER ZONE MASSIVE SULPHIDE 55.10-56.50 PYRITE SPHALERITE MASSIVE SULPHIDE Rubble brecciation at the unconformable contact contains brecciated pyrite clast, limestone, sphalerite and carbonaceous argillite clasts (mm to 15 centimetres) cemented by medium to coarse grained calcite. 30% pyrite, 10% sphalerite, 1% galena, trace pyrrhotite, 10% calcite, 5% quartz.	LZ	199402	55.10	56.50	0.00	33.80	0.09	3.43
		56.50-57.13 FLOATSTONE Crackle / rubble breccia, vuggy floatstone with 5% pyrite, 2% sphalerite clasts, 8% calcite. Irregular lower contact with massive sulfide below. Finely laminated, calcareous, in-fill sediment, oriented 30 to core axis at the lower contact.		199403	56.50	57.13	0.00	9.40	0.08	0.12
		57.13-58.13 PYRITE SPHALERITE MASSIVE SULPHIDE Fairly massive, medium to coarse grained pyrite and red-brown to black sphalerite, with 15% remnant limestone fragments and clasts. Limestone has brecciation ranging from crackle to mosaic with calcite +/- pyrite cement. 50% pyrite, 15% sphalerite, 2-3% galena, 15% limestone, 10% calcite and 8% quartz.		199404	57.13	58.13	0.00	182.40	0.41	8.47
		58.13-59.13 PYRITE SPHALERITE MASSIVE SULPHIDE Similar to the previous sample, but decreased limestone. Sulphides are again medium to coarse grained, with almost total		199405	58.13	59.13	0.00	270.40	2.26	7.52

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		replacement and only minor brecciation. 55% pyrite, 20% sphalerite, 4% galena, 5% limestone, 10% calcite and 5% quartz. 59.13-59.95 PYRITE SPHALERITE MASSIVE SULPHIDE Very similar to the previous sample. 55% pyrite, 20% sphalerite, 3% galena, 5% limestone, 10% calcite and 5% quartz. Sharp but irregular contact with limestone, along a very carbonaceous stylolite; variable between 50-70 degree contact.		199406	59.13	59.95	0.00	249.50	3.57	7.34
59.95	82.30	MCDAME LIMESTONE UNIT 1 General Description: Uppermost unit of the McDame limestone. Sharp, stylolitic upper contact with massive sulfide containing only minor crackle breccia adjacent and <1% pyrite in calcite-filled fractures. Variably bioclastic-rich, ranging from pale bluish-grey packstone to floatstone and occasionally rudstone. Fauna includes amphipora, massive stromatoporoid and thamnopora. Overall, competent rock, with scattered rubbly, brittle intervals where brecciation is present. Also frequent breaks along stylolites and vuggy intervals. Fossils stretched along foliation @ 60 to core axis. Intermittant crackle breccia, healed with calcite, crystals fine to coarse grained euhedral. 4% carbonate veining to 20 centimetres, at 40 & 70 to core axis. 1% pyrite as small clots with calcite. Broken lower contact with Unit 2. - 79.25m: Mistatch, lost 0.5 meters of core. 59.95-60.95 PACKSTONE Footwall sample. Sharp, irregular upper contact with massive sulphide along a carbonaceous stylolite. Packstone with scattered amphipora. Minor crbx; one calcite vein, 3 centimetres at 20 to core axis. 1% pyrite as clots & blebs within calcite.	MLS1	199407	59.95	60.95	0.00	5.30	0.07	0.09
82.30	95.85	MCDAME LIMESTONE UNIT 2 Main stromatoparoid unit comprised of rudstone to floatstone. The massive forms are up to 50 centimetres and amphipora mixed in locally. Rugose coral, Tryplasma is also present. Crackle breccia is common throughout, with localized zones of fine rubble to matrix breccia (clasts from 2 mm - 2 centimetres), 25 - 40 centimetres wide, and commonly with pyrite clots and calcite cement. 91.60-91.70 RUBBLE BRECCIA 92.55-94.75 RECRYSTALLIZED LIMESTONE Very mottled texture due to partial recrystallization as well as strong stylolitization. Original fossil forms obliterated. Very fine grained pyrite (to 4%) occurs as wisps and blebs along stylolites.	MLS2							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		94.75-95.85 RECRYSTALLIZED LIMESTONE Hanging wall sample. Similar to above description; mottled with only faint fossil outlines. Appearance of sphalerite stringers at 40 and 50 to core axis. Stringer at 95.7m is alternating mm bands of red-brown and black sphalerite. Irregular lower contact approximately 20 to core axis. 6% fine grained pyrite, 1% sphalerite.		199408	94.75	95.85	0.00	6.20	0.05	0.20
95.85	104.50	LOWER ZONE MASSIVE SULPHIDE General Description: Massive pyrite, sphalerite, galena with 10% remnant limestone (limestone is concentrated in the upper 2m of the section). Coarse grained, massive to vaguely banded galena predominant from 98.0-99.45m and is associated with coarse red-brown sphalerite and lesser pyrite. Massive, unbrecciated pyrite (minor sphalerite) comprises the centre of the zone from 99.45-101.5m (very siliceous and competent). Below the pyritic zone, banded to massive, siliceous, coarse grained red to black sphalerite dominates with lesser pyrite and galena. Strong brecciation below 103.8m has really reduced competency and from 103.8-104.5m, massive sulfide is very sphalerite rich and granular, like sand. Overall estimate: 45% pyrite, 20% sphalerite, 10% galena, 10% quartz, 5% carbonate, 10% limestone. Non-magnetic.	LZ							
		95.85-97.00 PYRITE SPHALERITE MASSIVE SULPHIDE LIMESTONE 80% recovery. Irregular upper contact with limestone, approximately 20 to core axis. Upper 80 centimetres is coarse grained, but imcompetent, massive pyrite + sphalerite. Lower 35 centimetres is remnant, recrystallized limestone, crackle brecciated with partial replacement by pyrite and sphalerite along fractures. 30% pyrite, 25% sphalerite, 1% galena, 10% calcite.		199409	95.85	97.00	0.01	170.80	0.55	18.19
		97.00-98.00 LIMESTONE PYRITE SPHALERITE MASSIVE SULPHIDE Similar to previous interval with a pod of crumbly massive, coarse grained pyrite and sphalerite, and below is a fragment of recrystallized limestone. There is increased limestone in this sample (60%). Sharp, irregular lower contact with banded sulphides below.		199410	97.00	98.00	0.00	70.40	0.24	4.85
		98.00-98.70 BASE METAL MASSIVE SULPHIDE		199411	98.00	98.70	0.03	1225.80	18.29	29.67

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Crudely banded to massive coarse grained galena, sphalerite and pyrite with quartz and calcite the main gangue minerals and as late fracture fillings. Banding at 60-70 to core axis.		199413	98.70	99.45	0.03	870.10	18.55	12.60
		98.70-99.45 BASE METAL MASSIVE SULPHIDE Similar description as previous sample with slightly more pyrite and decreased galena. Distinct sulphide bands at upper contact, 0.5-1.5 centimetres. 50-60 to core axis. 35% sphalerite, 30% pyrite, 20% galena, 10% quartz, 5% calcite.		199414	99.45	100.45	0.40	116.00	0.86	8.94
		99.45-100.45 PYRITE MASSIVE SULPHIDE Predominantly fine to coarse grained massive pyrite in a siliceous matrix: sphalerite occurs as coarse clots or fine grained intergrowths with pyrite. 75% pyrite, 9% sphalerite, trace-1% galena, 10% quartz, 5% calcite. Blank sample follows interval.		199416	100.45	101.45	0.31	177.40	3.43	10.27
		100.45-101.45 PYRITE MASSIVE SULPHIDE Similar to prevous sample, but even more competent and siliceous. Quartz-calcite str4s at 20 & 50 to core axis. 75% pyrite, 4% sphalerite, trace-1% galena, 15% quartz, 5% calcite.		199417	101.45	102.45	0.32	111.70	1.75	11.47
		101.45-102.45 PYRITE SPHALERITE MASSIVE SULPHIDE Increasing coarse grained sphalerite along with pyrite in a quartz-rich matrix; vuggy, but competent core. 50% pyrite, 25% sphalerite, 1% galena, 20% quartz, 5% calcite.		199418	102.45	103.45	0.17	160.90	2.87	20.67
		102.45-103.45 BASE METAL MASSIVE SULPHIDE Sphalerite as coarse grained clots and bands, increases down section, as well as coarse grained galena. Siliceous, competent core in the upper 50 centimetres, becoming crumbly below. 45% pyrite, 35% sphalerite, 5% galena, 10% quartz, 5% calcite. 103.45-104.50 BASE METAL MASSIVE SULPHIDE Upper 35cm is distinctly banded sphalerite and pyrite with minor galena, widths from 1 to 10 centimetres, @ 30 to core axis. Below 103.8 metres, rubble brecciation has reduced the spalerite-rich sulphide to sand.		199419	103.45	104.50	0.00	635.60	10.43	26.43
104.50	105.16	LOST CORE Drillers marker indicates 2 feet of wash where the core is crumbly and sandy. If it was similar to the sample above, it was likely sphalerite-rich.	LOST							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
105.16	107.50	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA General Description: Chaotic mix of anguler to sub-rounded black argillite (Earn), limestone, dolostone and sulphide clasts, mm to 5 centimetres, in a predominantly late stage, coarse grained calcite matrix (crystals to 1 centimetres) and minor sulphides. Probably a paleokarst feature which was partially in-filled with Earn carbonaceous sediments, then underwent late stage brecciation and hydrothermal karst development during mineralization. Overall approximately 25% pyrite, 10% galena, 10% sphalerite. 105.16-106.00 ARGILLITE/SULPHIDE/LIMESTONE RUBBLE BRECCIA	LZ	199420	105.16	106.00	0.01	252.40	4.64	7.00
		As in general description above. Approximately 75% recovery of argillite (35%), limestone/dolostone (15%) and sulphide (35%) clasts in a fine grained calcite - sulphide matrix.		199421	106.00	107.00	0.14	501.80	8.46	9.12
		106.00-107.00 SULPHIDE/ARGILLITE RUBBLE BRECCIA Rubble breccia as above, but with increased sulphides, both as clasts and replacement, in a variable matrix of calcite and sulphides. 35% pyrite, 15% sphalerite, 10% galena, 20% calcite.		199422	107.00	107.50	0.00	72.60	1.30	3.36
		107.00-107.50 ARGILLITE/SULPHIDE/LIMESTONE MOSAIC BRECCIA Mosaic breccia at the top of the unit, with mainly argillite clasts and lesser limestone and sulphide clasts, randomly oriented in a coarse grained, vuggy calcite matrix. The lower 20 centimetres is rubble breccia consisting mainly of very carbonaceous argillite clasts, minor sulphide and limestone clasts, in a calcite +/- pyrite matrix. Sharp lower contact @ 85 to core axis.								
107.50	124.50	MCDAME LIMESTONE UNIT 2 RUBBLE BRECCIA General Description: 60-70% of this unit is comprised of rubble breccia in an intermittantly weakly sulphidized lime mud matrix, lesser stylolitic breccia and minor mosaic breccia. Remaining identifiable fossils include stromatoporids, minor euryamphipora intercalations (e.g. @ 111.4m), amphipora, and possible thin shelled brachiopods (e.g. @ 114.95m). The presence of minor euryamphipora suggests Unit 2, but if that is the case, most or all of Unit 3 is not in the section - possibly displaced by faulting. Overall, 3% pyrite, trace sphalerite and galena. 107.50-108.50 WACKESTONE CRACKLE BRECCIA Footwall sample. Crackle brecciated wackestone with minor	MLS2	199423	107.50	108.50	0.01	3.70	0.04	0.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		stromatoponds and amphipora. Rare, small (<1 centimetres) argillite clasts in limestone, adjacent to Lower Zone. Vuggy with coarse grained calcite cement and vug fillings. 1% pyrite in calcite cement and as small clasts. 108.50-109.30 DOLOMITIZED LIMESTONE RUBBLE BRECCIA Limestone altered to secondary dolostone, now variably brecciated, from crackle breccia to rubble breccia. 1% fine grained pyrite as blebs along fractures. 115.70-124.50 LIMESTONE RUBBLE BRECCIA As in general description; brecciated limestone, dolostone and very sparse sulphide clasts, angular to sub-round, in a fine lime mud matrix which is locally sulphidized as are minor clasts being replaced by sulphides. 6% pyrite, trace - 2% galena + sphalerite. Rubble breccia also has intermittant strong stylolitization. Main concentrations of sulphides @ 115.8 - 116.7 metres, 120.0-120.2m, 120.5-120.7m, 121.15m, 121.5m and 121.9m. Bottom of the unit occurs at the appearance of dense euryamphipora.								
124.50	126.30	MCDAME LIMESTONE UNIT 4 Euramphipora rudstone to floatstone with stromatoporoid and amphipora floatstone in the middle of the unit. Euramphipora and thinness is diagnostic of this unit. Patchy recrystallization; moderate stylolites. Fossils oriented 35 to core axis. Trace - 1% pyrite.	MLS4							
126.30	135.30	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA Top of Unit 5, characterized by coarse amphipora (to 6mm) floatstone, minor stromatoporoid packstone. 10% calcite veining to 2 centimetres wide, at 20 to core axis. 1% pyrite associated with	MLS5							
135.30	138.70	MOSAIC BRECCIA RECRYSTALLIZED LIMESTONE 50% coarsely recrystallized limestone in a very coarse grained calcite matrix, remnant rubble breccia with calcareous mud infill sedimentation (e.g. 136.7m). 2% discontinuous pyrite stringers and clots along stylolites and at boundaries between calcite matrix & limestone clasts.	AMLS							
138.70	140.90	CRACKLE BRECCIA DOLOMITIZED LIMESTONE Brittle dolostone, crackle brecciated. Rugose coral at 138.9m. 1% disseminated pyrite and along fractures.	MLSD							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
140.90	155.50	STYLOLITIC BRECCIA RECRYSTALLIZED LIMESTONE Light bluish-grey to white, variably recrystallized limestone, from coarse grained sparry calcite to fine grained, sugary textured calcite. Stylolites common with some slip movement along them (e.g. @ 151.75m). Sparse mineralization concentrated along stylolites, pyrite - sphalerite stringer at 148.6m and galena clot + stringer at 149.45m. Below 151.2, stylolite orientation gradually flattens to nearly parallel to core axis - possible fold nose. Very rare recognizable fossils. 2% pyrite, trace sphalerite and galena.	AMLS							
155.50	164.20	LIMESTONE Unit 5?? Predominantly amphipora floatstone alternating with packstone / wackestone; minor stromatoporids. Approximately 30% altered / recrystallized to sucrosic textured calcite where only faint fossil outlines remain. Stylolites throughout and occasional crackle breccia. 1% fine grained pyrite along carbonate stringer margins, 20-30 degrees to core axis.	MLS5'							
164.20	185.90	CRACKLE BRECCIA DOLOMITIZED LIMESTONE Rubbly, dolomitized limestone with strong crackle breccia texture; 10% calcite healing fractures.	MLSD							

*** END OF HOLE *** 185.90

HOLE NO: SUD-00-68 SECTION:65-S GRID:SILVER CK S

PROJECT CODE : SILVERTIP
TENEMENT : SILVERTIP MINING
PROSPECT : CORPORATION
GRID : SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION : LIARD, MD, BC
HOLE TYPE : UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.50mE	1129.00RL

Pre-collar depth: Final depth: 212.80

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: DRILLED TO DEPTH

Comments: LZ: 51.6-52.6, 56.2-57.8, 95.4-101.5, 126.0-127.1, 169.5-180.4 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ -SHOT

Depth	Azimuth	Inclination
0.00	250.00	-51.00
23.77	257.70	-51.10
54.25	255.10	-52.90
84.73	257.50	-53.50
115.21	260.00	-53.70
145.69	259.00	-54.60
176.17	258.80	-55.00
206.65	260.50	-55.40

*** SUMMARY LOG ***

0.00	45.54	1B SANDSTONE SILTSTONE
45.54	47.60	1A CARBONACEOUS ARGILLITE
47.60	49.63	FAULT ZONE
49.63	51.59	1AC CALCAREOUS SILTSTONE
51.59	52.58	LOWER ZONE MASSIVE SULPHIDE
52.58	56.19	MCDAME LIMESTONE UNIT 1 AMPHIPORA WACKESTONE
56.19	57.82	LOWER ZONE MASSIVE SULPHIDE
57.82	95.38	MCDAME LIMESTONE UNIT 1
95.38	101.50	LOWER ZONE MASSIVE SULPHIDE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 212.80 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	6/1/00
Date finished:	10/1/00
Logged by:	CHRIS AKELAITIS
Relogged by:	
Sampled by:	RICHARD NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate:

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
50.33	62.31	11.98	26.71	0.11	1.34
94.44	104.54	10.10	280.13	5.20	11.34
123.51	128.10	4.59	244.82	5.30	2.60
168.60	188.40	19.80	24.94	0.08	3.24

Checked and signed:______________________ Date:__________

HOLE NO: SUD-00-68	SECTION:65-S	GRID:SILVER CK S

101.50	105.56	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
105.56	106.60	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE
106.60	125.96	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
125.96	127.11	LOWER ZONE / LIMESTONE MASSIVE SULPHIDE
127.11	138.37	MCDAME LIMESTONE UNIT 3 AMPHIPORA PACKSTONE
138.37	140.57	MCDAME LIMESTONE UNIT 4 EURYAMPHIPORA FLOATSTONE
140.57	169.50	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE
169.50	180.40	LOWER ZONE MASSIVE SULPHIDE
180.40	183.80	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE
183.80	187.40	LOWER ZONE MASSIVE SULPHIDE
187.40	204.17	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE
204.17	209.70	RECRYSTALLIZED LIMESTONE
209.70	212.80	MCDAME LIMESTONE UNIT 5 AMPHIPORA FLOATSTONE
212.80		END OF HOLE

Checked and signed: ____________________ Date: __________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	45.54	1B SANDSTONE SILTSTONE Interbedded, dark grey to black sandstones and interlaminated siltstones/mudstones with bedding at 40 to the core axis. Sandstones range from fine to coarse grained and form massive to fining upward sequences up to 50 centimetres wide. Ripped up mudstone clasts from 3 mm - 6 centimetres are found in the basal portions of sandstone beds. Sandstone beds decrease in thickness and abundance with depth. Siltstones and mudstones are interlaminated (laminae from 1 mm - 3 centimetres) and display soft-sediment deformation features. Quartz-carbonate and calcite veins are present and range from being bedding sub-parallel to cross-cutting. 3 % pervasive disseminated pyrite cubes nodules and stringers are found throughout the interval. 0.00-7.60 SILTSTONE MUDSTONE Competent core consisting of interbedded siltstones, mudstones and fine-grained sandstones with bedding at 35 to the core axis. From 5.24 metres - 5.34 metres, there is a 5 mm wide quartz-carbonate vein at 25 to the core axis, containing 3% sphalerite, 10% pyrite and a trace of galena. Directly adjacent and sub-parallel to this vein are a number of small (2 mm - 3 mm) stringers of pyrite and lesser sphalerite. 21.50-21.70 QUARTZ VEIN 1.5 - 3 centimetre wide quartz-carbonate vein at 65 to the core axis. Blebs of pyrite and sphalerite are found within this vein. Pyrite is also found as stringers and disseminated cubes adjacent to the vein. Overall the vein contains 5% pyrite and 1% sphalerite. 36.28-36.83 QUARTZ VEIN Incompetent broken up core consisting of black carbonaceous mudstone and a large, 5 centimetre, milky white quartz vein. Rare blebs of pyrite are found within the quartz vein (2%). 38.73-45.54 INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE Competent, interbedded siltstones, mudstones and sandstones. Sandstones are more prevalent at the top of the interval and decrease in abundance towards the base of the interval. Beds and laminae are at 65 to the core axis and are occassionally cross-bedded. Pervasive disseminated pyrite is found throughout	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		the interval and is concentrated in the coarser grained sandstone beds. Overall, the interval contains 4 % pyrite.								
45.54	47 60	1A CARBONACEOUS ARGILLITE Black, finely laminated, carbonaceous argillite and siltstone. 3% calcite stringers are found throughout the interval and are dominantly orientated parallel to laminae at 70 to the core axis. Pervasive disseminated pyrite is also found throughout the interval. Overall, 2% pyrite. 46.00-46.80 FAULT ZONE Black carbonaceous fault gouge with 2% pervasive disseminated pyrite and broken up pieces, up to 1.5 centimetres wide, of quartz-carbonate vein material.	1A							
47.60	49.63	FAULT ZONE Fault zone consisting of 50 % black carbonaceous gouge and 50 % black carbonaceous argillite rubble of unit 1AA. Rubble fragments are up to 3 centimetres in diameter. 2 % pervasive disseminated pyrite is found throughout the zone.	1AA							
49.63	51.59	1AC CALCAREOUS SILTSTONE Dark grey, laminated and weakly calcareous siltstone with 15 % calcite stringers orientated parallel to laminae at 60 to the core axis. From 50.59 metres - 51.21 metres there is a partially broken up, milky-white quartz-carbonate vein at 25 to the core axis. This vein contains 1% disseminated pyrite. Overall, 2 % disseminated pyrite is found thoughout the interval. 50.33-51.59 1AC CALCAREOUS SILTSTONE Hanging wall sample. Dark-grey, weakly calcareous and laminated siltstone as above.	1AC	199351	50.33	51.59	0.01	2.90	0.03	0.08
51.59	52.58	LOWER ZONE MASSIVE SULPHIDE Pyrite, sphalerite massive sulphide consisting of 64% pyrite, 15 % - 20 % red and black sphalerite, 5 % relict limestone fragments, 1 % magnetic pyrrhotite, and < 1 % galena. Core is silicified and very competent (10 % silica). Vugs throughout interval are lined by euhedral quartz and pyrite crystals. Contacts between massive sulfide and bounding limestone below and unit 1 AC above, are sharp.	LZ	199352	51.59	52.58	0.00	87.30	0.27	6.34

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
52.58	56.19	MCDAME LIMESTONE UNIT 1 AMPHIPORA WACKESTONE Unaltered amphipora wackestone with 10 % calcite stringers and veins up to 1 centimetre wide, which cause localised areas of crackle brecciation throughout the interval. Massive sulphide veins and stringers, of pyrite and sphalerite with lesser galena, up to 3 centimetres wide, are found throughout the interval and are orientated from 20 to 50 to the core axis. Overall estimate: 2 % pyrite, 1 % sphalerite, and a trace of galena.	MLS1	199353	52.58	53.58	0.00	2.50	0.01	0.08
		52.58-53.58 AMPHIPORA WACKESTONE Footwall sample. Weakly crackle brecciated amphipora wackestone with calcite and pyrite stringers up to 1 centimetre wide. Overall estimate: 5 % pyrite, 10 % secondary calcite.		199354	53.58	54.58	0.00	32.50	0.45	4.63
		53.58-54.58 AMPHIPORA WACKESTONE Unaltered to weakly crackle brecciated amphipora wackestone as above with pyrite, sphalerite massive sulfide veins up to 3 centimetres wide. These veins are orientated at 20 - 30 to the core axis and contain 64 % pyrite, 20 % red and black sphalerite, 15 % relict limestone, and 1 % galena. Overall the interval contains 2 % pyrite, 1% sphalerite and a trace of galena.		199355	54.58	55.58	0.00	4.60	0.06	0.15
		54.58-55.58 AMPHIPORA WACKESTONE Weakly crackle brecciated and laminated amphipora wackestone as in sample 199353. 10 % calcite stringers and rare massive sulfide stringers up to 3 mm wide are orientated parallel to laminae at 50 to the core axis. Overall, interval contains < 1% pyrite and < 1% sphalerite.		199356	55.58	56.19	0.00	1.00	0.01	0.04
		55.58-56.19 AMPHIPORA WACKESTONE Unaltered amphipora wackestone as above, with 10 % calcite stringers and < 1% pyrite.								
56.19	57.82	LOWER ZONE MASSIVE SULPHIDE Competent, partially silicified pyrite rich massive sulfide consisting of 75 % - 80 % pyrite, 5 % - 10 % fine-grained sphalerite, 5 % silica, 5 % secodary sparry calcite, and 2 % - 5 % relict limstone. Contacts with bounding limestone are sharp with the upper contact orientated at 60 to the core axis and the lower contact at 15 to the core axis. 56.19-56.95 LOWER ZONE MASSIVE SULPHIDE Pyrite rich massive sulphide as above with 80 % pyrite, 8 %	LZ	199357	56.19	56.95	0.00	100.45	0.21	0.12

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		sphalerite, 5 % secondary calcite, 5 % silica and 2 % relict limestone. 56.95-57.82 LOWER ZONE MASSIVE SULPHIDE Pyrite rich massive sulfide as above but with slightly more relict limestone and slightly less pyrite. Overall estimate: 75 % pyrite, 8 % sphalerite, 7 % relict limestone, 5 % silica and 5 % secondary calcite.		199359	56.95	57.82	0.00	102.40	0.31	3.37
57.82	95.38	MCDAME LIMESTONE UNIT 1 Variable limestone ranging from sparsely fossilized wackestones to amphipora, stromatoporoid, thamnopora floatstones. Upper portion of interval is dominantly unaltered and intact limestone with localised areas of weak crackle brecciation caused by 2 % calcite stringers. Towards the base of the interval, core becomes more strongly crackle brecciated by up to 5 % calcite stringers. In addition, limestone is dolomitized and finely recrystallized over the last 3.2 metres of the interval. Fine-grained sulphide (dominantly pyrite and lesser sphalerite) is found throughout the interval within calcite stringers and lining rare styolites and fractures. Overall estimate: 1 % pyrite, < 1% sphalerite. 57.82-58.27 AMPHIPORA WACKESTONE	MLS1	199360	57.82	58.27	0.00	1.60	0.00	0.78
		Footwall sample. Unaltered amphipora, stromatoporoid wackestone with 2 % pyrite stringers.		199362	58.27	59.77	0.01	2.30	0.03	0.02
		58.27-59.77 AMPHIPORA WACKESTONE Sparsely fossilized amphipora wackestone with 5 % randomly oriented stringers of secondary calcite. Disseminated fine-grained pyrite is observed within calcite stringers. Overall 1 % pyrite.		199363	59.77	61.13	0.00	1.50	0.02	0.02
		59.77-61.13 WACKESTONE *Sparsely fossilized wackestone with rare thamnopora, amphipora,* and stomatoporoids. Rare calcite stringers are present and contain < 1 % pyrite.		199364	61.13	61.69	0.00	31.30	0.08	2.44
		61.13-61.69 AMPHIPORA PACKSTONE Unaltered limestone which grades from an amphipora, Thamnopora, stomatoporoid packstone into a sparsely fossilized wackestone towards the base of the interval. Two massive sulfide veins up to 3 centimetres wide and oriented at 50 to the core axis are present within the interval. The first vein occurs at 61.21 metres, is bounded by styolites on either side and dominantly								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		consists of fine-grained pyrite. The second vein occurs at 61.56 metres. This vein is up to 1 centimetre wide and is very sphalerite rich (60 % sphalerite, 30 % pyrite, 10 % secondary calcite). Overall estimate: 4 % pyrite, 3 % sphalerite. 61.69-62.31 AMPHIPORA FLOATSTONE Unaltered wackestone which grades into a stromatoporoid, amphipora floatstone at 62.05 metres. Interval contains 1 %, randomly orientated, calcite stringers. Fine-grained sphalerite and pyrite are found within these stringers. Overall, < 1 % pyrite and < 1 % sphalerite. 62.31-77.11 STROMATOPOROID FLOATSTONE Competent, unaltered floatstone with stromatoporids, thamnopora and amphipora throughout. 2 % secondary calcite stringers are present throughout, and cause localised zones of moderate crackle brecciation. Calcite stringers commonly contain fine-grained sphalerite and pyrite. Rare styolites are present and dominantly occur between 50 and 65 to the core axis. Styolites are ocassionally lined by calcite and fine-grained sulphide. Overall estimate: < 1 % sphalerite, < 1 % pyrite. 77.11-86.26 LIMESTONE RUBBLE Unaltered thamnopora, stromatoporoid, amphipora floatstone as above, but consisting of 50 % rubble and 50 % intact core. Limestone rubble ranges in diameter from 0.5 centimetres - 5 centimetres. In areas a foliation defined by elongated fossils is observed and orientated parallel to styolites at 50 to the core axis. 86.26-88.01 CRACKLE BRECCIA FLOATSTONE Weakly crackle brecciated limestone that varies from a stromatoporoid floatstone to a packstone. Rare blebs of pyrite are found lying adjacent to styolites and calcite stringers. At 86.4 metres there is a 4 centimetre wide, sparry calcite vein orientated at 50 to the core axis. The selvage of this vein is lined by fine-grained black sphalerite. At 87.6 metres there is a bleb of massive sulfide up to 2 centimetres wide, containing 30 % galena, 30 % pyrite, and 40 % black sphalerite. Overall estimate: 1 % pyrite, < 1 % sphalerite, < 1 % galena.		199365	61.69	62.31	0.00	0.80	0.00	0.03

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		88.01-92.15 CRACKLE BRECCIA FLOATSTONE Crackle brecciated and vuggy floatstone containing fossils of thamnopora, stromatoporids, and amphipora. 5 % calcite stringers crackle brecciate the interval. At 89.28 metres fine-grained blebs of pyrite are found bleeding into limestone from adjacent styolites and calcite stringers. Overall the interval contains 1 % pyrite. 92. 15-94.44 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Strongly crackle brecciated and dolomitized limestone with localised areas up to 5 centimetres wide of rubble brecciated limestone. 94.44-95.38 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Hanging wall sample described above. At 95.05 metres dolomite begins to gradually change to unaltered limestone. Basal contact with massive sulphide is sharp and orientated at 80 to 90 degrees to the core axis.		199378	94.44	95.38	0.00	6.70	0.08	0.08
95.38	101.50	LOWER ZONE MASSIVE SULPHIDE Partially silicified, homogeneous massive sulphide ranging from fine grained pyrite, pyrrhotite mineralization to coarser grained, ubiquitous sphalerite, galena, pyrite mineralization. Sphalerite is both red and black with black being dominant. Weak sphalerite, pyrite banding is present from 96.9 metres - 99.9 metres and is orientated at 30 to the core axis. Overall estimate: 30 % pyrite, 30 % sphalerite, 20 % galena, 5 % pyrrhotite, and 10 % calcite gangue. 95.38-96.38 LOWER ZONE MASSIVE SULPHIDE Partially silicified sphalerite, galena, pyrite massive sulfide as above. Interval is competent with 2 % vugs lined by euhedral crystals of calcite, quartz, sphalerite, and pyrite. Pyrite is dominantly coarse grained but also occurs as fine grained sulphide in association with magnetic pyrrhotite. Black and red sphalerite and galena are present soley as coarse grained mineralization. In addition mm sized stringers of pyrite are present and are found cross-cutting earlier coarse grained sphalerite and galena mineralization. An orange carbonate (ankerite) is also present and found filling open space. Overall estimate: 30 % pyrite, 30 % sphalerite, 20 % galena, 10 % magnetic pyrrhotite, 10 % calcite, 5 % silica.	LZ	199366	95.38	96.38	0.01	658.50	13.00	12.61
		96.38-97.38 LOWER ZONE MASSIVE SULPHIDE Partially silicified sphalerite, galena, pyrite massive sulfide as		199367	96.38	97.38	0.00	258.40	3.17	13.89

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		above but with more quartz and calcite gangue and less pyrrhotite and pyrite mineralization. In the basal 25 centimetres of the interval two distinct phases of pyrite are visible. The first phase is a fine grained brassy pyrite which, is cross-cut by stringers of a second more golden colored and coarser grained phase of pyrite. This later pyrite mineralization, along with sphalerite, is found in association with a late stage open space fill quartz and calcite gangue. 20 % pyrite, 35 % sphalerite, 10 % galena, 5 % pyrrhotite, 30 % quartz and calcite gangue.								
		97.38-98.45 LOWER ZONE MASSIVE SULPHIDE Sphalerite, galena and pyrite massive sulfide with 3 % relict limestone. The upper 32 centimetres of the interval is competent and partially silicified. Within this upper portion of the sample coarse grained pyrite and sphalerite mineralization is found in association with late stage open space fill calcite gangue mineralization. Small mm sized stringers of this late stage pyrite are found cross-cutting earlier sphalerite and galena mineralization. The basal 75 centimetres of the interval is a less competent hydrothermal collapse massive sulfide rubble breccia. Clasts within this breccia consist of fine-grained pyrite and partially replaced and silicified limestone. Clasts are up to 5 centimetres wide and are found within a matrix of later coarse grained and crumbly black sphalerite mineralization. Very poor core recovery within this breccia. 30 % pyrite, 25 % sphalerite, 10 % galena, 20 % calcite, 10 % silica, 2 % magnetic pyrrhotite.		199368	97.38	98.45	0.12	175.40	2.07	7.78
		98.45-98.93 LOWER ZONE MASSIVE SULPHIDE *Partially silicified sphalerite, galena, pyrite rich massive sulfide* containing 40 % pyrite, 30 % sphalerite, 10 % galena, 10 % calcite, and 10 % quartz. Multiple stages of pyrite and sphalerite mineralization are present with late stage pyrite stringers found cross-cutting all earlier mineralization. Late stage massive sulfide is found associated with open space fill calcite gangue.		199369	98.45	98.93	0.01	254.60	4.77	17.05
		98.93-99.97 LOWER ZONE MASSIVE SULPHIDE Competent, weakly banded sphalerite, galena, pyrite rich massive sulfide containing 40 % red and black sphalerite, 35 % galena, 20 % pyrite, 5 % calcite gangue. Pyrite, sphalerite, and galena banding is orientated at 30 to the core axis.		199371	98.93	99.97	0.01	664.80	13.72	26.93
		99.97-100.65 LOWER ZONE MASSIVE SULPHIDE		199372	99.97	100.65	0.01	404.85	7.03	21.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Sp, pyrite, galena massive sulfide as above but with a decrease in sphalerite and galena mineralization and an increase in pyrite mineralization. Overall estimate: 1 % relict limestone, 40 % pyrite, 35 % sphalerite, 10 % galena, 14 % quartz and calcite gangue.		199374	100.65	101.50	0.00	609.90	11.58	23.04
		100.65-101.50 LOWER ZONE MASSIVE SULPHIDE Massive sulphide as above but with a decrease in pyrite and an increase in galena mineralization. Vague sphalerite and pyrite banding is observed at 50 to the core axis. Overall, 35 % pyrite, 35 % sphalerite, 15 % galena, 14 % quartz and calcite gangue and 1 % relict limestone.								
101.50	105.56	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Brittle, crackle brecciated dolomitized limestone with rare massive sulfide veins up to 3 centimetres wide. 5 % calcite stringers and veins up to 5 mm wide cross-cut and crackle brecciate the core. Core is very brittle and consists of 60 % rubble and 40 % intact rock. 101.50-103.02 CRACKLE BRECCIA DOLOMITIZED *LIMESTONE* Footwall sample. Crackle brecciated dolomitized limestone rubble. Contact with above lying massive sulfide is broken and rubbly. 5 % calcite stringers crackle brecciate the interval. CALCITE stringers are barren of sulphide. At 101.7 metres there is a small 2 mm wide fracture filled with calcite and a lead grey/blue colored mineral with a radiating acicular habit (Bismuthinite, jamesonite, boulangerite ?). Minor amounts of fine grained pyrite and sphalerite are also found within this fracture. At 102.4 metres there is a 2 centimetres wide pyrite vein at 20 to the core axis. Overall 2 % pyrite, trace sphalerite.	MLS1	*199375* 199376	*101.50* 103.02	*103.02* 103.67	*0.00* 0.01	2.90 162.90	0.03 4.27	0.19 14.20
		103.02-103.67 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Intact and crackle brecciated dolomitized limestone with two sphalerite, galena pyrite rich massive sulfide veins up to 3 centimetres wide. The first vein is found from 103.02 metres - 103.17 metres and is orientated at 20 to the core axis. Vein contains 60 % red and black sphalerite 10 % galena, 20 % pyrite and 10 % calcite. Small stringers of sulphide are visible bleeding *out from this vein and into the surrounding dolomite. The second*								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		vein is located at 103.55 metres and is orientated at 50 to the core axis. Overall the interval contains 10 % pyrite 10 % sphalerite, 3 % galena, and 2 % quartz and calcite gangue. 103.67-104.54 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated and dolomitized limestone rubble with 5 % calcite stringers and 1 % pyrite found lining fractures.		199377	103.67	104.54	0.01	1.00	0.01	0.03
105.56	106.60	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE Unaltered to weakly crackle brecciated limestone with bedding and rare styolites at 45 - 50 to the core axis. Small rare stringers of pyrite are found orientated parallel to bedding. Overall < 1 % pyrite.	MLS1							
106.60	125.96	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Moderately crackle brecciated stromatoporoid floatstones and rudstones with lesser euryamphipora, thamnopora and tryplasma throughout. 5 % calcite stringers result in localised areas of crackle brecciation. Rare styolites are present and dominantly occur at 30 - 50 to the core axis. Trace amounts of fine grained pyrite are observed lining some of these styolites. From 109.12 metres - 110.18 metres fossil beds are observed and orientated at 60 to the core axis. 110.18-111.64 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated, dolomitized limestone with 5 % calcite stringers up to 5 mm wide. Relict fossils of amphipora are preserved. 123.51-124.52 STROMATOPOROID FLOATSTONE Slightly crackle brecciated amphipora/stromatoporoid floatstone with the degree of crackle brecciation becoming stronger towards the base of the interval. From 124.02 metres - 124.28 metres the interval is rubble brecciated with clasts of limestone up to 2 centimetres wide. The basal 15 centimetres of the interval is dolomitized. 124.52-125.96 RECRYSTALLIZED LIMESTONE Hanging wall sample. 30 % coarsley recrystallized stromatoporoid floatstone. Upper 43 centimetres of the interval is a hydrothermal collapse rubble breccia with clasts of fine grained pyrite and limestone up to 6 centimetres wide within a matrix of coarse	MLS2	199379 199380	123.51 124.52	124.52 125.96	0.00 0.03	3.20 36.80	0.02 0.78	0.40 0.83

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		grained black sphalerite, pyrite, and quartz-calcite gangue. Sulphide matrix is observed invading into the host limestone along fractures and styolites. The basal 1.00 metre of the interval is dominantly partially recrystallized limestone with rare blebs, clasts and stringers of pyrite and lesser sphalerite. Overall estimate: 7 % pyrite, 4 % sphalerite, trace galena.								
125.96	127.11	LOWER ZONE / LIMESTONE MASSIVE SULPHIDE 60 % partially recrystallized and crackle brecciated limestone with 40 % massive sulfide. Mineralization dominantly occurs as massive sulfide veins from 2 centimetres - 18 centimetres wide. Sulphide is also observed eating into limestone along fractures and styolites found adjacent to sulphide veins. Localised hydrothermal collapse brecciass up to 8 centimetres thick are present and contain clasts of partially replaced limestone and calcite within a quartz-calcite and sulphide matrix. Overall, 20 % sphalerite, 10 % galena, 10 % pyrite.	LZ	199381	125.96	127.11	0.00	925.60	20.14	8.95
127.11	138.37	MCDAME LIMESTONE UNIT 3 AMPHIPORA PACKSTONE Limestone ranging from dense amphipora packstones to recrystallized and rubble brecciated limestone. The upper portion of the unit is characterized by dense amphipora packstones with amphipora ranging from 1 mm - 2 mm wide. Rare massive stromatoporids are also present. Numerous styolites throughout are occassionally lined by pyrite. The basal 3 metres of the interval has been styolitic brecciated. 127.11-128.10 CRACKLE BRECCIA RECRYSTALLIZED LIMESTONE Footwall sample. 30 % coarsely recrystallized and moderately crackle brecciated limestone of unit 3. Relict amphipora ranging from 1 mm - 2mm are preserved in the upper portion of the interval. A trace of fine-grained disseminated pyrite is observed lining fractures in the upper 30 centimetres of the interval. 128.10-132.32 LIMESTONE RUBBLE BRECCIA Dominantly dense amphipora packstones with 10 % recrystallized limestone and 5 % rubble brecciated limestone. Rubble breccia's	MLS3	199382	127.11	128.10	0.00	3.10	0.03	0.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		consist of clasts of limestone up to 5 centimetres within a carbonaceous lime mud. Sulphide is observed within these bx's replacing breccia matrix and clasts. Overall 1 % pyrite, trace sphalerite, trace galena. 132.32-138.37 RUBBLE BRECCIA STYLOLITIC BRECCIA Rubble to styolitic brecciated limestone with 30 % intact amphipora packstones and 10 % recrystallized limestone. Rubble breccia's consist of clasts of limestone up to 8 centimetres wide within a matrix of carbonaceous lime mud. Sulphide is dominantly found replacing breccia matrix and clasts. Rare clasts of sulphide may be present. The basal 3.5 metres of the interval is a styoitic breccia with fine-grained pyrite found lining stylolites. Clasts within this breccia are amphipora packstones up to 10 centimetres wide.								
138.37	140.57	MCDAME LIMESTONE UNIT 4 EURYAMPHIPORA FLOATSTONE Euryamphipora floastones and rudstones with minor massive stromatoporids. 2 % calcite stringers are present and cross-cut the limestone. From 139.47 metres - 139.7 metres the interval is rubble brecciated, with clasts of limestone and recrystallized limestone up to 4 centimetres within a lime mud matrix. Basal 35 centimetres is a styolitic breccia with fine grained pyrite and sphalerite found lining styolites and replacing limestone adjacent to styolites.	MLS4							
140.57	169.50	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE Dominantly dense amphipora packstones and wackestones with significantly thick intervals of coarsely recrystallized and rubble brecciated limestone. 3 % calcite stringers up 5 mm wide result in the crackle brecciation of the limestone throughout. Styolites are rare, however, they are commonly lined by fine-grained pyrite. Fossils present include amphipora, brachiopods and stromatoporids. 140.57-147.00 AMPHIPORA PACKSTONE Limestone ranging from dense amphipora packstones to wackestones. 3 % calcite stringers have resulted in strong to moderate crackle brecciation of the limestone throughout the interval. 147.00-151.61 RECRYSTALLIZED LIMESTONE Fine to coarsely recyrstallized limestone with small intervals up to 25 centimetres wide of unaltered amphipora/stromatoporoid packstones. Styolites throughout interval are commonly lined by fine grained pyrite and are orientated at 45 to the core axis. Overall pyrite is present in trace amounts.	MLS5							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		151.61-156.59 AMPHIPORA PACKSTONE Amphipora packstones and wackestones with rare brachiopods. 3 % calcite stringers and veins up to 1 centimetre have resulted in moderate to strong crackle brecciation of the limestone. Rare styolites at 40 to the core axis are occassionally lined by fine grained pyrite. At 154.84 metres there is a fracture filled with calcite gangue and pyrite. Overall, trace pyrite. 156.59-157.65 RECRYSTALLIZED LIMESTONE Coarsely recrystallized limestone with up to 20 % relict amphipora packstones. Interval is strongly crackle brecciated by 5 % calcite stringers and veins up to 5 mm wide. At 156.93 metres there is a 1.5 centimetre wide calcite vein with blebs of pyrite within it. Overall, trace pyrite. 157.65-158.45 RUBBLE BRECCIA LIMESTONE Rubble brecciated limestone with clasts of recrystallized limestone, dolomitized limestone and unaltered limestone up to 1.5 centimetres within a fine grained calcite matrix. Trace amounts of pyrite are present, and found replacing limestone clasts. 158.45-168.55 RECRYSTALLIZED LIMESTONE Variably fine to coarsely recrystallized limestone, weakly crackle brecciated by 2 % calcite stringers. Rare styolites are found throughout the interval, orientated at 40 to the core axis. Styolites are commonly lined by fine grained pyrite. Two sphalerite veins up to 5mm wide and at 45 to the core axis are found at 160.33 metres. Overall trace sphalerite, trace pyrite. 168.60-169.50 CRACKLE BRECCIA LIMESTONE Hanging wall sample Crackle brecciated limestone with the degree of crackle brecciation increasing towards the base of the interval. The basal 40 centimetres of the interval is strongly crackle brecciated and partially dolomitized with localized areas up to 4 centimetres wide of mosaic brecciation. Mosaic breccias consist of clasts of dolomite up to 2 centimetres wide within a crystalline calcite matrix. Fine grained pyrite is found lining fractures and styolites throughout the interval. Overall 1 % pyrite.		199383	168.60	169.50	0.00	3.00	0.03	0.03

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
169.50	180.40	LOWER ZONE MASSIVE SULPHIDE Strongly silicified and competent pyrrhotite, pyrite massive sulfide with 20 % relict limestone. Interval is very homogeneous and consists of fine to coarse grained pyrite and magnetic pyrrhotite completely to partially replacing limestone. Cp is present up to 1 % in localised areas and is found rimming pyrite and pyrrhotite. Sp is presents in areas up to 4 %. Stringers and veins of an orange carbonate mineral, possibly siderite cross-cut sulphide mineralization at 25 to the core axis. The core is slightly vuggy (2 % vugs) with vugs lined by fine grained euhedral pyrite and calcite crystals. Overall 24 % pyrite, 1 % sphalerite, 40 % pyrrhotite, <1 % chalcopyrite. 169.50-170.10 DOLOMITIZED LIMESTONE MASSIVE SULPHIDE	LZ	199384	169.50	170.10	0.00	31.80	0.03	0.04
		Dolomitized limestone crackle brecciated by 10 % calcite stringers. Upper 15 centimetres of the interval is a pyrite massive sulfide rubble breccia with clasts of fine-grained pyrite up to 1.5 centimetres within a matrix of fine to coarse grained pyrite. At 170.0 metres there is a 4 centimetre wide zone of fine-grained pyrite massive sulfide. Contacts between massive sulfide and adjacent dolomite are sharp. Overall, 35 % pyrite, 10 % calcite, 55 % dolomitized limestone.		199385	170.10	171.10	0.00	13.80	0.02	0.03
		170.10-171.10 MASSIVE SULPHIDE LIMESTONE Fine to coarse grained pyrite and magnetic pyrrhotite massive sulfide with 45 % unaltered relict LIMESTONE from 170.82 metres - 171.1 metres. From 170.1 metres - 170.35 metres fine grained pyrite, pyrrhotite rich massive sulfide is cross-cut by 1 % calcite and iron-carbonate stringers. Contact with underlying limestone at 171.1 metres is sharp and at 25 to the core axis. Overall estimate: 40 % pyrite, 10 % pyrrhotite, 5 % quartz, and 45 % limestone.		199386	171.10	172.10	0.00	14.00	0.02	0.04
		171.10-172.10 LOWER ZONE MASSIVE SULPHIDE Silicified and competent pyrrhotite, pyrite rich massive sulfide with 15 % relict limestone found throughout. Pyrite forms fine to coarse grained masses which lie adjacent to and within fine-grained blebs								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		of pyrrhotite. Minor chalcopyrite is present and is found rimming pyrrhotite and pyrite mineralization. Core contains 2 % vugs lined by euhedral calcite, pyrite, and quartz crystals. Overall, 45 % pyrite, 25 % pyrrhotite, 15 % silica, 0.5 % chalcopyrite, 15 % limestone.		199387	172.10	173.10	0.00	12.60	0.01	0.03
		172.10-173.10 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above but with less pyrite and more pyrrhotite mineralization. Strs of an orange iron-carbonate (siderite, ankerit?) cross-cut pyrrhotite and pyrite massive sulfide. 40 % pyrrhotite, 25 % pyrite, 15 % quartz, 0.5 %		199388	173.10	174.10	0.01	11.80	0.01	0.02
		chalcopyrite, 15 % limestone. 173.10-174.10 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above but with slightly more relict limestone and a decrease in pyrite. 39 % pyrrhotite, 20 % pyrite, 20 % relict limestone, 20 % quartz, 1 % chalcopyrite.		199389	174.10	175.10	0.00	7.00	0.01	0.02
		174.10-175.10 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above but with a slight increase in pyrite and decrease in pyrrhotite. Overall estimate: 40 % pyrite, 25 % pyrrhotite, 20 % quartz, 15 % limestone, 0.5 % chalcopyrite.		199390	175.10	176.20	0.00	5.50	0.01	0.02
		175.10-176.20 MASSIVE SULPHIDE LIMESTONE Pyrite rich massive sulfide as above but with lesser pyrrhotite and pyrite mineralization and more relict limestone. From 175.45 metres - 175.75 metres there is a zone of unreplaced and unaltered limestone. Contacts between this limestone and adjacent MASSIVE SULPHIDE are sharp. Overall estimate: 55 % limestone, 15 %quartz, 24 % pyrite, 5 % pyrrhotite, 1 % chalcopyrite.		199391	176.20	177.20	0.00	4.30	0.01	0.25
		176.20-177.20 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as in sample 199388 but with slightly more pyrrhotite and pyrite mineralization and less relict limestone. Overall, 40 % pyrrhotite, 33 % pyrite, 15 % quartz, 10 % limestone, 1 % chalcopyrite, and a trace of black coarse grained sphalerite.		199392	177.20	178.20	0.00	5.30	0.01	1.42
		177.20-178.20 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above but with a decrease in pyrite and an increase in pyrrhotite mineralization. Coarse grained black sphalerite is found in the upper 20		199393	178.20	179.20	0.00	7.70	0.01	1.76

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		centimetres of the interval. Overall, 60 % pyrrhotite, 20 % pyrite, 10 % quartz, 10 % relict limestone, 1 % sphalerite, and 0.5 % chalcopyrite.								
		178.20-179.20 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above. Coarse grained black sphalerite is found from 178.5 metres - 178.7 metres. 47 % pyrrhotite, 25 % pyrite, 10 % quartz, 15 % limestone, 2 % sphalerite, 1 % chalcopyrite. 179.20-180.40 LOWER ZONE MASSIVE SULPHIDE Pyrite, pyrrhotite rich massive sulfide as above but with an increase in coarse grained pyrite mineralization. Overall, 40 % pyrrhotite, 35 % pyrite, 15 % limestone, 10 % quartz, trace chalcopyrite, trace sphalerite.		199394	179.20	180.40	0.00	81.90	0.16	0.18
180.40	183.80	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE Amphipora, thamnopora, stromatoporoid floatstones to sparsely fossilized wackestones. Massive sulphide veins, of pyrite and pyrrhotite and lesser sphalerite and galena, up to 12 centimetres wide and at 20 to 50 to the core axis, cross cut the interval. 5 % calcite stringers result in localised areas of strong crackle brecciation. Occassional styolites are found lined by fine-grained pyrite. Overall 4 % pyrite, 1 % pyrrhotite, trace sphalerite, trace galena, 5 % calcite. 180.40-181.40 AMPHIPORA FLOATSTONE Footwall sample. Amphipora, stromatoporoid floatstone crackle brecciated by 3 % calcite stringers. From 180.97 metres - 181.13 metres there is a large pyrite, pyrrhotite massive sulfide vein which is bounded by styolites on either side. Vein contains 10 % relict limestone, 10 % pyrrhotite, 80 % fine to coarse grained pyrite. Overall the interval contains 10 % pyrite, 3 % galena, and 3 % calcite.	MLS5	199396	180.40	181.40	0.00	12.40	0.03	0.01
		181.40-182.40 CRACKLE BRECCIA WACKESTONE Sparsely fossilised amphipora wackestone, crackle brecciated by 3 % calcite stringers up to 5 mm wide. From 181.4 metres - 181.7 metres there is a 3 centimetres wide massive pyrite vein bounded by styolites and orientated at 10 to the core axis. Pyrite is found bleeding into the limestone adjacent to this vein. Styolites and fractures throughout the interval are lined by sulphide. Overall, trace galena, trace sphalerite, 5 % pyrite.		199397	181.40	182.40	0.01	16.70	0.18	0.20
		182.40-183.80 CRACKLE BRECCIA PACKSTONE		199398	182.40	183.80	0.01	1.00	0.00	0.23

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Hanging wall sample. Crackle brecciated amphipora packstone with rare tryplasma and thamnopora. Contact with below lying massive sulfide is sharp and at 90 to the core axis. Overall trace pyrite, 3 % calcite stringers.								
183.80	187.40	LOWER ZONE MASSIVE SULPHIDE Strongly homogeneous, partially silicified, ubiquitous, coarse grained sphalerite and pyrite rich MASSIVE SULPHIDE with minor galena. Zone contains 15 % relict unreplaced limestone which is dominantly found in the upper 1 metre of the interval. Overall the zone contains, 40 % pyrite, 40 % sphalerite, 5 % quartz, 15 % limestone, trace galena. 183.80-184.40 LOWER ZONE MASSIVE SULPHIDE Massive, ubiquitous, coarse grained black sphalerite and pyrite mineralization with 10 % relict, silicified limestone. Overall estimate: 45 % pyrite, 45 % sphalerite, 10 % limestone.	LZ	199399	183.80	184.40	0.00	35.10	0.08	16.41
		184.40-184.80 AMPHIPORA PACKSTONE Unaltered amphipora packstone with styolites, at 30 to the core axis, lined by fine-grained pyrite. 1 % sphalerite, and 1 % pyrite are found within the interval. Contact with above lying massive sulfide is sharp and at 40 to the core axis.		199451	184.40	184.80	0.00	0.80	0.00	0.06
		184.80-185.80 LOWER ZONE MASSIVE SULPHIDE Coarse grained black sphalerite and pyrite rich massive sulfide as in sample 199399. A 1.5 centimetres wide coarse grained pyrite quartz-carbonate vein orientated at 15 to the core axis is present in the upper 40 centimetres of the interval. Overall 50 % pyrite, 45 % sphalerite, 5 % quartz-carbonate.		199452	184.80	185.80	0.02	60.30	0.10	20.54
		185.80-186.60 LOWER ZONE MASSIVE SULPHIDE Coarse grained sphalerite, pyrite massive sulfide as above with quartz-carbonate gangue increasing towards the base of the interval. At 186.4 metres there is a small bleb of galena. Overall 15 % quartz-carbonate, 10 % relict, silicified limestone, 1 % galena, 35 % sphalerite, and 40 % pyrite.		199453	185.80	186.60	0.00	93.00	0.56	17.34
		186.60-187.40 LOWER ZONE MASSIVE SULPHIDE *Sphalerite, pyrite massive sulfide as above with sphalerite* dominant in the upper 40 centimetres of the interval and pyrite dominant in the basal 40 centimetres of the interval. Contact with below lying dolomitized limestone is sharp and at 50 to the core axis. Overall, 45 % sphalerite, 45 % pyrite, 10 %		199454	186.60	187.40	0.01	127.90	0.55	18.90

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		quartz-carbonate.								
187.40	204.17	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE Limestone ranging from amphipora floatstones to rudstones with minor stromatoporids. Minor thin shelled brachiopods are noted throughout. 10 % calcite stringers and veins, at 20 - 30 to the core axis, result in strong crackle brecciation. From 197.1 metres - 198.3 metres there is a mosaic breccia with clasts of limestone up to 8 centimetres wide within a coarsely crystalline calcite matrix. Less than 1 % of the clasts have been partially replaced by fine-grained sphalerite, pyrite and lesser galena. 187.40-188.40 AMPHIPORA FLOATSTONE Footwall sample. Crackle brecciated amphipora floatstone with minor stromatoporids. Upper 15 centimetres of the interval has been dolomitized. Sphalerite and pyrite mineralization is found lining styolites and fractures within the top 25 centimetres of the interval. Overall, 1 % pyrite, 1 % sphalerite, and 10 % calcite stringers	MLS5	199455	187.40	188.40	0.00	2.40	0.01	0.39
204.17	209.70	RECRYSTALLIZED LIMESTONE Light grey to blue recrystallized limestone, variable from fine-grained and sugary to coarsely crystalline. 5 % calcite stringers at 20 - 30 to the core axis, crackle brecciate the interval. From 208.7 metres - 208.9 metres there is a large sub-vertically oriented styolite lined by fine-grained pyrite. Limestone up to 2 centimetres adjacent to this styolite has been partially replaced. Overall pyrite is present in trace amounts.	MLS5							
209.70	212.80	MCDAME LIMESTONE UNIT 5 AMPHIPORA FLOATSTONE Amphipora floatstone to rudstone with minor stromatoporids. 5 % calcite stringers, at 20 - 30 to the core axis, cross-cut and crackle brecciate the core. Numerous styolites, lined with trace amounts of fine-grained pyrite, are present and are orientated at 50 to the core axis.	MLS5							

*** END OF HOLE *** 212.80

HOLE NO: SUD-00-69	SECTION:65 C	GRID:SILVER CK S

PROJECT CODE : SILVERTIP
TENEMENT : SILVERTIP MINING
PROSPECT : CORPORATION
GRID : SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION : LIARD MD, BC
HOLE TYPE : UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43317.50mN	24957.50mE	1133.00RL

Pre-collar depth: Final depth: 157.00

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 71.3-73.7, 99.4-105.3, 111.8-126.0

*** SURVEYDATA ***

Survey Method: RELEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-43.00
33.50	251.70	-42.60
64.00	251.20	-43.20
94.50	252.20	-43.90
124.97	252.20	-44.70
155.40	252.60	-45.50

*** SUMMARY LOG ***

0.00	64.00	1B SANDSTONE / SILTSTONE
64.00	71.30	1AA CARBONACEOUS ARGILLITE
71.30	73.70	LOWER ZONE MASSIVE SULPHIDE
73.70	99.40	MCDAME LIMESTONE UNIT 1
99.40	105.30	LOWER ZONE RUBBLE BRECCIA
105.30	111.80	MCDAME LIMESTONE UNIT 1
111.80	126.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA
126.00	128.00	DOLOMITIZED LIMESTONE RUBBLE BRECCIA
128.00	145.70	MCDAME LIMESTONE UNIT 2
145.70	157.00	MCDAME LIMESTONE UNIT 3
157.00		END OF HOLE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 157.00 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	10/1/00
Date finished:	12/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation
Top of fresh rock: 0
Water first encountered:
Water inflow estimate:

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
70.30	74.70	4.40	104.35	1.09	6.72
89.60	92.10	2.50	8.46	0.04	0.47
98.40	106.30	7.90	176.70	3.24	3.50
110.80	128.00	17.20	330.46	5.18	6.68

Checked and signed:______________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	64.00	1B SANDSTONE / SILTSTONE General Description: Similar to hole SUD-00-67. Interbedded, medium grey, fine to medium grained sandstone, laminated to thinly bedded, dark grey siltstone and black, fine grained mudstone. Graded sandstone beds, fining upward, range between 20-140 centimetres. Bedding at 30 degrees to core axis, intermittantly distorted and convoluted. Scattered sandstone beds weakly calcareous between 16.8 - 31.2m. Below 26.0m, the sandstone layers are much thinner, averaging mm to 5 centimetres. Moderately competent core down to 15.6m, below which is variable from poker chip core, brittle fracture zones with core chips between 5mm - 3cm, and carbonaceous gouge zones. Trace - 2% quartz - calcite stringers @ 5, 10 & 30 degrees to core axis. 1-4% pyrite, generally increases down section with up to 2cm veins associated with the quartz - calcite veining. 15.60-16.50 GOUGE ZONE Carbonaceous gouge and small chips; broken upper contact, discordant, sharp lower contact @ 70 to core axis. 31.30-40.80 FAULT ZONE Series of fault gouge and chip intervals, 30 centimetres to 1.5 metres wide with thinly interbedded sandstone/siltstone between. Crumbly pyritic quartz veins often associated with the rubbly intervals. Bedding angle shallows to 20 to core axis towards the *base*. 45.90-58.00 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE Beginning to see an increase in pyrite (to 5%), disseminated throughout the sediments and semi-massive, fine grained, concordant bands to 2 centimetres. Bedding steepens back up to 60 degrees, then flattens again to 40 degrees to core axis @ 56.0m. - 51.3-51.8m: Carbonaceous gouge. - 52.0-52.15m: Quartz-pyrite rubble, broken contacts. 58.00-64.00 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE Dominantly laminated, dark grey siltstone, interbedded with 20% thin medium grey sandstone beds. Bedding is 25-30 degrees to core axis. Breccation, on a small scale and within beddint	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		layers, occurs, which was not noted in drill hole SUD-00-67. The concordant brecciated lenses are 1 to 10 centimetres in width, often contorted and are cemented with quartz - calcite. The lower contact is where the sandstone content is less than ~5%. 3% disseminated pyrite and as thin, discontinuous laminae in the brecciated layers.								
64.00	71.30	1AA CARBONACEOUS ARGILLITE Dark grey to black, laminated to massive, carbonaceous ar; frequent breaks along graphitic bedding planes. Similar to above sub-interval (58.0 - 64.0m), there are appoximately 15% concordant, finely brecciated lenses, healed with quartz - carbonate and often contorted. 3% disseminated pyrite and mm stringers. 70.30-71.30 CARBONACEOUS ARGILLITE Hanging wall sample. As in general unit discription above. No real visible alteration, except for minor sulphidation as pyrite clots (4%) immediately adjacent to the massive sulfide. Irregular lower contact @ ~50 degrees to core axis.	1AA	199424	70.30	71.30	0.02	1.50	0.01	0.01
71.30	73.70	LOWER ZONE MASSIVE SULPHIDE Pyrite - sphalerite massive sulfide in a fine grained siliceous matrix. 7% remnant, unreplace limestone in the centre. Red-brown sphalerite is very coarse grained. Overall estimate: 60% pyrite, 13% sphalerite, 4% galena, 6% carbonate, 10% quartz. 71.30-72.30 PYRITE SPHALERITE MASSIVE SULPHIDE Massive, fine grained, granular pyrite with lesser, coarse grained red-brown sphalerite and minor galena in a siliceous matrix - *unbrecciated. The bottom 15 centimetres is remnant limestone* with very fine sulphide-filled fractures. 55% pyrite, 10% sphalerite,	LZ	199425	71.30	72.30	0.01	190.40	3.38	2.23
		4% galena, 10% quartz and 6% calcite. Sub-planar lower contact between limestone remnant and massive sulfide @ ~40 degrees to core axis. 72.30-73.00 PYRITE SPHALERITE MASSIVE SULPHIDE Fine grained pyrite at the top, becoming coarser grained below, intergrown with coarse grained, red-brown and black sphalerite. Abundant vugs with transparent, euhedral quartz crystals, with the remaining open space filled by white anhedral quartz. The black		199426	72.30	73.00	0.02	110.70	0.60	9.47

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		sphalerite appears to be a later stage phase as it often rims the red-brown sphalerite. 60% pyrite, 25% sphalerite, 3% galena, 10% quartz and 3% calcite. *73.00-73.70 PYRITE SPHALERITE MASSIVE SULPHIDE* Similar to previous interval, but coarse grained at the top, becoming finer grained approaching the lower contact, which is sub-planer irregular @ ~40 degrees to core axis. Spectacular coarse red-brown and black sphalerite. 55% pyrite, 30% sphalerite, 4% galena, 10% quartz.		199427	73.00	73.70	0.01	268.80	1.42	29.48
73.70	99.40	MCDAME LIMESTONE UNIT 1 General Description: Unit 1 of the limestone, with the upper 16 metres consisting of competent amphipora rudstone, minor massive stromatoponds alternating with dense packstone and mudstone. *Below 91.1m begin to see abundant thamnopora, indicating sub-unit* 1B. Brittle, broken sections <50 centimetres, generally have increased calcite veining, stringers or crackle breccia. Main fractures occur @ 5 & 40 degrees to core axis. Occasional stylolites subparallel to fossil elongation ~ 40 degrees to core axis. 1% disseminated pyrite and small clots marginal to calcite or along stylolites. Trace galena @ 89.3m along stylolite. Narrow Lower Zone mineralization between 90.6 - 91.1m containing pyrite and sphalerite replacing limestone. Sharp lower contact @ 45 to core axis with rubble breccia Lower Zone. Increased crackle breccia approaching *lower contact.* 73.70-74.70 PACKSTONE CRACKLE BRECCIA Footwall sample. Partially recrystallized to a sucrosic textured cc; weak crackle breccia. 3% disseminated and small blebs of pyrite to 2mm. Predominantly calcite-filled fractures oriented between 30-40 degrees to core axis. 89.60-90.60 FLOATSTONE Hanging wall sample above narrow massive sulfide mineralization. Appears unaltered; 1% pyrite clots and disseminations. 90.60-91.10 LIMESTONE MINERALIZED *65% limestone, 45% massive sulfide, occurring as a 15* centimetres sulphide vein above, at 40 degrees to core axis, where pyrite and red-brown sphalerite have replaced 95% of the	MLS1	*199428* 199429 199430	*73.70* 89.60 90.60	*74.70* 90.60 91.10	*0.01* 0.02 0.01	*1.60* 1.10 38.10	*0.01* 0.00 0.18	*0.07* 0.02 2.27

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		limestone. Following is a 20 centimetres section of stylolitic limestone, with calcite-pyrite stringers. Below that is an irregular *clot of fine to medium grained pyrite (minor sphalerite) replacing* limestone. 91.10-92.10 RUDSTONE Footwall sample. First appearance of abundant thamnopora, indicating sub-unit 1B. Fairly unaltered, competent with only *trace* - 1% disseminated pyrite along fractures and stylolites. 98.40-99.40 FLOATSTONE RUBBLE BRECCIA Hanging wall sample. Upper 30 centimetres is rubble to mosaic breccia, below in unaltered-looking limestone with 5% vuggy calcite veining. Sharp lower contact @ 45 degrees with rubble brecciated Lower Zone mineralization. 2% pyrite as *disseminations and clots.*		199431 199432	91.10 98.40	92.10 99.40	0.01 0.01	1.00 2.20	0.00 0.03	0.01 0.02
99.40	105.30	LOWER ZONE RUBBLE BRECCIA General Description: Two complex sulphide rubble breccia intervals, separated by an interval of rubble brecciated limestone. The upper sulphide section, 1.9m wide consists of carbonaceous *argillite Earn* clasts, pyrite and sphalerite clasts, limestone clasts in a calcareous pyritic matrix. The basal portion of the upper section is a fine grained, black laminated, calcareous, carbonaceous pyritic cavern sediment. Below the centre limestone (either a large clast or remnant limestone), 1.9m of galena - sphalerite -rich massive sulfide is followed by 1 *meter* of sulphide breccia in a very carbonaceous, black, fine grained mud (very incompetent). Irregular lower contact with limestone. Overall sulphide estimate: 35% pyrite, 20% sphalerite, and 10% galena. 99.40-100.40 SULPHIDE / ARGILLITE / LIMESTONE RUBBLE BRECCIA Chaotic rubble breccia containing pyrite, carbonaceous argillite, limestone and sphalerite clasts, 2mm - 8cm, sub-angular to sub-rounded in a pyritic, calcareous matrix. 50% pyrite, 15% sphalerite, 1% galena, 10% calcite. 100.50-101.30 SULPHIDE / ARGILLITE / LIMESTONE RUBBLE *BRECCIA* Possibly a later stage karst in-fill sediment comprised mainly of fine grained carbonaceous lime sediment and fine grained pyrite,	LZ	199433 *199434*	99.40 *100.40*	100.40 *101.30*	0.01 *0.02*	70.30 *42.70*	0.40 *0.27*	4.02 2.75

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		with occasional fragments of sulphide, argillite and limestone. Bedding / layering @ 40 degrees to core axis. Approximately 20% pyrite, 5% sphalerite and trace galena.		199435	101.30	102.20	0.01	13.10	0.11	0.56
		101.30-102.20 LIMESTONE RUBBLE BRECCIA Remnant block of brecciated limestone in a fine grained, black, carbonaceous, pyritic (minor sphalerite) matrix. 6% pyrite, 0.5% sphalerite. Irregular lower contact at ~20 degrees to core axis.		199436	102.20	103.20	0.08	867.30	17.68	9.76
		102.20-103.20 BASE METAL MASSIVE SULPHIDE Nearly 100% replacement with massive sulfide, consisting of 40% fine grained to coarse pyrite, 30% fine to coarse red-brown sphalerite and 20% coarse grained galena. Note: Sample 199437 is a Duplicate of this interval.		199438	103.20	104.30	0.01	267.80	4.85	5.88
		103.20-104.30 PYRITE MASSIVE SULPHIDE Massive to banded sulphides (mm to centimetres bands); upper 20 centimetres is crumbly pyrite sphalerite sand. 70% pyrite, 15% sphalerite, 10% galena.		199439	104.30	105.30	0.02	87.80	1.41	4.10
		104.30-105.30 MASSIVE SULPHIDE / LIMESTONE Upper 20 centimetres is rubble breccia with sulphide and limestone clasts in a very black carbonaceous, fine grained matrix. Below is incompetent, carbonaceous - pyritic mud, possibly sediment in-fill at the base of a cave?? Irregular lower contact with limestone. 50% pyrite, 5% sphalerite, trace galena, 10% calcite.								
105.30	111.80	MCDAME LIMESTONE UNIT 1 General Description: Amphipora-stromatoporoid rudstone / floatstone with minor thamnopora. Fossil layering ~ 50 degrees to core axis. Carbonaceous stylolites throughout. Start to see pyrite replacement clots and galena - calcite stringers below 110.9m	MLS1							
		105.30-106.30 FLOATSTONE Footwall sample. Upper 20 centimetres is rubble and carbonaceous chips, the remainder - as in general description above. 3% fine grained pyrite, mostly as wisps along stylolites.		199441	105.30	106.30	0.02	23.50	0.37	0.30
		110.80-111.80 PACKSTONE MINERALIZED Hanging wall sample. Limestone above the massive sulfide a pyrite - galena - calcite stringers, fracture fillings and clots to 4 centimetres. Fractures @ 30-40 degrees to core axis. Irregular		199512	110.80	111.80	0.07	113.00	2.01	0.89

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		lower contact. 6% pyrite, 1% galena, trace sphalerite, 4% calcite.								
111.80	126.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA General Description: Variable, complex zone with mineralization ranging from pyrite to sphalerite to pyrrhotite to galena - rich sulphide. Textures range from massive to vaguely banded, to brecciated (mosaic and rubble breccia), partial replacement in a very siliceous matrix. Approximately 15% remnant limestone occurs in the centre of the zone. Below 122.6m: pyrrhotite is abundant, but unlike the pyrrhotite - rich zone in SUD-00-68, base metals galena & sphalerite are present. The lower contact is gradational over about 2m, where sulphide clasts within a limestone rubble breccia gradually decrease. Overall estimate: 25% pyrite, 20% pyrrhotite, 15-20% sphalerite, 10-15% galena, 15% limestone and 10% silica.	LZ	199442	111.80	112.80	0.12	378.20	6.95	9.21
		111.80-112.80 MASSIVE SULPHIDE / LIMESTONE The upper 30 centimetres is limestone with massive sphalerite clots to 11 centimetres. At 112.1m, the massive sulfide begins along a sharp contact, 40 degrees to core axis. The lower 70 centimetres is 50% pyrite (fine to coarse grained), 20% sphalerite, 15% galena in a calcareous matrix.		199443	112.80	113.80	0.02	671.70	11.36	11.70
		112.80-113.80 BASE METAL MASSIVE SULPHIDE Massive to irregularly banded, fine to coarse grained pyrite (35%), 30% medium to coarse grained sphalerite and 25% coarse grained galena in a silica-calcite gangue.		199444	113.80	114.80	0.00	259.00	4.08	7.19
		113.80-114.80 BASE METAL MASSIVE SULPHIDE Massive, but crumbly, incompetent sulphides (only two pieces >10 centimetres) in an increasingly siliceous matrix. Decrease in galena from the previous sample. 50% pyrite, 25% red-brown to black sphalerite, 10% galena and 15% quartz.		199445	114.80	115.80	0.06	247.00	2.61	8.42
		114.80-115.80 PYRITE SPHALERITE MASSIVE SULPHIDE Increased quartz gangue, decreased galena. Brittle rock, slightly more competent than previous sample. 45% pyrite, 30% sphalerite, 5% galena and 20% quartz.		199446	115.80	116.80	0.03	538.00	6.53	6.49
		115.80-116.80 MASSIVE SULPHIDE / LIMESTONE MOSAIC BRECCIA								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Upper portion of the interval is mosaic breccia comprised of angular to sub-rounded sulphide clasts in a mostly calcite (minor quartz) matrix. The lower 25 centimetres is vuggy, brecciated limestone. 35% pyrite, 10% sphalerite, 5% galena, 15% calcite, 10% quartz.		199447	116.80	117.90	0.02	1128.60	20.54	6.58
		116.80-117.90 BASE METAL MASSIVE SULPHIDE Pyrite - sphalerite rich sulphide in a predominantly calcareous matrix, becoming very galena - rich below 117.3m. Crude sulphide banding oriented 50-60 degrees to core axis. 40% pyrite. 25% galena, 15% sphalerite, 10% calcite, 5% quartz.		199448	117.90	118.50	0.01	55.60	0.82	6.09
		117.90-118.50 PYRITE SPHALERITE MASSIVE SULPHIDE Massive fine grained pyrite in a siliceous gangue with clotty sphalerite associated with coarse grained calcite. Lower 20 centimetres is partially replaced limestone with mainly pyrite & minor sphalerite. 50% pyrite, 10% sphalerite, 5% galena, 15% calcite and 10% quartz. 118.50-119.40 MASSIVE SULPHIDE / LIMESTONE MOSAIC BRECCIA		199449	118.50	119.40	0.03	172.10	2.91	3.68
		Upper 50 centimetres is limestone / sulphide mosaic breccia with very large clasts (to 15 centimetres) within a coarse grained calcite matrix. Limestone is partially dolomitized. Below is *limestone rubble breccia with minor sulphide replacement and* sulphide clasts. 30% pyrite, 5% sphalerite, 1% galena, 20%		199450	119.40	119.80	0.00	419.70	4.75	13.95
		calcite and 5% quartz. 119.40-119.80 BASE METAL MASSIVE SULPHIDE Narrow interval of massive coarse grained sphalerite - galena - pyrite with coarse grained calcite filling voids. 30% sphalerite, 20% pyrite, 15% galena and 25% calcite. Sharp lower contact		199501	119.80	120.60	0.03	51.80	0.87	1.38
		with limestone, 60 degrees to core axis. 119.80-120.60 LIMESTONE RUBBLE BRECCIA Unbrecciated limestone grading into a sulphidized rubble breccia below. The matrix is sulphidized as well as partially to totally replace limestone clasts. 15% pyrite, 3% sphalerite, 2% galena, 10% calcite. 120.60-121.60 PYRRHOTITE BASE METAL MASSIVE		199502	120.60	121.60	0.04	260.40	3.42	15.59
		SULPHIDE Early fine grained, massive pyrrhotite in a siliceous matrix, with		199505	121.60	122.60	0.01	45.40	0.16	6.54

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		later phase, coarse grained sphalerite - galena - pyrite. Vague banding of sphalerite @ 40 degrees to core axis. 30% sphalerite, 30% pyrrhotite, 15% galena, 7% pyrite, 15% quartz and 3% iron carbonate (yellow-brown -> siderite). 121.60-122.60 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Massive fine grained, net-textured pyrrhotite in a silica and iron								
		carbonate matrix and a large (5 centimetres) clot of coarse grained sphalerite at the start of the interval. The lower half is dolomitized limestone rubble breccia, partially replaced by coarse grained red-brown sphalerite and pyrite. 30% pyrrhotite, 20% pyrite, 15% sphalerite, 5% galena, trace cpy, 15% quartz, 10%		199506	122.60	123.60	0.01	758.10	11.34	4.28
		calcite + iron carbonate. 122.60-123.60 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Similar textures as the previous sample, with increased pyrrhotite and galena. 45% pyrrhotite, 15% sphalerite, 10% galena, 10% pyrite & 15% quartz. 123.60-124.60 PYRRHOTITE BASE METAL MASSIVE		199507	123.60	124.60	0.04	202.50	3.19	7.52
		SULPHIDE RUBBLE BRECCIA The pyrrhotite is not present below 123.9m and silica also decreases significantly, while calcite increases. Sample varies from partial to total replacement of limestone breccia clasts by		199508	124.60	125.40	0.01	576.10	9.24	16.25
		pyrite (45%), sphalerite (15%), pyrrhotite (10%) and galena (8%), in a calcite matrix (silica at the top). 124.60-125.40 PYRITE SPHALERITE MASSIVE SULPHIDE RUBBLE BRECCIA *Continuation of the sulphidized rubble breccia seen in the* previous sample. 55% pyrite, 20% sphalerite, 8% galena. 125.40-126.00 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA The frequency of replaced limestone clasts within thge rubble breccia decreases quickly over the 60 centimetres of the interval. The majority of remaining limestone clasts are dolomitized. 25% pyrite, 5% sphalerite, trace - 1% galena, 20% calcite matrix and 50% limestone clasts. Rubble breccia continues below but sulphides are <10%, so not classed as Lower Zone.		199509	125.40	126.00	0.02	157.90	2.63	4.28

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
126.00	128.00	DOLOMITIZED LIMESTONE RUBBLE BRECCIA Two meter interval at the base of the massive sulfide is rubble brecciated dolomitized limestone. Minor sulphide replacement occurs and generally decreases with depth.								
		126.00-127.00 DOLOMITIZED LIMESTONE RUBBLE BRECCIA Footwall sample. Continuation of the rubble breccia occurring at the base of the Lower Zone, but <10% sulphides. The intensity of the dolomitization decreases with depth. Clasts are sub-angular to sub-rounded, and range from 3mm - 12cm. in a calcareous matrix. 5% pyrite, 1% galena & 1% sphalerite.	MLS2	199510	126.00	127.00	0.00	11.60	0.15	0.50
		127.00-128.00 LIMESTONE RUBBLE BRECCIA Combination of rubble and stylolitic breccia - stromatoporids and amphipora recognizable. 3% pyrite along stylolites and as small clots in the rubble breccia.		199511	127.00	128.00	0.01	4.40	0.03	0.08
128.00	145.70	MCDAME LIMESTONE UNIT 2 General Description: Unit intermittantly recrystallized to coarse sparry calcite, giving the rock a mottled texture. Abundant stromatoporids and lesser amphipora are visible, indicating Unit 2. Stylolites are common throughout. Competent rock with minor fracturing @ 30 & 50 degrees to core axis. 2% disseminated pyrite and clots throughout, associated with calcite fractures and stylolites. Thamnopora are typical at the base of Unit 2 and seen at 145.2m.	MLS2							
145.70	157.00	MCDAME LIMESTONE UNIT 3 General Description: Top of the unit has fine, 1-2 mm amphipora, which is diagnostic of the start of Unit 3. Amphipora rudstone with minor stromatoporids characterizes the interval; layering @ 60 degrees to core axis. Stylolites common, trace - 1% pyrite. 155.80-156.40 LIMESTONE RUBBLE BRECCIA Limestone rubble breccia in a calcareous, carbonaceous matrix. 5% limestone clasts replaced by fine grained pyrite.	MLS3							

*** END OF HOLE *** 157.00

HOLE NO: SUD-00-70	SECTION:65S	GRID:SILVER CK S

PROJECT CODE	:SILVERTIP
TENEMENT	:SILVERTIP MINING
PROSPECT	:CORPORATION
GRID	:SILVER CK S
MAP REFERENCE	:104/O-16W
LOCATION	:LIARD MD, BC
HOLE TYPE	:UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.50mE	1129.00RL

Pre-collar depth: Final depth: 203.60

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 109.8-110, 111.8-112.5, 121.3-122.8, 175.4-176, 191.2-192.3

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-43.00
19.20	254.80	-43.10
49.68	254.20	-44.30
80.20	256.20	-46.00
110.60	255.10	-46.50
141.10	256.10	-47.00
171.60	256.50	-46.70
202.10	258.30	-46.40

*** SUMMARY LOG ***

0.00	52.90	INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE
52.90	57.00	FAULT ZONE
57.00	63.60	1BA LAMINATED SILTSTONE / SANDSTONE MUDSTONE
63.60	72.20	1AA CARBONACEOUS ARGILLITE
72.20	109.80	MCDAME LIMESTONE UNIT 1 AMPHIPORA FLOATSTONE
109.80	110.00	LOWER ZONE MASSIVE SULPHIDE
110.00	111.80	RECRYSTALLIZED LIMESTONE
111.80	113.50	LOWER ZONE MASSIVE SULPHIDE
113.50	121.30	CRACKLE BRECCIA MOSAIC BRECCIA DOLOMITIZED LIMESTONE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 203.60 HQ
Drill contractor:	ADVANCED DRILLING LTD
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	10/1/00
Date finished:	13/1/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE

Base of complete oxidation –

Top of fresh rock: 0.0

Water first encountered: NONE

Water inflow estimate: 0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
72.10	76.50	4.40	0.98	0.00	0.01
109.00	123.80	14.80	256.79	5.31	4.30
174.40	177.00	2.60	156.78	5.36	5.87
189.70	193.30	3.60	235.35	4.53	4.16
195.50	197.60	2.10	27.36	0.61	0.65
200.40	203.40	3.00	0.52	0.00	0.00

Checked and signed:____________ Date:________

HOLE NO: SUD-00-70	SECTION:65S	GRID:SILVER CK S

121.30	122.80	LOWER ZONE MASSIVE SULPHIDE
122.80	125.40	CRACKLE BRECCIA DOLOMITIZED LIMESTONE
125.40	138.90	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
138.90	159.60	AMPHIPORA PACKSTONE
159.60	161.90	EURYAMPHIPORA PACKSTONE
161.90	175.40	AMPHIPORA FLOATSTONE
175.40	176.00	LOWER ZONE MASSIVE SULPHIDE
176.00	189.70	AMPHIPORA PACKSTONE
189.70	190.80	FAULT ZONE
190.80	191.20	AMPHIPORA PACKSTONE
191.20	192.30	LOWER ZONE MASSIVE SULPHIDE MOSAIC BRECCIA
192.30	196.50	AMPHIPORA PACKSTONE CRACKLE BRECCIA
196.50	196.60	LOWER ZONE MASSIVE SULPHIDE
196.60	201.40	LIMESTONE RUBBLE BRECCIA
201.40	203.40	FAULT ZONE
203.40	203.60	LIMESTONE CRACKLE BRECCIA
203.60		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	52.90	*INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE* Interbedded, medium-grey, fine to coarse grained sandstone and laminated to thinly bedded siltstones and black mudstones. Bedding is at 30 to the core axis. Sandstone beds are up to 1.2 metres and range from being massive to fining upwards. They are non-moderately calcareous and decrease in abundance and thickness with depth. Cross bedding and soft sediment deformation are observed throughout the interval. Pervasive disseminated pyrite is found throughout the interval and is concentrated in the coarser grained sandstone beds. Overall the interval contains 1 % pyrite. 24.30-24.60 FAULT ZONE *Fault zone consisting of dark grey to black carbonaceous fault* gouge and crushed rock. The zone has been infiltrated and weakly healed by 10 % quartz-carbonate. 37.50-41.52 INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE Interlaminated siltstones and moderately carbonaceous mudstones with lesser sandstones. Interval is very broken and consists of 70 % crushed rock and 30 % intact rock. 1 % disseminated pyrite is found throughout. 41.52-45.30 INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE Interbedded to laminated mudstones, siltstones and sandstones. *Sandstone beds are up to 1.5 centimeters thick and contain up to* 70 % pyrite. At 43.65 metres there is a 1 centimetre wide quartz-carbonate vein at 50 to the core axis. Coarse grained pyrite and black sphalerite are found lining the vein selvage. Overall trace sphalerite, 2 % pyrite. 45.30-52.85 INTERBEDDED SILTSTONE / MUDSTONE SANDSTONE Laminated black carbonaceous mudstonesd and siltstones with rare sandstone beds. Interval is very broken and consists of 50 % rubble, 35 % intact rock, and 15 % black carbonaceous fault gouge. At 50.03 metres there is a 3 mm wide pyrite, sphalerite massive sulfide vein at 60 to core axis. Overall the interval	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		contains 2 % pyrite, trace sphalerite.								
52.90	57.00	FAULT ZONE Fault zone consisting of black fault gouge and black carbonaceous argillite rubble with 5 % intact rock. The interval has been healed by quartz-carbonate cement. A trace of sphalerite is found within quartz-carbonate mineralization. 2 % pervassive disseminated pyrite is found throughout the interval.	FZ							
57.00	63.60	1BA LAMINATED SILTSTONE / SANDSTONE MUDSTONE Strongly laminated black carbonaceous argillites, siltstones, and fine grained medium grey sandstones. 10 -15 % contorted quartz-carbonate stringers and veins orientated parallel to laminations at 30 to core axis are present throughout the interval. Sandstones beds decrease in abundance towards the base of the interval. Quartz-carbonate stringers and veins are commonly folded and contain brecciated clasts of adjacent earn up to 4 mm wide. Fine-grained sulphide, dominantly pyrite, is also found within these veins. Overall 3 % pyrite.	1BA							
63.60	72.20	1AA CARBONACEOUS ARGILLITE Fine grained black carbonaceous argillite with rare siltstone laminae at 20 - 30 to core axis. Interval is randomly non-moderately calcareous. 5 - 10 % calcite stringers, orientated parallel to laminae, cause localised areas of crackle to mosaic brecciation. The basal 20 centimetres of the interval is strongly crackle to mosaic brecciated with earn clasts within a coarsely crystalline calcite and pyrite matrix. The unconformity contact with below lying limestone is sharp and at 20 to core axis. Overall the interval contains 1 % pyrite with the majority of *the pyrite concentrated in the basal 5 - 10 centimetres of the interval.* 71.20-72.20 1AA CARBONACEOUS ARGILLITE Hanging wall sample. Black carbonaceous argillite with 15 % contorted quartz-carbonate stringers which crackle brecciate the argillite. Localized areas of mosaic brecciation are present with clasts of argillite up to 3 centimetres wide within a crystalline quartz and calcite matrix. 1 % pervasive fine grained	1AA	199456	72.10	72.20	0.00	1.50	0.01	0.02

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		disseminated pyrite is found throughout the interval.								
72.20	109.80	MCDAME LIMESTONE UNIT 1 AMPHIPORA FLOATSTONE Amphipora floatstones to rudstones with minor massive stromatoporids, alternating with amphipora packstones and wackestones. Upper 2.5 metres of the unit is mottled by quartz-carbonate veins and clots which contain up to 10 % fine grained pyrite. Core ranges from being intact and unaltered to crackle, mosaic, and rubble brecciated with large intervals of limestone rubble throughout. A foliation defined by elongated fossils is present and orientated at 50 to core axis. Overall the interval contains 5 % quartz-carbonate veins and 0.5 % pyrite	MLS1	199457	72.20	73.20	0.00	1.30	0.01	0.01
		72.20-73.20 AMPHIPORA FLOATSTONE Amphipora floatstone crackle brecciated by 5 % contorted and linear calcite stringers. Pyrite is found associated with calcite stringers throughout but is dominantly found in the upper 15 centimetres of the interval, directly below the unconformity. It is found as fine grained blebs within calcite matrix and eating into and replacing adjacent limestone. Overall 3 % pyrite.		199458	73.20	74.20	0.00	0.90	0.01	0.00
		73.20-74.20 AMPHIPORA FLOATSTONE Amphipora floastone, mottled and crackle brecciated by 10 % contorted calcite stringers and blebs. Fine grained pyrite is found associated with calcite stringers and eating into and replacing adjacent limestone. Overall estimate, 8 % pyrite.		199459	74.20	75.20	0.00	0.90	0.00	0.01
		74.20-75.20 AMPHIPORA FLOATSTONE Amphipora floatstone that grades into a wackestone towards the base fo the interval. Interval is crackle brecciated to a lesser degree than above interval and contains 3 % calcite stringers. Fine grained pyrite is found associated with calcite stringers and along styolites at 35 to core axis. Overall 5 % pyrite.		199460	75.20	76.50	0.00	0.80	0.00	0.01
		75.20-76.50 AMPHIPORA WACKESTONE Footwall sample. Amphipora wackestone which becomes an amphipora floatstone towards the base of the interval. 2 % calcite stringers crackle brecciate the core. 76.50-82.70 AMPHIPORA WACKESTONE Dark grey amphipora wackestone to lime mudstone with minor								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		massive stromatoporids. Interval is dominantly rubble with 25 % intact limestone. 3 % contorted and linear calcite stringers cr brecciate the core with crackle brecciation strongest towards the base of the interval. Overall, trace pyrite found within quartz-carbonate stringers. 82.70-83.60 FLOATSTONE Partially recrystallized thamnopora floatstone with massive stromatoporids becoming more prevalent towards the base of the interval. Interval has a sugary texture due to fine grained partial recrystallization of limestone. 10 % fine grained interconnected blebs of pyrite are visible throughout the interval. Pyrite appears to travel along styolites and fractures and replaces limestone adjacent to these structures. Pyrite is similar to that sampled beneath the unconformity (samples 199456 - 199460). 83.60-87.70 LIMESTONE CRACKLE BRECCIA Variable, unaltered, recrystallized and dolomitized limestone, crackle brecciated by 5 % quartz-carbonate veins and stringers up to 7 mm wide. In the upper portion of the interval a foliation defined by elongated fossils is observed at 50 to core axis. A trace of fine-grained pyrite is found lining fractures. Interval consists of 70 % limestone rubble and 30 % intact rock. 87.70-90.35 MOSAIC BRECCIA RUBBLE BRECCIA Upper 1 metre of the interval is a limestone mosaic breccia with clasts of recrystallized limestone, unaltered limestone and dolomitized limestone up to 10 centimetres within a coarsely crystalline white calcite matrix. At 88.8 metres themosaic breccia grades into a limestone rubble breccia which alternates with an intact thamnopora floatstone. Rubble breccia's consist of angular clasts of dolomitized limestone and limestone up to 3 centimetres wide within a finely ground lime matrix. Fine-grained sphalerite and pyrite are present lining stylolites within rubble breccias. Overall trace sphalerite, trace pyrite. 90.35-100.80 AMPHIPORA PACKSTONE Unaltered to partially recrystallized amphipora packstone to								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		wackestone with massive stromatoponds and rare thamnopora throughout. 3 % calcite stringers at 15 and 70 to core axis cause localised areas of weak crackle brecciation. A foliation, defined by elongated fossils, is orientated at 40 to core axis. A trace of fine-grained pyrite is found lining stylolites throughout interval. 100.80-104.10 RECRYSTALLIZED LIMESTONE Finely recrystallized and mottled looking limestone with 8 % interconnected blebs and stringers of pyrite. Fine-grained pyrite is observed along styolites and replacing limestone adjacent to styolites. 15 % ,pyrite bearing, contorted and linear quartz-carbonate stringers and veins up to 1 centimetres wide and at 15 to core axis, crackle brecciate the core. 104.10-109.00 FLOATSTONE RUDSTONE Dominantly, unaltered to finely recrystallized stromatoporoid floatstone to rudstone with lesser amphipora. 5 % calcite stringers at 50 and 20 to core axis cause weak to moderate crackle brecciation of the limestone. Fine-grained sulphide, dominantly pyrite with minor sphalerite, is found lining styolites. Basal 60 centimetres of the interval has been finely recrystallized to a sugary texture. Overall trace pyrite, trace sphalerite. 109.00-109.80 RECRYSTALLIZED LIMESTONE Hanging wall sample. Finely recrystallized limestone, weakly crackle brecciated by 1 % calcite stringers. Sharp contact at 45 to core axis with underlying massive sulphide.		199461	109.00	109.80	0.00	1.20	0.00	0.01
109.80	110.00	LOWER ZONE MASSIVE SULPHIDE Medium grained, ubiquitous sphalerite, pyrite, galena, massive sulfide. Overall 45 % red and black sphalerite, 45 % pyrite, 10 % galena. Massive sulphide displays sharp contacts with adjacent limestone.	LZ	199462	109.80	110.00	0.00	906.50	21.71	12.28
110.00	111.80	RECRYSTALLIZED LIMESTONE Finely recrystallized limestone with relict amphipora and lesser stromatoporids. Limestone has been crackle brecciated by 3 % calcite stringers. Interconnected blebs and stringers of fine-grained pyrite are observed travelling along styolites and fractures and replacing limestone adjacent to these structures. Overall 3 % pyrite. 110.00-110.90 RECRYSTALLIZED LIMESTONE Footwall sample. Recrystallized amphipora floatstone to rudstone as above. Overall 3 % pyrite.		199463	110.00	110.90	0.01	5.90	0.06	0.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		110.90-111.80 RECRYSTALLIZED LIMESTONE Hanging wall sample. Recrystallized amphipora floastone as above but with slightly less pyrite. Overall 2% pyrite.		199464	110.90	111.80	0.00	89.20	2.13	1.60
111.80	113.50	LOWER ZONE MASSIVE SULPHIDE Ubiquitous sphalerite, galena, pyrite rich massive sulfide. Mineralization is coarse grained with galena dominantly found in the upper 70 centimetres and basal 50 centimetres of the interval. Both black and red sphalerite are present with red sphalerite found surrounded by black sphalerite. Pyrite occurs as coarse grained crystals and blebs within galena and sphalerite mineralization, and as mm sized stringers which cross-cut all earlier lower zone mineralization. Overall 23 % pyrite, 50 % sphalerite, 22 % galena, 1 % pyrrhotite, 3 calcite.		199465	111.80	112.50	0.00	1835.20	37.39	11.35
		111.80-112.50 LOWER ZONE MASSIVE SULPHIDE Coarse grained sphalerite, galena, pyrite massive sulfide with minor fine-grained magnetic pyrrhotite. Overall, 40 % sphalerite, 35 % galena, 23 % pyrite, 2 % magnetic pyrrhotite.		199466	112.50	113.00	0.00	426.90	7.22	33.53
		112.50-113.00 LOWER ZONE MASSIVE SULPHIDE Coarse grained sphalerite, pyrite, galena massive sulfide as above but with an increase in sphalerite and a decrease in galena mineralization. From 112.7 metres -112.95 metres the core is incompetent and consists of sphalerite and lesser pyrite rubble.		199467	113.00	113.50	0.02	2341.20	54.20	8.78
		Overall, 65 % sphalerite, 20 % pyrite, 10 % galena, 5 % quartz. 113.00-113.50 LOWER ZONE MASSIVE SULPHIDE Coarse grained sphalerite, galena, pyrite massive sulfide as above but with an increase in galena and a decrease in sphalerite. Weak sphalerite, pyrite banding is observed at 50 to core axis. Overall 40 % sphalerite, 30 % galena, 25 % pyrite, 5 % quartz-carbonate. Sharp contact at 30 to core axis with underlying dolomitized limestone.								
113.50	121.30	CRACKLE BRECCIA MOSAIC BRECCIA DOLOMITIZED LIMESTON Crackle to mosaic brecciated, dolomitized limestone with minor recrystallized limestone. Interval is incompetent and consists of 70 % intact core and 30 % rubble. Upper 8.3 metres of the interval is dominantly dolomitized limestone crackle brecciated by 15 -20 %								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		quartz-carbonate stringers and veins up to 2 centimetres wide. Coarse grained pyrite and red and black sphalerite, are found within quartz-carbonate veins and lining fractures. From 113.7 metres - 113.95 metres there is strongly strained and foliated limestone which appears to have deformed plastically?. This highly strained limestone is sandwiched between blocks of stronger dolomite. During jurassic deformation the limestone may have acted as a weak layer and accomodated the majority of the strain. Basal 1.5 metres of the interval is a mosaic breccia with clasts of dolomite and sphalerite, pyrite, galena massive sulfide up to 8 centimetres wide within a coarsely crystalline white quartz-calcite matrix. Pyrite and sphalerite are also found as crystals within the breccia matrix. Overall 1% pyrite, 1% sphalerite, trace galena.	MLS							
		113.50-114.50 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated dolomitized limestone rubble with 15 % quartz-carbonate stringers and veins. Pyrite, sphalerite, and galena are observed replacing dolomite in the upper 10 centimetres of the interval. Overall 1 % pyrite, < 1 % sphalerite, < 1 % galena.		199469	113.50	114.50	0.00	3.20	0.04	0.06
		114.50-115.50 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated dolomitized limestone rubble as above with trace amounts of fine-grained euhedral pyrite cubes found lining fractures and within quartz-carbonate stringers.		199470	114.50	115.50	0.01	2.60	0.03	0.09
		115.50-116.50 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated dolomitized limestone rubble as above. Overall a trace amount of pyrite is found lining fractures and as disseminated cubes within stringers.		199471	115.50	116.50	0.00	0.70	0.00	0.01
		116.50-117.50 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Intact, crackle brecciated, dolomitized limestone as above. Interval contains 5 % vugs which are lined by euhedral quartz and calcite crystals. At 117.3 metres there is a 1.5 centimetre wide coarse		199472	116.50	117.50	0.00	2.40	0.03	0.73

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		grained red and black sphalerite vein orientated at 30 to core axis. Small euhedral cubes of pyrite are found near and within this sphalerite vein. Overall < 1% sphalerite, trace pyrite.		199473	117.50	118.50	0.01	4.50	0.03	2.50
		117.50-118.50 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Intact crackle brecciated dolomitized limestone as above, with quartz-carbonate stringers at 45-50 to core axis. From 118 .3 metres - 118.5 metres there is a pyrite, sphalerite, massive sulfide vein which pinches and swells up to 1.5 centimetres wide. This vein is orientated at 15 - 20 to core axis. Small stringers and disseminated cubes of pyrite are found adjacent to this vein. Overall, < 1 % sphalerite, < 1 %pyrite.		199474	118.50	119.50	0.00	15.30	0.15	3.81
		118.50-119.50 RUBBLE BRECCIA LIMESTONE Unaltered to dolomitized, crackle and rubble brecciated limestone. Throughout the interval sphalerite and pyrite are found lining fractures and replacing limestone rubble breccia matrix. Overall 1 % pyrite, 1 % sphalerite.		199475	119.50	120.10	0.01	46.80	0.85	1.59
		119.50-120.10 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle to mosaic brecciated dolomitized limestone. Mosaic brecciation is dominantly found in the basal 30 centimetres of the interval and consists of clasts of crackle brecciated dolomitized limestone and sphalerite, pyrite, massive sulfide up to 10 centimetres wide within a coarsely crystalline white quartz-carbonate matrix. Overall < 1 % pyrite, < 1 % sphalerite, trace galena.		199476	120.10	120.50	0.02	1146.70	23.68	13.18
		120.10-120.50 MOSAIC BRECCIA LIMESTONE Mosaic breccia consisting of clasts of sphalerite, pyrite, galena massive sulfide and dolomitized limestone up to 4 centimetres wide, within a coarsely crystalline white quartz-carbonate matrix. Basal 10 centimetres of the interval is massive sphalerite, galena, pyrite mineralization. Overall, 15 % sphalerite, 5 % galena, 5% pyrite.		199477	120.50	121.30	0.00	78.30	1.53	1.48
		120.50-121.30 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Variable crackle and mosaic brecciated, dolomitized limestone. Clasts of sphalerite, galena, pyrite massive sulfide up to 3								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		centimetres wide are found within mosaic breccias. Overall trace sphalerite, trace galena, trace pyrite.								
121.30	122.80	LOWER ZONE MASSIVE SULPHIDE Partially silicified sphalerite, pyrite, galena massive to mosaic brecciated sulphide. Upper 25 centimetres of the intercept is dominantly silicified fine grained pyrite and magnetic pyrrhotite mineralization. From 121.55 metres - 121.8 metres the interval is mosaic brecciated with clasts of sphalerite, galena, pyrite and dolomite up to 3 centimetres within a coarsely crystalline quartz-carbonate matrix. Basal 1 metre of the interval is sphalerite, pyrite, and galena rich massive sulfide. Overall 2 % magnetic pyrrhotite, 40 % sphalerite, 30 % pyrite, 10 % galena.								
		121.30-122.00 LOWER ZONE MASSIVE SULPHIDE Partially silicified sphalerite, pyrite and lesser galena massive sulfide as above. Overall 20 % sphalerite, 40 % pyrite, 5 % magnetic pyrrhotite, 5 % galena.	LZ	199478	121.30	122.00	0.01	191.20	2.63	9.17
		122.00-122.80 LOWER ZONE MASSIVE SULPHIDE Partially silicified sphalerite, pyrite, galena massive sulfide with weak sphalerite, pyrite banding at 40 to core axis. Sphalerite and galena are coarse grained whereas pyrite is fine to coarse grained. Overall 45 % pyrite, 35 % sphalerite, 10 % galena, 10 % quartz.		199479	122.00	122.80	0.00	186.30	2.49	11.86
122.80	125.40	CRACKLE BRECCIA DOLOMITIZED LIMESTONE Crackle brecciated dolomitized limestone with 15 % randomly orientated quartz-carbonate stringers and veins. Interval is brittle and consists of 70 % intact core and 30 % rubble. From 124.6 metres - 125.0 metres the interval is mosaic brecciated with clasts of unaltered limestone and dolomitized limestone up to 5 centimetres wide within a quartz-carbonate matrix. Sphalerite, pyrite, and galena are found partially replacing dolomite clasts within this breccia. Overall, trace sphalerite, trace pyrite, trace galena.	MLS							
		122.80-123.80 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Footwall sample. Crackle brecciated dolomitized limestone rubble and intact rock with 15 % quartz-carbonate stringers. Relict amphipora are present.		199481	122.80	123.80	0.00	2.90	0.03	0.14

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
125.40	138.90	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Stromatoporoid floatstones to rudstones with minor amphipora. Significant widths of the unit have been rubble brecciated with clasts of limestone up to 7 centimetres wide within a laminated lime mud matrix. Rare sulphide (dominantly pyrite and lesser sphalerite) is found within these limestone rubble breccia's, replacing brecciated limestone clasts. 1 - 2 % calcite stringers which cross-cut areas of rubble brecciation, result in local zones of weak crackle brecciation. Relict recrystallized thamnopora and tryplasma are found throughout the unit. 129.10-132.60 LIMESTONE RUBBLE BRECCIA Limestone rubble breccia with clasts of limestone up to 7 centimetres wide within a lime mud matrix. This breccia is clast supported. Rare pyrite and lesser sphalerite are present within the breccia and are found partially replacing clasts of limestone. Overall, 1 % pyrite, trace sphalerite.	MLS2							
138.90	159.60	AMPHIPORA PACKSTONE Amphipora packstones, floatstones and rudstones with minor massive stromatoporids and tryplasma throughout. Amphipora tend to be fine grained in the upper portion of the interval (< 3mm) and become larger (up to 6 mm) towards the base of the interval. 3 % calcite stringers cause local zones of moderate crackle brecciation. Numerous styolites are present throughout the interval and commonly lie parallel to fossil beds at 30 and 55 to core axis. From 155.7 metres - 156.1 metres fine grained pyrite is observed lining small fractures and styolites and eating into adjacent limestone. Overall trace pyrite.	MLS3							
159.60	161.90	EURYAMPHIPORA PACKSTONE Euryamphipora packstones and floatstones with minor massive stromatoporids and amphipora. 1 - 2 % calcite stringers, orientated at 15 and 70 to core axis create local zones of weak crackle brecciation. Rare blebs of pyrite up to 5 mm wide are found replacing limestone.	MLS4							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Overall trace pyrite.								
181.90	175.40	AMPHIPORA FLOATSTONE Unaltered amphipora floatstones, packstones, and wackestones with lesser massive stromatoponds and rare thin shelled brachiopods. 5 - 10 % calcite stringers and veins up to 2 centimetres wide cause intervals of moderate - strong crackle brecciation. Styolites at 40-65 to core axis, are observed throughout the interval but become more prevalent towards the base of the interval. Sulphide, dominantly pyrite and lesser sphalerite and galena, is commonly found lining styolites and bleeding into adjacent limestone. Overall, < 1 % pyrite, trace sphalerite, trace galena. 174.40-175.40 CRACKLE BRECCIA FLOATSTONE Hanging wall sample. Amphipora floatstone with massive stromatoponds in the upper 30 centimetres of the interval. Sample is crackle brecciated by 5 - 10 % calcite stringers up to 1 centimetre wide. Fine-grained pyrite and lesser sphalerite and galena are found lining styolites and bleeding into adjacent limestone. Overall < 1 % pyrite, trace sphalerite, trace galena.	MLS5	199482	174.40	175.40	0.00	18.80	0.44	0.27
175.40	176.00	LOWER ZONE MASSIVE SULPHIDE Ubiquitous, coarse grained, sphalerite, galena, pyrite massive sulfide with weak sphalerite, pyrite banding at 70 to core axis. Zone is weakly calcareous and appears to have been healed by quartz and calcite cement. Contacts with above and below lying limestone are sharp but irregular (replacement front). The basal contact is at 10 to core axis. Overall, 35 % sphalerite, 30 % galena, 30 % pyrite, 5 % relict limestone.	LZ	199483	175.40	176.00	0.00	645.90	22.48	24.96
176.00	189.70	AMPHIPORA PACKSTONE Variable unaltered to recrystallized, amphipora packstones, floatstones and wackestones. Minor massive stromatoponds are found throughout the interval. 2 % calcite stringers result in localised areas of weak to moderate crackle brecciation. Styolites are present throughout the interval, orientated parallel to fossil beds at 50 to core axis. Fine-grained pyrite is occasionally found lining styolites and bleeding into adjacent limestone. Recrystallized limestone varies from being finely to coarsely recrystallized. Overall trace pyrite. 176.00-177.00 CRACKLE BRECCIA PACKSTONE	MLS5	199485	176.00	177.00	0.01	1.30	0.01	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Footwall sample. Amphipora packstone with minor massive stromatoporids found near the base of the interval. 30 % calcite stringers and veins up to 4 centimetres wide are present and crackle brecciate the interval. Fine-grained pyrite is found lining styolites and fractures and bleeding into adjacent limestone. Overall trace pyrite. 187.00-189.70 RECRYSTALLIZED LIMESTONE Finely recrystallized limestone with a sugary texture. Rare styolites at 15 - 30 to core axis are lined by fine grained pyrite. Overall trace pyrite.								
189.70	190.80	FAULT ZONE Fault zone consisting of 30 % grey-green (sericite-chlorite) fault gouge and 30 % relict limestone fragments. Interval has been partially healed by a quartz-calcite cement. 20 % pervasive fine grained disseminated pyrite and pyrite blebs are found throughout the zone.	FZ	199486	189.70	190.80	0.00	0.20	0.01	0.00
190.80	191.20	AMPHIPORA PACKSTONE Hanging wall sample. Amphipora packstone, weakly crackle brecciated by 1 - 2 % calcite stringers. A strong foliation, defined by elongated fossils, is present and orientated at 60 to core axis. Styolites throughout the interval are lined by very fine grained sulphide. Overall, trace pyrite, trace sphalerite.	MLS5	199487	190.80	191.20	0.00	17.20	0.39	0.13
191.20	192.30	LOWER ZONE MASSIVE SULPHIDE MOSAIC BRECCIA Mosaic brecciated massive sulfide consisting of clasts of sphalerite, galena and pyrite up to 4 centimetres wide within a white crystalline calcite and minor quartz matrix. Primary blebs and crystals of pyrite, sphalerite and galena are also found within the breccia matrix. From 191.6 metres - 191.7 metres there is a small grey-green zone of fault gouge, similar to sample 199486. Overall, 20 % pyrite, 20 % sphalerite, 10 % galena, 10 % fault gouge, 40 % calcite matrix.	LZ	199488	191.20	192.30	0.01	760.60	14.65	13.48
192.30	196.50	AMPHIPORA PACKSTONE CRACKLE BRECCIA Strongly foliated amphipora packstones and wackestones. Foliation is defined by elongated fossils and is orientated at 30 - 40 to core axis. 4 % calcite stringers up to 7 mm wide cause moderate to locally strong crackle brecciation of the limestone. Numerous styolites are present and are orientated parallel to the foliation. From 194.3 metres - 195.4								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		metres the limestone has been finely recrystallized. Fine-grained sulphide is found lining styolites in the upper 30 centimetres of the interval. Overall trace pyrite.	MLS5							
		192.30-193.30 CRACKLE BRECCIA PACKSTONE Footwall sample. Crackle brecciated amphipora packstone as above. Fine-grained pyrite is found lining styolites in the upper 30 centimetres of the interval. Overall trace pyrite.		199489	192.30	193.30	0.00	3.50	0.03	0.11
		195.50-196.50 CRACKLE BRECCIA PACKSTONE Hanging wall sample. Crackle brecciated and strongly foliated amphipora packstone as above. Sharp contact with underlying massive sulfide.		199490	195.50	196.50	0.00	1.50	0.02	0.03
196.50	196.60	LOWER ZONE MASSIVE SULPHIDE Very fine grained sphalerite, pyrite, galena massive sulfide with weak sphalerite and pyrite banding at 75 to core axis. A fine grained, soft, massive, silvery blue mineral is present. It may be galena, however, it does not display galena's typical cubic habit. 1 % calcite stringers cross cut massive sulfide. Overall 70 % pyrite, 20 % sphalerite, 10 % galena.	LZ	199491	196.50	196.60	0.01	480.50	11.56	11.86
196.60	201.40	LIMESTONE RUBBLE BRECCIA Rubble brecciated limestone with clasts of limestone, dolomite, calcite and rare pyrite up to 3 centimetres wide within a fine lime mud matrix. Fine grained sulphide is found selectively replacing this breccia matrix. The interval has been healed and crackle brecciated by 20 % calcite and quartz cement and stringers.	MLS5							
		196.60-197.60 LIMESTONE RUBBLE BRECCIA Footwall sample. Limestone rubble breccia as above. Interval has been crackle brecciated by 20 - 30 % calcite stringers. Overall, trace sphalerite, trace pyrite, trace galena.		199492	196.60	197.60	0.00	7.90	0.11	0.14
		200.40-201.40 RECRYSTALLIZED LIMESTONE Finely recrystallized limestone styolitic breccia. Interval has been crackle brecciated by 10 - 15 % calcite stringers. Rare fine grained pyrite is observed lining some styolites. Overall trace pyrite.		199493	200.40	201.40	0.00	1.10	0.00	0.01
201.40	203.40	FAULT ZONE Fault zone consisting of 50 % grey-green (sericite and chlorite) fault gouge with 30 % relict, strongly crackle brecciated, fragments of limestone. Fault zone is mildly calcareous and appears to have been								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		partially healed by quartz and calcite cement. 15 - 20 % fine grained dissminated pyrite is found throughout the interval.	FZ							
		201.40-202.30 FAULT ZONE GOUGE 60 % relict limestone fragments within 40 % green - grey (sericite, chlorite) fault gouge with 10 % fine grained disseminated pyrite found throughout.		199494	201.40	202.30	0.00	0.40	0.00	0.00
		202.30-203.40 FAULT ZONE GOUGE Fault zone as above but with 60 % green - grey fault gouge and 25 % relict limestone fragments. 15 % fine grained disseminated pyrite is found throughout the interval. A whole rock sample was taken from 203.0 metres - 203.4 metres (sample 199496).		199495	202.30	203.40	0.00	0.10	0.00	0.00
203.40	203.60	LIMESTONE CRACKLE BRECCIA Very strongly crackle brecciated limestone adjacent to fault zone. Overall 30 % calcite stringers.	MLS5							

*** END OF HOLE *** 203.60

HOLE NO: SUD-00-71 SECTION:65 SOUTH GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16/W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.50mE	1129.00RL

Pre-collar depth: Final depth: 183.80

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ 68.7-90.0M, 127.1-127.7M, 131.3-132.9M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-60.00
25.30	264.50	-62.60
55.78	267.60	-63.20
86.23	256.20	-64.00
116.74	269.10	-64.80
147.22	269.90	-65.10
177.70	269.10	-65.80

*** SUMMARY LOG ***

0.00	40.90	1B SANDSTONE / SILTSTONE
40.90	44.50	FAULT ZONE 1A CARBONACEOUS ARGILLITE
44.50	50.20	1A CARBONACEOUS ARGILLITE SILTSTONE
50.20	63.00	MCDAME LIMESTONE UNIT 1
63.00	63.70	MCDAME LIMESTONE/1A ARGILLITE
63.70	65.70	MCDAME LIMESTONE UNIT 1
65.70	68.70	RECRYSTALLIZED LIMESTONE
68.70	90.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA
90.00	126.10	MCDAME LIMESTONE UNIT 2

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 183.80 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL 150 SUPER DRILL
Date started:	14/1/00
Date finished:	16/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation
Top of fresh rock: 0
Water first encountered:
Water inflow estimate:

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
19.90	22.30	2.40	6.53	0.17	0.05
67.70	91.00	23.30	187.69	3.84	6.32
125.10	133.90	8.80	238.14	4.58	3.85

Checked and signed:__________ Date:______

HOLE NO: SUD-00-71	SECTION:65 SOUTH	GRID:SILVER CK S

126.10	127.10	MCDAME LIMESTONE UNIT 1 PYRITIC CRACKLE BRECCIA
127.10	127.70	LOWER ZONE MASSIVE SULPHIDE
127.70	131.30	MCDAME LIMESTONE UNIT 3 RUBBLE BRECCIA
131.30	132.90	LOWER ZONE MASSIVE SULPHIDE
132.90	142.90	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA
142.90	159.20	MCDAME LIMESTONE/1A ARGILLITE RUBBLE BRECCIA
159.20	169.70	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA
169.70	169.90	FAULT ZONE
169.90	183.80	MCDAME LIMESTONE
183.80		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	40.90	1B SANDSTONE / SILTSTONE 0.00-19.90 SANDSTONE / SILTSTONE 70% fine to medium grained sandstone, interbedded with 30% fine grained, laminated to thinly bedded. Graded sandstone beds, fining upward, range from 20-90 centimetres. Bedding @ 55 degrees to core axis. Intermittant, weakly calcareous sandstone beds. Moderately competent rock, breaks along bedding and minor fractures, at 5 & 30 degrees to core axis. At 8.8m, 5mm cross-cutting calcite veinlet, 20 degrees to core axis, 1 centimetres wide with pyrite + sphalerite blebs.	1B	199513	19.90	20.90	0.00	0.20	0.00	0.00
		19.90-20.90 SANDSTONE / SILTSTONE Hanging wall sample above quartz - calcite - sulphide vein. Sandstone, interbedded with laminated siltstone becomes strongly calcareous approaching the vein, along with small pyrite blebs (4%) and discontinuous stringers. Sharp lower contact, 15 degrees to core axis.		199514	20.90	21.30	0.00	38.40	0.99	0.29
		20.90-21.30 VEIN Four centimetres vein, 15 degrees to core axis, consisting of thinly banded quartz, pyrite, calcite with coarse grained clots of galena & sphalerite within the quartz bands. Sharp lower contact @ 15 degrees to core axis. 20% pyrite, 5% sphalerite, 5% galena, 40% quartz & 10% calcite.		199515	21.30	22.30	0.00	0.10	0.00	0.01
		21.30-22.30 SANDSTONE / SILTSTONE Footwall sample. Pyrite-rich within the upper 60 centimetres as disseminations and associated with calcite stringers. 22.30-40.90 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE Marked decrease in the width and percentage of sandstone beds, and an increase in carbonaceous argillite which is often incompetent rubble to chips. Bedding angle varies from 55 degrees at the top, 80 degrees @ 30.5m and back to 60 degrees to core axis at the base. Pyrite generally increasing down section as disseminations and fine grained irregular bands to 3 centimetres, parallel to bedding (4%).								
40.90	44.50	FAULT ZONE 1A CARBONACEOUS ARGILLITE Consists of 20% pyritic, carbonaceous gouge, 50% siltstone/argillite chips, and 30% rubble and poker chip core. Upper contact sub-parallel to bedding, 55 degrees to core axis. Arbitrary lower	FZ							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		contact where core becomes more competent. 5% disseminated pyrite.								
44.50	50.20	1A CARBONACEOUS ARGILLITE SILTSTONE 44.50-48.30 ARGILLITE/SILTSTONE Interbedded siltstone / argillite with pyritic (7%) sandy lenses, bedding / laminations often contorted. Poker chip core. Irregular lower contact with quartz vein. 48.30-48.80 QUARTZ VEIN Brittle, bull white quartz vein, trace - 1% pyrite blebs, 5% carbonaceous wisps. Broken lower contact. 48.80-50.20 ARGILLITE RUBBLE BRECCIA Carbonaceous argillite, variably silicified (nil to strong), brecciated and healed with calcite +/- quartz. 7% fine grained pyrite pods and disseminations throughout. Incompetent; almost gouge in the lower 30 centimetres. Fairly sharp, unconformable contact with limestone, 35 degrees to core axis.	1A							
50.20	63.00	MCDAME LIMESTONE UNIT 1 50.20-51.20 SILICIFIED LIMESTONE CRACKLE BRECCIA Medium grey, becoming very pale grey, cherty-like with depth. The upper 60 centimetres could be silicified argillite - difficult to tell with the alteration. Weak crackle breccia. 9% fine grained pyrite as bnads to 5 centimetres, 70-80 degrees to core axis. Broken lower contact with unsilicified limestone. 51.20-63.00 FLOATSTONE Predominantly amphipora floatstone, minor rudstone, interlatered with dense packstone. Competent, unaltered-looking with minor crackle breccia. Trace - 2% pyrite blebs associated with calcite fracture fillings. Broken lower contact.	MLS1							
63.00	63.70	MCDAME LIMESTONE/1A ARGILLITE Post-karst formation sediment in-fill, consisting of alternating laminations of fine grained carbonaceous sediment and fine to medium grained calcareous sediment with rounded limestone grains to 4 mm. Layering @ 70-80 degrees to core axis. 6% disseminated and clotty pyrite.	MLS/ 1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
63.70	65.70	MCDAME LIMESTONE UNIT 1 Stromatoporoid floatstone and dense packstone, relatively unaltered. 2% disseminated and wispy pyrite.	MLS1							
65.70	68.70	RECRYSTALLIZED LIMESTONE Partially recrystallized limestone, giving the rock a fine speckled (white and grey) appearance between mottled looking fossils (mainly stromatoporids), i.e. They don't have the sharp outlines typical of unaltered limestone. 4% wispy pyrite clots. 67.70-68.70 RECRYSTALLIZED LIMESTONE Hanging wall sample. Similar description as above. Sharp lower contact, somewhat irregular, @ 70 degrees to core axis. 4% wispy pyrite clots.	MLSA	199516	67.70	68.70	0.00	2.20	0.02	0.10
68.70	90.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA General Description: Complex, competent Lower Zone consisting of four sub-zones based on sulphide mineralogy and percentage of limestone replacement. The remnant limestone is mostly pre-mineralization rubble breccia (minor matrix breccia) that has fragments partially replaced by sulphides as well as matrix that is now sulphidized. Looks to be a section of limestone that had been brecciated prior to mineralization and formed an excellent host for fluid passage and deposition (CARBONACEOUS. Rees). Siliceous gangue dominant, except for the third zone of pyrite - sphalerite - calcite. The Zone has excellent recovery of 95-100%. 1st Zone: 68.7 - 73.8m Base metal rich massive sulfide. 25% galena. 25% sphalerite, 25% pyrite, 8% pyrrhotite. 2nd Zone: 73.8 - 83.5m Partially replaced limestone / massive sulfide, silicified. 30% pyrite, 8% sphalerite, 8% galena. 3rd Zone: 83.5 - 86.2m Pyrite - sphalerite rich massive sulfide. 60% pyrite, 15% sphalerite in calcite gangue. 4th Zone: 86.2 - 90.0m Pyrrhotite - pyrite - sphalerite - galena massive sulfide.								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		25% pyrrhotite, 25% pyrite, 20% sphalerite, 15% galena in a very siliceous gangue, trace cpy.	LZ							
		68.70-69.70 BASE METAL MASSIVE SULPHIDE Very massive coarse grained (to 1.5 centimetres) intergrowths of galena, red-brown & black sphalerite, pyrite and minor finer grained pyrrhotite towards the base of the sample. 35% galena, 30% sphalerite, 20% pyrite, 8% pyrrhotite, trace cpy.		199517	68.70	69.70	0.00	843.00	20.61	13.38
		69.70-70.70 BASE METAL MASSIVE SULPHIDE Very similar textures and mineralogy as the sample above, with a minor crumbly section @ 70.3m (containing 5-10 centimetres of sulphide sand). Becoming siliceous within the lower 80 centimetres. 30% galena, 25% sphalerite, 25% pyrite, 5% pyrrhotite, trace cpy.		199518	69.70	70.70	0.01	489.30	10.94	12.82
		70.70-71.70 BASE METAL MASSIVE SULPHIDE Again, massive coarse grained sulphides - very sphalerite - rich. Excellent open space mineralization textures visible. The red-brown sphalerite clots are rimmed by what looks like a later, finer grained black sphalerite. The pyrrhotite is fine grained and forms a feathery texture with silica. 35% sphalerite. 35% pyrite, 15% galena and 5% pyrrhotite, trace cpy.		199519	70.70	71.70	0.00	545.00	12.80	12.57
		71.70-72.80 BASE METAL MASSIVE SULPHIDE Similar to previous sample, very sphalerite - rich, but decreased galena and increased fine grained pyrrhotite, also in a siliceous matrix. 35% sphalerite, 35% pyrite, 15% pyrrhotite, 10% galena, trace cpy.		199521	71.70	72.80	0.00	241.50	6.28	12.67
		72.80-73.80 PYRITE SPHALERITE MASSIVE SULPHIDE Massive sulphides decreasing slightly, with 10-15% variably silicified remnant limestone. Vague orientation of late coarse grained sulphides @ 30-40 degrees to core axis. 50% pyrite, 10% sphalerite, 10% galena, 5% pyrrhotite, 10% quartz.		199522	72.80	73.80	0.00	535.90	11.77	5.65
		73.80-74.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Marked decrease in sulphides - this marks the start of the second zone, characterized by recrystallized limestone rubble breccia, later sulphidized by dominantly pyrite, but also intermittant large clots of coarse grained red-brown (minor black) sphalerite and lesser galena. Sulphides replacing both matrix and clasts. Portions, but not all are siliceous. Low angle fractures. 5-10		199524	73.80	74.80	0.00	85.00	1.98	0.95

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		degrees to core axis, are common. 35% pyrite, 5% sphalerite, 1% galena.		199525	74.80	75.80	0.00	61.10	0.94	3.67
		74.80-75.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Similar to the previous interval; remnant limestone clasts dolomitized in the lower 40 centimetres. 40% pyrite. 5% sphalerite, trace galena.		199526	75.80	76.80	0.00	36.50	0.48	2.81
		75.80-76.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Excellent limestone rubble breccia texture visible, with sulphide replacement and also open-space fill with coarse grained pyrite, sphalerite and calcite. Less pyrite than previous sample. 20% pyrite, 5% sphalerite, trace galena.		199527	76.80	77.80	0.00	388.10	7.94	1.76
		76.80-77.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA The upper 20 centimetres contains rubbly, partially recrystallized limestone with few sxs; below, partially dolomitized and silicified limestone rubble breccia has pyrite, galena and sphalerite partial replacement of both matrix and clasts. There is a vague orientation of sulphides between 20 & 40 degrees to core axis. 25% pyrite, 5% sphalerite, 5% galena, 15% calcite, 10% quartz.		199528	77.80	78.80	0.00	15.90	0.08	0.06
		77.80-78.80 LIMESTONE MOSAIC BRECCIA Limestone clasts in a very coarse grained calcite matrix (30% calcite) and scattered replacement of clasts by pyrite (7%).		199529	78.80	79.80	0.00	125.40	2.45	2.39
		78.80-79.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Sulphides increasing below 79.2m as coarse grained clasts and matrix replacement of siliceous limestone rubble breccia. 25% pyrite, 10% sphalerite, 5% galena.		199530	79.80	80.80	0.01	229.00	4.04	8.02
		79.80-80.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Sulphides continuing to increase, replacing partially dolomitized, siliceous limestone clasts in a rubble breccia. 40% pyrite, 7% sphalerite, 3% galena, 3% pyrrhotite.		199531	80.80	81.80	0.00	102.60	0.52	7.45
		80.80-81.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Sample contains 30 centimetres of massive pyrite, sphalerite & galena, vaguely banded @ 40 degrees to core axis. Frequent								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		vugs lined by coarse grained calcite, sphalerite & pyrite. Limestone clasts below 81.2m appear strongly altered - dolomitized, silicified and/or recrystallized to a sucrosic carbonate. 40% pyrite, 8% sphalerite, 6% galena, 10% quartz, 15% calcite.		199532	81.80	82.80	0.00	14.00	0.14	1.84
		81.80-82.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Limestone rubble breccia has a similar altered appearance as the previous sample - dolomitized, partly siliceous and partly recrystallized to a sucrosic-textured carbonate. Patchy pyrite replacement in the upper 60 centimetres, increasing below with both coarse grained and fine grained pyrite, minor sphalerite. Some bladed crystals likely marcasite (~5%). 30% pyrite, 3% sphalerite, 15% calcite, 10% quartz.		199535	82.80	83.80	0.00	17.40	0.05	1.90
		82.80-83.80 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA Similar description as previous sample. 25% pyrite, 3% sphalerite, 20% calcite, 10% quartz.		199536	83.80	84.80	0.00	57.00	0.07	4.26
		83.80-84.80 PYRITE MASSIVE SULPHIDE 60% coarse grained pyrite, 2% sphalerite, in a carbonate-silica gangue. Sphalerite as clots and vague bands @ 55 degrees to core axis.		199537	84.80	85.80	0.00	24.10	0.04	9.66
		84.80-85.80 PYRITE SPHALERITE MASSIVE SULPHIDE Similar to previous sample, with increased coarse grained sphalerite clots and stringers @ 40 degrees to core axis. Both coarse grained and fine grained pyrite present. 50% pyrite, 12% sphalerite, trace galena, 25% calcite, 10% quartz.		199538	85.80	86.20	0.04	12.70	0.02	3.73
		85.80-86.20 PYRITE MASSIVE SULPHIDE 70% fine to medium grained pyrite, 2% sphalerite in a calcite - rich matrix, roughly layered at 50 degrees to core axis.		199539	86.20	87.20	0.00	45.40	0.07	5.54
		86.20-87.20 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Distinct change in sulphide mineralogy. Early stage fine grained pyrrhotite is overprinted with later stage coarse grained pyrite and sphalerite in a strongly siliceous matrix. 35% pyrrhotite, 35% pyrite, 12% sphalerite, trace cpy, 15% quartz. Rough banding @ 50 degrees to core axis.		199540	87.20	88.20	0.01	74.60	0.39	11.15
		87.20-88.20 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Similar to the previous sample. Pyrrhotite - sphalerite - rich								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		massive sulfide, with lesser coarse grained pyrite and marcasite and minor galena in a strongly siliceous gangue. Trace cpy along pyrrhotite margins. Vague banding visible, 50 degrees to core axis. 30% pyrrhotite, 20% red & black sphalerite, 20% pyrite. 3% galena, trace cpy.		199541	88.20	89.20	0.00	165.30	2.85	16.08
		88.20-89.20 PYRRHOTITE BASE METAL MASSIVE SULPHIDE As above, with increasing galena as massive bands and intergrowths with sphalerite. 30% sphalerite, 30% pyrrhotite, 15% pyrite, 10% galena, trace cpy, 10% quartz and 5% calcite.		199542	89.20	90.00	0.00	298.40	5.31	12.19
		89.20-90.00 PYRRHOTITE BASE METAL MASSIVE SULPHIDE 30% coarse grained galena as rough bands to 15 centimetres, ~60 degrees tca; 25% coarse grained sphalerite, 15% pyrite, 10% pyrrhotite and 25% remnant limestone with sharp upper and lower contact with massive sulfide @ 50 & 80 degrees respectively.								
90.00	126.10	MCDAME LIMESTONE UNIT 2 Massive stromatoporoid unit containing the usual abundant massive stromatoporoid rudstone and floatstone, intermittant amphipora and scattered Tryplasma corals. Minor sulphides, mainly fine grained pyrite associated with calcite veining. -94.5m: partial dolomitization over 70 centimetres. -101.7m: 5 centimetres pyrite clot (minor sphalerite in an irregular calcite vein, ~20 centimetres wide. -108.7m: intersection with old drill hole ~30 degrees to core axis. -110.6-115.0m: Partial recrystallization, especially of the stromatoporids, to coarse grained sparry calcite. 1 centimetres calcite vein, 30 degrees to core axis with galena along vein margin. -115.0-118.5m: Strong recrystallization and crackle breccia, minor rubble breccia. Increased pyrite approaching the base of the unit likely related to the narrow Lower Zone below.								
		90.00-91.00 PACKSTONE CRACKLE BRECCIA Footwall sample. Sharp upper contact with sulphides @ 60 degrees to core axis. Brittle, weakly siliceous amphipora packstone, abundant stylolites, and weak crackle breccia. Trace - 2% fine grained pyrite, 6% calcite.	MLS2	199543	90.00	91.00	0.00	7.00	0.03	0.12
		125.10-126.10 LIMESTONE PYRITIC Amphipora floatstone, moderate crackle breccia, with 6% fine grained pyrite as wispy bands and clots to 3 centimetres, possibly related to the narrow massive sulfide below.		199544	125.10	126.10	0.00	2.60	0.02	0.05

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
126.10	127.10	MCDAME LIMESTONE UNIT 1 PYRITIC CRACKLE BRECCIA Very fine amphipora marking the top of Unit 3. Hanging wall sample. Pyritic amphipora floatstone, partially recrystallized with 10% wispy, fine grained pyrite stringers and clots. Low angle slickensided contact with sulphides, 10 degrees to core axis.	MLS1	199545	126.10	127.10	0.01	111.60	1.92	0.87
127.10	127.70	LOWER ZONE MASSIVE SULPHIDE Narrow Lower Zone mineralization consisting of rubbly, incompetent massive pyrite (55%), sphalerite (20%) and galena (15%). Irregular lower contact with limestone.	LZ	199546	127.10	127.70	0.00	596.10	9.56	9.85
127.70	131.30	MCDAME LIMESTONE UNIT 3 RUBBLE BRECCIA Weakly sulphidized interval of limestone between the two massive sulfide zones. Breccia ranges from crackle, stylolitic, rubble and mosaic.								
		127.70-128.70 LIMESTONE RUBBLE BRECCIA Footwall sample. Irregular, low angle contact with sulphides above. Adjacent rock is strongly brecciated and healed with coarse calcite crystals. 10 centimetres calcite clot at the base contains fine grained pyrite and coarse galena. 3% pyrite, 1% galena.	MLS3	199547	127.70	128.70	0.03	4.50	0.04	0.10
		128.70-130.30 FLOATSTONE CRACKLE BRECCIA Amphipora floatstone, with 15% calcite veining, 30-50 degrees to core axis, trace - 1% pyrite.		199548 199549	128.70 129.30	129.30 130.30	0.01 0.01	1.30 1.00	0.01 0.00	0.01 0.01
		130.30-131.30 LIMESTONE CRACKLE BRECCIA Hanging wall sample of mineralized limestone. Increased calcite veining / crackle breccia with 3% fine grained pyrite - sphalerite - galena clots. Sharp lower contact with sulphides, 50 degrees to core axis, which looks to have been cut by later slip movement, cross-cutting the original contact at 25 to core axis (marked by a smooth, slickensided plane).		199550	130.30	131.30	0.00	1.40	0.01	0.01
131.30	132.90	LOWER ZONE MASSIVE SULPHIDE 131.30-132.10 BASE METAL MASSIVE SULPHIDE Crumbly, slickensided, coarse grained black sphalerite and galena .	LZ	199551	131.30	132.10	0.01	1553.30	29.12	11.16
		- rich massive sulfide with 5% remnant limestone. Slickensides @ 15 & 25 degrees to core axis. 35% sphalerite, 25% galena, 25% pyrite, 15% calcite. 132.10-132.90 BASE METAL MASSIVE SULPHIDE		199552	132.10	132.90	0.01	462.80	11.57	22.36

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Similar to previous interval with frequent smooth slickensided surfaces. 20-30 degrees to core axis. Very base metal rich with 40% coarse black sphalerite, 25% galena and 20% pyrite in a calcite matrix. Irregular lower contact between 20 & 50 degrees.								
132.90	142.90	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA General Description: The upper 5 metres consists of pale grey to white, recrystallized limestone, now coarse sparry calcite, 1-4 centimetres. No fossils remain. Stylolites are common, as are vugs with open-space euhedral calcite. Trace iron carbonate (siderite) @ 135.2m. The lower section, from 138.0-142.9m is a mix of recrystallized limestone, mosaic breccia, crackle breccia and rubbly dolostone. 1% pyrite as fine grained replacement in the brecciated intervals, trace red sphalerite @ 149.4m. 132.90-133.90 RECRYSTALLIZED LIMESTONE STYLOLITIC BRECCIA Footwall sample of recrystallized limestone, as described above. Strong carbonaceous stylolites often with fine grained pyrite wisps and clots (2%).	MLSA	199553	132.90	133.90	0.00	3.20	0.03	0.15
142.90	159.20	MCDAME LIMESTONE/1A ARGILLITE RUBBLE BRECCIA Wide interval of rubble breccia consisting of angular to sub-rounded clasts of limestone, dolostone and argillite in a black to dark grey, carbonaceous, calcareous, fine to medium grained matrix. Variable clast size from 3 mm to 10 centimetres. 1-4% pyrite replacing clasts and lesser amount within the matrix. Fissure / cavern fill. Some of the remnant limestone may be large blocks. The lower 70 centimetres consists of sheared-looking rock with bands of soft sericite-chlorite, roughly @ 40 degrees to core axis, fairly similar looking to the rocks within the Camp Creek Fault Zone.	MLS/ 1A							
159.20	169.70	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA Possibly Unit 5 (Unit 4 - Euramphipora, has likely been obliterated by the wide rubble breccia above). The upper 3.5m is recrystallized crackle breccia, with 15% very coarse grained, vuggy, calcite veins (crystals to 4 centimetres). Below 162.9m is amphipora rudstone to floatstone, elongation of fossils along 50 degrees to core axis, with frequent stylolites and minor calcite veining. Sharp lower contact with narrow Fault Zone.	MLS5							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
169.70	169.90	FAULT ZONE Pale greenish-grey, soft, fine grained chlorite-sericite phyllite, sub-parallel to layering and stylolites within the adjacent limestone. Similar in appearance to rocks within the Camp Creek Fault - possible small splay off the main fault??	FZ							
169.90	183.80	MCDAME LIMESTONE Amphipora rudstone to floatstone, minor stroms: Euramphipora @ 176.6m and scattered rugose corals (178.4m). Sections are partially recrystallized and weakly dolomitized. Note that in Unit 5, Euramphipora is lacking, so this may be Unit 6 - but there is such a large percentage of altered, brecciated limestone, that the stratigraphy is difficult to break down into Units. 1% disseminated pyrite and small blebs with calcite and wisps along stylolites. - 178.9-179.7m: Carbonaceous sediment in-fill, ~ 60 degrees to core axis, and rubble breccia below.	MLS							

*** END OF HOLE *** 183.80

HOLE NO: SUD-00-72	SECTION:65-C	GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43317.50mN	24957.50mE	1133.00RL

Pre-collar depth: Final depth: 95.40

Purpose of hole: TEST FOR FEEDER MINERALIZATION.

Hole status: COMPLETED

Comments: LZ: 49.0-52.1M, 82.0 - 85.1M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-60.00
34.44	250.00	-58.90
64.92	250.00	-59.90
94.50	250.00	-60.50

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 94.50 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE SKID MODEL 150
Date started:	15/1/00
Date finished:	17/1/00
Logged by:	C. REES
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0.0
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
48.50	53.15	4.65	90.98	1.12	1.07
78.00	86.10	8.10	223.06	3.49	7.20

*** SUMMARY LOG ***

0.00	22.50	1B SANDSTONE / LAMINATED SILTSTONE
22.50	27.60	1B LAMINATED SILTSTONE / SANDSTONE
27.60	30.90	1BA LAMINATED SILTSTONE PYRITIC
30.90	49.00	1A CARBONACEOUS SILTSTONE/ARGILLITE
49.00	52.15	LOWER ZONE MASSIVE SULPHIDE
52.15	55.10	MCDAME LIMESTONE UNIT 1
55.10	65.70	MCDAME LIMESTONE UNIT 1
65.70	75.60	MCDAME LIMESTONE UNIT 1
75.60	81.95	MCDAME LIMESTONE UNIT 1 PYRITIC
81.95	85.10	LOWER ZONE MASSIVE SULPHIDE
85.10	95.40	MCDAME LIMESTONE UNIT 1 DOLOMITIZED
95.40		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	22.50	1B SANDSTONE / LAMINATED SILTSTONE 0.00-7.01 LAMINATED SILTSTONE / SANDSTONE Thickly interlaminated fine sandstone and siltstone. Laminae up to 2 centimetres.. Less than 1% disseminated pyrite, but locally patches of 5%. 6 mm thick quartz - pyrite veinlet @ 6.2 metres. 20 degrees to core axis. Abundant laminae are calcareous. 7.01-19.15 SANDSTONE Dominantly medium to coarse grained sandstone in beds up to 40 or 50 centimetres thick. Sandstone beds separated by intervals (several centimetres) of interlaminated fine sandstone and siltstone. Generally less than 1% disseminated pyrite. Minor shearin @ 16.5 metres. Bedding @ 40 degrees to core axis. Rock is quite calcareous, especially coarser laminae. 19.15-22.50 LAMINATED SILTSTONE / SANDSTONE Thickly to thinly inter laminated siltstone, fine sandstone and sandstone. Less than 1% pyrite. Bedding 45 degrees to core axis. Calcareous.								
22.50	27.60	1B LAMINATED SILTSTONE / SANDSTONE Well and thinly laminated siltstone and fine to medium grained sandstone. Moderately calcareous, especially sandstone. Less than 1% disseminated pyrite. Bedding @ 60 degrees to core axis. Some shearing on slate laminae. 25.60-27.60 PYRITIC SILTSTONE / SANDSTONE As above but with stronger disseminated pyrite, 2-3%. 3 centimetres thick quartz - pyrite vein @ 35 degrees to core axis @ 27.3 metres.								
27.60	30.90	1BA LAMINATED SILTSTONE PYRITIC Fairly uniform thinly laminated siltstone and minor fine sandstone. Upper part has 2-3% disseminated pyrite, and some coating fracture surfaces. Weakly to moderately calcareous. Locally 1 mm pyrite laminae. Poker chip to hockey puck separations. Lower part (1 metres) has less than 1% pyrite. Bedding @ 82 degrees to core axis.								
30.90	49.00	1A CARBONACEOUS SILTSTONE/ARGILLITE 30.90-39.65 LAMINATED SILTSTONE SLATE Grey to dark grey, uniformly fine grained slaty argillite with siltstone laminae. Generally about 1% disseminated pyrite. Locally 1-2 mm thick laminae of fine to medium grained pyrite. Locally thick laminae (1 centimetres +) of semi-massive (50%) pyrite. Core is generally friable and broken with partings along								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		bedding / foliation. No real fault zones. Bedding @ 73 degrees to core axis. 39.65-42.10 CARBONACEOUS ARGILLITE SILICEOUS Mainly carbonaceous, fine grained argillite to siltstone, but with white siliceous, concordant, discordant and contorted laminae, veinlets and micro-veinlets. Locally quartz veinlets have pyrite. Argillite has up to 5% pyrite rarely, but generally 1-3%. 42.10-46.00 CARBONACEOUS ARGILLITE SILTSTONE Moderately laminated argillite and siltstone. Locally calcareous. Some siliceous laminae and micro-veinlets. Bedding @ 55 degrees to core axis. Quartz-pyrite vein @ 44.2 metres, about 1-2 centimetres thick, some very coarse pyrite.								
		46.00-48.50 CARBONACEOUS ARGILLITE SLATE Similar to previous, but mostly softer and broken into soft flaky chips. Probably not a fault though. Generally not calcareous. 48.50-49.00 SILICIFIED ARGILLITE Disrupted (probably brecciated) pyritic argillite. Ill-defined structure-texture due to pyrite (3-4%) - silica overprint, including 12 centimetres thick quartz vein.		199601	48.50	49.00	0.00	11.90	0.15	0.13
49.00	52.15	LOWER ZONE MASSIVE SULPHIDE General: Unconformity manto. Virtually solid sulphide with no remnant limestone and no brecciation. Dominantly pyrrhotite - pyrite. Only one good base metal zone. Sharp upper and lower contacts. Overall pyrite 40%, pyrrhotite 28%, sphalerite 10%, galena 2%, calcite 10%, quartz 10%. 49.00-49.70 PYRITE PYRRHOTITE MASSIVE SULPHIDE Fine to medium grained pyrrhotite and pyrite. Partially replaced by coarser pyrite. Minor interstitial sphalerite. Very minor quartz - sphalerite space filling. Weakly calcareous at top (pyrrhotite is magnetic). Pyrrhotite 40%, pyrite 40%, sphalerite 5%, galena 5%.		199602	49.00	49.70	0.00	53.30	0.43	0.32
		49.70-49.95 BASE METAL MASSIVE SULPHIDE Fine to medium grained pyrite and sphalerite, plus medium to coarse grained pyrite, sphalerite and galena. Interstitial quartz, locally strong. Only base metal rich band in the Lower Zone.		199603	49.70	49.95	0.00	900.60	16.17	5.40
		Pyrite 50%, sphalerite 30%, galena 15%, quartz 10%.		199604	49.95	50.45	0.00	127.30	0.97	2.35

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		49.95-50.45 PYRRHOTITE PYRITE MASSIVE SULPHIDE Strong bronze coloured pyrrhotite, and pyrite, fine to medium grained. Possibly some fine sphalerite. Interstitial quartz, locally with coarse pyrite and sphalerite. Pyrrhotite 50%, pyrite 40%, sphalerite 5%, quartz 5%.		199605	50.45	51.15	0.00	48.30	0.27	0.16
		50.45-51.15 PYRITE MASSIVE SULPHIDE Fine to medium grained pyrite with fine sphalerite, possibly. No significant magnetic pyrrhotite. Fine interstitial calcite and local veinlet. Also interstitial quartz. Whole zone is calcareous. Pyrite 70%, sphalerite 10%, calcite 15%, quartz 7%.		199606	51.15	52.15	0.01	54.80	0.13	2.06
		51.15-52.15 PYRITE PYRRHOTITE MASSIVE SULPHIDE Fine to medium grained pyrite - pyrrhotite, but interspersed with significant quartz and minor calcite. Prominent open space vein and cavity lined with very coarse calcite crystals (2-3 centimetres). Vein is 25 centimetres long, subparallel to core axis. Some coarser sphalerite and galena associated with quartz and calcite gangue, but interval is generally base metal poor. Bottom contact with limestone is fine to coarse grained gangue of calcite, quartz and pyrite. Pyrite 20%, pyrrhotite 15%, sphalerite 10%, galena 1%, quartz 25%, calcite 25%.								
52.15	55.10	MCDAME LIMESTONE UNIT 1 SUBUNIT 1A, last few meters. Unaltered dense packstone, with amphipora and local massive stromatoporoids. Minor calcite crackle and stylolites. 52.15-53.15 LIMESTONE Footwall sample of unaltered limestone. Includes aobut 15 centimetres of strong calcite veins (5-8 mm thick) with recent solution openings but no sulphides.		199607	52.15	53.15	0.00	2.40	0.00	0.01
55.10	65.70	MCDAME LIMESTONE UNIT 1 SUBUNIT 1B. Based on appearance of Thamnopora, along with other Thamnopora-rich zones in unit, including at bottom. With Amphipora and Stromataporoids, these concentrations form floatstone to rudstone. Rest of limestone is packstone to amphipora floatstone. Not altered or brecciated. Typical amount of calcite crackle veins and veinlets, up to 5-10 mm thick. 30 degrees to core axis is typical. Veinlet @ 63.9 metres has 1-3 mm thick selvage of sphalerite and galena.								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
65.70	75.60	MCDAME LIMESTONE UNIT 1 SUBUNIT 1C. Top based on disappearance of dense Thamnopora. This upper part of 1C is grey packstone with sporadic small Amphipora and infrequent massive stromatoporids. Local intervals of floatstone of coarser Amphipora. Bedding about 50 degrees to core axis. Calcite vein to calcite mosaic breccia (25 centimetres thick) @ 73.2 metres, and @ 75.0 metres (15 centimetres thick). No sulphides. 71.40-71.70 RUBBLE BRECCIA CARBONACEOUS Very carbonaceous (bituminous) rubble to matrix breccia or calcarenite. Probably cave / fissure sediment. Not hydrothermal.								
75.60	81.95	MCDAME LIMESTONE UNIT 1 PYRITIC SUBUNIT 1C. Roughly coincides with change from upper 1C to lower stromatoporoid 1C, but division based on appearance of stringers and blebs of pyrite. Host limestone is deformed floatstone to mudstone. Now thoroughly infiltrated by fine crackle and cracking or suturing, disruptine texture, but not to point of brecciation. Incipient dolomitization locally, but not well developed. Pyrite is fine grained, infiltrating along fossil margins and stylolites - permeability contrasts rather than following dilational microstuctures or veins. Stringers are 1-3 mm, growing to clots up to 10 - 20 mm across. 75.60-78.00 LIMESTONE PYRITIC Roughly 1-2% pyrite stringers and blebs.		199608	78.00	79.00	0.01	1.80	0.00	0.00
		78.00-79.00 LIMESTONE PYRITIC Roughly 3% pyrite stringers and blebs.		199609	79.00	80.00	0.00	2.00	0.00	0.01
		79.00-80.00 LIMESTONE PYRITIC 1-2% pyrite stringers.		199610	80.00	81.00	0.00	1.80	0.00	0.00
		80.00-81.00 LIMESTONE Much less pyrite here. Sample may be enriched by contamination. Some calcite flooding.		199611	81.00	81.95	0.00	49.50	0.46	1.58
		81.00-81.95 DOLOMITIZED LIMESTONE PYRITIC Fracture and crackle veined limestone, partly broken. Patchy dolomitization. Main mineralization is in 5 centimetres thick pyrite vein (probably manto) at the top of the interval - fine to coarse pyrite and minor sphalerite. Another pyrite coated fracture lower down. Grade may be enhanced by contamination (crumbly sulphides abundant).								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
81.95	85.10	LOWER ZONE MASSIVE SULPHIDE General: Manto-like Lower Zone. Sharp upper and lower contacts at high angle to core axis. Lower contact very simple replacement front against unaltered limestone. Mostly latter stage, coarse grained sulphides, with small patches of pyrrhotite rich, siliceous, early stage sulphide. Base metals strongest in centre. No remnant limestone. 81.95-82.60 PYRITE MASSIVE SULPHIDE		199612	81.95	82.60	0.00	693.20	14.31	15.15
		Pyrite rich sulphide. Fine to coarse grained. Significant fine grained sphalerite and galena also, and interstitial calcite and quartz gangue. Coarse sphalerite and galena locally. Pyrite 70%, sphalerite 12 %, galena 3%, calcite 5%, quartz 5%.		199613	82.60	83.20	0.00	627.80	11.46	14.66
		82.60-83.20 BASE METAL MASSIVE SULPHIDE Rich in coarse grained, maroon-grey sphalerite and galena. Also coarse pyrite, as overgrowths. Strong interstitial quartz gangue locally. Most of interval is later stage mineralization, but bottom 15 centimetres is dominantly fine to medium grained quartz, pyrrhotite and pyrite, probably of early stage mineralization, and come coarser pyrite. Pyrite 30%, pyrrhotite 10%, sphalerite 20%, galena 20%, quartz 15%, calcite 5%.		199615	83.20	84.10	0.00	857.45	12.42	19.10
		83.20-84.10 BASE METAL MASSIVE SULPHIDE Very similar to previous. Medium to coarse grained pyrite, with significant coarse grained, dark red-grey sphalerite and galena. Minor quartz interstitial gangue and a little open space lined with coarse sulphide. Very little pyrrhotite. Pyrite 40%, pyrrhotite 1%, sphalerite 25%, galena 20%, quartz 10%, calcite 4%.		199617	84.10	85.10	0.00	152.20	0.38	20.95
		84.10-85.10 PYRITE SPHALERITE MASSIVE SULPHIDE Slight increase in pyrite at expense of sphalerite and especially galena. Zone is much more crumbly, breaking up with coarse and very coarse grained pyrite. No pyrrhotite. Late stage, coarse dark red-brown sphalerite is locally strong, but much less galena than previous interval. As in rest of Lower Zone, no remnant limestone. Pyrite 50%, sphalerite 25%, galena 5%, quartz 10%, calcite 5%.								
85.10	95.40	MCDAME LIMESTONE UNIT 1 DOLOMITIZED Homogeneous interval (except for first 0.7 metres - see below) of dolomitized limestone. Medium grey, medium grained crystalline texture, dominated by coarse to fine calcite crackle and beinlets.								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Only local development (1-3 centimetres) of crackle to mosaic breccia. Marked by lack of sulphides, except for fine, smeared pyrite on fracture surfaces. Relict fossils (small stromatoporids, amphipora) recognizable locally, but core is almost entirely broken so textures are obscure. Main point - no mineralization, even at top. 85.10-86.10 LIMESTONE Footwall sample. Abrupt disappearance of mineralization. Sample is unaltered pale grey limestone with minor calcite veins and crackle. Bottom 30 centimetres is dolomitized, as for the rest of this major unit.		199618	85.10	86.10	0.00	3.00	0.11	0.05

*** END OF HOLE *** 95.40

HOLE NO: SUD-00-73	SECTION:65S	GRID:SILVER CK S

PROJECT CODE : SILVERTIP
TENEMENT : SILVERTIP MINING
PROSPECT : CORPORATION
GRID : SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION : LIARD, MD, BC
HOLE TYPE : UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.50mE	1129.00RL

Pre-collar depth: Final depth: 112.20

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: *LZ: 69.9 - 82.5, 95.8 - 96.1 M*

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-68.00
19.20	262.10	-69.50
49.68	263.60	-69.90
80.20	263.00	-70.20
110.60	267.20	-69.80

*** SUMMARY LOG ***

0.00	34.60	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
34.60	45.15	FAULT ZONE
45.15	48.70	1BA LAMINATED MUDSTONE/SILTSTONE SANDSTONE
48.70	54.30	1AA CARBONACEOUS ARGILLITE
54.30	69.90	MCDAME LIMESTONE UNIT 1
69.90	82.50	LOWER ZONE MASSIVE SULPHIDE
82.50	95.80	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
95.80	96.10	LOWER ZONE MASSIVE SULPHIDE
96.10	112.20	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
112.20		END OF HOLE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 112.20 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	17/1/00
Date finished:	18/1/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate:

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
60.30	61.40	1.10	2.30	0.01	0.01
68.90	83.50	14.60	300.53	5.12	9.46
94.80	97.10	2.30	15.67	0.03	2.27

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	34.60	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Interbedded sandstones and laminated siltstones and mudstones with bedding at 40 - 60 to core axis. Soft sediment deformation and cross bedding are observed throughout the area. Sandstone beds are dominantly found in the upper portion of the interval and gradually decrease in abundance and thickness with depth. They range from being massive to fining upwards and are up to 50 centimetres thick. Ripped up mudstone clasts up to 3 centimetres wide are occasionally observed within the basal portion of sandstone beds. Beds randomly *range from being non-strongly calcareous throughout the interval.* Quartz-carbonate veins cross cut the interval at 20 and 50 to core axis and contain pyrite and lesser sphalerite. Pyrite is also present as disseminated grains throughout. Overall, 1-2 % pyrite. 4.55-4.60 QUARTZ VEIN 1.5 centimetre wide quartz-calcite vein at 30 to core axis. Calcite within the vein is found within the central portion of the vein and is bounded on either side by quartz. Both quartz and calcite portions *of the vein contain sphalerite and pyrite. however, pyrite is* dominantly found within quartz mineralization whereas sphalerite is dominantly found within calcite. Overall, 20 % pyrite, 10 % sphalerite. 19.50-19.70 QUARTZ VEIN 3.5 centimetre wide quartz-carbonate vein at 20 to core axis. Vein appears to be the product of multiple cycles of fluid infiltration and is ribbon banded. Overall the vein contains 20 % pyrite, and trace sphalerite.	1B							
34.60	45.15	*FAULT ZONE* Fault zone consisting of 60 % black carbonaceous fault gouge and 40 % intact rock. Intact rock consists of interlaminated mudstones, siltstones and sandstones. 2 % linear and contorted quartz-carbonate stringers are found orientated parallel to laminae. *Fine-grained* disseminated pyrite is present throughout interval but is dominantly found within coarse grained sandstone laminae. Overall, 2 - 3 % pyrite.	FZ							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
45.15	48.70	1BA LAMINATED MUDSTONE/SILTSTONE SANDSTONE Finely laminated sandstones, siltstones and carbonaceous mudstones. Interval ranges from being non-strongly calcareous on a bed by bed basis. Pyrite is found throughout the interval within quartz-carbonate stringers and as fine grained disseminated cubes. Overall, 1-2 % pyrite.	1BA							
48.70	54.30	1AA CARBONACEOUS ARGILLITE Finely laminated carbonaceous argillite and siltstone with rare sandstone laminae at 70 to core axis. The interval becomes more strongly graphitic with depth. Numerous (~ 10 %) contorted quartz-carbonate stringers are found throughout the interval parallel to laminations. 3 % pyrite is found throughout the interval. 52.30-52.80 FAULT ZONE Black fine-grained carbonaceous fault gouge and 40 % carbonaceous argillite rubble. < 1 % fine grained pyrite is present within the interval. 53.60-53.63 QUARTZ VEIN 3 centimetre wide quartz vein at 80 to core axis. Vein contains 35 % pyrite. 53.70-54.30 ARGILLITE RUBBLE BRECCIA Earn rubble breccia ranging from clast to matrix supported. This breccia consists of clasts of carbonaceous argillite up to 5 centimetres wide within a strongly calcareous lime mud matrix. Localised sections of this breccia are clast supported and contain tightly packed clasts of argillite and limestone. Very fine-grained disseminated pyrite is found throughout the breccia (2-3 %).	1AA							
54.30	69.90	MCDAME LIMESTONE UNIT 1 Limestone ranging from amphipora packstones and wackestones to *stromatoporoid, thamnopora floatstones. The limestone is dominantly* unaltered and crackle brecciated throughout, but very localised zones of dolomitization and mosaic brecciation are present. The basal 3.8 metres of the interval has been finely recrystallized and displays a sugary texture. 10 % calcite stringers and veins up to 4 centimetres wide crackle brecciate the interval throughout and cause localised zones up to 20 centimetres wide of mosaic brecciation. Mosaic breccias contain clasts of limestone and dolomitized limestone up to 5	MLS1							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		centimetres wide within a coarsely crystalline sparry calcite matrix. Calcite stringers are randomly orientated. Rarely calcite stringers are found associated with fine grained sulphide. Pyrite is also found as stringers up to 3 mm wide and as blebs within limestone. Pyrite blebs are ususally found adjacent to styolites or calcite stringers. Overall 1 % pyrite, trace galena, trace sphalerite. 58.80-60.30 CRACKLE BRECCIA WACKESTONE Moderately crackle brecciated and finely recrystallized amphipora wackestone. Styolites and secondary calcite veins contain very fine grained pyrite which is found bleeding into the adjacent limestone and formining interconnected blebs up to 4 centimetres wide. Overall 4 % calcite stringers, 3 % pyrite.		199497	60.30	61.40	0.00	2.30	0.01	0.01
		60.30-61.40 RECRYSTALLIZED LIMESTONE Finely recrystallized limestone as above but with more pyrite and less crackle brecciation. Overall, 15 % fine grained pyrite blebs and stringers. 66.10-68.90 RECRYSTALLIZED LIMESTONE Very fine, partially to completely recrystallized limestone. Recrystallization has partially overprinted fossils and has resulted in a sugary, mottled texture of the rock. In the basal 1 metre of the interval, possible relict clasts of limestone are visible indicating *a possible limestone rubble breccia.* Recrystallization has overprinted and masked the protolith making this speculative. 1 - 2 % calcite stringers cross cut the limestone. Fine grained pyrite, sphalerite, and lesser galena are found within these stringers and lining styolites. Overall, trace pyrite, trace sphalerite, trace galena.		199498	68.90	69.90	0.00	3.50	0.02	0.04
		68.90-69.90 DOLOMITIZED LIMESTONE Hanging wall sample. Dolomitized and crackle brecciated limestone which grades into a finely recrystallized limestone in the basal 30 centimetres of the interval. The dolomitized portion of the interval is very brittle and highly fractured and breaks into angular fragments. The recrystallized portion of the rock displays a sugary texture. 2 % calcite stringers and veins up to 1 centimetres wide cross-cut and crackle brecciate the interval. These veins and stringers are dominantly found in the upper dolomitized portion of								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		the interval and are orientated at 10 - 20 to core axis. Fine-grained sulphide, dominantly pyrite, is observed bleeding into the limestone adjacent to these veins to form blebs up to 5 mm wide. Fine-grianed sulphide is also found following rare styolites and fractures throughout the interval. Overall, 1% pyrite.								
69.90	82.50	LOWER ZONE MASSIVE SULPHIDE Complex and competent lower zone mineralization which can be broken down into 5 sub-zones based upon texture and the amount of relict limestone. Sulphide mineralization ranges from early fine grained pyrite, pyrrhotite massive sulfide to later stage coarse grained, ubiquitous sphalerite, galena, pyrite massive sulfide. Partially replaced and strongly silicified limestone rubble breccia's are also present within the lower zone and may indicate that the protolith was a highly permeable limestone rubble breccia. This lower zone intercept appears *to have been subject to at least 3 phases of sulphide mineralization* and displays similar characteristics to the lower zone intercepted in hole SUD-00-71 from 68.7 metres - 90.0 metres. Zone 1: 69.9 - 74.1 metres Silicified massive sulphide with occasional fragments of pyrite, pyrrhotite partially replaced limestone. Chalcopyrite is present and found rimming sphalerite and pyrrhotite mineralization. In addition a silver mineral with an acicular radiating habit (resembling a pin-cushion) is found lining fractures. Possibly Jamesonite or Bismuthinite? 30 % pyrite, 30 % sphalerite, 20 % pyrrhotite, 15 % limestone, 5 % galena. Zone 2: 74.1 - 75.8 metres Strongly silicified limestone rubble breccia with clasts up to 5 centimetres wide. Limestone clasts have been partially replaced by fine grained disseminated pyrite. Coarse grained sphalerite and pyrite mineralization is found replacing the matrix of the breccia and rimming silicified clasts of limestone. Sulphide appears to be slowly replacing								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		clasts from the margins inward. 60 % limestone. 15 % pyrite, 10 % sphalerite, 10 % quartz, 5 % calcite. Zone 3: 75.6 - 77.9 metres Silicified early fine grained pyrite, pyrrhotite massive sulfide overprinted by later coarse grained sphalerite, galena and pyrite massive sulfide. Weak sphalerite, pyrite banding is observed and orientated at 80 to core axis. This zone is similar to zone 1. 30 % pyrite, 20 % sphalerite	LZ	199499	69.90	70.70	0.00	704.50	12.51	13.75
		69.90-70.70 LOWER ZONE MASSIVE SULPHIDE Competent and silicified early fine grained pyrite, pyrrhotite massive sulfide overprinted by later coarse grained, ubiquitous sphalerite, galena, pyrite massive sulfide. 2 % relict partially replaced limestone is present. Contact with above lying limestone is sharp and at 30 to core axis. At 70.65 metres there is a fracture lined by euhedral calcite and siderite crystals. Overall, 35 % sphalerite, 25 % pyrite, 20 % galena, 15 % magnetic pyrrhotite, 3 % calcite stringers, 2 % relict limestone.		199500	70.70	71.70	0.00	140.50	0.87	9.95
		70.70-71.70 LOWER ZONE MASSIVE SULPHIDE Competent, early fine grained pyrite, pyrrhotite massive sulfide overprinted by later coarse grained sphalerite, galena, and pyrite massive sulfide as above. Chalcopyrite is found rimming sphalerite and pyrrhotite. Overall, 40 % pyrrhotite, 20 % pyrite, 15 % sphalerite, 1 % chalcopyrite, 1 % calcite, and 33 % relict limestone.		140451	71.70	72.70	0.00	91.00	0.23	9.51
		71.70-72.70 LOWER ZONE MASSIVE SULPHIDE Dominantly coarse grained pyrite, sphalerite massive sulfide with lesser early pyrrhotite. Sphalerite ranges from red-black and is found in association with coarse grained pyrite and open space filling sparry calcite veins. Interval is fractured and vuggy with euhedral crystals of calcite and a silver mineral with an acicular radiating habit (jamesonite, bismuthinite?) found lining fractures and vugs. Overall, 65 % pyrite, 15 % sphalerite, 10 % pyrrhotite, 5 % calcite, < 1% bismuthinite?, 4 % silica.		140452	72.70	73.40	0.07	124.30	0.28	14.54
		72.70-73.40 LOWER ZONE MASSIVE SULPHIDE Competent and silicified lower zone mineralization ranging from		140453	73.40	74.10	0.00	83.40	0.46	22.86

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		pyrite, sphalerite, pyrrhotite massive sulfide to limestone which has been strongly silicified and partially replaced by early fine grained pyrite and pyrrhotite. Overall, 40 % relict limestone, 25 % sphalerite, 25 % pyrite, 10 % pyrrhotite. 73.40-74.10 LOWER ZONE MASSIVE SULPHIDE Lower zone mineralization as above but with more sphalerite and less relict limestone. 20 % limestone, 35 % sphalerite, 25 % pyrite, 15 % pyrrhotite, 5 % quartz-carbonate.		140454	74.10	74.80	0.00	233.40	3.86	12.85
		74.10-74.80 LOWER ZONE RUBBLE BRECCIA Competent and silicified limestone rubble breccia. Coarse grained pyrite, sphalerite and galena are found replacing the breccia matrix and rimming limestone clasts. The margins of limestone clasts are corroded and are slowly being replaced by sulphide. Overall, 65 % limestone, 10 % quartz, 10 % sphalerite, 10 % pyrite, 5 % galena.		140455	74.80	75.60	0.01	194.30	3.99	7.00
		74.80-75.60 LOWER ZONE RUBBLE BRECCIA Rubble brecciated limestone as above. From 74.9 metres - 75.1 metres there is a hydrothermal collapse max/ist rubble breccia with clasts of limestone, sphalerite, and pyrite up to 1 centimetre wide within a coarsely crystalline calcite matrix. This breccia is later than the adjacent limestone rubble breccia. Overall, 70 % limestone, 15 % pyrite, 5 % sphalerite, 10 % quartz-calcite.		140456	75.60	76.60	0.00	153.75	2.87	14.94
		75.60-76.60 LOWER ZONE MASSIVE SULPHIDE Strongly silicified and competent pyrite, pyrrhotite, sphalerite massive sulfide with 10 % relict partially replaced limestone. Early fine grained pyrite, pyrrhotite massive sulfide has been overprinted by later coarse grained sphalerite, pyrite and minor galena mineralization. Weak sphalerite, pyrite banding is observed towards the base of the interval and orientated at 80 to 90 to core axis. Bismuthinite (?) is found within the interval lining fractures.		140458	76.60	77.30	0.00	80.30	1.49	21.18
		In addition, a soft, dull lead grey mineral is found in association with euhedral calcite, lining a vug at the start of the interval (tetrahedrite?). Overall, 30 % pyrite, 20 % sphalerite, 5 % galena, 20 % silica, 5 % calcite, 15 % pyrrhotite, 5 % limestone. 76.60-77.30 LOWER ZONE MASSIVE SULPHIDE Strongly silicified pyrite, pyrrhotite, sphalerite massive sulfide as above. Weak sphalerite, pyrite banding is present at 80 - 90 to		140459	77.30	77.90	0.00	49.80	0.56	4.90

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		core axis. Overall, 30 % sphalerite, 20 % pyrite, 10 % pyrrhotite, *20 % limestone, 15 % quartz, 2 % galena, 3 % calcite.*		*140460*	*77.90*	*79.00*	*0.01*	*48.80*	*0.32*	*5.15*
		77.30-77.90 LOWER ZONE MASSIVE SULPHIDE Lower zone pyrite, pyrrhotite, sphalerite massive sulfide as above with ~ 20 % relict limestone. Euhedral, acicular crystals of the mineral Bismuthinite (?) are found lining fractures within the interval. Overall, 30 % limestone, 25 % pyrite, 10 % sphalerite, 5 % pyrrhotite, 2 % galena, 15 % quartz, 10 % calcite. 77.90-79.00 LOWER ZONE RUBBLE BRECCIA Limestone rubble breccia with clasts of silicified and finely recrystallized limestone up to 6 centimetres wide. Disseminated pyrite crystals are found throughout the limestone clasts. Coarse grained pyrite, sphalerite and lesser galena are found throughout the interval replacing the breccia matrix. The mineral Bismuthinite *(?) is commonly found in association with pyrite and quartz along* fracture surfaces. Overall, 69 % limestone, 5 % sphalerite, 10 % pyrite, 10 % quartz, 5 % calcite, 1 % galena, trace bismuthinite. 79.00-79.90 LOWER ZONE MASSIVE SULPHIDE Partially replaced to rubble brecciated limestone. At 79.05 metres there is a 2 centimetre wide sparry calcite vein at 15 to core axis. Directly beneath this vein to 79.3 metres the limestone is rubble brecciated with clasts of limestone up to 3 centimetres wide.		140461	79.00	79.90	0.00	187.40	4.03	6.41
		Pyrite, sphalerite and lesser galena are found replacing limestone clasts and matrix within this breccia. Beneath this breccia thse limestone is highly fractured and is cross-cut by numerous quartz-carbonate veins at 10 - 60 to core axis. Pyrite , sphalerite, and galena are found partially replacing limestone throughout the interval. Overall, 15 % pyrite, 10 % sphalerite, 2 % galena, 15 % *calcite, 10 % quartz, 50 % limestone.*		140462	79.90	80.60	0.01	198.00	12.28	5.80
		79.90-80.60 LOWER ZONE MASSIVE SULPHIDE Coarse grained pyrite, sphalerite, galena massive sulfide with 20 % relict limestone. Coarsely crystalline calcite veins up to 3 centimetres wide, and orientated at 15 -30 to core axis, cross-cut relict limestone and sulphide. Overall, 30 % limestone, 20 %calcite, 30 %pyrite, 10 % sphalerite, 5 % galena, 5 % quartz. 80.60-81.60 LOWER ZONE MASSIVE SULPHIDE Sphalerite, pyrite, galena massive sulfide with 5 % relict		140463	80.60	81.60	0.00	1357.40	22.03	5.95

From	*To*	*Geological Log*	*UNIT*	*SAMPLE*	*FROM* (m)	*TO* (m)	*Au* gm/t	*Ag* gm/t	*Pb* %	*Zn* %
		%calcite, 30 %pyrite, 10 % sphalerite, 5 % galena, 5 % quartz. 80.60-81.60 LOWER ZONE MASSIVE SULPHIDE Sphalerite, pyrite, galena massive sulfide with 5 % relict limestone. Early fine grained pyrite, pyrrhotite massive sulfide is overprinted by coarse grained sphalerite, pyrite, galena massive sulfide. Weak sphalerite, pyrite, galena banding is observed and *orientated at 40 - 50 to core axis. Overall, 40 % pyrite, 20 %* galena, 20 % sphalerite, 10 % pyrrhotite, 5 % limestone, 5 % calcite. 81.60-82.50 LOWER ZONE MASSIVE SULPHIDE Pyrite, sphalerite, galena massive sulfide as above. Overall, 40 % pyrite, 25 % sphalerite, 15 % galena, 10 % pyrrhotite, 5 % quartz, 5 % calcite.		140464	81.60	82.50	0.00	1276.20	20.25	13.96
82.50	95.80	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Stromatoporoid floatstones and rudstones with lesser tryplasma and *thamnopora throughout. Minor amphipora are present and become* more prevalent towards the base of the interval. Limestone is dominantly unaltered, however, localised areas of finely recrystallized limestone are present. 2 - 3 % calcite stringers and veins are present and cause zones of weak crackle brecciation. Styolites throughout *the interval are occasionally lined by fine grained sulphide* (dominantly pyrite). At 89.3 metres there is a fracture lined with euhedral crystals of bismuthinite. Overall, trace pyrite, trace bismuthinite. 82.50-83.50 CRACKLE BRECCIA LIMESTONE Footwall sample. Finely recrystallized limestone with minor dolomitized limestone. 3 % calcite stringers crackle brecciate the interval throughout. A trace of fine grained pyrite is observed lining	MLS2	140466	82.50	83.50	0.01	18.20	0.09	0.15
		styolites and within calcite stringers. 94.80-95.80 CRACKLE BRECCIA FLOATSTONE Hanging wall sample. Partially recrystallized stromatoporoid floatstone crackle brecciated by 2 % calcite stringers. Very fine grained pyrite is found within calcite stringers and lining styolites.		140467	94.80	95.80	0.00	4.90	0.04	0.14

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
95.80	96.10	LOWER ZONE MASSIVE SULPHIDE Coarse grained, manto style, sphalerite and pyrite massive sulfide with lesser early fine grained magnetic pyrrhotite. Late quartz-calcite veins up to 1 centimetre wide and at 30 to core axis are found throughout the interval. Overall, 70 % pyrite, 15 % sphalerite, 5 % pyrrhotite, 10 % quartz-calcite.	LZ	140468	95.80	96.10	0.00	93.50	0.03	15.54
96.10	112.20	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Stomatoporoid floatstones and rudstones with minor amphipora. Interval dominantly consists of unaltered limestone, however, rare zones up to 50 centimetres wide have been coarsely recrystallized. 2 % calcite stringers and veins up to 5 mm wide cross-cut the interval and cause localised zones of moderate crackle brecciation. Styolites throughout the interval are occasionally lined by fine grained pyrite. Overall, trace pyrite. 96.10-97.10 STROMATOPOROID FLOATSTONE Footwall sample. Stromatoporoid floatstone with minor amphipora. The upper 50 centimetres of the interval is strongly recrystallized and crackle brecciated. At 96.4 metres there is a large vug lined by very coarse crystals of sparry calcite up to 3 centimetres across. The basal 50 centimetres of the interval is unaltered and weakly crackle brecciated. Fine-grained pyrite is found lining styolites throughout the interval. Overall, trace pyrite. 106.10-106.45 STROMATOPOROID FLOATSTONE Stromatoporoid floatstone with large blebs up to 6 centimetres wide of coarse grained black sphalerite and pyrite. Overall, 1 % pyrite, 1 % sphalerite. 108.60-112.20 RECRYSTALLIZED LIMESTONE Finely recrystallized limestone with a sugary texture. Relict amphipora and stromatoporids are preserved. 3 % sparry calcite veins up to 3 centimetres wide crackle brecciate the interval.	MLS2	140469	96.10	97.10	0.00	3.10	0.01	0.41

*** END OF HOLE *** 112.20

HOLE NO: SUD-00-74	SECTION:65C	GRID:SILVER CK S

PROJECT CODE : SILVERTIP
TENEMENT : SILVERTIP MINING
PROSPECT : CORPORATION
GRID : SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION : LIARD, MD, BC
HOLE TYPE : UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43317.50mN	24957.50mE	1133.00RL

Pre-collar depth: Final depth: 92.40

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 60.1-72.2, 76.5-78.6 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-69.00
23.77	253.90	-69.30
54.25	255.00	-69.90
84.73	258.50	-70.30

*** SUMMARY LOG ***

0.00	31.40	1B SANDSTONE / SILTSTONE
31.40	36.20	1B SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE PYRITIC
36.20	42.50	FAULT ZONE 1BA
42.50	49.80	1A CARBONACEOUS ARGILLITE SILICIFIED
49.80	60.10	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA
60.10	72.20	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA
72.20	76.50	LIMESTONE BRECCIA RECRYSTALLIZED LIMESTONE
76.50	78.60	LOWER ZONE MASSIVE SULPHIDE / LIMESTONE BRECCIA
78.60	85.30	RECRYSTALLIZED LIMESTONE BRECCIA
85.30	92.40	MCDAME LIMESTONE UNIT 2
92.40		END OF HOLE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 92.40 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	17/1/00
Date finished:	18/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation
Top of fresh rock: 0.0
Water first encountered:
Water inflow estimate:

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
59.10	79.60	20.50	205.26	3.77	5.36

Checked and signed:______________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	31.40	1B SANDSTONE / SILTSTONE 0.00-16.70 SANDSTONE / SILTSTONE Interval dominated by medium grey, medium to coarse grained, *massive sandstone, fining upwar, topped by dark grey laminated* siltstone. Sandstone layers range from 10 centimetres - 1 metres thick, with rare pyrite nodules to 1 centimetres. Occasional soft sediment deformation and minor rip-up clasts. Laminations @ 50 degrees to core axis. Trace - 1% pyrite, predominantly associated with calcite along mm-centimetres fractures. - 5.6m: 1 centimetres quartz - calcite - pyrite)sphalerite) stringer, 15 degrees to core axis. - 6.7m: Curved, smooth slickensided surface, 0-5 degrees to core axis, fine bladed pyrite along surface. - 13.2 - 16.3m: rubbly interval with frequent low angle fracture planes, often slickensided. 20-30 degrees to core axis. 16.70-31.40 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE Marked decrease in sandstone layers, which now are 0.5-5 centimetres thick, interbedded with laminated siltstone *Carbonaceous argillite intervals are usually broken into chips and* minor gouge. Poker chip core below 24.2m. 1-2% ft pyrite along fractures and disseminations or discontinuous stringers, parallel to bedding (60-70 degrees to core axis). - 23.8m: 3 centimetres pyrite - quartz - calcite - sphalerite cross-cutting stringer, 40 degrees to core axis.	1B							
31.40	36.20	1B SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE PYRITIC Pyrite increasing (8%), as abundant disseminations, especially in the sandstone layers, forming almost massive bands to 1 centimetres. Incompetent poker chip core. Carbonaceous gouge and quartz chips @ 32.7 & 35.3m. Fairly arbitrary lower contact where the amount of gouge and chips increases to greater than the amount of competent core.	1B							
36.20	42.50	FAULT ZONE 1BA Rubbly zone consists of 25% pyritic carbonaceous, quartz gouge, *25% carbonaceous argillite chips and the remainder is laminated* siltstone, bedding @ ~ 65 degrees to core axis. Very imcompetent	FZ							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		core.								
42.50	49.80	1A CARBONACEOUS ARGILLITE SILICIFIED Unit 1A of the Earn Group is generally fairly imcompetent and rubbly, but in this hole, the laminated to massive argillite is moderate to strongly silicified from 46.1-49.8m. The upper 3.6m is less competent and less silicified. 5-10% calcareous lenses and minor, thin sandy beds contain abundant fine grained pyrite (7%). Contorted calcite lenses contain small argillite clasts - small scale brecciation over 1-10 centimetres. Bedding @ 70 degrees to core axis. Fairly sharp lower contact with limestone @ 70 degrees. - *48.2-48.3m: Quartz - calcite - pyrite vein, 65 degrees to core axis.* - 48.9-49.0m: 10 centimetres carbonaceous gouge. Irregular uc; subconformable lower contact @ 70.	1A							
49.80	60.10	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA The upper 1.5 metres looks to be partial, small-scale post-karst sedimentation, containing calcareous mud and fragments to 3 centimetres, including some Earn fragments and fine grained carbonaceous lenses. Below that is packstone to mudstone, intermittant intervals of amphipora rudstone and floatstone, sparse massive stromatoporids. Weak to moderate crackle breccia, vuggy, healed with calcite. Minor, patchy recrystallization, gives the rock a mottled appearance with fine sucrosic texture. One 15 centimetres interval with strong crackle breccia is partially altered to dolostone ~ 60 centimetres above the massive sulfide. - 56.85m: 5 mm pyrite - sphalerite - calcite stringer, 20 degrees to core axis.	MLS1							
		59.10-60.10 RECRYSTALLIZED LIMESTONE CRACKLE *BRECCIA* Hanging wall sample. The upper 40 centimetres is a dense packstone; below is a 15 centimetres section of strongly crackle brecciated, partially dolomitized limestone, with fractures @ roughly 40 degrees to core axis and 3% fine grained pyrite along stylolites. The lower 45 centimetres is mottled, partially recrystallized limestone accompanied by fine pyrite & galena stringers adjacent to sulphides. Lower contact ~60 degrees to core axis.		199554	59.10	60.10	0.00	12.50	0.16	0.02

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
60.10	72.20	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA *General Description*: This is a very continuous zone of massive sulfide, with only minor remnant limestone over the entire length. The zone can be divided into 3 gneral sub-zones based on mineralogy and texture. 1st Zone: 60.1-65.1m: Massive, coarse grained pyrite - sphalerite - galena in a siliceous, fine grained pyrite matrix. Approximately 5% remnant limestone, which are predominantly silicified. The core barrel was jammed between 60.4 & 61.9m by fine grained, sandy pyrite & sphalerite. The rod had to be cut to get the core barrel out. Sample 199556 is from this interval and represents about 25 centimetres of lost core. Fractures are frequent @ 25 & 50 degrees to core axis, sub-parallel to quartz stringers, leaving core rubbly. Overall: 40% pyrite, 20% sphalerite, 10% galena, 15% quartz, 5% calcite & 5% limestone. 2nd Zone: 65.1 - 69.9m: Brecciated limestone clasts, replaced by *fine grained pyrrhotite & silica, followed by a second stage of* mineralization consisting of very coarse grained sphalerite, pyrite & galena which partially replaces pyrrhotite clasts. Small blebs of chalcopyrite present (<1%), rimming pyrrhotite. Fine grained quartz appears to rim the secondary replacement. Iron carbonate rims vugs. This section is very competent. Overall: 35% pyrite, 35% sphalerite, 10% galena, trace chalcopyrite, 15% quartz. 3rd Zone: 69.9-72.2m: Lacks the pyrrhotite seen above; increase in fine grained pyrite and secondary calcite. Core much more fractured and rubbly, fractures and minor slickensides @ 10, 30 & 60 degrees to core axis. Overall: 55% pyrite, 15% sphalerite, 8% galena, 10% calcite, 10% quartz.	LZ	199555	60.10	61.10	0.01	316.10	6.26	5.82
		60.10-61.10 PYRITE SPHALERITE MASSIVE SULPHIDE Upper contact is somewhat gradational, starting with vague bands / clots of medium grained pyrite, sphalerite & galena in a siliceous matrix. Euhedral quartz crystals to 7mm visible in a random orientation. *Banding roughly @ 55 degrees to core axis.* Sulphides increase in abundance and grain size with depth - mostly as massive intergrowths. 55% pyrite, 20% sphalerite, 6% galena, 20% quartz.		199557	61.10	62.10	0.00	230.80	3.45	4.17

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		61.10-62.10 PYRITE SPHALERITE MASSIVE SULPHIDE Rubbly to sandy core - this is likely the portion of the 5 foot run (60.4-61.9m) that the core barrel became jammed into the rods by very sandy, unconsolidated pyrite & sphalerite. Recovery of core ~75%, and the remainder was collected when the rod was cut off around the core barrel (Sample 199556 - this sample should not be included in the weighted averages). *This zone may represent* a late fault, with associated abundant quartz gangue and open space fill.		199558	62.10	63.10	0.02	347.90	6.20	6.13
		62.10-63.10 PYRITE SPHALERITE MASSIVE SULPHIDE Weak to moderately competent, massive, medium to coarse grained pyrite intergrown with fine grained brown to black sphalerite and lesser galena. Sphalerite and galena also form rough bands ~ 50 degrees to core axis, 5-10 centimetres thick. 60% pyrite, 25% sphalerite, 5% galena, 15% quartz.		199559	63.10	64.10	0.01	159.80	3.48	0.92
		63.10-64.10 PYRITE SPHALERITE MASSIVE SULPHIDE Coarse grained, massive intergrowths of pyrite and finer grained sphalerite, cut by fractures 10, 35 & 60 degrees to core axis. A few fragments of siliceous limestone remain, but it is difficult to discern the original texture of the limestone that the fluids invaded - can't tell if it was brecciated or altered or both. Below 63.6m, the sample is quartz - rich with a sugary texture and vugs lined with fine grained pyrite. 50% pyrite, 15% sphalerite, 4% galena, 30% quartz.		199560	64.10	65.10	0.12	352.75	6.84	4.71
		64.10-65.10 PYRITE SPHALERITE MASSIVE SULPHIDE *The upper 50 centimetres is fine to coarse grained pyrite and fine* grained sphalerite in a siliceous matrix; below is coarse grained pyrite, sphalerite & galena. Sulphides here could be replacing a limestone rubble breccia - pyrite seems to preferrentially replace clasts and sphalerite replaces / forms the matrix. Below this interval, start to see pyrrhotite. 50% pyrite, 25% sphalerite, 6% galena, 20% quartz.		199562	65.10	66.10	0.02	719.20	8.57	15.83
		65.10-66.10 PYRRHOTITE BASE METAL MASSIVE SULPHIDE RUBBLE BRECCIA Fairly distinct remnant rubble breccia texture, all clasts replaced								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		now by pyrrhotite, pyrite, sphalerite and galena in a siliceous gangue. *The coarser grained pyrite, sphalerite & galena, all* rimmed by feathery quartz, is a later phase than the fine grained pyrrhotite. Iron carbonate (siderite) lining vugs. This is the start of		199564	66.10	67.10	0.02	306.10	6.54	8.20
		the 2nd Zone from the general description. 30% sphalerite, 25% pyrite, 20% pyrrhotite, 10% galena, trace chalcopyrite, 15% quartz. 66.10-67.10 PYRRHOTITE BASE METAL MASSIVE SULPHIDE RUBBLE BRECCIA		199565	67.10	68.10	0.03	655.10	13.74	12.48
		Similar textures as the previous sample - rubble breccia replaced by massive sulfide in a siliceous matrix. Competent core. 30% pyrite, 25% sphalerite, 15% pyrrhotite, 10% galena, trace chalcopyrite, 20% quartz. 67.10-68.10 PYRRHOTITE BASE METAL MASSIVE SULPHIDE RUBBLE BRECCIA Increased coarse grained sphalerite as massive clots and bands to 15 centimetres. 5% remant limestone. Late cross-cutting fractures @ 5 & 20 degrees to core axis. 35% sphalerite, 30% spy, 15% pyrrhotite, 7% galena trace chalcopyrite, 15% calcite.		199566	68.10	69.10	0.00	228.50	4.97	14.68
		68.10-69.10 PYRRHOTITE BASE METAL MASSIVE SULPHIDE RUBBLE BRECCIA Very distinct, large coarse grained clots of sphalerite (+/- galena, pyrite), often rimmed by opaque, fine grained quartz, replacing *sub-angular limestone clasts within a remnant rubble breccia.* Fine grained pyrrhotite within a siliceous matrix is decreasing.		199567	69.10	70.10	0.03	291.20	5.89	9.92
		30% sphalerite, 30% pyrite , 10% galena, 10% pyrrhotite, trace chalcopyrite, 15% quartz. 69.10-70.10 PYRRHOTITE BASE METAL MASSIVE SULPHIDE RUBBLE BRECCIA Similar to the previous sample, with increased quartz (as fine grained, opaque matrix) and decreased pyrrhotite. 30% pyrite,		199568	70.10	71.10	0.03	337.60	6.45	9.87
		25% sphalerite, 10% galena, 8% pyrrhotite, 20% quartz, trace chalcopyrite. 70.10-71.10 PYRITE SPHALERITE MASSIVE SULPHIDE Loose the fine grained pyrrhotite as well as the remnant rubble breccia textures. Increase in rubbly / sandy pyrite & sphalerite. Coarse grained calcite in the matrix increasing to 10%. Pyrite		199569	71.10	72.20	0.32	61.00	1.13	11.97

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		quite fine grained approaching the base of the sample. 40% pyrite, 20% sphalerite, 8% galena, 20% quartz, 10% calcite. 71.10-72.20 PYRITE SPHALERITE MASSIVE SULPHIDE Base of the Lower Zone comprised of finer grained pyrite - sphalerite clots (increased red-brown sphalerite) in a mixed siliceous +/- calcareous matrix. 50% rubbly core. One good slickenside at 45 degrees to core axis. Lower contact broken. 55% pyrite, 15% sphalerite, 5% galena, 15% quartz & 10% calcite.								
72.20	76.50	LIMESTONE BRECCIA RECRYSTALLIZED LIMESTONE Brittle, fractured interval of brecciated limestone, including crackle breccia, pods of matrix breccia and styolitic breccia. Patchy recrystallization with few remnant fossils. 6% fine grained pyrite slots and wisps along calcite fracture-filled margins, along stylolites and within the matrix breccia. Sampled the entire length to fill-in between sulphide zones.								
		72.20-73.20 RECRYSTALLIZED LIMESTONE BRECCIA Footwall sample comprised of rubbly core at the upper contact, containing abundant fine grained pyrite (10%) along fractures as *small euhedral cubes in calcite stringers and trace sphalerite.* Recrystallized to a fine sugary texture.	AMLS	199570	72.20	73.20	0.02	5.20	0.03	0.13
		73.20-74.30 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Brittle, recrystallized limestone, similar to the previous sample. 6% pyrite, trace sphalerite.		199571	73.20	74.30	0.00	3.90	0.02	0.01
		74.30-75.50 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Similar to previous sample. 6% pyrite, 10% calcite.		199572	74.30	75.50	0.01	3.80	0.01	0.01
		75.50-76.50 RECRYSTALLIZED LIMESTONE MATRIX BRECCIA Hanging wall sample. Mottled & recrystallized with irregular pods of pyritic matrix breccia, vuggy crackle breccia and 6% wispy and disseminated pyrite. Irregular lower contact.		199573	75.50	76.50	0.04	8.70	0.07	0.10
76.50	78.60	LOWER ZONE MASSIVE SULPHIDE / LIMESTONE BRECCIA General Description: Narrow sulphide replacement containing coarse grained sphalerite and galena, followed by 1.1m of mosaic brecciated limestone with pyrite clots and wisps along fractures. Below that is a rubbly, dolomitized interval with massive sulfide bands to 8 centimetres. Overall ~ 60% limestone,10% calcite, 10% sphalerite, 5% galena, 15% pyrite.								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		76.50-76.90 BASE METAL MASSIVE SULPHIDE Pod of Lower Zone type replacement containing massive coarse grained intergrowths of pyrite (40%), sphalerite (25%) and galena (15%).	LZ	199574	76.50	76.90	0.01	371 50	8.45	7.21
		76.90-78.10 RECRYSTALLIZED LIMESTONE MOSAIC BRECCIA Strongly crackle to mosaic breccia, weakly dolomitized limestone, 6% fine grained pyrite, 30% calcite.		199575	76.90	78.10	0.01	4.30	0.01	0.03
		78.10-78.60 DOLOMITIZED LIMESTONE CRACKLE BRECCIA 75% dolomitized limestone, strong crackle breccia and brittle, rubbly core. 20% massive coarse grained pyrite - sphalerite as a band (now crumbly) at the top of the interval. Pyrite also throughout, lining fractures.		199576	78.10	78 60	0.00	6.00	0 01	1.44
78.60	85.30	RECRYSTALLIZED LIMESTONE BRECCIA Variable interval containing rubble breccia, dolomitized limestone, crackle breccia and calcite veining with 5% pyrite clots. 78.60-79.60 RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA Footwall sample. 10 centimetres below the upper, broken contact is a rubble breccia fissure filling (?) ~ 20 degrees to core axis, containing calcite and limestone clasts in a muddy, calcareous matrix. Below, the limestone is dolomitized for 15 centimetres, then recrystallized to a white, sugary textured calcite. No fossils remain. 3% pyrite.	AMLS	199577	78.60	79.60	0.00	3 60	0.00	0.01
85.30	92.40	MCDAME LIMESTONE UNIT 2 Massive stromatoporoid unit, relatively unaltered, compared to the section above. Section comprised dominantly of massive stromatoporoid rudstone to floatstone with scattered amphipora. Minor dolomitized patches. Trace - 1% pyrite.	MLS2							

*** END OF HOLE *** 92.40

HOLE NO: SUD-00-75	SECTION:65-SS	GRID:SILVER CK S.

PROJECT CODE	:SILVERTIP
TENEMENT	:SILVERTIP MINING
PROSPECT	:CORPORATION
GRID	:SILVER CK S.
MAP REFERENCE	:104/O-16W
LOCATION	:LIARD MD, BC
HOLE TYPE	:UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43281.00mN	24978.00mE	1125.00RL

Pre-collar depth: Final depth: 193.50

Purpose of hole: TEST EXTENSION OF 65-S ZONE

Hole status: COMPLETED

Comments: LZ: 180.5-181.0M, 182.2-183.3M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-52.00
12.19	255.30	-51.20
42.67	255.00	-50.90
73.15	256.70	-50.20
103.63	257.40	-49.10
134.11	260.10	-47.60
164.59	260.30	-46.20
193.50	262.00	-44.60

*** SUMMARY LOG ***

0.00	48.60	1B SANDSTONE / SILTSTONE
48.60	53.90	FAULT ZONE 1A
53.90	56.20	1AA CARBONACEOUS ARGILLITE
56.20	61.90	MCDAME LIMESTONE/1A ARGILLITE RUBBLE BRECCIA
61.90	114.70	MCDAME LIMESTONE UNIT 1
114.70	140.60	MCDAME LIMESTONE UNIT 2
140.60	151.70	MCDAME LIMESTONE UNIT 3
151.70	153.30	MOSAIC BRECCIA MCDAME LIMESTONE UNIT 4
153.30	177.00	MCDAME LIMESTONE UNIT 5
177.00	180.50	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 193.50 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	18/1/00
Date finished:	21/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole:	NONE
Base of complete oxidation	0.0
Top of fresh rock:	0.0
Water first encountered:	0
Water inflow estimate:	0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
179.70	184.30	4.60	267.56	5.01	4.16

Checked and signed:________________ Date:________

HOLE NO: SUD-00-75	SECTION:65-SS	GRID:SILVER CK S.

180.50	181.00	LOWER ZONE MASSIVE SULPHIDE
181.00	182.20	RECRYSTALLIZED LIMESTONE MOSAIC BRECCIA
182.20	183.30	LOWER ZONE MASSIVE SULPHIDE
183.30	184.30	RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA
184.30	189.80	LIMESTONE CRACKLE BRECCIA
189.80	191.40	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
191.40	193.50	DOLOMITIZED LIMESTONE RUBBLE BRECCIA
193.50		END OF HOLE

Checked and signed: ____________________ Date: __________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	48.60	1B SANDSTONE / SILTSTONE 0.00-31.00 SANDSTONE / SILTSTONE Dominantly medium by, medium to coarse grained massive sandstone, fining upward, topped by dark grey laminated siltstone. Sandstone layers range from 10 centimetres - 1.3 metres thick. Bedding @ 30 degrees to core axis. Intermittant rubbly carbonaceous intervals (mainly from 0.0 - 6.5m). 1-3% quartz - calcite stringers, 25 & 45 degrees to core axis, often with fine grained pyrite (2%) lining fractures. Rare trace sphalerite associated with stringers. Occasional fractures 5-10 degrees, with centimetres slip (reverse movement). 31.00-48.60 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE PYRITIC Sharp decrease in the frequency and thickness of the massive sandstone layers, now 0.5 - 5 centimetres thick. Core is less competent - poker chip core. Intermittant calcareous bands, and also pyritic bands (4%) parallel to bedding, 2mm - 1cm wide. Bedding angle variable from 50-65 degrees to core axis.	1B							
48.60	53.90	FAULT ZONE 1A Dominantly carbonaceous argillite rubble to gouge and chips with frequent quartz vein rubble to 5 centimetres, sub-parallel to bedding (often contorted beds, 40-60 degrees to core axis). Broken upper and lower contacts. - 50.4 - 50.6m: two partially intact, cross-cutting pyrite - sphalerite - galena stringers, 1cm @ 40 & 60 degrees to core axis.	FZ							
53.90	56.20	1AA CARBONACEOUS ARGILLITE Poker chip core, calcareous laminations throughout. 4% disseminated pyrite and wisps within convoluted quartz stringers. Quartz vnd lower contact.	1AA							
56.20	61.90	MCDAME LIMESTONE/1A ARGILLITE RUBBLE BRECCIA Contact zone between the limestone and Earn, comprised of a chaotic mix of limestone breccia (breccia textures include rubble, matrix and mosaic breccia) with intermittant post-paleokarst infill of calcareous carbonaceous mudstone, as well as finely laminated lime mud. Moderate pyrite mineralization (6%) concentrated in the upper meter of	MLS/ 1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		the unit, as small clots and wisps within mottled, recrystallized limestone. Definately fluids through the contact, but only weak pyrite sulphidation. Lower contact ~25 degrees to core axis.								
61.90	114.70	MCDAME LIMESTONE UNIT 1 Intact section of Unit 1 which closely follows the stratigraphy breakdown by Regional Resources (i.e. 1A, 1B & 1C). The upper 4.5m is moderate rubble to matrix breccia, fairly broken with patchy recrystallization to white, fine grained, sucrosic textured calcite. Below are predominantly packstones and mudstones, amphipora floatstone and sparse massive stromatoporoids and thamnopora. Good coral, Tryplasma, @ 68.7m. Minor partial recrystallization giving fossils a mottled texture with vague outlines. Abundant thamnopora @ 78.6m. Intermittant crackle breccia dolostone intervals, up to 1 metres in length. 96.90-103.70 RECRYSTALLIZED LIMESTONE Zone of mottled, partial recrystallization to white, fine grained, sugary textured carbonate. Minor rubble to matrix breccia. 5% wispy fine grained pyrite along stylolites and along calcite stringer margins, oriented ~ 30-50 degrees to core axis. Sharp, irregular lower contact with dolostone. 103.70-110.20 DOLOMITIZED LIMESTONE CRACKLE BRECCIA Rubbly, brittle, coarse grained, dolomitized limestone with moderate crackle breccia. One 2mm sulphide stringer @ 60 degrees to core axis of pyrite, sphalerite, & galena, following along a calcite - filled fracture.	MLS1							
114.70	140.60	MCDAME LIMESTONE UNIT 2 Well preserved section of the massive stromatoporoid Unit 2 that is virtually unbrecciated or recrystallized, except for the upper 2 metres which is brittle dolomitized limestone. Minor crackle breccia throughout. 3-5% calcite stringers, 5mm - 10cm, predominantly @ 25-40 degrees to core axis. Main rock types include massive stromatoporoid rudstone to floatstone, minor amphipora, abundant corals, minor Euramphipora in the upper 12 metres and a few Thamnopora. Carbonaceous stylolites are frequent, sub-parallel to layering. Pyrite (trace - 1%) is sparsely disseminated as small blebs along calcite fractures. Little indication of nearby mineralization.	MLS2							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		- 130.8m: 20cm very coarse grained calcite vein - open space fill texture, 25% to core axis, but lacks sulphides.								
140.60	151.70	MCDAME LIMESTONE UNIT 3 Typical Unit 3 limestone containing the diagnostic dense, fine amphipora rudstone in the upper portion, massive stromatoporids in the middly and dense amphipora rudstone at the base. Low angle (5-10 degrees to core axis) fractures towards the base have open-space euhedral quartz crystals to 6mm. Rare pyrite along calcite fractures. Minor calcite stringers (20 degrees to core axis) and weak crackle breccia.	MLS3							
151.70	153.30	MOSAIC BRECCIA MCDAME LIMESTONE UNIT 4 The upper 50 centimetres is mosaic breccia with limestone clasts in a coarse calcite matrix; sharp stylolitic contact, 20 degrees to core axis, with a sliver of Euramphipora rudstone (20 centimetres). Below is an additional 30 centimetres of mosaic breccia followed by 60 centimetres of karst infill laminated lime mud with fragments of limestone to 2 centimetres. Bedding @ 90 degrees. Sharp, discordant lower contact, at 20 degrees. Trace pyrite in the upper section of the karst sediment.	MLS4							
153.30	177.00	MCDAME LIMESTONE UNIT 5 Top of the unit marked by the characteristic coarse amphipora, followed by interlayered packstone, amphipora rudstone & floatstone, minor massive stromatoponds and, bleached, recrystallized sections to 2.5 metres. 8% calcite veining, 0.5-5 centimetres in width, predominantly cross-cutting @ 25 degrees to core axis, occasionally with pyrite clots or cubes (to 1%) and trace sphalerite @ 170.55 metres. 159.10-162.90 RECRYSTALLIZED LIMESTONE Bleached, pale bluish-grey, fine to medium grained, recrystallized limestone, portions of which look like a lime mud with mm limestone clasts, layered @ 35 degrees to core axis and cross-cut by mm pyrite (1%) stringers @ 30 degrees. 175.20-177.00 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Somewhat coarser grained than the previous interval and increased intensity of crackle breccia. Stylolitic contacts with 40 centimetres of unaltered amphipora floatstone occur in the centre of the interval.	MLS5							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
177.00	180.50	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA Moderate to strong crackle breccia (calcite healed fractures) with sections up to 30 centimetres of mosaic breccia. Dominant orientation of calcite fractures is 30-40 degrees. Sulphide band (pyrite-sphalerite) occurs 0.8m above the massive sulfide. 179.70-180.50 LIMESTONE CRACKLE BRECCIA Hanging wall sample. Crackle to mosaic brecciated limestone with 1-2 centimetres, fine grained pyrite - sphalerite irregular stringer ~35 degrees to core axis, sub-parallel to calcite fractures at the top of the interval. One sphalerite - pyrite clot @ the base which is likely an extension of the more massive sulphide below. 7% pyrite, 2% sphalerite. Irregular lower contact, and mosaic breccia at the base.	MLS5	199578	179.70	180.50	0.00	5.30	0.04	0.76
180.50	181.00	LOWER ZONE MASSIVE SULPHIDE 180.50-181.00 PYRITE SPHALERITE MASSIVE SULPHIDE Massive fine grained pyrite with lesser sphalerite and chalcopyrite. 10% remnant limestone as irregular, partially replaced clots. More chalcopyrite than usually seen in the sulphide zones below the unconformity, occurring as very fine intergrowths or rimming pyrite. Sphalerite also occurs as fine grained intergrowths. The lower contact is sub-planar ~ 40 degrees to core axis. Non-magnetic. Possibly replacing a mosaic breccia (??), similar to the non-sulphidized rock above, but difficult to say for sure. 70% pyrite, 13% sphalerite, 2% chalcopyrite.	LZ	199579	180.50	181.00	0.03	61.40	0.05	0.61
181.00	182.20	RECRYSTALLIZED LIMESTONE MOSAIC BRECCIA Bleached, mottled interval between massive sulfide zones, recrystallized mosaic breccia (?? possible to probable). Trace - 1% pyrite in calcite fractures and small blebs along stylolites. Fairly sharp irregular contact, 40-60 degrees to core axis.	AMLS	199580	181.00	182.20	0.00	25.10	0 01	0.05
182.20	183.30	LOWER ZONE MASSIVE SULPHIDE 182.20-183.30 BASE METAL MASSIVE SULPHIDE Very massive, coarse grained, black sphalerite & galena, with finer grained pyrite, trace chalcopyrite, and 10% coarse grained calcite blebs (remnant, recrystallized limestone?). Minor crumbly sections where the black sphalerite is massive but finer grained. 95% recovery. Lacks silica and pyrrhotite (a non-magnetic zone). Sulphide textures suggest in some places that pyrite often	LZ	199581	182.20	183.30	0.06	1055.30	20.87	16.34

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		replaced the limestone clasts and the sphalerite & galena formed in the interstial zones between clasts. At the lower contact (~40 degrees), there is 5 centimetres of rubble to matrix breccia visible.								
183.30	184.30	RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA 183.30-184.30 RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA Footwall sample. MCDAME LIMESTONE UNIT 5? Originally a limestone rubble breccia, now almost completely recrystallized to bluish-white coarse sparry calcite. Trace - 1% pyrite wisps.	AMLS	199584	183.30	184.30	0.01	4.90	0.04	0.20
184.30	189.80	LIMESTONE CRACKLE BRECCIA Unit 5? Variable interval, strong stylolitic breccia at the top, abutting sparry calcite clasts with non-recrystallized limestone. Below, crackle breccia increases in intensity. Sulphide wisps (mainly pyrite, minor sphalerite) appear below 184.5 metres along calcite fractures.	AMLS							
189.80	191.40	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Rubbly, brecciated upper contact with 3% wisps and disseminations in the matrix. Below is brittle, strongly crackle brecciated, partially dolomitized limestone.	MLSD							
191.40	193.50	DOLOMITIZED LIMESTONE RUBBLE BRECCIA Again, rubbly and brittle, similar to the above interval, but distinct rubble breccia down to 192.7 metres. Minor pyrite (2%) replacement in the matrix and clots in calcite fractures.	MLSD							

*** END OF HOLE *** 193.50

HOLE NO: SUD-00-76	SECTION:65N	GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43337.00mN	24949.00mE	1136.00RL

Pre-collar depth: Final depth: 156.40

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: DRILLED TO DEPTH

Comments: LZ: 115.1 - 115.6 M,

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-41.00
26.82	253.00	-40.40
57.30	251.70	-41.80
87.78	252.50	-43.10
118.26	253.10	-43.70
148.74	253.50	-44.20

*** SUMMARY LOG ***

0.00	44.50	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
44.50	47.00	FAULT ZONE
47.00	54.30	1BA SANDSTONE/MUDSTONE SILTSTONE
54.30	57.25	1A CARBONACEOUS ARGILLITE
57.25	58.90	FAULT ZONE 1A
58.90	84.90	1A CARBONACEOUS ARGILLITE
84.90	107.85	MCDAME LIMESTONE UNIT 1
107.85	115.10	MCDAME LIMESTONE RUBBLE BRECCIA
115.10	115.60	LOWER ZONE / LIMESTONE RUBBLE BRECCIA
115.60	119.00	MCDAME LIMESTONE RUBBLE BRECCIA
119.00	130.45	MCDAME LIMESTONE UNIT 2 BRECCIA

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 156.40 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	19/1/00
Date finished:	21/1/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
113.70	116.60	2.90	14.48	0.09	0.83

Checked and signed:______________ Date:__________

HOLE NO: SUD-00-76 SECTION:65N GRID:SILVER CK S

130.45	149.80	MCDAME LIMESTONE UNIT 3
149.80	156.10	MCDAME LIMESTONE UNIT 4 CRACKLE BRECCIA
156.10	156.40	MCDAME LIMESTONE UNIT 5
156.40		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	44.50	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Interbedded sandstones and laminated mudstones & siltstones with bedding @ 40 degrees to core axis. Sandstone beds range from massive to graded fining-upward sequences up to 50 centimetres wide. Occasional clasts of ripped up mudstone occur within the sandstone beds. Sandstone beds decrease in abundance and thickness with depth. All lithologies range from being non-calcareous to moderately calcareous. Quartz - carbonate veins cross-cut bedding and are oriented at ~ 15 degrees to core axis. Tension gashes are associated with these veins and typically occur between 30-50 degrees to core axis. These veins are up to 1 centimetres wide and commonly contain fine grained pyrite and sphalerite. Pervasive disseminated pyrite becomes more prevelent towards the base of the unit. Overall trace - 1% pyrite. 10.70-11.70 FAULT ZONE Small fault zone consisting of 40% black carbonaceous fault gouge and 60% crushed carbonaceous mudstone and siltstone. In the basal 5 centimetres of the zone, sheared up pieces of quartz vein contain minor fine grained pyrite. 22.30-23.80 MUDSTONE / SANDSTONE SILTSTONE Interbedded sandstone and laminated mudstone & siltstone, cross-cut by quartz - carbonate veins @ 15 degrees to core axis. Veins contain fine grained pyrite + sphalerite (10% pyrite, 2% sphalerite). Overall trace pyrite, sphalerite. 36.00-41.70 PYRITIC MUDSTONE / SANDSTONE Interbedded sandstone with laminated mudstone / siltstone. Beds up to 1.5 centimetres and orientated @ 25-50 degrees to core axis. Pervasive disseminated pyrite throughout, but concentrated in the coarse grained sandstone beds. At 40.25 metres, there is a 7 mm quartz stringer @ 40 degrees to core axis which cross-cuts bedding and contains 10% pyrite, 10% sphalerite. Overall 5% pyrite, trace sphalerite. 42.45-42.55 QUARTZ VEIN 3 centimetre quartz - carbonate vein @ 15 degrees to core axis, containing 5% red sphalerite, 10-15% pyrite.	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
44.50	47.00	FAULT ZONE Fault zone consisting of 45% black carbonaceous fault gouge and 55% crushed + intact rock. Intact rock within and adjacent to fault zone contains pyrite bearing quartz - carbonate stringers which have been contorted and warped post emplacement. These stringers appear to lie parallel to bedding, @ 30-50 degrees to core axis. Overall trace pyrite.	FZ							
47.00	54.30	1BA SANDSTONE/MUDSTONE SILTSTONE Strongly laminated sandstone / mudstone / siltstone, with laminae @ 40 degrees to core axis. Sandstone laminae decrease in abundance towards the base of the interval. Fine grained disseminated pyrite is found throughout, but is concentrated in the coarser grained sandstone beds. Overall, 1-2% pyrite.	1BA							
54.30	57.25	1A CARBONACEOUS ARGILLITE Strongly carbonaceous argillite with occasional siltstone laminae @ 45 degrees to core axis. Interval is incompetent and consists of 40% intact rock, 60% rubble. 1% disseminated pyrite throughout.	1A							
57.25	58.90	FAULT ZONE 1A Zone is made up of 60% black carbonaceous fault gouge and 40% crushed fragments of argillite, up to 3 centimetres wide. Trace fine grained disseminated pyrite throughout.	1A							
58.90	84.90	1A CARBONACEOUS ARGILLITE Laminated carbonaceous argillite and fine grained siltstone. The interval is thicker than normal (26.0 metres), possibly due to a repeated sequence caused by faulting. Laminae are oriented from 20-30 degrees to core axis. Numerous warped and contorted quartz - carbonate veins are present and are dominantly orientated parallel to laminations, and often contain fine grained pyrite and occasionally a trace sphalerite + galena. A later stage of calcite veins cross-cut the earlier contorted veins and are orientated at 20 degrees to core axis, and contain rare fine grained pyrite. Argillite and siltstone proximal to the fault zone above are brecciated and folded. Folding may also explain the unusually thick sequence. The interval is highly incompetent and consists of 40% crushed rock and 60% intact core. The argillite and siltstone become strongly calcareous from the middle to the base of the interval. 1% fine grained pyrite throughout, trace sphalerite, trace galena.	1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		60.90-61.90 CARBONACEOUS ARGILLITE Black carbonaceous argillite with numerous quartz veins up to 3 centimetres, containing fine grained sphalerite, pyrite and galena. Overall 1% pyrite, trace sphalerite, galena. 72.50-74.10 NO RECOVERY 1A 10% recovery due to miss latch. 75.70-77.10 FAULT ZONE Fault zone consising of 70% black fault gouge and 30% crushed carbonaceous argillite. <1% fine grained disseminated pyrite. Poor recovery due to another miss latch (20% recovery). 77.10-84.90 CARBONACEOUS ARGILLITE Carbonaceous argillite, infiltrated by numerous (15%) quartz - calcite stringers up to 3 mm wide, parallel to laminae (30 degrees to core axis) which are now warped and contorted. Argillite is weak to moderately calcareous. <1% disseminated pyrite.								
84.90	107.85	MCDAME LIMESTONE UNIT 1 Limestone ranging from amphipora floatstones to packstones and wackestones with minor massive stromatoporids. Fossil beds are orientated 35-45 degrees to core axis. Interval is cross-cut by numerous quartz - calcite stringers (3-5%) @ 15 - 30 degrees to core axis. Calcite stringers cause weak to strong crackle brecciation and occasionally contain fine grained sulphide (dominantly pyrite, lesser chalcopyrite). Stylolites are common and orientated parallel to bedding. Fine grained sulphide lines stylolites and bleeds into adjacent limestone. Overall trace pyrite, sphalerite, chalcopyrite, galena. 86.60-86.70 CALCITE VEIN Irregular, sub-vertical calcite vein up to 1 centimetre wide, bounded by stylolites on either side and containing small fragments of limestone, from 3-5 mm wide. Very fine grained sulphide consisting of pyrite and minor chalcopyrite is found within the matrix of the vein and replacing limestone within and adjacent to the vein. Overall 1% pyrite, trace chalcopyrite. 100.50-100.70 CALCITE VEIN Large white sparry calcite vein observed pinching into fractures and swelling into open space. The vein is sub-vertically oriented and swells up to 7 centimetres wide and pinches down to 3 mm. Fragments of adjacent limestone, up to 4 centimetres wide are	MLS1							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		found within the vein. Fine grained pyrite (1%), sphalerite (1%) and galena (trace) occur within the matrix and replacing limestone fragments and adjacent limestone.								
107.85	115.10	MCDAME LIMESTONE RUBBLE BRECCIA Variable rubble brecciated limestone, ranging from an earn limestone rubble breccia in the upper 2.5 metres to a limestone rubble breccia with clasts of limestone, recrystallized limestone and rare earn in the basal 4.7 metres of the interval. The entire interval appears to have been healed and crackle brecciated by 10% late stage calcite stringers. Stylolites are common and dominantly orientated sub-vertically. Fine grained sulphide (dominantly pyrite) occurs within calcite stringers, lining stylolites and replacing breccia matrix and clasts. Overall: 2% pyrite, trace sphalerite, galena, chalcopyrite.	MLS							
		113.70-115.10 LIMESTONE RUBBLE BRECCIA Hanging wall sample. Limestone rubble breccia, as above, with clasts of limestone, recrystallized limestone, partially dolomitized limestone and rare Earn clasts. Clasts range from 1mm - 5cm. Interval is healed and crackle brecciated by 10-15% randomly orientated calcite stringers. Very fine grained sulphide (dominantly pyrite with lesser sphalerite & chalcopyrite) is found lining stylolites and replacing breccia matrix and clasts. Overall: 2% pyrite, trace sphalerite, chalcopyrite.		140470	113.70	115.10	0.02	8.60	0.05	0.21
115.10	115.60	LOWER ZONE / LIMESTONE RUBBLE BRECCIA 25 - 30% pyrite - sphalerite massive sulfide and 70 - 75% rubble brecciated limestone. Limestone rubble breccias consist of clasts of limestone, dolomitized limestone and recrystallized limestone, and are cross-cut and healed by 5-10% calcite stringers. Massive sulphide consists of coarse grained pyrite, red and black sphalerite and a soft silvery-lead blue-grey mineral. Black sphalerite is found to rim red sphalerite. Sulphides invade into and replace the breccia matrix and clasts along stylolites and fractures. In addition, some sulphide occurs within calcite stringers. Overall 15% pyrite, 10% sphalerite, trace galena (?). Contact between massive sulfide and limestone is irregular but dominantly sub-vertical.	LZ	140471	115.10	115.60	0.02	49.50	0.35	4.15
115.60	119.00	MCDAME LIMESTONE RUBBLE BRECCIA Limestone rubble breccia with sub-rounded clasts of limestone and dolomitized limestone within a finely ground limestone / carbonate matrix. Clasts range in size from 1mm to 2cm. The interval is								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		competent and has been healed and crackle brecciated by a calcite fluid. Rare sulphides replace matrix and clasts within the breccia. Sub-rounded clasts and finely ground up matrix of this breccia may indicat a tectonic origin (Chris Rees). Overall: trace pyrite. 115.60-116.60 LIMESTONE RUBBLE BRECCIA Footwall sample. Limestone rubble breccia with clasts of limestone and dolomitized limestone from 2 mm - 2.5 centimetres wide. The breccia is competent and has been healed and crackle brecciated by a calcite fluid (10% calcite stringers). Very fine grained pyrite is dominantly found in the upper 35 centimetres of the interval and lines stylolites and replaces matrix and clasts within the breccia. Overall: 1% pyrite, trace sphalerite.	MLS	140472	115.60	116.60	0.00	5.20	0.01	0.05
119.00	130.45	MCDAME LIMESTONE UNIT 2 BRECCIA Variably brecciated unit of limestone ranging from a styolitic to a rubble breccia. Generally styolitic breccias are dominant and grade into and out of rubble breccia zones which are upwards of 40 centimetres wide. Stylolitic breccias consist of clasts of limestone up to 7 centimetres wide, which are completely bounded by styloites. Rubble breccias consist of sub-rounded clasts of limestone and recrystallized limestone up to 6 centimetres wide within a fine grained carbonaceous lime / earn mud matrix, possibly of paleokarst origin. Numerous stromatoporids are present and make up a large % of the clasts within the breccias. Fine grained sulphide (dominantly pyrite) is found lining stylolites and bleeding into and replacing adjacent limestone. Overall, trace pyrite.	MLS2							
130.45	149.80	MCDAME LIMESTONE UNIT 3 Highly variable interval of limestone alternating between intact dense amphipora packstones and floatstones with minor massive stromatoporids and collapse limestone rubble brecciasa. Numerous intervals of laminated carbonaceous lime mud of paleokarst origin, which are upwards of 60 centimetres wide are found throughout the interval. The orientation of laminae within these intervals is variable and ranges from 20 - 60 degrees to core axis. Limestone collapse rubble brecciasa consist of sub-rounded clasts of limestone and recrystallized limestone and secondary calcite upwards of 30 or more centimetres within a carbonaceous lime mud matrix. This indicates								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		that these breccias are likely the result of gravitational collapse into paleokarst caverns. Very fine grained pyrite is found replacing the lime mud matrix and limestone clasts. The lack of sulphide clasts indicates that brecciation was a pre-mineral event. Overall: trace pyrite. 130.45-137.50 PACKSTONE Dominantly intact dense amphipora packstone with minor intervals upwards of 25 centimetres wide of rubble brecciated limestone, as above. Interval is cross-cut by 5% calcite stringers @ 20-30 degrees to core axis. 137.50-147.20 LIMESTONE RUBBLE BRECCIA Gravitational collapse limestone rubble breccia and laminated carbonaceous lime / Earn mud, as above. Rubble breccia consists of sub-rounded clasts of limestone, recrystallized limestone and secondary calcite within a carbonaceous lime / Earn mud matrix. Clasts of limestone can be upwards of 30 centimetres wide. Sulphide is late but fine grained pyrite occasionally replaces clasts of limestone and lime mud matrix. Overall: trace pyrite. 147.20-149.80 PACKSTONE RECRYSTALLIZED LIMESTONE Intact amphipora packstone and rudstone which becomes partially recrystallized towards the base of the interval. Fossil beds are present and are orientated at 50 degrees to core axis. The upper 80 centimetres of the interval is cross-cut and strongly crackle brecciated by 10% calcite stringers and veins up to 1 centimetre wide. Numerous stylolites rarely contain very fine grained sulphide. Trace pyrite.	MLS3							
149.80	156.10	MCDAME LIMESTONE UNIT 4 CRACKLE BRECCIA Euryamphipora floatstone and rudstone with minor massive stromatoporids. Interval has been strongly crackle breccia throughout and contains localised zones of rubble breccia's, up to 30 centimetres wide. Some calcite stringers contain fine grained sulphide and some cross-cut sulphide - filled fractures. Numerous stylolites are found throughout and are commonly lined by fine grained sulphide. Overall <1% pyrite, trace sphalerite, galena.	MLS4							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
156.10	156.40	**MCDAME LIMESTONE UNIT 5** Weakly crackle brecciated amphipora packstones of Unit 5. Contact with above lying Unit 4 is broken. Minor calcite veining and stringers @ 20-30 degrees to core axis.	MLS5							

*** END OF HOLE *** 156.40

HOLE NO: SUD-00-77	SECTION:65-SS	GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43281.00mN	24978.00mE	1125.00RL

Pre-collar depth: Final depth: 92.40
Purpose of hole: TEST LZ EXTENSION FROM 65-S.
Hole status: COMPLETED
Comments:

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 92.40 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	21/1/00
Date finished:	22/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0
Water inflow estimate: 0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
6.00	6.80	0.80	2.10	0.05	0.05

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-66.00
23.77	256.10	-65.60
54.25	259.90	-65.70
84.73	260.50	-66.10

*** SUMMARY LOG ***

0.00	4.60	FAULT ZONE 1B
4.60	6.00	1B SANDSTONE / SILTSTONE
6.00	6.80	VEINED
6.80	43.40	1B SANDSTONE / SILTSTONE
43.40	56.40	1AA CARBONACEOUS ARGILLITE
56.40	71.40	MCDAME LIMESTONE UNIT 1
71.40	74.80	RECRYSTALLIZED LIMESTONE PYRITIC
74.80	81.70	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
81.70	87.60	MCDAME LIMESTONE UNIT 1
87.60	92.40	MCDAME LIMESTONE UNIT 2
92.40		END OF HOLE

Checked and signed:________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	4.60	FAULT ZONE 1B Rubbly, carbonaceous gouge (10%), chips (40%) and broken core <10 centimetres length (50%). 4% irregular quartz - calcite stringers and fracture filling. 2% pyrite clots associated with the stringers.	FZ							
4.60	6.00	1B SANDSTONE / SILTSTONE Medium grained, massive sandstone beds to 20 centimetres, interlayered with black, fine grained laminated siltstone - poker chip core. Bedding @ 50 degrees to core axis. Sharp, discordant lower contact with quartz - sulphide vein / breccia, 20 degrees.	1B							
6.00	6.80	VEINED 6.00-6.80 QUARTZ SULPHIDE VEIN MOSAIC BRECCIA Sharp upper contact @ 20, lower contact @ 40 degrees to core axis, with a quartz-sulphide vein (10% pyrite, 6% sphalerite). The adjacent sandstone is brecciated.	VN	199585	6.00	6.80	0.02	2.10	0.05	0.05
6.80	43.40	1B SANDSTONE / SILTSTONE 6.80-27.30 SANDSTONE / SILTSTONE Typical 1B lithology, comprised of dominantly medium grey, medium to coarse grained massive sandstone, occasionally fining upward and intermittantly calcareous throughout, interbedded with dark grey, laminated siltstone. The sandstone layers range from 5 centimetres - 1.3 metres thick. Bedding @ 50 degrees to core axis. Minor rubbly sections to 40 centimetres, broken along irregular carbonaceous fractures. 2% cross-cutting quartz stringers, 3 mm to 2 centimetres, 20-40 degrees to core axis, with pyrite clots and rare sphalerite. Pyrite also as smears along joints and fractures. 27.30-43.40 SILTSTONE / SANDSTONE PYRITIC Interbedded siltstone and ss; siltstone layers are 1 mm - 3 centimetres, and sandstone beds 2 mm to 2 centimetres thick. Variable bedding angle averages 55 degrees, but folds occure @ 30.0 metres, with the axial plane @ 40 degrees to core axis. Slip movement occurs along the axial plane. Incompetent, poker chip core and one minor carbonaceous gouge interval @ 30.6 metres (40 centimetres wide). 25% of the core is comprised of chips <3 centimetres. 2% quartz stringers, 2 mm - 1 centimetres,	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		cross-cutting @ 20 degrees and parallel to bedding. 5% fine grained pyrite as pyritic sandstone beds to 1 centimetres and clots within stringers.								
43.40	56.40	1AA CARBONACEOUS ARGILLITE Quartz veined upper contact, sub-parallel to bedding with sphalerite - galena - pyrite bands to 3 mm, 65 degrees to core axis. Black, fine grained massive to laminated, strongly carbonaceous argillite and intermittant dark grey siltstone beds or laminations. Incompetent, rubbly core, <5% of the core pieces >10 centimetres in length. Bedding and laminations, @ 60 degrees to core axis, are occasionally contorted (as are quartz stringers). Predominant fractures @ 10 & 40 degrees. 5% quartz +/- calcite stringers, sub-parallel to bedding and also cross-cutting. 6% fine grained pyrite bands to 1 centimetres, discontinuous lenses and clots within and adjacent to quartz. 55.80-56.40 CARBONACEOUS ARGILLITE RUBBLE BRECCIA Narrow zone of rubble breccia adjacent to the unconformity containing sub-angular to sub-rounded argillite and siltstone clats, tightly packed within a carbonaceous matrix. 4% pyrite clots and wisps along fractures. Sharp lower contact ~ 60 degrees to core axis.	1AA							
56.40	71.40	MCDAME LIMESTONE UNIT 1 Generally unaltered packstone, amphipora-stromataporid floatstone with locally abundant thamnopora (between 68.0-71.0 metres). Layering / fossil elongation oriented @ 55 degrees to core axis. The upper contact lacks mineralization except for rare (1%) pyrite - calcite stringers to 6 mm, @ 55 degrees, sub-parallel to banding. Crackle breccia is weak to nil. Dominant fractures @ 5 & 30 degrees to core axis. Lower contact with recrystallized interval is gradational over 40 centimetres.	MLS1							
71.40	74.80	RECRYSTALLIZED LIMESTONE PYRITIC MCDAME LIMESTONE UNIT 1 ?? Pale bluish-grey, finely recrystallized limestone with no remnant fossils. The rock has a wispy look with dark blue-grey wisps and 7% fine grained pyrite wisps and clots, often oriented ~60 degrees to core axis. Any remnant textures indicating a breccia are not discernable.	AMLS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
74.80	81.70	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Medium to dark grey, coarsely crystalline, dolomitized limestone, with approximately 15% only partially or not recrystallized (i.e. From 77.3-78.6 metres which has mottled portions that faintly resemble rubble breccia). Brittle fracture with weak to strong crackle breccia, which grades into mosaic breccia between 78.6 - 80.7 . (photo). Prominant fractures @ 15, 30 & 50 degrees to core axis. 2% disseminated pyrite along fractures and small clots in the mosaic breccia replacing dolostone and rimming calcite matrix.	MLSD							
81.70	87.60	MCDAME LIMESTONE UNIT 1 Dominantly packstone, weakly recrystallized, with minor amphipora floatstone. Nil to very weak crackle breccia. At 86.8 m: fracture @ 20 degrees, filled with euhedral quartz crystals, 2-5 mm. Sparse disseminated pyrite and wisps along fractures. 84.70-85.50 DOLOMITIZED LIMESTONE CRACKLE BRECCIA Dark grey, brittle, coarsely crystalline, dolomitized limestone with moderate to strong crackle breccia and 10% calcite pods.	MLS1							
87.60	92.40	MCDAME LIMESTONE UNIT 2 Top of the main massive stromatoporoid unit, with characteristic abundant stromatoporids, lesser amphipora and intercalated Euramphipora. Fairly unaltered - only weak, intermittant crackle breccia. One low angle coarse grained calcite vein / mosaic breccia from 89.2 - 90.5m. <1% pyrite. 89.20-90.50 MOSAIC BRECCIA Low angle to core axis, anastomosing coarse calcite vein / mosaic breccia, possibly a sub-vertical fracture, infilled with calcite and limestone clasts. <1% pyrite.	MLS2							

*** END OF HOLE *** 92.40

HOLE NO: SUD-00-78 SECTION:65N GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL 43337.00mN 24949.00mE 1136.00RL

Pre-collar depth: Final depth: 200.60

Purpose of hole: TEST FIEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 78.2 - 78.5 M, 137.4 - 137.9 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-51.00
17.68	252.00	-49.70
48.16	252.20	-50.60
78.64	253.10	-51.10
109.12	253.60	-51.90
139.60	254.10	-52.50
170.08	254.00	-53.00
200.56	253.50	-53.40

*** SUMMARY LOG ***

0.00	44.00	INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
44.00	60.40	1A CARBONACEOUS ARGILLITE
60.40	61.20	1AC CALCAREOUS ARGILLITE
61.20	63.90	1A ARGILLITE RUBBLE BRECCIA
63.90	68.00	ARGILLITE LIMESTONE RUBBLE BRECCIA
68.00	78.20	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE
78.20	78.50	LOWER ZONE MASSIVE SULPHIDE
78.50	94.90	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE
94.90	100.90	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 200.60 HQ
Drill contractor:	ADVANCED DRILLING LTD
Drill rig:	MINI MYTE MODEL 150
Date started:	23/1/00
Date finished:	26/1/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation –
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
77.10	79.50	2.40	105.95	1.34	1.41
102.00	102.20	0.20	2.70	0.03	0.02
136.40	138.90	2.50	37.48	0.96	1.28

Checked and signed:__________ Date:________

HOLE NO: SUD-00-78 SECTION:65N GRID:SILVER CK S

100.90	107.60	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
107.60	111.80	STROMATOPOROID AMPHIPORA FLOATSTONE
111.80	128.50	MCDAME LIMESTONE UNIT 3 AMPHIPORA PACKSTONE
128.50	130.90	MCDAME LIMESTONE UNIT 4 EURYAMPHIPORA RUDSTONE
130.90	137.40	AMPHIPORA FLOATSTONE RUBBLE BRECCIA
137.40	137.90	LOWER ZONE LIMESTONE RUBBLE BRECCIA
137.90	180.70	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE
180.70	187.10	MCDAME LIMESTONE UNIT 5 DOLOMITIZED LIMESTONE CRACKLE BRECCIA
187.10	200.60	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE
200.60		END OF HOLE

Checked and signed:____________ Date:________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	44.00	INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Interbedded sandstone and laminated siltstone/mudstone, with bedding at 40 - 50 degrees to core axis. Cross-bedding and soft sediment deformation features are observed throughout the interval. Beds are dominantly non-calcareous, however, weakly to strongly calcareous beds are present. Sandstone beds throughout range from being massive to fining upwards and are up to 80 centimetres thick. Ripped up clasts of mudstone up to 5 centimetres wide are occasionally found in the basal portion of sandstone beds. Quartz and calcite veins are found throughout the interval and are orientated parallel to bedding at 10 - 20 degrees to core axis. Fine grained sulphide, dominantly pyrite and lesser sphalerite, is found within some of these veins. Pyrite is also found as nodules and as disseminated cubes within the Earn group sediments. Core becomes strongly incompetent towards the base of the interval. Overall 1 - 2 % pyrite, trace sphalerite. 10.10-11.10 FAULT ZONE Fault zone consisting of 40 % black carbonaceous fault gouge and 60 % intact and crushed rock of unit 1B. Numerous contorted quartz-carbonate stringers are present within intact rock in the upper 20 centimetres of the interval. 1 - 2 % fine grained disseminated pyrite is found throughout the interval. 20.00-20.50 SANDSTONE Fine grained sandstone, fractured and cross-cut by 10 % quartz-calcite stringers and tension gashes orientated at 50 to 70 to core axis. Fine grained pyrite is found as stringers and lining fractures. Overall 2 - 3 % pyrite. 23.30-23.35 QUARTZ VEIN 7 mm wide quartz-carbonate vein at 40 to core axis. Vein contains 20 % fine grained pyrite. 26.50-30.90 LAMINATED SILTSTONE / SANDSTONE Very incompetent section of laminated sandstone, carbonaceous mudstone and siltstone. Interval consists of 80 % rubble and 20 % intact rock. A small section of black carbonaceous fault gouge is present in the upper 40 centimetres of the interval. Pervasive	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		disseminated pyrite is found throughout the interval and appears to be concentrated in the coarser sandstone laminae. Overall 3 % pyrite. 30.90-34.40 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Sandstones interbedded with laminated siltstones and mudstones. Beds are up to 2cm wide and are orientated at 50 degrees to core axis. Interval is incompetent and breaks parallel to bedding. 3 - 4 % pyrite is found throughout the interval. 34.40-42.10 LAMINATED SILTSTONE / SANDSTONE Incompetent section of laminated sandstones, siltstones and carbonaceous mudstones. Interval consists of 70 % broken rubble, 15 % intact rock and 10 % black carbonaceous fault gouge. Laminae are at 70 degrees to core axis and are up to 1 centimetre wide. Fine-grained pyrite is found throughout the interval and is concentrated in the coarser sandstone beds. Overall, 5 % pyrite. 42.10-44.00 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Sandstone interbedded with laminated siltstone and carbonaceous mudstone. Bedding is at 45 degrees to core axis. Pyrite rich lenticular sandstone beds are present and are upto 1.5 centimetres wide. These beds contain up to 80 % fine grained disseminated pyrite. Overall, 4 % pyrite.								
44.00	60.40	1A CARBONACEOUS ARGILLITE Incompetent carbonaceous argillite consisting of 50 % intact rock, 30 % rubble and 20 % fault gouge. Numerous contorted and warped quartz-carbonate stringers (10 -15 %) are found throughout, orientated parallel to laminae at 40 - 60 degrees to core axis. Rare calcite veins up to 3 centimetres wide are also present and create local zones of mosaic brecciation with clasts of earn up to 1.5 centimetres wide, within a calcite matrix. Pervasive fine grained disseminated pyrite is found within quartz-carbonate stringers and throughout earn group sediments. Overall 3 - 4 % pyrite. 44.00-49.20 CARBONACEOUS ARGILLITE	1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Incompetent carbonaceous argillite consisting of 60 % rubble, 10 - 15 % intact rock, and 25 - 30 % carbonaceous fault gouge. Gouge zones are up to 30 centimetres wide. 3 % fine grained disseminated pyrite is found throughout. 49.20-54.00 CARBONACEOUS ARGILLITE Slightly more competent interval of carbonaceous argillite with rare sandstone and siltstone laminae at 50 to core axis. Fine grained pyrite is found throughout the interval but is concentrated within the coarser grained sandstone beds. Overall, 3 % pyrite. 54.00-54.30 FAULT ZONE Fault zone consisting of black carbonaceous fault gouge and argillite rubble. 4 % fine grained disseminated pyrite is found throughout. 54.30-60.40 CARBONACEOUS ARGILLITE Broken up carbonaceous argillite with occasional siltstone laminae. Interval contains numerous contorted and warped quartz-carbonate stringers orientated parallel to laminae at 50 degrees to core axis. 3 % fine grained pyrite found throughout.								
60.40	61.20	1AC CALCAREOUS ARGILLITE Finely laminated fine-grained calcareous mudstone and siltstone with 5 - 10 % calcite stringers at 25 and 60 degrees to core axis. Interval is competent and contains 5 % pervasive fine grained disseminated pyrite. 60.40-61.20 CALCAREOUS ARGILLITE Finely laminated calcareous mudstone and siltstone with 5 - 10 % calcite stringers at 25 and 60 to core axis. Interval is competent and contains 5 % pervasive fine grained disseminations pyrite.	1AC							
61.20	63.90	1A ARGILLITE RUBBLE BRECCIA Hydrothermal collapse rubble breccia consisting of angular clasts of lithified argillite of unit 1A up to 15 centimetres within a white sparry calcite matrix. Sulphide is rare within the interval, however, very fine grained pyrite is found within the matrix of the breccia. The lack of sulphide within the breccia indicates that the hydrothermal fluids responsible for the brecciation were either baren or spent of sulphide.	1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
63.90	68.00	ARGILLITE LIMESTONE RUBBLE BRECCIA Hydrothermal collapse rubble breccia as above but with clasts of lithified Earn and limestone up to 10 - 15 centimetres wide. Limestone clasts gradually become more abundant towards the base of the interval. A trace of fine grained pyrite is found within the breccia matrix.	MLS							
68.00	78.20	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE Limestone ranging from amphipora packstones to wackestones with minor stromatoporids and thamnopora throughout. Fossil beds are orientated at 40 - 60 degrees to core axis. Rare zones of styolitic and rubble breccia's, up to 50 centimetres wide are present. Numerous styolites, occasionally lined by fine grained pyrite, are orientated parallel to fossil beds. 10 %, randomly orientated, quartz-carbonate stringers cause local zones of moderate to strong crackle brecciation. Overall trace pyrite. 70.00-70.10 LIMESTONE/ARGILLITE RUBBLE BRECCIA Collapse rubble breccia with clasts of dark grey to black argillite up to 4 centimetres wide within a laminated carbonaceous lime mud matrix. Laminae are at 35 to core axis. 72.35-72.40 MASSIVE SULPHIDE VEIN 1.5 centimetre wide pyrite, sphalerite massive sulfide vein with 20 % quartz-carbonate gangue. Vein is orientated at 40 to core axis. Overall, 30 % sphalerite, 50 % pyrite. 75.00-75.30 LIMESTONE STYLOLITIC BRECCIA Styolitic breccia with clasts of limestone up to 3 centimetres wide, bounded by styolites. 77.10-78.20 CRACKLE BRECCIA PACKSTONE Hanging wall sample. Strongly crackle brecciated amphipora packstone to wackestone with calcite stringers orientated at 5 - 20 degrees to core axis. < 1 % fine grained pyrite is found within calcite stringers in the upper 30 centimetres of the interval. Styolites are found throughout the interval and are rarely lined by sulphide. Overall, < 1 % pyrite.	MLS1	140473	77.10	78.20	0.00	1.60	0.01	0.02
78.20	78.50	LOWER ZONE MASSIVE SULPHIDE Manto style pyrite, sphalerite, galena massive sulfide with 5 % relict limestone and 10 % open space fill quartz-calcite. Massive sulphide consists of fine grained pyrite with lesser sphalerite overprinted by later coarse grained pyrite, sphalerite, and galena. Later stage.	LZ	140474	78.20	78.50	0.01	831.70	10.65	11.14

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		coarser grained mineralization is found in association with open space fill quartz-calcite. A very fine grained, massive, soft, lead grey mineral is present, possibly massive galena? Weak sphalerite, pyrite banding is observed and is orientated at 40 to core axis. Overall, 45 % pyrite, 20 % galena, 20 % sphalerite. Contacts with above and below lying limestone are sharp and at 40 and 60 degrees to core axis respectively.								
78.50	94.90	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE Variable limestone ranging from amphipora packstones and wackestones in the upper and basal portions of the interval to thamnopora and stromatoporoid floatstones in the mid-portion of the interval. 3 % calcite stringers up to 4 mm wide cause local zones of weak to moderate crackle brecciation. Crackle brecciation is strongest in the upper 5 metres of the interval. Rare zones of limestone rubble breccia's up to 50 centimetres wide occur within the interval. These breccia's contain trace amounts of fine grained pyrite which is found replacing the breccia matrix. Styolites are found throughout the interval and are occasionally lined by fine grained sulphide. Overall, trace pyrite, trace sphalerite. 78.50-79.50 CRACKLE BRECCIA PACKSTONE Footwall sample. Incompetent interval of amphipora packstones and wackestones consisting of 50 % rubble and 50 % intact rock. 5 % calcite stringers cross-cut and strongly crackle brecciate the interval. Fine-grained pyrite is found throughout the interval but is predominant in the upper 30 centimetres of the interval. Pyrite is found lining styolites and bleeding into and replacing limestone. Overall, < 1 % pyrite. 87.30-88.20 LIMESTONE RUBBLE BRECCIA Limestone rubble breccia consisting of sub-rounded clasts of limestone up to 2 centimetres wide within a lime mud matrix. Trace amounts of fine grained pyrite are observed lining styolites and bleeding into and replacing adjacent limestone. Overall, trace pyrite.	MLS1	140475	78.50	79.50	0.00	3.00	0.01	0.02

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
94.90	100.90	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Stromatoporoid floatstones and rudstones with occasional bryplasma throughout. 2 - 3 % calcite stringers, orientated sub-vertically, are present and cross-cut the limestone causing local zones of weak to moderate crackle brecciation. Crackle brecciation is strongest in the basal 2 metres of the interval. Styolites within the interval are commonly lined by fine grained sulphide including pyrite, galena and sphalerite. Sulphide is found bleeding into and replacing adjacent limestone to form blebs up to 5 mm wide. Overall, < 1 % pyrite, trace galena, trace sphalerite. 97.80-97.85 MASSIVE SULPHIDE VEIN 3 mm wide galena, sphalerite, pyrite, calcite vein at 40 to core axis. Vein contains, 30 % galena, 30 % sphalerite, 20 % pyrite, 20 % calcite. 99.30-100.90 STROMATOPOROID FLOATSTONE Stromatoporoid floatstone partially recrystallized to a fine grained sugary texture. 3 - 5 % calcite stringers have strongly crackle brecciated the interval. Styolites throughout, are lined by fine grained sulphide including pyrite, sphalerite and galena. Sulphide is found eating into and replacing adjacent limestone forming blebs of massive sulfide up to 5 mm wide. Rare calcite stringers contain fine grained pyrite. Overall, 1 % pyrite, trace galena, trace sphalerite	MLS2							
100.90	107.60	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Strongly crackle brecciated dolomitized limestone which grades into and out of zones, up to 20 centimetres wide, of mosaic and rubble breccia's. Relict, highly strained limestone is present and is being squeezed between and around dolomite clasts. Highly strained limestone may be a feature of Jurassic deformation. Fine-grained sulphide, dominantly pyrite, is present and is observed replacing limestone and dolomite clasts throughout. Sulphide is also found as blebs within calcite veins and stringers and lining styolites. Overall, 2 % pyrite, trace galena, trace sphalerite, 30 % calcite. 102.00-102.20 DOLOMITIZED LIMESTONE MOSAIC BRECCIA Crackle to mosaic brecciated, dolomitized limestone with 20 % pyrite found within calcite stringers and veins and replacing dolomitized limestone clasts. Overall, 20 % pyrite, 30 % calcite, trace galena, trace sphalerite, 50 % dolomitized limestone.	MLS2	140476	102.00	102.20	0.01	2.70	0.03	0.02

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
107.60	111.80	STROMATOPOROID AMPHIPORA FLOATSTONE Intact and unaltered stromatoporoid, amphipora floatstones and rudstones. 2 % calcite stringers cause local zones of weak crackle brecciation, and rarely contain fine grained pyrite. From 109.2 metres - 109.5 metres there is a limestone rubble breccia with sub-rounded clasts of limestone and secondary calcite up to 1 centimetre wide. This breccia is clast supported and contains numerous styolites, a few of which are lined by fine grained pyrite. Overall, trace pyrite.	MLS2							
111.80	128.50	MCDAME LIMESTONE UNIT 3 AMPHIPORA PACKSTONE Variable, amphipora packstones, floatstones and rudstones with minor massive stromatoporids. Fossil beds are orientated at 40 - 60 degrees to core axis. 10 % paleokarst caverns up to 20 centimetres wide, are present and are filled with laminated carbonaceous lime mud. Clasts of limestone up to 5 centimetres wide are commonly found within these paleokarst caverns, creating small local zones of rubble brecciation. Numerous styolites, rarely lined by fine grained pyrite, are present and orientated parallel to fossil beds. 113.30-114.10 LIMESTONE RUBBLE BRECCIA Rubble brecciated limestone consisting of sub-rounded clasts of limestone up to 3 centimetres wide. Interval has been overprinted by weak-moderate crackle brecciation caused by 3 % calcite stringers. Numerous styolites, occasionally lined by fine grained pyrite, are present.	MLS3							
128.50	130.90	MCDAME LIMESTONE UNIT 4 EURYAMPHIPORA RUDSTONE Euryamphipora rudstones with minor massive stromatoporids and thamnopora. Interval contains 60 % paleokarst caverns filled with laminated carbonaceous lime mud and clasts of limestone up to 10 centimetres wide. Sphalerite, galena and pyrite are found lining styolites and partially replacing the matrix and clasts of these breccia's. Overall, 1 % pyrite, < 1 % sphalerite, < 1 % galena. 129.00-130.10 LIMESTONE RUBBLE BRECCIA Limestone rubble breccia with clasts of limestone up to 10 centimetres wide within a carbonaceous lime mud matrix. Sulphide (pyrite, sphalerite, galena) is found lining styolites and replacing the matrix and clasts of this breccia. Overall, 1 % pyrite,	MLS4							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		< 1 % galena, < 1 % sphalerite.								
130.90	137.40	AMPHIPORA FLOATSTONE RUBBLE BRECCIA Rubble brecciated limestone consisting of clasts of limestone and secondary calcite from 3 mm wide to large blocks of amphipora floatstones, packstones and rudstones,up to 30 centimetres wide. Large blocks of limestone have been rotated, as fossil beds are randomly orientated from one block to another. Blocks and clasts of limestone are found lying within a matrix of carbonaceous lime mud. Numerous styolites are present throughout and are commonly lined by fine grained sulphide (dominantly pyrite with lesser sphalerite and galena). Sulphide is replacing brecciated clasts and matrix. Overall, 1 % pyrite, trace sphalerite, trace galena. 136.40-137.40 RECRYSTALLIZED LIMESTONE Hanging wall sample. Coarsely recrystallized limestone with local zones of limestone rubble brecciation up to 50 centimetres wide. Rubble breccia's consist of clasts of recrystallized limestone within a dark grey lime mud matrix. Styolites, proximal to brecciated zones are lined by fine grained sulphide, dominantly pyrite. Sulphide is found bleeding into and replacing limestone and brecciated limestone clasts. Overall, 1 % pyrite.	MLS5	140477	136.40	137.40	0.00	1.80	0.16	1.16
137.40	137.90	LOWER ZONE LIMESTONE RUBBLE BRECCIA Massive sulphide/limestone rubble breccia containing sub-rounded clasts of limestone and recrystallized limestone up to 10 centimetres wide within a finely ground limestone matrix. Sulphide is found lining styolites and replacing the matrix and clasts of the breccia. Large clasts of galena, sphalerite, and pyrite rich massive sulfide up to 5 centimetres wide are present within the breccia. Whether these are actual clasts of limestone or selective replacement of pre-existing limestone clasts by sulphide is questionable. Overall 50 % limestone, 20 % pyrite, 15 % galena, 15 % sphalerite.	LZ	140478	137.40	137.90	0.02	178 20	4.31	3.61
137.90	180.70	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE Variable limestone ranging from unaltered amphipora packstones and floatstones with minor stromatoporids to recrystallized and dolomitized limestone. Brachiopods are present throughout with nice examples of stringeocephalids (thick shelled brachiopods) from 170.1 metres -								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		170.5 metres. Fossil beds throughout the interval lie at 30 - 50 degrees to core axis. Numerous stylolites are orientated parallel to fossil beds. Laminated carbonaceous lime mud and blocks of brecciated limestone are observed in the upper 3 metres of the interval. 5 % calcite stringers cause local zones of crackle brecciation. Crackle brecciation is strongest in the dolomitized sections of the interval. Fine-grained sulphide dominantly pyrite is occasionally observed lining stylolites, filling fractures and within calcite stringers. Overall < 1 % pyrite, trace sphalerite, trace galena. 137 90-138.90 AMPHIPORA PACKSTONE Footwall sample. Amphipora packstone with 3 % randomly orientated stylolites, lined by fine grained sulphide including 2 % pyrite, < 1 % sphalerite, trace galena. 139.20-140.40 LIMESTONE RUBBLE BRECCIA Rubble brecciated limestone consisting of blocks of limestone up to 20 centimetres wide within a matrix of dark grey carbonaceous lime mud. Trace amounts of fine grained pyrite are observed lining stylolites and replacing the matrix within this breccia. 143.60-144.30 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Dolomitized limestone strongly crackle brecciated by 20 % calcite stringers and veins. From 143.9 metres - 144.0 metres the interval is mosaic brecciated with angular clasts of dolomite and relict limestone up to 3 centimetres wide within a calcite matrix. 145.70-156.40 RECRYSTALLIZED LIMESTONE Variable, fine to coarsely recrystallized limestone with 10 % relict unaltered amphipora, stromatoporoid floatstones. At 154.2 metres there is a 7 mm wide fracture at 30 to core axis filled with secondary calcite and pyrite. From 155.6 metres - 156.0 metres fine grained pyrite is observed replacing recrystallized limestone and forming blebs up to 5 centimetres wide. Overall, < 1 % pyrite. 156.90-160.70 CRACKLE BRECCIA DOLOMITIZED LIMESTONE Dolomitized limestone, strongly crackle brecciated by 15 % calcite stringers orientated at 20 to core axis.	MLS5	140479	137 90	138.90	0.01	2.80	0 09	0.23

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
180.70	187.10	MCDAME LIMESTONE UNIT 5 DOLOMITIZED LIMESTONE CRACKLE BRECCIA Brittle dolomitized limestone, crackle brecciated by 15 % calcite stringers and veins orientated from 10 - 20 degrees to core axis. Interval consists of 50 % rubble and 50 % intact rock. Local zones of mosaic breccia's up to 15 centimetres wide are present and contain angular clasts of dolomite within a calcite matrix. From 186.5 metres - 186.7 metres fine grained pyrite is found within calcite stringers and replacing dolomitized limestone clasts. Overall, < 1 % pyrite.	MLS5							
187.10	200.60	MCDAME LIMESTONE UNIT 5 AMPHIPORA PACKSTONE Amphipora, stromatoporoid packstones and floatstones with lesser thin shelled brachiopods. Styolites are found throughout the interval at 40 - 50 degrees to core axis. Basal 3 metres of the interval has been bleached and partially recrystallized and displays a foliation, defined by elongated fossils, at 70 to core axis. Rare bands of fine grained pyrite are found orientated parallel to this foliation. 2 - 3 % calcite stringers cross-cut the interval and cause localised zones of moderate crackle brecciation. At 197.3 metres there is a 5 mm wide massive sulfide vein at 30 degrees to core axis which contains pyrite and sphalerite. Overall < 1 % pyrite, trace sphalerite.	MLS5							

*** END OF HOLE *** 200.60

HOLE NO: SUD-00-79 SECTION:91-S GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43282.00mN	24983.00mE	1125.00RL

Pre-collar depth: Final depth: 200.30

Purpose of hole: TEST EAST SILVER CK S.
Hole status: COMPLETED
Comments: LZ: 104.5-107.4, 113.9-114.5, 120.9-124.0, 139.8-140.4 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	98.00	-67.00
15.24	99.60	-65.90
45.72	96.40	-66.80
76.20	96.40	-67.50
106.68	94.60	-67.80
137.16	95.60	-67.80
167.64	97.30	-68.80
198.12	98.30	-69.30

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 200.30 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	23/1/00
Date finished:	27/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0.0
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
103.50	108.90	5.40	24.40	0.38	2.14
112.40	116.00	3.60	13.37	0.15	0.04
117.00	118.50	1.50	3.00	0.04	0.01
119.90	134.50	14.60	10.79	0.17	1.04
138.30	141.40	3.10	109.28	1.57	2.57
147.40	149.90	2.50	13.32	0.22	1.83
155.50	158.00	2.50	20.90	0.38	3.12
173.90	181.50	7.60	39.68	0.60	2.49

*** SUMMARY LOG ***

0.00	10.10	1B SANDSTONE / SILTSTONE
10.10	13.80	FAULT ZONE 1B
13.80	40.40	1B SANDSTONE / SILTSTONE
40.40	46.40	FAULT ZONE 1AA
46.40	51.50	1A ARGILLITE SILICIFIED
51.50	55.80	FAULT ZONE 1A
55.80	64.30	1BA SILTSTONE / SANDSTONE / ARGILLITE
64.30	70.90	1A ARGILLITE SILICIFIED
70.90	73.10	FAULT ZONE 1AA CARBONACEOUS ARGILLITE
73.10	75.60	1AC CALCAREOUS ARGILLITE
75.60	79.60	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA
79.60	81.10	1A/MLS RUBBLE BRECCIA
81.10	90.00	LIMESTONE MOSAIC BRECCIA

Checked and signed:____________ Date:________

HOLE NO: SUD-00-79 SECTION:91-S GRID:SILVER CK S.

90.00	92.60	YBR DYKE
92.60	93.60	FAULT ZONE 1A CARBONACEOUS ARGILLITE
93.60	99.70	1AA CARBONACEOUS ARGILLITE
99.70	102.80	MCDAME LIMESTONE
102.80	104.50	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA
104.50	107.40	LOWER ZONE RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA
107.40	113.90	RECRYSTALLIZED LIMESTONE
113.90	114.50	LOWER ZONE MASSIVE SULPHIDE
114.50	120.90	RECRYSTALLIZED LIMESTONE
120.90	124.00	LOWER ZONE RECRYSTALLIZED LIMESTONE
124.00	139.80	RECRYSTALLIZED LIMESTONE MINERALIZED
139.80	140.40	LOWER ZONE MASSIVE SULPHIDE
140.40	148.40	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA
148.40	148.90	LOWER ZONE MASSIVE SULPHIDE
148.90	156.50	MCDAME LIMESTONE UNIT 3 STYLOLITIC BRECCIA
156.50	157.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA
157.00	174.90	LIMESTONE BRECCIA
174.90	176.10	LOWER ZONE MASSIVE SULPHIDE
176.10	200.30	LIMESTONE BRECCIA
200.30		END OF HOLE

Checked and signed: ____________________ Date: __________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	10.10	1B SANDSTONE / SILTSTONE Very broken interval with bedding @ 20 degrees to core axis. Core breaks easily along carbonaceous bedding planes. Angle shallows to nearly 0 degrees adjacent to gouge / fault zone. Bedding disruption adjacent to fault. Lithology is interbedded, medium to fine grained sandstone and siltstone. 3% quartz stringers, 40-60 degrees to core axis, often with small pyrite clots (1%).	1B							
10.10	13.80	FAULT ZONE 1B Low angle to core axis fault zone (15 degrees), comprised of carbonaceous gouge, sandstone chips and broken up quartz - pyrite stringers / clots. 75% recovery. Broken lower contact.	FZ							
13.80	40.40	1B SANDSTONE / SILTSTONE General Description: Moderately incompetent interval of light grey, fine to medium grained sandstone (massive beds, 0.5 - 20 centimetres thick), interbedded with dark grey, fine grained, laminated siltstone. In addition to frequent breaks along bedding, core is also broken along fractures and cross-cutting quartz stringers. 3% quartz stringers, @ 20-40 degrees to core axis, have pyrite blebs and fine grained chlorite. Minor gouge, but frequent chip intervals where bedding has been contorted or folded. Pyrite also occurs as fine stringers parallel to and cross-cutting bedding (3%). Base of unit occurs where core becomes strongly carbonaceous. 35.20-35.70 QUARTZ VEIN Bull white, opaque, brittle quartz vein, 40 degrees to core axis, with 5% pyrite clots.	1B							
40.40	46.40	FAULT ZONE 1AA Moderate to poor recovery of strongly carbonaceous argillite gouge (20%), chips (50%) and core >4 centimetres in length (30%). 5% quartz rubble, 4% fine grained pyrite stringers and clots. Sharp lower contact, 50 degrees to core axis.	FZ							
46.40	51.50	1A ARGILLITE SILICIFIED Black, massive to laminated argillite, bedding @ 60 degrees to core axis. 2% parallel and cross-cutting quartz strs; 5% pyrite clots within the quartz and as mm stringers parallel to bedding. Becomes broken / fractured below 49.3 metres.	1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
51.50	55.80	FAULT ZONE 1A Poor recovery of predominantly siliceous argillite chips, 1-4 centimetres, except at the lower contact where the chips are <1 centimetres and gouge present, 30 degrees to core axis.	FZ							
55.80	64.30	1BA SILTSTONE / SANDSTONE / ARGILLITE Interval of soft sediment deformation - ripup clasts of poorly lithified sandstone, siltstone and argillite in a silty matrix. Frequent pyrite nodules, discontinuous bands and disseminations (6%). Sandstone clasts are occasionally calcareous. Faint layering ~60 degrees to core axis. Silty gouge at irregular lower contact.	1BA							
64.30	70.90	1A ARGILLITE SILICIFIED Rubbly to competent, dark grey, thinly laminated, silicified argillite, layering @ 60 degrees to core axis. 10% quartz as conformable bands to 2 centimetres and as contorted to cross-cutting stringers, predominantly with pyrite (5%) wisps and clots within. Fractures lined with powdery calcite coating.	1A							
70.90	73.10	FAULT ZONE 1AA CARBONACEOUS ARGILLITE Interval comprised of calcareous, carbonaceous argillite chips (65%), gouge (15%) and competent core to 5 centimetres (20%). Sharp upper contact @ 20 degrees to core axis, broken lower contact.	FZ							
73.10	75.60	1AC CALCAREOUS ARGILLITE Dark grey and white striped, thinly laminated, calcareous argillite / mudstone, laminations 75 degrees to core axis and often disrupted by irregular calcite veining. 2% discontinous pyrite stringers and small clots in or adjacent to calcite. Sharp lower contact, 60 degrees to core axis, with limestone.	1AC							
75.60	79.60	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA The combination of weak to strong crackle breccia, plus abundant dissolution along stylolites gives the amphipora rudstone / floatstone and packstones a strong brecciated texture. 15% coarse sparry calcite matrix is often accompanied by pyrite clots (eg. 76.6 metres). Pyrite and calcite occurs as a net-textured replacement of limestone (eg 79.4 metres). Sharp lower contact, 60 degrees to core axis.	MLS1							
79.60	81.10	1A/MLS RUBBLE BRECCIA Hydrothermal karsted rubble breccia, containing sub-angular argillite and limestone clasts, faintly graded from fine at the base to large clasts at the top. Frequent slickensides @ 60 degrees. Both	1A/MLS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		pre-karst and syn-karst replacement pyrite present (4%). Irregular lower contact.								
81.10	90.00	LIMESTONE MOSAIC BRECCIA Highly variable interval that is not strictly a mosaic breccia, but contains all varieties including crackle, mosaic, and rubble breccia, as well as patches of recrystallized limestone and a section with an anastomosing, pyritic YBR-type dyke from 82.3 - 83.2m. One strongly slickensided, coarse grained calcite vein @ 84.7 metres, 10 degrees to core axis. 5% fine grained pyrite as wispy clots along stylolites, replacement blebs in limestone and clots in calcite fracture-filling. Sharp lower contact @ 60 degrees.	MLS							
90.00	92.60	YBR DYKE Pale greenish-grey, medium to fine grained quartz - sericite - pyrite dyke ?? Faint layering @ upper contact, 60 degrees to core axis. Adjacent to the upper contact are rafts of bleached limestone to 8 centimetres. Below 91.8 metres, the rock becomes incompetent and fractured. Lower contact with gouge is at approximately 65 degrees.	YBR							
92.60	93.60	FAULT ZONE 1A CARBONACEOUS ARGILLITE Probable fault zone containing 50% carbonaceous gouge, 30% chips and 20% core <10 centimetres in length.	FZ							
93.60	99.70	1AA CARBONACEOUS ARGILLITE Strongly carbonaceous argillite which varies from incompetent, with frequent narrow (1 - 5 centimetres) gouge seams down to 98.1, below which is more competent and silicified. Some soft sediment deformation evident. 6% pyrite disseminations within bands and as clots & wispy stringers. Laminations are variable from 35 - 65 degrees to core axis. Becoming weakly calcareous approching the sharp lower contact, @ 60 degrees to core axis.	1AA							
99.70	102.80	MCDAME LIMESTONE Predominantly amphipora rudstone to floatstone, relatively unaltered, with minor crackle breccia. Calcite-filled fractures oriented 5 & 50 degrees to core axis. 1% pyrite along stylolites and fractures. Gradational contact with recrystallized limestone below.	MLS							
102.80	104.50	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA General Description: Partially recrystallized crackle breccia at the top, gradually becoming totally recrystallized to coarse sparry calcite. Irregular veinlets of possible YBR dyke (pale greenish-grey) occur @ 103.55 metres. 4% wispy pyrite stringers predominantly along	AMLS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		stylolites. 103.50-104.50 RECRYSTALLIZED LIMESTONE Hanging wall sample, as in general description. 5% wispy pyrite along stylolites. Original textures such as breccia is difficult to determine. Sharp lower contact @ 25 degrees with sphalerite vein.		199586	103.50	104.50	0.01	2.10	0.01	0.04
104.50	107.40	LOWER ZONE RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA General Description: Zone comprised of 45% massive sulfide replacement bands and clots, 10 - 30 centimetres wide, with strongly recrystallized limestone (to coarse sparry calcite) interstial to sulphide bands. At the upper contact, faint rubble breccia remnant textures are visible, but its difficult to say definatively for the remainder of the unit. Sphalerite-rich at the top, becoming more pyrite-rich towards the base. Minor galena. Overall estimate: 30% pyrite, 10% sphalerite, 3% galena. 104.50-105.00 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA 75% massive sulfide, 25% recrystallized limestone rubble breccia.	LZ	199587	104.50	105.00	0.02	127.60	2.17	12.09
		Immediately below the sharp upper contact (25 degrees to core axis), the rubble brecciated limestone contains a recrystallized clast that is nearly totally replaced by pyrite in a fine grained sphalerite - galena matrix (10 centimetres). Below is recrystallized limestone with fine sphalerite filling fractures, followed by 25 centimetres of massive fine to medium grained black sphalerite, pyrite and minor galena. 35% pyrite, 35% sphalerite, 5% galena. Faint layering 35 degrees to core axis. Broken lower contact.		199588	105.00	106.10	0.01	11.80	0.30	0.66
		105.00-106.10 RECRYSTALLIZED LIMESTONE MINERALIZED Mottled white and bluish grey, recrystallized limestone, possible remnant rubble breccia texture (?). Three pyrite - sphalerite (galena) partial replacement clots are siliceous and enveloped by a coarse grained sparry calcite. 10% pyrite, 2% sphalerite, 5% quartz.		199589	106.10	107.40	0.00	39.40	0.49	3.63
		106.10-107.40 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA 70% replacement by massive pyrite and black sphalerite. The								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		remnant limestone is predominantly recrystallized with sulphide stringers and wisps along stylolites and as small replacement clasts. A faint remnant rubble breccia texture occurs @ 106.75 metres. The sulphides are in a moderately siliceous matrix with a trace chalcopyrite. 55% pyrite, 14% sphalerite, 1% galena, trace chalcopyrite, 10% quartz.								
107.40	113.90	RECRYSTALLIZED LIMESTONE General Description: 95% recrystallized limestone to coarse sparry calcite - mottled bluish patches are partially silicified. 6% pyrite as wisps along stylolites and euhedral crystals to 5 mm often adjacent to a stylolite. Trace sphalerite with pyrite.								
		107.40-108.90 RECRYSTALLIZED LIMESTONE BRECCIA Footwall sample. Faint, patchy rubble breccia (as low angle fissure-fillings), strong stylolites, coarse sparry calcite recrystallization, with 8% wispy pyrite replacement along and adjacent to stylolites and as cubes to 5 mm within calcite.	AMLS	199590	107.40	108.90	0.00	1.10	0.01	0.01
		112.40-113.90 RECRYSTALLIZED LIMESTONE Hanging wall sample containing massive, recrystallized limestone (now coarse sparry calcite). Intermittant stylolites, no remnant breccia textures. 2% pyrite as small disseminated cubes and wisps along stylolites.		199591	112.40	113.90	0.00	1.00	0.00	0.00
113.90	114.50	LOWER ZONE MASSIVE SULPHIDE 70% massive sulfide, 30% remnant, recrystallized limestone. Sulphides are dominantly crumbly, coarse grained cubic to bladed pyrite (65%) with minor sphalerite (4%) and galena (1%). The sphalerite & galena are concentrated in a clot adjacent to the upper contact.	LZ	199592	113.90	114.50	0.04	73.20	0.81	0.22
114.50	120.90	RECRYSTALLIZED LIMESTONE General Description: Weakly mineralized, strongly recrystallized limestone with patchy, weak silicification. Mottled texture obliterates most remnant textures. Possible crackle to rubble breccia @ 117.0 - 117.4 metres, with strong stylolites from 117.9 - 118.5 metres. 10% pyrite as wispys along stylolites and fine grained clots adjacent. Trace sphalerite, galena.								
		114.50-116.00 RECRYSTALLIZED LIMESTONE Footwall sample, as in general description above.	AMLS	199593	114.50	116.00	0.03	1.80	0.03	0.00
		117.00-118.50 RECRYSTALLIZED LIMESTONE STYLOLITIC BRECCIA REPRESENTATIVE SAMPLE of weakly mineralized,		199594	117.00	118.50	0.01	3.00	0.04	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		recrystallized limestone. 10% wisps and replacement clots of fine pyrite, again concentrated in and adjacent to stylolites. Rare sphalerite and galena clots. Strong stylolites throughout; faint breccia texture from 117.0 - 117.3 metres.								
		119.90-120.90 RECRYSTALLIZED LIMESTONE Hanging wall sample. Contains a small pod of partially replaced mosaic breccia (??) with fine grained pyrite-sphalerite replacing clasts in a calcite matrix. Spotty disseminated and discontinuous pyrite (10%) stringers throughout, roughly 60 degrees tca; 1% sphalerite, 1% galena as coarse grained clots.		199595	119.90	120.90	0.02	9.20	0.14	0.42
120.90	124.00	LOWER ZONE RECRYSTALLIZED LIMESTONE General Description: Increased siliceous massive sulfide bands (pyrite, sphalerite & minor galena), 15 - 45 centimetres wide, with recrystallized limestone (45%) in between. Sulphides vary from fine, net-textured replacement to fine to medium grained massive to faintly banded. Minor open-space fill. Overall estimate: 35% pyrite, 10% sphalerite, 3% galena, 10% quartz. Non-magnetic.	LZ							
		120.90-121.40 PYRITE SPHALERITE MASSIVE SULPHIDE Clotty to banded massive sulfide in a siliceous matrix. Pyrite is fine to medium grained, often net-textured where only partially replaced. Banding ~ 45 degrees to core axis. 55% pyrite, 12% red & black sphalerite, 8% galena, 15% quartz.		199596	120.90	121.40	0.19	72.10	1.15	4.07
		121.40-122.80 MASSIVE SULPHIDE / LIMESTONE 35% massive, fine pyrite, sphalerite, and galena, 65% recrystallized limestone. Moderately siliceous, wispy to banded sulphides. Minor vugs and open space, but predominantly replacement.		199597	121.40	122.80	0.12	10.95	0.11	2.11
		122.80-124.00 MASSIVE SULPHIDE / LIMESTONE 50% massive sulfide, 50% partially recrystallized limestone. Again, alternating irregular banded (40 degrees) to massive sulfide clots with partially recrystallized, moderately silicified limestone. Minor iron carbonate rimming small vugs. Sulphides are quite fine grained, except for scattered coarse grained, euhedral pyrite crystals. The remnant limestone has pyrite lining abundant hairline fractures. Irregular lower contact. 40% pyrite, 10% sphalerite, 2% galena, 10% quartz.		199600	122.80	124.00	0.06	11.80	0.08	2.96

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
124.00	139.80	RECRYSTALLIZED LIMESTONE MINERALIZED General Description: Strongly altered / recrystallized limestone with 7% massive sulfide bands and stringers (pyrite, sphalerite, & minor galena), mm to 15 centimetres wide, generally oriented between 40 & 60 degrees to core axis. Previously dolomitized sections are still visible and contain crackle and mosaic breccia from 127.7 - 130.8 metres. Sampled @ 1.5 metres intervals down to 134.5 metres, and although not ore grade - some of the sulphide bands are very sphalerite-rich.								
		124.00-125.50 RECRYSTALLIZED LIMESTONE MINERALIZED Very mottled, marbly-looking limestone. Stylolites, often lined with fine pyrite, are generally oriented 40 - 60 degrees to core axis. Wispy sulphide replacement consists of 6% pyrite, 1% sphalerite and trace galena. Possible remnant rubble breccia texture from 124.5 - 124.8 metres.	AMLS	140501	124.00	125.50	0.01	1.70	0.01	0.30
		125.50-127.00 RECRYSTALLIZED LIMESTONE MINERALIZED Similar to the previous sample, with increased pyrite replacement. Remnant mosaic breccia texture from 126.5 - 126.8 metres. 12% pyrite, 2% sphalerite, trace galena.		140502	125.50	127.00	0.12	7.00	0.13	0.18
		127.00-128.50 RECRYSTALLIZED LIMESTONE MINERALIZED Variable interval containing mm hairline stringers of pyrite, sphalerite & galena at the top, mushrooming into a 15 centimetres wide pyrite - sphalerite - galena band, 40 degrees to core axis. This is followed by 50 centimetres of mosaic breccia containing sub-rounded dolomitized limestone clasts, some of which are partially replace by pyrite, sphalerite or galena. A number of clasts appear to be recrystallized limestone, indicating recrystallization was pre-breccia and mineralization.		140503	127.00	128.50	0.04	13.60	0.26	1.37
		128.50-130.00 DOLOMITIZED LIMESTONE MINERALIZED Upper 50 centimetres is recrystallized, marbly-looking limestone with red sphalerite and galena rimming stylolites. Below is crackle breccia (minor mosaic breccia), dolomitized limestone with one massive sphalerite, galena, pyrite stringer, 30 degrees to core axis, 2 centimetres wide. 2% pyrite, 1% sphalerite, 1% galena.		140504	128.50	130.00	0.00	7.50	0.21	0.33
		130.00-131.50 RECRYSTALLIZED LIMESTONE MINERALIZED Continuation of the crackle breccia dolomitized limestone down to		140505	130.00	131.50	0.01	4.40	0.07	0.19

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		130.5 metres, below which becomes recrystallized with moderate stylolites and a 10 centimetres pyrite - sphalerite band. Pyrite cubes also occur in clots to 3 centimetres.								
		131.50-133.00 RECRYSTALLIZED LIMESTONE MINERALIZED Interval has two massive sulfide bands, the first one @ 55 degrees to core axis, 5 centimetres wide of massive to medium grained pyrite, sphalerite & galena. The second band, 70 degrees to core axis, 4 centimetres, contains massive red and black sphalerite with lesser coarse pyrite + galena. 3% sphalerite, 3% pyrite, trace - 1% galena.		140506	131.50	133.00	0.01	4.60	0.08	0.45
		133.00-134.50 RECRYSTALLIZED LIMESTONE MINERALIZED Partial recrystallization gives the rock a pseudo-breccia look. Contains one 10 centimetres massive pyrite - sphalerite (galena) band, 60 degrees to core axis, one irregular pyrite - sphalerite pod and the typical mineralization along stylolites (including galena). 5% pyrite, 3% sphalerite, trace galena. Below 134.5 metres, the remaining limestone is weakly mineralized, but to a lesser extent than above.		140507	133.00	134.50	0.03	16.40	0.21	1.34
		138.30-139.80 RECRYSTALLIZED LIMESTONE MINERALIZED Hanging wall sample to narrow Lower Zone below. Mottled, marbly, recrystallized limestone, with one carbonaceous slickenside, 30 degrees to core axis. 2% fine grained pyrite, 1% sphalerite, and trace galena as wisps along stylolites.		140508	138.30	139.80	0.01	11.20	0.20	0.56
139.80	140.40	LOWER ZONE MASSIVE SULPHIDE 139.80-140.40 BASE METAL MASSIVE SULPHIDE The upper 15 centimetres is rich sphalerite - galena as partial replacement adjacent to a stylolite and below is a massive sphalerite - pyrite - galena band, 25 centimetres wide, ~50 degrees to core axis. Irregular lower contact where sulphides are seeping into the limestone below. 35% pyrite, 30% sphalerite, 10% galena.	LZ	140509	139.80	140.40	0.02	487.80	7.09	11.40
140.40	148.40	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA General Description: Mottled white and pale blue, marbly recrystallized limestone, with patches of less altered limestone increasing downhole. Crackle to mosaic breccia textures evident. The sulphide bands seen in the previous intervals are not present. 1%								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		pyrite, trace sphalerite + galena along infrequent stylolites. - 145.85m: 5 centimetres of fine grained, soft sericite (pyrite) schist - looks like YBR-type rock squeezed into the limestone. 140.40-141.40 RECRYSTALLIZED LIMESTONE Footwall sample, as in general description. 2% fine grained pyrite, trace - 1 % sphalerite + galena as wisps and small clots adjacent to stylolites. 147.40-148.40 RECRYSTALLIZED LIMESTONE Hanging wall sample. Strongly recrystallized with a couple of less altered fragments of limestone - look like possible remnant clasts, but fairly rounded now. Faint layering @ 60 degrees to core axis. 1% pyrite, trace sphalerite + galena along stylolites.	AMLS	140510 140511	140.40 147.40	141.40 148.40	0.02 0.01	29.30 2.00	0.32 0.04	0.30 0.01
148.40	148.90	LOWER ZONE MASSIVE SULPHIDE 148.40-148.90 PYRITE SPHALERITE MASSIVE SULPHIDE Narrow interval of Lower Zone type mineralization consisting of fine grained to bladed pyrite (60%), fine grained massive sphalerite clots and stringers (25%) and 5% galena. Faint layering 45 degrees to core axis. Upper and lower contacts gradational with disseminated pyrite. Calcareous, weakly siliceous matrix.	LZ	140512	148.40	148.90	0.03	60.80	1.01	9.10
148.90	156.50	MCDAME LIMESTONE UNIT 3 STYLOLITIC BRECCIA General Description: Recrystallized down to 151.1 metres, below which is only patchy recrystallization, where fossils are identifiable - mainly amphipora, suggesting Unit 3. Very strong stylolitization -> now a stylolitic breccia with weak crackle. Becomes rubble breccia approaching the lower contact with sulphide zone. 1% pyrite mainly as wisps along stylolites. 148.90-149.90 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Footwall sampl. 40% recrystallized limestone to coarse sparry calcite, 60% crackle breccia limestone. Moderate stylolites with 1% pyrite, trace sphalerite as wisps along stylolites. 155.50-156.50 LIMESTONE RUBBLE BRECCIA Hanging wall sample. Predominantly rubble breccia, minor matrix breccia consisting of small angular to sub-rounded limestone and argillite clasts in both a calcareous muddy matrix and coarse grained, open-space fill calcite. Irregular lower contact with sulphides. 2% wispy and disseminated pyrite, trace mm	MLS3	140513 140514	148.90 155.50	149.90 156.50	0.00 0.00	0.90 1.10	0.00 0.01	0.02 0.09

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		sphalerite stringers.								
156.50	157.00	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA 156.50-157.00 PYRITE SPHALERITE MASSIVE SULPHIDE RUBBLE BRECCIA Rubble breccia at the top in calcite cement with sulphides replacing limestone clasts. The lower half is massive fine grained to bladed pyrite - sphalerite (galena) in a calcareous matrix. Lower contact ~50 degrees to core axis. 35% pyrite, 35% sphalerite, 6% galena.	LZ	140515	156.50	157.00	0.00	92.90	1.70	15.00
157.00	174.90	LIMESTONE BRECCIA General Description: Complex interval of highly variable breccia types and intermittant recrystallization & dolomitization. Portions have a compressed / shear texture, oriented 50-60 degrees to core axis. The strain + breccia could indicate proximity to a major structure / fault?? At 164.35m, there is a 3 centimetres band, roughly parallel to foliation, comprised of pale green, soft sericite / chlorite, similar to YBR fault rocks?? All breccia types are present. - 172.0 - 174.9m: particularly strong crackle breccia, grading into mosaic breccia with calcite cement. Intermittant strongly carbonaceous stylolites. 1-2% fine grained pyrite wisps and stringers, trace sphalerite. 157.00-158.00 LIMESTONE STYLOLITIC BRECCIA Footwall sample. Strongly stylolitic, minor carbonaceous laminated sediment at the base of the rubble breccia / massive sulfide, 8% vuggy calcite - filling. 1% pyrite wisps and small clots. 173.90-174.90 DOLOMITIZED LIMESTONE MOSAIC BRECCIA Hanging wall sample. Very strong crackle to mosaic breccia, partially dolomitized limestone. Irregular lower contact with massive sulfide.	MLS	140516 140517	157.00 173.90	158.00 174.90	0.01 0.00	4.70 1.20	0.10 0.01	0.21 0.02
174.90	176.10	LOWER ZONE MASSIVE SULPHIDE 174.90-176.10 PYRITE SPHALERITE MASSIVE SULPHIDE Very sphalerite - rich, comprised of fine grained clots of re-brown to almost orange-brown sphalerite with very fine grained massive pyrite and minor coarser grained pyrite clots: galena present as irregular clots, all in a siliceous matrix. At the top of the interval, remnant crackle to mosaic breccia limestone is present and likely	LZ	140518	174.90	176.10	0.02	219.80	3.01	14.73

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		the host of mineralization. Faint banding towards the lower contact @ 35 degrees to core axis. 45% sphalerite. 35% pyrite, 5% galena, 8% quartz.								
176.10	200.30	LIMESTONE BRECCIA General Description: Generally similar to the unit above the massive sulfide, ie, limestone, strongly brecciated with a dizzying array of breccia textures, patchy dolomitization and rare recognizable fossils. Breccia textures include crackle & mosaic (the 2 most prevalent), rubble and minor matrix breccia. Excellent potential sulphide host, but only one narrow zone of pyrite replacement from 179.7 - 180.5 metres, otherwise sulphides are sparse.								
		176.10-177.10 LIMESTONE CRACKLE BRECCIA Footwall sample. Moderate crackle breccia and stylolites. Fairly sharp upper contact, 35 degrees, with massive sulfide.	MLS	140519	176.10	177.10	0.00	1.40	0.01	0.05
		177.10-178.70 LIMESTONE BRECCIA Variable sample from relatively unaltered, followed at a low angle to core axis (20 degrees) a peculiar zone of lenticular fragments to 2 centimetres long, 1 - 2 mm thick, in a mixed calcareous, carbonaceous matrix. Some clay mineral development (?). This is followed by recrystallized limestone, then dolomitized limestone with moderate crackle breccia. Trace-1% pyrite as disseminations and small clots.		140520	177 10	178.70	0.00	0.70	0.00	0 01
		178.70-179.70 LIMESTONE BRECCIA Hanging wall sample. The upper 60 centimetres is rubble breccia, containing limestone clasts in a muddy, calcareous matrix; followed by 40 centimetres of crackle breccia dolomitized limestone. Trace - 1% pyrite.		140521	178.70	179.70	0.00	0.70	0.00	0 01
		179.70-180.50 LIMESTONE MINERALIZED 35% fine grained pyrite replacement of partially dolomitized limestone accompanied by moderate crackle breccia. Replacement occurs as irregular clots.		140522	179.70	180.50	0.01	40.70	1 19	1.40
		180.50-181.50 DOLOMITIZED LIMESTONE BRECCIA Footwall sample. Dolomitized limestone with crackle to mosaic breccia. Clasts are sub-rounded. 1-2% disseminations and pyrite clots.		140523	180.50	181 50	0.01	0.80	0.01	0.01

*** END OF HOLE *** 200.30

HOLE NO: SUD-00-80	SECTION:65N	GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43337.00mN	24949.00mE	1136.00RL

Pre-collar depth: Final depth: 113.70

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 48.2 - 55.1 M, 69.4 - 69.6 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-69.00
22.25	256.60	-71.30
52.73	262.80	-72.30
83.21	265.10	-72.70
113.69	262.30	-73.00

*** SUMMARY LOG ***

0.00	30.50	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
30.50	32.10	1A CARBONACEOUS ARGILLITE
32.10	33.40	FAULT ZONE
33.40	47.60	1A CARBONACEOUS ARGILLITE
47.60	48.20	MCDAME LIMESTONE UNIT 1 SILICIFIED LIMESTONE
48.20	55.10	LOWER ZONE MASSIVE SULPHIDE LIMESTONE
55.10	64.30	CRACKLE BRECCIA AMPHIPORA PACKSTONE
64.30	69.40	HETEROLITHIC RUBBLE BRECCIA
69.40	69.60	LOWER ZONE MASSIVE SULPHIDE
69.60	99.80	CARBONACEOUS ARGILLITE LIMESTONE RUBBLE BRECCIA
99.80	113.70	MCDAME LIMESTONE AMPHIPORA PACKSTONE
113.70		END OF HOLE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 113.70 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	26/1/00
Date finished:	27/1/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
47.60	56.10	8.50	245.27	4.10	2.89
64.30	70.60	6.30	73.19	1.27	1.83
85.00	85.20	0.20	11.30	0.02	0.10
94.10	94.80	0.70	12.60	0.15	0.38

Checked and signed:______________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	30.50	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Sandstone interbedded with laminated siltstone and carbonaceous mudstone. Bedding is at 60 - 70 degrees to core axis. Cross-bedding and soft sediment deformation is occasionally observed throughout the interval. Sandstone beds are rarely calcareous and form fining upward sequences up to 20 centimetres wide. These beds decrease in abundance and thickness with depth. < 1 % quartz-carbonate veins, up to 1 5 centimetres wide and orientated from 15 - 30 degrees to core axis, cross-cut bedding. These veins are commonly found to contain pyrite and sphalerite. Pervasive fine grained disseminated pyrite is present throughout the interval. Overall, 1 - 3 % pyrite. 0 00-7.90 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Interbedded sandstone and laminated siltstone and mudstone with bedding at 70 to core axis. Sandstone beds within the interval are up to 5 centimetres wide. Interval is 50 % sandstone and 50 % md/st. 2 % fine grained disseminated pyrite is found throughout. 7.90-8.80 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Interval consists of fining upward sandstone beds up to 20 centimetres wide with lesser md/st beds. Three quartz-carbonate veins up to 1.5 centimetres wide are orientated from 15 - 30 degrees to core axis and contain pyrite and sphalerite. Up to 5 % disseminated pyrite cubes are present within sandstone beds. Overall, 6 % pyrite. < 1 % sphalerite. 8.80-9.10 FAULT ZONE Fault zone consisting of black carbonaceous fault gouge and rubble. Interval has been partially healed by quartz and contains 3 % pyrite throughout. 20.70-30.50 LAMINATED SILTSTONE / SANDSTONE Laminated siltstones and sandstones with laminae from 70 - 80 degrees to core axis. Sandstone laminae decrease in abundance towards the base of the interval. Interval is weak and breaks parallel to bedding planes into smaller pieces resembling poker chips. 2 % disseminated pyrite is found throughout.	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
30.50	32.10	1A CARBONACEOUS ARGILLITE Carbonaceous argillite with occasional siltstone laminae at 60 - 70 degrees to core axis. Numerous quartz veins, up to 1.5 centimetres and orientated parallel to bedding, are found within the basal 60 centimetres of the interval. These veins contain up to 50 % pyrite. Fine-grained pyrite is also found throughout the argillite sediments.	1A							
32.10	33.40	FAULT ZONE Fault zone consisting of 50 % grey-black fault gouge and 50 % carbonaceous argillite and bull quartz rubble. Upper 50 centimetres of the zone has been partially healed by pyrite bearing silica. Overall, 2 % pyrite.	FZ							
33.40	47.60	1A CARBONACEOUS ARGILLITE Variably broken to silicified and intact carbonaceous argillite with occasional siltstone and sandstone laminae. Siltstone and sandstone laminae become more abundant towards the base of the interval and are orientated at 70 -80 degrees to core axis. Numerous pyrite bands and contorted quartz stringers are found orientated parallel to bedding. From 42.1 metres - 43.6 metres the interval displays strong soft sediment folding and deformation. 3 - 4 % pervassive disseminated pyrite and pyrite bands are found throughout. 33.40-41.80 SILICIFIED CARBONACEOUS ARGILLITE Variably broken to intact silicified carbonaceous argillite as above. Overall, 3 % pyrite. 41.80-47.50 CARBONACEOUS ARGILLITE Atypical interval of unit 1A with up to 30 % sandstone and siltstone laminations at 80 to core axis. Interval is silicified and weakly calcareous. Soft sediment folding and deformation of sandstone and siltstone beds is observed from 42.1 metres - 43.6 metres and may be the result of coarser grained sandstones and siltstones slumping into a 1A carbonaceous argillite basin from above. 3 - 4 % fine grained disseminated pyrite is found throughout the interval.	1A							
47.60	48.20	MCDAME LIMESTONE UNIT 1 SILICIFIED LIMESTONE Hanging wall sample. Strongly silicified and fractured limestone with numerous quartz veins found filling and healing fractures. Upper 20 centimetres of the interval is a limestone rubble breccia with	MLS1	140480	47.60	48.20	0.00	1.80	0.03	0.15

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		sub-rounded clasts of limestone up to 7 mm wide healed by quartz-carbonate cement. Bands of light grey laminated earn group sediment up to 2 centimetres wide are found in the basal 10 centimetres of the interval. Bands of pyrite, sphalerite and galena are present throughout the interval at 70 to core axis. Overall, 3 - 4 % pyrite, < 1 % sphalerite, < 1 % galena.								
48.20	55.10	LOWER ZONE MASSIVE SULPHIDE LIMESTONE Alternating massive sulfide and amphipora packstones with minor stromatoponds. Overall the interval contains 55 % limestone and 45 % sulphide. Upper 1.5 metres of the interval is strongly silicified coarse grained pyrite, sphalerite, galena rich massive sulfide with weak sphalerite, pyrite, galena banding at 50 to core axis. Limestone in the upper 30 centimetres of the interval has been rubble to mosaic brecciated. Limestone clasts within this breccia are being partially to fully replaced by sulphide. Beneath this zone, sulphide mineralization is found within localised zones up to 70 centimetres wide of massive sulfide limestone rubble breccia's. Sulphide within these breccia's is found replacing breccia clasts and matrix. Overall, 55 % limestone, 20 % pyrite, 15 % sphalerite, 10 % galena. 48.20-48.90 LOWER ZONE MASSIVE SULPHIDE Strongly silicified coarse grained pyrite, sphalerite, galena massive sulfide with weak sphalerite, pyrite , galena banding at 50	LZ	140481	48.20	48.90	0.00	987.90	17.24	6.88
		degrees to core axis. In the upper 30 centimetres of the interval a relict rubble brecciated limestone is visible with clasts and matrix within this breccia partially replaced by sulphide mineralization. Overall, 40 % pyrite, 30 % quartz, 15 % sphalerite, 15 % galena. 48.90-49.70 LOWER ZONE MASSIVE SULPHIDE		140483	48.90	49.70	0.00	1392.50	23.95	8.26
		Strongly silicified pyrite, sphalerite, galena massive sulfide as above. Overall, 30 % pyrite, 30 % quartz, 20 % sphalerite, 20 % galena. 49.70-50.70 LIMESTONE CRACKLE BRECCIA Partially silicified limestone crackle brecciated by 5 % calcite stringers up to 5 mm wide. From 50.1 - 50.3 metres Crackle brecciated limestone grades into a zone of mosaic brecciation with silicified and partially replaced limestone clasts within a late calcite matrix. Fine-grained pyrite is observed replacing limestone		140485	49.70	50.70	0.00	4.40	0.04	0.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		from 50.2 metres - 50.6 metres. Pyrite appears to be bleeding into limestone from calcite stringers, fractures and styolites. Overall, 15 % pyrite, 5 - 10 % calcite, 5 % silica, 70 % limestone. 50.70-50.90 LOWER ZONE / LIMESTONE RUBBLE BRECCIA		140486	50.70	50.90	0.00	466.40	6.96	7.49
		Rubble brecciated limestone with silicified clasts of limestone and rare earn clasts up to 3 centimetres wide within a lime mud matrix. Sphalerite, galena, and pyrite are found throughout, replacing brecciated limestone clasts and matrix. Overall, 15 % galena, 20 % sphalerite, 20 % pyrite, 40 % limestone, 5 % earn. 50.90-52.00 AMPHIPORA FLOATSTONE		140487	50.90	52.00	0.00	2.90	0.01	0.02
		Partially silicified amphipora, stromatoporoid floatstone. 2 % calcite stringers, rarely containing coarse grained euhedral pyrite, cross-cut the interval. Overall, trace pyrite. 52.00-53.10 LOWER ZONE LIMESTONE		140488	52.00	53.10	0.00	6.90	0.03	0.25
		Weakly silicified and competent stromatoporoid floatstone with minor thamnopora. Interval is cross-cut by calcite veins up to 1.5 centimetres wide and orientated at 50 degrees to core axis. From 52.7 metres - 52.9 metres there is a zone of black, laminated, carbonaceous, lime mud. This zone has been infiltrated and mosaic brecciated by calcite. Fine-grained pyrite is occasionally observed lining styolites. Overall, trace pyrite. 53.10-53.80 LOWER ZONE / LIMESTONE RUBBLE BRECCIA		140489	53.10	53.80	0.00	75.40	0.55	11.46
		Limestone rubble breccia with sub-rounded clasts of limestone up to 4 centimetres wide. Numerous styolites are found throughout and completely bound some limestone clasts. Pyrite, sphalerite, and minor galena mineralization is found replacing pre-existing brecciated limestone clasts and matrix. Sulphide appears to have used styolites to infiltrate into the limestone rubble breccia. A late stage calcite fluid is present and cross-cuts both sulphide mineralization and rubble brecciated limestone. Overall, 35 % relict limestone, 10 % calcite, 30 % sphalerite, 25 % pyrite, and a trace of galena. 53.80-54.50 LIMESTONE RUBBLE BRECCIA		140490	53.80	54.50	0.00	9.10	0.02	1.11
		Limestone rubble breccia as above but with less replacement of limestone by sulphide. Styolites throughout the interval are lined by coarse grained pyrite and sphalerite. Overall, 3 % sphalerite, 2 % pyrite, 95 % limestone. 54.50-55.10 MCDAME LIMESTONE/1A ARGILLITE RUBBLE		140491	54.50	55.10	0.00	175.90	2.77	2.85

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		BRECCIA Heterolithic rubble breccia with 20 % argillite clasts. Pyrite, sphalerite, and galena are observed replacing limestone clasts and breccia matrix. Overall, 5 % pyrite, 5 % sphalerite, 5 % galena, 5 % calcite, 80 % limestone.								
55.10	64.30	CRACKLE BRECCIA AMPHIPORA PACKSTONE Amphipora packstones and floatstones with rare thamnopora and stromatoporids. Limestone is crackle brecciated by 10 - 15 % randomly orientated calcite stringers and veins up to 6 centimetres wide. From 62.4 metres - 63.1 metres the interval is weakly rubble brecciated, and contains clasts of limestone and secondary calcite up to 4 centimetres wide. From 63.4 metres - 64.3 metres there is a large white sparry calcite vein with clasts of limestone and rare pyrite within it. Numerous stylolites are present throughout the interval and are occasionally lined by fine grained pyrite. Overall, trace pyrite. 55.10-56.10 AMPHIPORA FLOATSTONE Footwall sample. Weakly crackle brecciated amphipora floatstone with minor thamnopora and massive stromatoporids. Small fractures up to 5 mm wide are common and are filled with rubble brecciated limestone. The matrix of these brecciass has been partially replaced by fine grained pyrite and lesser sphalerite. Overall, 1 % pyrite and trace sphalerite.	MLS1	140492	55.10	56.10	0.00	5.00	0.03	0.67
64.30	69.40	HETEROLITHIC RUBBLE BRECCIA Mineralized heterolithic rubble breccia with clasts of argillite, limestone and rare sulphide up to 8 centimetres wide. The breccia has been healed by white sparry calcite, which has resulted in local zones of mosaic brecciation. Sulphide is present as rare clasts but is more dominantly found replacing the breccia matrix and limestone clasts. The upper 25 centimetres of the interval is fining upwards. Overall, 3 % pyrite, 1 % sphalerite, < 1 % galena, 47.5 % argillite, 47.5 %limestone. 64.30-65.30 MINERALIZED RUBBLE BRECCIA Upper 50 centimetres of the interval is a mineralized, fining upwards, rubble breccia with clasts of argillite and limestone from	MLS	140493	64.30	65.30	0.00	17.90	0.24	0.44

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		< 1mm - 3 centimetres wide. Fine-grained sulphide, dominantly pyrite, is found replacing limestone clasts and breccia matrix. The basal 50 centimetres of the interval has been infiltrated and mosaic brecciated by a late stage white, sparry calcite vein. Overall, 2 % pyrite. 65.30-66.30 MINERALIZED RUBBLE BRECCIA Mineralized rubble breccia with clasts of limestone and argillite up to 7 centimetres wide. Pyrite and lesser sphalerite is found replacing breccia matrix and limestone clasts. Rare clasts of sulphide may also be present. Overall, 2 % pyrite, and 1 % sphalerite. 66.30-67.70 MINERALIZED RUBBLE BRECCIA Mineralized rubble breccia as above. Upper 50 centimetres of the interval has been infiltrated and mosaic brecciated by white sparry calcite. Sulphide is found replacing breccia matrix and limestone clasts. Overall, 2 % pyrite, 1 % sphalerite. 67.70-68.60 MINERALIZED RUBBLE BRECCIA Mineralized rubble breccia as above. 2 % pyrite, trace sphalerite, trace galena. 68.60-69.40 MINERALIZED RUBBLE BRECCIA Hanging wall sample. Mineralized rubble breccia with clasts of argillite, limestone and rare sulphide up to 8 centimetres wide. Sulphide within the interval is found replacing the breccia matrix and limestone clasts. Overall, 4 % pyrite, 2 % sphalerite, 1 % galena.		140494 140495 140496 140497	65.30 66.30 67.70 68.60	66.30 67.70 68.60 69.40	0.00 0.00 0.00 0.00	49.90 20.10 55.20 146.00	0.74 0.28 1.10 2.43	1.34 0.43 1.08 3.53
69.40	69.60	LOWER ZONE MASSIVE SULPHIDE Coarse grained pyrite, sphalerite, galena, manto style, massive sulfide with 20 % relict limestone. Contacts between lower zone and adjacent rubble breccia's are sharp. The upper contact is at 60 degrees to core axis and the lower contact is at 80 degrees to core axis. Overall, 20 % limestone, 40 % pyrite, 25 % sphalerite, 15 % galena.	LZ	140498	69.40	69.60	0.00	787.50	13.68	8.92
69.60	99.80	CARBONACEOUS ARGILLITE LIMESTONE RUBBLE BRECCIA Collapse ar/lst rubble breccia healed by a late stage calcite fluid. Interval is variable in the amount of argillite vs limestone with limestone clasts being concentrated in the upper 2 metres and basal 7 metres								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		of the interval. The majority of the breccia consists of tightly packed angular clasts of carbonaceous argillite. Diagenetic pyrite is found within argillite clasts throughout the interval. Sulphide is rare within the breccia and is concentrated in the upper 1.5 metres and the basal 6 metres of the interval. Sulphide is found replacing the breccia matrix and limestone clasts. Overall, 3 - 4 % pyrite, trace sphalerite, trace galena, 10 -15 % calcite, 15 % limestone, 65 % argillite. 69.60-70.60 MINERALIZED RUBBLE BRECCIA Footwall sample. Mineralized ar/lst rubble breccia with clasts up to 11 centimetres wide. Pyrite, sphalerite, and galena are present, replacing breccia matrix and limestone clasts. Overall, 50 % argillite, 40 % limestone, 5 % pyrite, 1 % sphalerite, 5 % calcite, trace galena. 85.00-85.20 CALCITE VEIN 12 centimetre wide, white sparry calcite vein found cross-cutting and healing an argillite rubble breccia. Vein contains 30 % pyrite, 15 % sphalerite. 94.10-94.80 HETEROLITHIC RUBBLE BRECCIA Representative sample of the collapse ar/lst rubble breccia with a relatively high degree of sulphide replacement (relative to the majority of the breccia). Sulphide is found replacing the breccia matrix and limestone clasts. Overall, 10 % calcite, 3 % pyrite, < 1 %sphalerite, trace galena, 60 % argillite, 25 % limestone. 95.40-95.41 BLOCK MISTAKE Drillers have numbered this block as 318 ft (96.9 metres). This block is actually 313 ft (95.4 metres). 96.60-96.90 HETEROLITHIC RUBBLE BRECCIA Very nice example of a fining upward sequence within this ar/lst collapse rubble breccia. Argillite clasts near the base of the interval are up to 2 centimetres wide and clasts at the top of the interval are < 1mm wide. Trace pyrite.	1A	140499 140500 140551	69.60 85.00 94.10	70.60 85.20 94.80	0.00 0.01 0.00	41.20 11.30 12.60	0.93 0.02 0.15	3.54 0.10 0.38
99.80	113.70	MCDAME LIMESTONE AMPHIPORA PACKSTONE Amphipora packstone with localised zones of rubble breccia's up to 70 centimetres wide. Rubble breccia's consist of clasts of limestone and argillite up to 5 centimetres wide, with minor amounts of sulphide found replacing limestone clasts and breccia matrix. Upper 5 metres								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		of the interval is crackle brecciated by numerous calcite stringers and veins up to 10 centimetres wide. Numerous styolites are present throughout the interval and are occasionally lined by fine grained pyrite. Basal 1 metre of the interval has been coarsely recrystallized. 99.80-105.90 CRACKLE BRECCIA PACKSTONE Amphipora packstone with minor stromatoporids and euryamphipora, crackle brecciated by 10 - 15 % calcite stringers and veins up to 10 centimetres wide. From 101.3 metres - 101.7 metres the interval is mosaic brecciated, with clasts of limestone and rare argillite, up to 3 centimetres wide, within a coarsely crystalline sparry calcite matrix. Styolites are occasionally lined by fine grained pyrite. 105.90-106.90 AMPHIPORA PACKSTONE Amphipora packstone cross-cut by 2 % calcite stringers and veins at 40 degrees to core axis. 106.90-107.60 HETEROLITHIC RUBBLE BRECCIA Limestone, argillite collapse rubble breccia with clasts up to 5 centimetres wide. Rare sphalerite, pyrite and galena are found replacing the breccia matrix and limestone clasts. Overall, 1 % pyrite, trace sphalerite, trace galena. 107.60-112.70 AMPHIPORA PACKSTONE Amphipora packstone. From 110.4 metres - 111.5 metres there is a calcite vein at 5 degrees to core axis which contains sphalerite and pyrite. Overall, 1 % pyrite, trace sphalerite. 112.70-113.70 RECRYSTALLIZED LIMESTONE Coarsely recrystallized limestone.	MLS							

*** END OF HOLE *** 113.70

HOLE NO: SUD-00-81 SECTION:65SS GRID:SILVER CK S

PROJECT CODE	:SILVERTIP
TENEMENT	:SILVERTIP MINING
PROSPECT	:CORPORATION
GRID	:SILVER CK S
MAP REFERENCE	:104/O-16W
LOCATION	:LIARD, MD, BC
HOLE TYPE	:UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43281.00mN	24978.00mE	1125.00RL

Pre-collar depth: Final depth: 121.30

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: NO LZ MINERALIZATION INTERCEPTED

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-41.00
22.25	253.30	-42.00
52.73	252.80	-42.60
83.21	254.30	-43.20
113.69	257.00	-43.80

*** SUMMARY LOG ***

0.00	48.80	1B SANDSTONE / LAMINATED SILTSTONE
48.80	56.50	FAULT ZONE 1BA
56.50	59.60	1A CARBONACEOUS ARGILLITE
59.60	62.50	FAULT ZONE 1A
62.50	66.40	1AC CARBONACEOUS MUDSTONE CALCAREOUS
66.40	72.30	MCDAME LIMESTONE UNIT 1
72.30	73.80	1AC CALCARENITE PYRITIC
73.80	76.00	MCDAME LIMESTONE UNIT 1
76.00	76.90	1AC CALCARENITE PYRITIC
76.90	105.00	MCDAME LIMESTONE UNIT 1
105.00	112.70	RECRYSTALLIZED LIMESTONE PYRITIC
112.70	113.90	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
113.90	119.30	RECRYSTALLIZED LIMESTONE PYRITIC

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 121.30 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	27/1/00
Date finished:	29/1/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole:	NONE
Base of complete oxidation	--
Top of fresh rock:	0.0
Water first encountered:	NONE
Water inflow estimate:	0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %

Checked and signed:______________ Date:__________

HOLE NO: SUD-00-81	SECTION:65SS	GRID:SILVER CK S

119.30	121.30	DOLOMITIZED LIMESTONE CRACKLE BRECCIA
121.30		END OF HOLE

Checked and signed:________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	48.80	1B SANDSTONE / LAMINATED SILTSTONE 0.00-33.50 SANDSTONE / LAMINATED SILTSTONE Dominantly medium grey, medium to coarse grained massive sandstone, fining upward, topped by dark grey laminated siltstone. Sandstone layers range from 5 centimetres to 1 metres thick. Siltstone layers are 5 mm - 5 centimetres thick. Variable bedding angles: 45 degrees @ 6.0 metres, 50 degrees @ 10.8 metres, then flattening to 35 degrees @ 17.6 metres and 30 degrees @ 30.0 metres. Occasional soft sediment deformation and rip-up clasts (eg: 20.5 & 34.5 metres) 2% quartz - calcite stringers to 1 centimetres, cross-cutting and parallel to bedding, occasionally containing pyrite clots parallel to bands. Pyrite also as hairline fractures, nodules and flakes along bedding. The siltstone is moderately carbonaceous from the top down to 12.6 metres and RQD is moderate to poor in this section. Below 12.6 metres, core is much more competent. 33.50-48.80 SILTSTONE / SANDSTONE / CARBONACEOUS ARGILLITE PYRITIC Below 33.5 metres, there are no longer any thick, fining upward sandstone beds - they are now laminated to thinly interbedded dark grey siltstone, pyritic sandstone and occasional carbonaceous argillite. Incompetent core breaks easily along bedding and frequent low angle fractures (5-10 degrees). 2% cross-cutting quartz - calcite stringers to 1 centimetres, @ 5 & 30 degrees to core axis. 7% pyrite, dominantly as fine grained disseminations in sandstone lenses (diagenetic) and minor cross-cutting fractures. Bedding variable from 50 degrees (39.0 metres), 35 degrees (41.0 metres) and 40 degrees @ 45.2 metres. Base of the unit located where there is increased carbonaceous argillite gouge and chips.								
48.80	56.50	FAULT ZONE 1BA Incompetent interval comprised of 15% carbonaceous gouge, 40% chips and rubbly core (no piece >5 centimetres). Major gouge is concentrated near the top and bottom broken contacts. The lithology is predominantly carbonaceous argillite, with minor pyritic sandy lenses and thin beds. 5% pyrite.								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
56.50	59.60	1A CARBONACEOUS ARGILLITE Narrow interval of weakly competent core, massive to vaguely laminated carbonaceous argillite (60 degrees to core axis) with 4% quartz stringers to 2 centimetres, 15 degrees to core axis. 4% pyritic lenses, parallel to bedding.								
59.60	62.50	FAULT ZONE 1A Contorted, broken interval of carbonaceous argillite containing 20% gouge and 80% chips. 5% broken up quartz rubble, 4% disseminated pyrite and small clots.								
62.50	66.40	1AC CARBONACEOUS MUDSTONE CALCAREOUS Mix of calcarenite and carbonaceous mudstone, thinly laminated to massive, bedding 50 degrees to core axis. Moderately competent, 3% disseminated pyrite. Sharp lower contact, 50 degrees to core axis.								
66.40	72.30	MCDAME LIMESTONE UNIT 1 Predominantly intact amphipora floatstone and dense pa; minor massive stromatoporids and stacyodes, weak to nil crackle breccia. Dominant orientation of hairline calcite fractures is 25 degrees to core axis. Moderate pervasive silicification approaching fairly sharp lower contact, ~70 degrees to core axis. Trace fine grained pyrite along fractures.								
72.30	73.80	1AC CALCARENITE PYRITIC Likely a pre-Earn deposition dissolution cavity / karst within the limestone, now filled with finely laminated, pyritic calcareous mudstone. The bedding angle varies from 15 - 50 degrees to core axis. 10% fine grained diagenetic pyrite following layering. Weak pervasive silicification. Sharp lower contact, 40 degrees.								
73.80	76.00	MCDAME LIMESTONE UNIT 1 Unaltered, unbrecciated amphipora floatstone. Trace pyrite along calcite fractures. Sharp lower contact, 60 degrees to core axis.								
76.00	76.90	1AC CALCARENITE PYRITIC Similar karst / cavity infill as described from 72.3 - 73.8 metres. Laminations @ 45 degrees, 8% fine grained disseminated or vaguely banded pyrite. Sharp lower contact, 35 degrees.								
76.90	105.00	MCDAME LIMESTONE UNIT 1 Wide section of intact Unit 1 limestone with very minor, intermittant crackle breccia. Lithologies include interlayered amphipora packstone, floatstone, dense packstone and minor massive								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		stromatoporids. Fossil layering @ 55 degrees. 5% dolomitized intervals to 40 centimetres wide, usually containing calcite veining / crackle breccia. Sulphides rare: trace - 1% wispy pyrite along stylolites.								
105.00	112.70	RECRYSTALLIZED LIMESTONE PYRITIC Very light grey and light bluish-grey, mottled, finely recrystallized limestone, now a fine sugary texture (not the coarse grained recrystallization to sparry calcite seen in SUD-00-79). Fossils not identifiable down to 110.6 m: below, amphipora and massive stromatoporids are recognizable. Pyrite is abundant (7%) as fine grained wisps and clots along hairline fractures and stylolites. Weak to nil crackle breccia.								
112.70	113.90	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Dark grey, brittle, dolomitized limestone, weak to moderate crackle breccia. Trace fine grained pyrite along fractures.								
113.90	119.30	RECRYSTALLIZED LIMESTONE PYRITIC Very similar to the unit described from 105.0 - 112.7 metres. Mottled, light grey and bluish grey, finely recrystallized limestone -> now a fine sugary texture. Fossils obliterated. Again abundant fine grained pyrite (7%) as thin, discontinuous wisps and clots, along stylolites, adjacent to calcite clots and mm fractures.								
119.30	121.30	DOLOMITIZED LIMESTONE CRACKLE BRECCIA Brittle, crackle to mosaic breccia, dark grey, dolomitized limestone with 50 centimetres of bleached, recrystallized limestone. Rubbly core. 1% pyrite associated with calcite cement and stringers.								

*** END OF HOLE *** 121.30

HOLE NO: SUD-00-82 SECTION:65-N GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL 43337.00mN 24949.00mE 1136.00RL

Pre-collar depth: Final depth: 116.70

Purpose of hole: NORTH DRILL FAN TESTING LZ EXTENT

Hole status: COMPLETED

Comments: LOWER ZONE: 54.6 - 55.1M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-60.00
23.77	256.30	-60.00
54.25	259.20	-61.00
84.73	259.90	-61.90
115.21	258.50	-62.70

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 116.70 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE SKID MODEL 150
Date started:	28/1/00
Date finished:	29/1/00
Logged by:	C. REES
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0.0
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
53.50	56.70	3.20	14.10	0.03	1.48
60.20	60.35	0.15	4.60	0.01	0.01
113.45	113.65	0.20	2.10	0.01	0.01

*** SUMMARY LOG ***

0.00	29.80	1B LAMINATED SANDSTONE / SILTSTONE
29.80	32.00	1BA LAMINATED SILTSTONE
32.00	54.45	1AA ARGILLITE/SILTSTONE
54.45	54.60	MCDAME LIMESTONE BRECCIATED PYRITIC
54.60	55.10	LOWER ZONE PYRITIC
55.10	55.70	1A ARGILLITE RUBBLE BRECCIA
55.70	60.15	MCDAME LIMESTONE UNIT 1
60.15	63.10	1A ARGILLITE RUBBLE BRECCIA
63.10	74.00	MCDAME LIMESTONE UNIT 1
74.00	76.45	CALCITE VEINED
76.45	85.90	MCDAME LIMESTONE UNIT 1
85.90	90.40	DOLOMITIZED LIMESTONE BRECCIATED
90.40	92.35	MCDAME LIMESTONE UNIT 1

Checked and signed:________________ Date:________

HOLE NO: SUD-00-82	SECTION:65-N	GRID:SILVER CK S.

92.35	116.70	MCDAME LIMESTONE UNIT 2
116.70		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	29.80	1B LAMINATED SANDSTONE / SILTSTONE Thickly to thinly laminated medium to fine grained sandstone and darker grey siltstone and slaty argillite. Laminae are mm-scale to several centimetres thick, but no thick or coarse sandstone beds. Sandstone laminae are commonly calcareous. Graded bedding common. Uniform bedding, rather good recovery overall. Bedding 48 degrees to core axis @ 2.8 m. 46 degrees to core axis @ 24.0 metres. Very local pyrite laminae. Generally <1% pyrite, locally patches of 3-5%. -Broken core between 9.2 - 11.3 metres.	1B							
29.80	32.00	1BA LAMINATED SILTSTONE Well and uniformly laminated (<1-3 mm) dark grey siltstone and slate, and minor paler grey fine sandstone. Latter can be qite pyritic, several %, but unit overall about 1% pyrite. Poker chip to quite broken core. Bedding 55 degrees to core axis @ 31.5 metres.	1BA							
32.00	54.45	1AA ARGILLITE/SILTSTONE Generally dark grey to black, very fine grained carbonaceous argillite, slaty argillite and siltstone, with minor laminae (<5%) of paler grey fine sandstone. Somewhat laminated but less well and regularly than previous units. Basically non-calcareous except for local calcite crackle and rare calcareous laminae. Generally 1-2% disseminated pyrite but can be much stronger (50%) in mm-scale, isolated laminae, lenses, pods and veinlets. These are generally discordant. Recovery is quite good overall, but one is broken in short intervals. Quartz (and much less calcite) crackle and veinlets are locally strong, but unit is not brecciated to any degree. Bedding 62 degrees to core axis @ 38.5 metres. 47.50-50.25 SILTSTONE/ARGILLITE SANDSTONE Interval of thinly laminated siltstone - argillite and minor fine grained sandstone which is disrupted by a combination of soft-sediment deformation and tectonic shearing. Discontinuous laminae, especially of sandstone, some minor folding. Bedding at various angles to core axis, including parallel. Generally 2% pyrite overall, with local laminae (1 centimetres thick) with 30%.	1AA							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Not calcareous. 50.25-50.85 INTERBEDDED SILTSTONE / ARGILLITE BRECCIATED As above, but with a stronger brittle overprint - micro brecciation, with quartz crackle. 50.85-53.00 CARBONACEOUS ARGILLITE SLATY Very fine grained black carbonaceous slaty argillite with minor quartz veinlets and crackle. Very broken core but not faulted. Weakly pyritic; not calcareous. 53.00-54.45 ARGILLITE CRACKLE BRECCIA Black, very fine grained carbonaceous but silicified. Moderately to strongly crackle veined and brecciated with fine quartz veinlets. True crackle to mild mosaic breccia only in the last 25 centimetres. Non-calcareous. Weakly pyritic - some pyrite in laminae, some in veinlets. Base taken at appearance of McDame limestone fragment. 53.50-54.45 ARGILLITE CRACKLE BRECCIA Sample of silicified argillite crackle breccia, description as above.		199619	53.50	54.45	0.00	1.60	0.01	0.02
54.45	54.60	MCDAME LIMESTONE BRECCIATED PYRITIC Short ill-defined interval of brecciated, pyritic and silicified rubble (?) breccia of McDame limestone. Has about 3% fine grained pyrite as disseminated replacement and in veinlets in fractures.	MLS	199620	54.45	54.60	0.00	6.60	0.04	0.20
54.60	55.10	LOWER ZONE PYRITIC Small, low grade Lower Zone, developed on possibly rubble brecciated McDame. Not solid massive sulphide except for bottom 20 centimetres which comprises fine grained pyrite and probably sphalerite, plus medium to coarse pyrite and lesser red-brown sphalerite. No visible galena. Remainder is mainly quartz or silicified limestone and lesser calcite. Overall 55% pyrite, 5% sphalerite, 25% quartz, 15% calcite.	LZ	199621	54.60	55.10	0.00	76.70	0.13	9.16
55.10	55.70	1A ARGILLITE RUBBLE BRECCIA Black, tightly packed and well indurated (but no silicified). clast-supported rubble breccia. Clasts are angular, moderately calcareous, black 1A at. Matrix is fine grained, dark grey to almost black Earn-rich but calcareous sediment. Minor calcite crackle veinlets. About 3% fine disseminated pyrite throughout but no replacement mineralization.	1A	199622	55.10	55.70	0.00	3.10	0.01	0.07

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
55.70	60.15	MCDAME LIMESTONE UNIT 1 Probably unit MLS1A. Narrow rubble breccia contact with unit above, with a 2 centimetres thick band of medium grained pyrite replacement. Thereafter, most of limestone is dense packstone with areas of Amphipora. Rare fine grained pyrite in blebs or mm-thick stringers along stylolites. Calcite veinlets and crackle common, with some crackle to mosaic breccia between 57.4 - 57.9 metres. This is followed by 30 centimetres of rubble to matrix breccia with minor fine pyrite replacement. More of this between 59.5 and 60.15 metres. 55.70-56.70 LIMESTONE Sample of mainly solid limestone with ~1% fine grained pyrite in blebs and stringers, and the 2 centimetres thick band referred to above.	MLS1	199623	55.70	56.70	0.00	2.40	0.01	0.05
60.15	63.10	1A ARGILLITE RUBBLE BRECCIA *Rubble breccia in limestone above gives way to this unit with* appearance of Earn in poorly sorted rubble breccia comprising mm - to several centimetres - scale angular fragments of somewhat calcareous 1A argillite in medium grey matrix of fine to fine grained calcarenite. Small percentage of limestone clasts, mainly at top and bottom contacts. Matrix becomes more carbonaceous and Earn-flour rich in *bottom metre where Earn clasts are larger and more tightly packed.* About 1% pyrite overall, as rare small clasts (1-8 mm) or as spotty or disseminated replacement of matrix. Largest pyrite concentration is sample below. 60.20-60.35 PYRITIC RUBBLE BRECCIA Mixed Earn and limestone fragments in calcareous-arenite matrix, overprinted by irregular replacement by fine grained pyrite. Pyrite about 25% overall. Partly silicified.	1A	199624	60.20	60.35	0.00	4.60	0.01	0.01
63.10	74.00	MCDAME LIMESTONE UNIT 1 Probably unit MLS1A, still largely packstone with areas of Amphipora and a few massive stromatoporids. Mostly solid limestone with typical stylolitization and crackle to crackle breccia. Lesser intervals of rubble breccia to stylolitic breccia, e.g.: 63.1 - 63.7m. Local coarse	MLS1							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		calcite veins. 64.25-74.00 MATRIX BRECCIA PYRITIC Weakly laminated, slightly rubbly matrix breccia - calcareous-arenite, with 3% pyrite replacement in mm-scale patches, up to 1 - 3 centimetres long. No Earn or sulphide clasts. Bedding 85 degrees to core axis. 72.60-72.90 LIMESTONE PYRITIC MINERALIZATION Grey packstone with patches up to 8 X 4 centimetres of very fine grained pyrite replacement. Generally follows limestone texture, but immediately adjacent to 1 - 2 centimetres thick calcite veins.								
74.00	76.45	*CALCITE VEINED* Core runs down a subparallel vein of very clean, creamy white and very coarse grained calcite. Vitreous euhedral calcite crystals up to several centimetres across. No sulphides. Some open space. Contact with limestone wall rock visible in part of core, parallel to axis.	VN							
76.45	85.90	MCDAME LIMESTONE UNIT 1 Probably still unit MLS1A. Mostly typical McDame mid-grey fine grained packstone, with local Amphipora and a few stromatoporoids. Generally solid and non-brecciated, except for a few short (few centimetres) intervals of weak fbbx and crackle breccia where calcite veinlets are strong. Millimeter-scale blebs and stringers of fine grained pyrite replacement locally (76.7 - 76.8 metres) generally following textural boundaries in limestone. Strongest pyrite infiltration is between 82.1 - 82.5 metres, amounting to 2%, following stylolites or edges of calcite crackle. No coarse or massive sulfide. 84.10-84.30 ARGILLITE CALCARENITE Very carbonaceous, weakly laminated argillite to graded calcareous-arenite. Probably paleokarst filling narrow, bedding parallel fissure in McDame. Sharp contacts.	MLS1							
85.90	90.40	DOLOMITIZED LIMESTONE BRECCIATED Moderately dolomitized limestone, obscuring original texture except *for very local rubble breccia. Remnants of original limestone in* places. Texture of unit is dominated by typically strong calcite crackle veining to breccia to minor mosaic breccia. No significant silica or sulphides. Core partly broken up.	MLSD							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
90.40	92.35	MCDAME LIMESTONE UNIT 1 Transitional contact with unit above, as this is partly dolomitized too, but patchy with islands of limestone. Minor calcite veinlets and crackle. Possible gastropod @ 91.7 metres. Last 50 centimetres is unaltered limestone. Very minor fine grained pyrite.	MLS1							
92.35	116.70	MCDAME LIMESTONE UNIT 2 Tentatively starts at 92.35 metres, approximately. Texture near top obscurred by prominent 1-2 centimetres thick calcite vein with much open space, parallel to core axis, @ 92.6 - 93.8 metres. Vein is barren but 5 X 1 centimetres patch of fine grained pyrite @ 92.5 metres. Strong fossiliferous composition characterizing Unit 2 appears @ 94.3 metres, with Tryplasma solitary coral, and abundant massive stromatoporids and Amphipora thereafter. Whole unit is basically solid except for localrbbx (20-30 centimetres thick) and strong crackle to mosaic breccia associated with 1-3 centimetres thick calcite veins. No alteration. 1 centimetres thick, 40 centimetres long calcite shear fracture, 5 degrees to core axis, @ 111.5 metres. 25 centimetres thick, Euramphipora-rich band @ 115.3 metres. 113.45-113.65 LIMESTONE PYRITIC Isolated zone of stylolitized fossiliferous limestone with delicate and wispy very fine grained pyrite infiltrating stylolites and textural boundaries. About 10% pyrite.	MLS2	199625	113.45	113.65	0.00	2.10	0.01	0.01

*** END OF HOLE *** 116.70

HOLE NO: SUD-00-83	SECTION:77-N	GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43479.00mN	24878.00mE	1160.00RL

Pre-collar depth: Final depth: 150.30

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: COMPLETED

Comments: LZ: 47.2 - 49.2 M,

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	240.00	-72.00
28.35	252.90	-72.20
58.83	256.30	-72.20
89.31	256.90	-72.00
119.79	259.30	-72.20
150.00	240.00	-72.00
150.27	261.50	-72.30

*** SUMMARY LOG ***

0.00	15.40	1AA CARBONACEOUS ARGILLITE
15.40	29.60	1AA CARBONACEOUS ARGILLITE
29.60	31.00	CARBONACEOUS ARGILLITE MOSAIC BRECCIA
31.00	43.00	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA
43.00	47.20	MCDAME LIMESTONE MOSAIC BRECCIA
47.20	49.20	LOWER ZONE BRECCIA SILICIFIED
49.20	68.10	MCDAME LIMESTONE BRECCIA
68.10	74.00	MCDAME LIMESTONE UNIT 3
74.00	76.60	MCDAME LIMESTONE UNIT 4
76.60	98.50	MCDAME LIMESTONE UNIT 5

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 150.30 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	30/1/00
Date finished:	1/2/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
45.20	50.20	5.00	66.39	0.31	3.08

Checked and signed:________________ Date:__________

HOLE NO: SUD-00-83	SECTION:77-N	GRID:SILVER CK S

98.50	111.30	RECRYSTALLIZED LIMESTONE
111.30	133.30	MCDAME LIMESTONE UNIT 5
133.30	137.60	RECRYSTALLIZED LIMESTONE STYLOLITIC BRECCIA
137.60	150.30	MCDAME LIMESTONE UNIT 5
150.30		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	15.40	1AA CARBONACEOUS ARGILLITE Black, fine grained, massive to thinly laminated, carbonaceous argillite, intermittantly moderately silicified; breaks easily along carbonaceous beds - at times very broken. Bedding @ 55 degrees. 6% quartz - calcite stringers, parallel to bedding and cross-cutting @ 5-10 degrees. Stringers parallel to bedding are often contorted. 4% fine grained pyrite as disseminations within bands, cross-cutting fractures and in quartz - calcite stringers. Trace galena @ 9.8 metres in a 2 centimetres quartz - calcite stringer, 60 degrees to core axis.								
15.40	29.60	1AA CARBONACEOUS ARGILLITE Much less competent than the argillite above, due to folding, increased quartz - calcite stringers (12%) and minor faulting. From 17.7 - 19.0 metres, layering is parallel to core axis and contains abundant irregular stringers & pods of quartz - calcite. At the top and bottom of the interval, the bedding is @ 60 degrees. 4% fine grained pyrite clots within the stringers and disseminations within argillite bands. Overall, approximately 25% of the core is chips <2 centimetres, 5% gouge and 70% broken core <8 centimetres. Sharp lower contact, @ 60 degrees to core axis.								
29.60	31.00	CARBONACEOUS ARGILLITE MOSAIC BRECCIA Mosaic breccia at the unconformity, comprised of 45% large angular clasts of carbonaceous argillite to 7 centimetres, in a dirty carbonaceous calcite matrix. Rare (2%) pyrite as fine grained clots and lenses within the calcite, and somewhat concentrated at the low angle (20 degrees) lower contact with limestone.								
31.00	43.00	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA Dominantly packstone and amphipora floatstone, moderate crackle breccia, intermittant strong styloitic breccia and minor mosaic breccia. Fractures oriented @ 20 & 40 degrees to core axis. 4% pyrite as fine grained clots to 4 centimetres within calcite fractures and as wisps along styolites.								
43.00	47.20	MCDAME LIMESTONE MOSAIC BRECCIA General Description: Variably, but strongly brecciated interval above the Lower Zone, consisting of mosaic, grading into rubble breccia at the top. Next is a narrow section of styolitic breccia, then into rubble								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		breccia below. At the appearance of pyrite mineralization (46.3 metres), the breccia is very strongly silicified. 45.20-46.20 LIMESTONE RUBBLE BRECCIA Sample above the weakly mineralized hanging wall sample below. Variable styolite, crackly, mosaic and rubble breccia, dominantly calcite - healed with a weak pervasive silicification. Fractures trend 30 - 40 degrees to core axis and besides calcite, contain wispy fine grained pyrite (3%).		140524	45.20	46.20	0.00	3.90	0.06	0.11
		46.20-47.20 BRECCIA MINERALIZED Silicified, weakly mineralized limestone breccia. **Two episodes of breccia evident as ther are sub-rounded to sub-angular clasts of strongly silicified rubble breccia, within a mosaic breccia, predominantly healed by calcite. Sulphides (mainly pyrite) appear to have come in during the second stage as the pyrite occurs as clots and stringers rimming calcite and partially replaces rubble breccia clasts. 7% pyrite, trace sphalerite.		140525	46.20	47.20	0.00	12.30	0.08	0.83
47.20	49.20	LOWER ZONE BRECCIA SILICIFIED 47.20-48.20 PYRITE SPHALERITE MASSIVE SULPHIDE RUBBLE BRECCIA Narrow zone of pyrite - sphalerite rich massive to faintly banded (40 degrees) sulphides that have partially replaced strongly silicified rubble breccia. 20% relic silicified limestone rubble breccia. 45% pyrite occurs as fine grained intergrowths with sphalerite as well as later coarse grained crystals with coarse grained sphalerite (35%). Irregular lower contact with mineralized limestone below.		140526	47.20	48.20	0.01	276.15	1.16	11.91
		48.20-49.20 MASSIVE SULPHIDE / LIMESTONE RUBBLE BRECCIA 80% silicified limestone rubble breccia with 20% massive sulfide as two bands, both ~ 10 centimetres wide. Both look to have seeped in along very carbonaceous styolites and partially replaced the adjacent brecciated limestone. 12% pyrite, 8% sphalerite, both fine grained.		140528	48.20	49.20	0.03	38.10	0.24	2.47
49.20	68.10	MCDAME LIMESTONE BRECCIA General Description: Variable, but strongly brecciated interval of limestone, sections to 1.5 metres strongly silicified. Occasional relic fossils include amphipora and massive stromatoporoids between 60.4								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		- *83.0 metres. Breccia textures include stylolite, crackle, rubble and* mosaic breccia. From 50.8 - 53.2 metres, a very low angle, slickensided contact (2-5 degrees to core axis) between relatively unbrecciated and strongly brecciated limestone (crackle to mosaic breccia). Dominant fracture orientations are 10, 30 & 40 degrees. Sparse pyrite mineralization (1-3%) as fine grained wispy clots along fractures and stylolites. 49.20-50.20 LIMESTONE RUBBLE BRECCIA Footwall sample below mineralized limestone. Strong crackle to rubble breccia, with moderate pervasive silicification. Slickensides @ 60 degrees to core axis. Sparse pyrite (trace - 1%) as fine grained clots along fractures.		140530	49.20	50.20	0.00	1.50	0.01	0.05
68.10	74.00	MCDAME LIMESTONE UNIT 3 Out of the brecciated zone and into much less altered limestone. Frequent stylolites, and at times stylolitic breccia along with minor recrystallization, but fossils recognizable, including amphipora rudstone / floatstone and minor massive stromatoporids. Strong stylolitic contact with Unit 4. Dominant fracture orientations are 20 & 50 degrees, healed with coarse calcite, accompanied by 1% fine grained pyrite.								
74.00	76.60	*MCDAME LIMESTONE UNIT 4* Distinctive, intact, Euramphipora rudstone, marking Unit 4, with massive stromatoporoid and minor amphipora in the center of the unit. The top has a carbonaceous stylolite along with fine grained pyrite which appears to have crystallized firs along the stylolite, then migrated outward into the limestone. 4% fine grained pyrite.								
76.60	98.50	MCDAME LIMESTONE UNIT 5 The top of Unit 5 is characterized by very coarse amphipora (to 5 mm). In between the amphipora rudstone and floatstone are dense packstone, minor massive stromatoporids and intervals of up to 2 metres of moderate to strongly recrystallized limestone as outlined in the minor intervals below. Relatively intact rocks with only minor intermittant crackle breccia. At 82.5 metres, two stringocephalids (thick shelled brachiopods) were identifed - which have so far only been documented on Tour Ridge, 1 metres above the base of the								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		unit. May be anomalous here, as Unit 5 is normally 65 - 113 metres thick. Minor stylolites throughout. 1% fine grained pyrite along fractures and rare wisps lining stylolites. Fossil layering ~ 60 degrees to core axis. A carbonaceous styl, 65 degrees, marks the lower contact. 80.50-82.30 RECRYSTALLIZED LIMESTONE Totally white, sugary-textured, fine to medium grained calcite. Irregular lower contact. No visible sulphides. 84.50-86.40 RECRYSTALLIZED LIMESTONE Similar to the above interval, but comprised of coarser sparry calcite. Sparse sericite on fractures. No visible sulphides.								
98.50	111.30	*RECRYSTALLIZED LIMESTONE* Pale grey to bluish-grey, mottled-looking, recrystallized fine grained limestone. Rare, faint relic fossils. Between 99.8 - 100.3 metres, there are 3 irregular bands, 2 - 4 centimetres thick, 40 & 60 degrees to core axis, of soft, crumbly sericite phyllite - pale green color which resemble ** YBR fault rocks. 1-2% fine grained, wispy pyrite along stylolites and with calcite pods. - 101.6m: millimeter sphalerite stringer, 20 degrees to core axis. - 106.0 - 110.0m: moderate crackle breccia, minor partial dolomitization.								
111.30	133.30	MCDAME LIMESTONE UNIT 5 Predominantly amphipora packstone and floatstone, interlayered with dense packstone and minor massive stromatoporids. 5% dolomitized intervals (usually strong crackle breccia and broken core), and sections up to 1 metres partially recrystallized. Crackle breccia is nil to weak throughout, and a narrow zone of strong stylolitic breccia occurs *@ 120.5 - 121.0 metres. Dominant fractures are oriented @* 20 degs to core axis. Rare sulphides, trace - 1% fine grained wispy pyrite along stylolites and small clots along calcite fracture selvages.								
133.30	137.60	RECRYSTALLIZED LIMESTONE STYLOLITIC BRECCIA *Partially recrystallized limestone, not recrystallized to the extent of* the previous intervals described. Pale bluish-grey, moderately crystalline limestone, with frequent carbonaceous stylolites oriented @ 65 degrees to core axis. **In the upper 20 centimetres, 4 bands of light green sericite phyllite, roughly 65 degrees to core axis, 1-3								

2000
UG DRILL LOG

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		centimetres thick, resemble the YBR fault rocks and could be narrow splays from the main fault. Trace - 1% pyrite.								
137.60	150.30	MCDAME LIMESTONE UNIT 5 Intact, unbrecciated, unaltered amphipora floatstone, minor rudstone. dense packstone and spheroidal (?) packstone. 1-2% calcite fractures, 5-20 degrees to core axis with trace pyrite.								

*** END OF HOLE *** 150.30

HOLE NO: SUD-00-84	SECTION:65-S	GRID:SILVER CK. S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK. S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.00mE	1129.00RL

Pre-collar depth: Final depth: 95.40

Purpose of hole: TEST E EXTEN. OF LZ FROM SUD-00-73

Hole status: DRILLED TO DEPTH

Comments: LZ: 67.3 - 75.2 M,

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-80.00
26.82	278.00	-83.00
57.30	286.90	-83.40
87.78	294.70	-83.20
95.00	250.00	-80.00

*** SUMMARY LOG ***

0.00	17.80	1B SANDSTONE / SILTSTONE MUDSTONE
17.80	18.00	QUARTZ VEIN MINERALIZED
18.00	24.60	1B SANDSTONE / SILTSTONE MUDSTONE
24.60	37.49	1BA SANDSTONE / SILTSTONE CARBONACEOUS ARGILLITE
37.49	40.34	1A CARBONACEOUS ARGILLITE
40.34	41.53	FAULT ZONE
41.53	50.53	1A CARBONACEOUS MUDSTONE / SANDSTONE
50.53	52.28	1AA CALCAREOUS CARBONACEOUS ARGILLITE
52.28	67.30	MCDAME LIMESTONE UNIT 1
67.30	75.20	LOWER ZONE MASSIVE SULPHIDE
75.20	95.40	MCDAME LIMESTONE UNIT 1

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 95.40 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL 150
Date started:	SUPERDRILL
Date finished:	30/1/00
Logged by:	31/1/00
Relogged by:	C. AKELAITIS
Sampled by:	
	R. NEY

Material left in hole: NONE
Base of complete oxidation –
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
17.80	18.00	0.20	5.60	0.03	0.04
66.30	76.20	9.90	349.54	5.20	12.73
85.40	85.80	0.40	2.00	0.02	0.29

Checked and signed:______________ Date:__________

HOLE NO: SUD-00-84	SECTION:65-S	GRID:SILVER CK. S.

95.40	END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	17.80	1B SANDSTONE / SILTSTONE MUDSTONE General Description: Interbedded grey, massive to fining upwards sandstone with laminated black siltstone and mudstone. Bedding and laminae are @ 65 - 70 degrees to core axis. Sandstone beds range from being non- to strongly calcareous and occasionally are found to contain rip-up clasts of mudstone. Rare quartz - carbonate veins up to 5 mm wide, @ 40 degrees to core axis, cross-cut bedding and contain pyrite + lesser sphalerite mineralization. Very fine grained diagenetic pyrite is found throughout the interval and occurs as disseminated grains and nodules within the Earn group sediments. At 10.6m there is a nodule of magnetic pyrrhotite with a quartz - carbonate pressure shadow parallel to bedding. Overall 1% pyrite.	1B							
17.80	18.00	QUARTZ VEIN MINERALIZED 6 centimetre wide, ribbon-banded quartz - carbonate vein @ 20 degrees to core axis, with pyrite found in the vein selvage. Overall the vein contains 35% pyrite, 55% silica, 10% carbonate and a possible trace of sphalerite.	VN	140552	17.80	18.00	0.00	5.60	0.03	0.04
18.00	24.60	1B SANDSTONE / SILTSTONE MUDSTONE Competent interbedded to laminated sandstone / siltstone / mudstone with bedding @ 55-60 degrees to core axis. Sandstone beds are up to 15 centimetres wide and decrease in thickness towards the base of the interval. Bedding occasionally displays soft-sediment folding and deformation. Pervasive disseminated pyrite is present and up to 2%.	1B							
24.60	37.49	1BA SANDSTONE / SILTSTONE CARBONACEOUS ARGILLITE General Description: Finely laminated sandstone / siltstone / carbonaceous mudstone with laminae at 70 degrees to core axis. Interval ranges from being moderately competent to incompetent and consists of 60% intact rock and 40% broken up rubble. 5% localised zones of fault gouge up to 10 centimetres wide are present throughout the interval. Pervasive disseminated pyrite is present throughout and is concentrated in the coarse grained sandstone beds. At 36.1 metres there is a 1.5 centimetre wide massive sulfide vein at 30 degrees to core axis. Vein contains 80% pyrite, 10% sphalerite, 10% quartz - calcite gangue. Overall 3-4% pyrite, trace sphalerite.	1BA							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
37.49	40.34	1A CARBONACEOUS ARGILLITE Highly incompetent carbonaceous argillite with rare siltstone laminae at 70 degrees to core axis. Interval consists of 65% argillite rubble, 20% intact and silicified rock and 15% black carbonaceous fault gouge. Pervasive fine grained disseminated pyrite is found throughout the interval (1%).	1A							
40.34	41.53	FAULT ZONE Black carbonaceous fault gouge with 10 - 15% carbonaceous argillite rubble. Fine-grained disseminated pyrite is present throughout (1-2%). Very poor recovery over the interval (~53%).	FZ							
41.53	50.53	1A CARBONACEOUS MUDSTONE / SANDSTONE Anomalously coarse grained interval of Unit 1A, with 30% sandstone lenses and soft sediment deformed beds from 1mm - 9cm wide. Sandstone beds and lenses decrease in thickness and abundance towards the base of the interval. The sandstone component of this interval may be the result of soft sediment slumping into a carbonaceous argillite basin from above. Pervasive fine grained pyrite is found throughout (2-3%).	1A							
50.53	52.28	1AA CALCAREOUS CARBONACEOUS ARGILLITE Partially silicified and weakly calcareous, blocky, moderately carbonaceous argillite, with rare (<1%) mm sized calcite stringers found throughout the interval. 2-3% pervasive, disseminated, fine grained pyrite.	1AA							
52.28	67.30	MCDAME LIMESTONE UNIT 1 Limestone ranging from unaltered amphipora packstones and wackestones with minor massive stromatoporoids to brittle dolomitized limestone rubble. 1-2% linear and contorted calcite stringers and veins up to 7 mm wide, cross-cut the core and commonly contain fine grained pyrite. Stylolites throughout interval are lined by fine grained pyrite. Overall, 1% pyrite. 52.73-55.18 ALTERED PACKSTONE Weakly bleached and fractured amphipora packstone cross-cut by 2% contorted calcite stringers. Bleaching gives the rock a mottled appearance. Pyrite is found throughout the interval within calcite stringers and lining stylolites and fractures. In addition,	MLS1							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		interconnected blebs of pyrite up to 2 centimetres wide are found within the limestone adjacent to these structures. Overall 4% pyrite. 57.73-60.04 ALTERED PACKSTONE Weakly bleached amphipora packstone as above but with less pyrite and less fracturing. Relict amphipora and stromatoponds are visible. Overall 1-2% pyrite, 1% calcite stringers. 60.80-61.90 DOLOMITIZED LIMESTONE Very brittle and incompetent, partially dolomitized limestone rubble. From 60.9 - 61.0 metres, there is a fracture @ 10 degrees to core axis lined by euhedral crystals of barite and lesser calcite. 64.10-66.30 DOLOMITIZED LIMESTONE Crackle brecciated, brittle dolomitized limestone rubble with 25% relict unaltered limestone found in the basal 55 centimetres of the interval. 2% calcite stringers cause localised zones of weak to moderate crackle brecciation. Pyrite is rare but is occasionally found lining fractures and as fine grained disseminated crystals within unaltered limestone. Overall <1% pyrite.		140553	66.30	67.30	0.00	5.80	0.10	0.04
		66.30-67.30 PACKSTONE Hanging wall sample. Dominantly weak and broken amphipora packstone with minor massive stromatoporids. Interval is cross cut by 2% calcite stringers. From 66.45 - 66.65 metres, there is a localised zone of fractured dolomitized limestone. Beneath this zone, the limestone becomes more competent and intact. Fine grained pyrite (1%) is found liming stylolites and within calcite stringers over the basal 40 centimetres of the interval. The basal contact with Lower Zone massive sulfide is sharp but irregular (wavy).								
67.30	75.20	LOWER ZONE MASSIVE SULPHIDE Ubiquitous sphalerite, galena, pyrite - rich massive sulfide, partially silicified, with 10% intervals of intact and unaltered limestone up to 44 centimetres wide. Un-replaced limestone is dominantly found in the upper 2.5 metres of the intersection. Massive sulphide mineralization consists of early fine grained pyrite and magnetic pyrrhotite, overprinted by coarser grained red and black sphalerite, pyrite + galena. Large blebs of chalcopyrite, up to 1 centimetre across, are found rimming early fine grained pyrite and pyrrhotite and later sphalerite. Weak sphalerite, pyrite, galena banding is present and								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		oriented at 35 - 50 degrees to core axis. Late stage stringers of pyrite and ankerite up to 3 mm wide are present, and cross cut all earlier mineralization. In addition, euhedral crystals of siderite are found lining vugs. Overall 30% pyrite, 20% magnetic pyrrhotite, 20% sphalerite, 14% galena, 1% chalcopyrite, 5% quartz.								
		67.30-68.60 PYRITE PYRRHOTITE SPHALERITE MASSIVE SULPHIDE Silicified, ubiquitous sphalerite, pyrite, pyrrhotite massive sulfide. Pyrite is present as fine grained massive sulfide and as coarse grained euhedral cubes. Stringers of ankerite and pyrite at 10-20 degrees to core axis cross-cut all earlier mineralization. Overall 30% pyrite, 30% sphalerite, 30% magnetic pyrrhotite, 1% galena, trace chalcopyrite, 1% ankerite, 8% silica.	LZ	140554	67.30	68.60	0.00	315.40	0.99	21.21
		68.60-69.50 MASSIVE SULPHIDE / LIMESTONE Dominantly unaltered amphipora packstone with pyrite, sphalerite, pyrrhotite massive sulfide from 69.05 - 69.19 metres and sphalerite, galena, pyrite from 69.4 - 69.5 metres. Contacts between massive sulfide and limestone are sharp but irregular with the basal massive sulfide zone contact at 25 degrees to core axis. Sytylolites and calcite stringers within the unreplaced limestone are lined by fine grained pyrite. Overall, 75% limestone, 2% galena, 3% pyrrhotite, 10% pyrite, trace chalcopyrite.		140555	68.60	69.50	0.00	151.40	2.22	7.38
		69.50-70.50 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Sphalerite, pyrite, galena, pyrrhotite - rich massive sulfide with weak sulphide banding at 35 - 50 degrees to core axis. The upper 70 centimetres of the sample is sphalerite and galena rich whereas the basal 30 centimetres is pyrite, pyrrhotite + silica rich. Chalcopyrite is present throughout and found rimming early fine grained pyrite + pyrrhotite and later coarse grained sphalerite. Overall 25% pyrrhotite, 25% pyrite, 15% silica, 1-2% chalcopyrite, 20% sphalerite, 13% galena.		140556	69.50	70.50	0.00	669.30	12.98	14.98
		70.50-71.50 BASE METAL MASSIVE SULPHIDE Sphalerite, galena and pyrite rich massive sulfide with weak sulphide banding at ~40 degrees to core axis. Magnetitc		140557	70.50	71.50	0.00	902.30	16.11	21.39

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		pyrrhotite is present throughout the interval but is concentrated in the upper 40 centimetres of the sample. Galena, on the other hand, is concentrated in the basal 50 centimetres of the sample. Chalcopyrite is found rimming early pyrite, pyrrhotite and later sphalerite. Stringers of pyrite + ankerite @ ~20 degrees to core axis, cross-cut all earlier mineralization. Overall 35% sphalerite, 20% galena, 14% pyrrhotite, 20% pyrite, 10% quartz, 1% chalcopyrite.		140558	71.50	72.50	0.00	365.80	4.47	19.31
		71.50-72.50 PYRITE PYRRHOTITE SPHALERITE MASSIVE SULPHIDE Sphalerite, pyrite and galena massive sulfide as above but with a decrease in galena mineralization and an increase in silicified relict limestone. Sulphide banding is present @ 60 degrees to core axis. At 72.1 metres, there is a large vug filled with green-orange euhedral siderite crystals. Overall, 35% sphalerite, 5% galena, 10% relict silicified limestone, 1% chalcopyrite, 1% siderite, 30% pyrite, 18% pyrrhotite.		140559	72.50	73.50	0.00	432.70	5.25	9.45
		72.50-73.50 PYRITE PYRRHOTITE MASSIVE SULPHIDE Dominantly fine grained pyrrhotite & pyrite massive sulfide with lesser sphalerite and galena mineralization. Chalcopyrite is present throughout rimming early fine grained pyrrhotite and pyrite as well as later coarse grained sphalerite. An orange carbonate, possibly ankerite, is present and is found filling open space. Overall 45% pyrrhotite, 5% relict silicifed limestone, 26% pyrite, 10% sphalerite, 10% galena, 1% chalcopyrite, 3% ankerite, trace bornite (?? blue, purple, green massive mineral on freshly fractured faces).		140561	73.50	74.50	0.00	187.90	2.45	12.96
		73.50-74.50 PYRITE PYRRHOTITE SPHALERITE MASSIVE SULPHIDE Massive sulphide as above but with a decrease in pyrrhotite and slight increase in sphalerite. Overall 10% silica, 15% sphalerite, 10% galena, 1% chalcopyrite, 1% ankerite, 35% pyrrhotite, 28% pyrite, trace bornite (?? found with quartz - carbonate on fresh fractures.		140562	74.50	75.20	0.00	489.90	9.61	19.38
		74.50-75.20 PYRRHOTITE BASE METAL MASSIVE SULPHIDE Massive sulphide as above but with a slight increase in sphalerite								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		underlying limestone is sharp but irregular (wavy). Overall 30% sphalerite, 10% galena, 15% silica, 1% chalcopyrite, 25% pyrrhotite, 19% pyrite.								
75.20	95.40	MCDAME LIMESTONE UNIT 1 Limestone ranging from stromatoporoid, amphipora floatstones and rudstones, to amphipora packstones with rare localized intervals of dolomitized limestone up to 40 centimetres wide. Dense beds of thamnopora are present between 77.7 - 78.64 metres (possibly subunit 1B?). 3-5% randomly oriented calcite stringers and veins up to 7 centimetres wide, cross-cut the interval and cause weak to strong crackle brecciation of the limestone. Rarely pyrite + lesser sphalerite & galena are found within or adjacent to these veins. Numerous stylolites are present throughout and are dominantly oriented parallel to fossil beds at 70 degrees to core axis. Fine grained sulphide is occasionally found lining stylolites and fractures. Overall trace sphalerite, trace galena, <1% pyrite.								
		75.20-76.20 FLOATSTONE Footwall sample. Intact and unaltered amphipora, stromatoporoid floatstone, cross-cut by 2% calcite stringers. Fine grained pyrite, sphalerite and galena are commonly found lining the margins of these stringers. Numerous stylolites at 75 degrees to core axis are present throughout the interval and are also commonly lined by fine grained sulphide. Overall <1% pyrite, trace sphalerite, trace galena.	MLS1	140564	75.20	76.20	0.00	7.40	0.10	0.08
		85.40-85.80 DOLOMITIZED LIMESTONE CRACKLE BRECCIA Strongly crackle brecciated and dolomitized limestone with fine grained pyrite within calcite stringers and veins and as blebs up to 4 centimetres long, replacing dolomitized limestone adjacent to calcite stringers and veins. Overall, 15% pyrite, 10% calcite stringers and veins.		140565	85.40	85.80	0.00	2.00	0.02	0.29

*** END OF HOLE *** 95.40

HOLE NO: SUD-00-85	SECTION:65S	GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43300.00mN	24966.00mE	1129.00RL

Pre-collar depth: Final depth: 107.60

Purpose of hole: TEST E EXTEN. OF LZ FROM SUD-00-73

Hole status: DRILLED TO DEPTH

Comments: LZ: 88.5 - 89.8 M, 101.6 - 102.4 M

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	70.00	-85.00
39.01	53.20	-84.30
69.49	46.60	-84.20
99.97	42.10	-83.80
100.00	70.00	-85.00

*** SUMMARY LOG ***

0.00	30.84	1B SANDSTONE / SILTSTONE MUDSTONE
30.84	32.10	FAULT ZONE
32.10	35.31	1BA MUDSTONE / SANDSTONE SILTSTONE
35.31	36.53	FAULT ZONE
36.53	41.30	1AA CARBONACEOUS ARGILLITE
41.30	41.95	FAULT ZONE
41.95	49.77	1A ARGILLITE SANDSTONE
49.77	54.74	1AA CARBONACEOUS ARGILLITE
54.74	67.53	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA
67.53	88.50	MCDAME LIMESTONE UNIT 2
88.50	89.80	LOWER ZONE MASSIVE SULPHIDE / LIMESTONE
89.80	92.83	RECRYSTALLIZED LIMESTONE
92.83	101.60	MCDAME LIMESTONE UNIT 3
101.60	102.40	LOWER ZONE MASSIVE SULPHIDE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 107.60 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	1/2/00
Date finished:	2/2/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
56.30	59.20	2.90	2.90	0.00	0.04
87.50	90.80	3.30	63.22	0.06	6.80
100.60	103.40	2.80	135.96	2.51	2.81

Checked and signed:____________ Date:________

HOLE NO: SUD-00-85	SECTION:65S	GRID:SILVER CK S

102.40	107.60	MCDAME LIMESTONE UNIT 3
107.60		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	30.84	1B SANDSTONE / SILTSTONE MUDSTONE Interbedded sandstone, siltstone and carbonaceous mudstone with bedding @ 70 degrees to core axis. Sandstone beds are up to 50 centimetres wide, and decrease in thickness with depth. They are vaiably massive to fining upwards and range from geing non- to strongly calcareous. From 27.35 - 30.84m, bedding is warped and contorted and orientated between 20 - 45 degrees to core axis. This change in bedding character may be the result of a proximal shear zone. Quartz - carbonate stringers up to 3 centimetres wide and dominantly at 20 degrees to core axis, commonly contain pyrite and lesser sphalerite. Pyrite is also found throughout the interval, lining fractures and as disseminated cubes. Overall 2-3% pyrite. 19.06-19.20 QUARTZ VEIN 4 centimetre wide ribbon banded quartz - carbonate vein at 20 degrees to core axis, with pyrite and rare sphalerite found within the vein and lining the selvage. This vein is very similar to the one sampled from hole SUD-00-84. Overall 40% pyrite, trace sphalerite, 60% quartz - carbonate. 22.00-27 35 LAMINATED SILTSTONE / SANDSTONE MUDSTONE Strongly cross-laminated sandstone, siltstone and mudstone with laminae up to 5 mm wide and @ 70 degrees to core axis. *Disseminated fine grained pyrite (2%) throughout.* 27.35-30.84 LAMINATED SILTSTONE / SANDSTONE MUDSTONE Strongly contorted and disturbed laminated siltstone, sandstone & mudstone with bedding at ~20 - 45 degrees to core axis. Disturbed nature of bedding may be the result of the fault zone lying below. Fine grained disseminated pyrite is found throughout the interval (2%).	1B							
30.84	32.10	FAULT ZONE Fault zone consisting of 40% black carbonaceous fault gouge and 60% sandstone, siltstone & mudstone rubble. 1% disseminated pyrite throughout.	FZ							
32.10	35.31	1BA MUDSTONE / SANDSTONE SILTSTONE Weak and broken laminated carbonaceous mudstone and siltstone with lesser sandstone. Laminae are @ 70 degrees to core axis. 5% localised zones of fault gouge up to 10 centimetres wide are present	1BA							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		throughout. Fine grained disseminated pyrite is found throughout, but is concentrated within the coarse grained sandstone beds. Overall 2-3 % pyrite.								
35.31	36.53	FAULT ZONE Fault zone consisting of 50% black carbonaceous fault gouge and 50% black carbonaceous argillite rubble. 1% pyrite throughout.	FZ							
36.53	41.30	1AA CARBONACEOUS ARGILLITE Incompetent and broken (poker chip core) carbonaceous argillite with occasional siltstone laminae at 70-80 degrees to core axis. Numerous contorted and warped calcite stringers up to 1 centimetre wide are present, oriented subparallel to bedding. Fine grained pyrite blebs and euhedral cubes are commonly found within the stringers (1-2%).	1AA							
41.30	41.95	FAULT ZONE Fault zone consisting of 60% black carbonaceous fault gouge and 40% broken carbonaceous argillite rubble. Overall 1% fine grained disseminated pyrite.	FZ							
41.95	*49.77*	*1A ARGILLITE SANDSTONE* Anomalously coarse grained and sandy interval of Unit 1A with 40% lenticular beds and deformed nodules of sandstone. The coarse grained nature of the interval may be the result of sand slumping into an argillite basin from above. This theory is supported by the widespread soft sediment deformation observed throughout the interval. The other possibility is that this is a repeated sequence of 1B caused by faulting. This is unlikely as the interval does not display the regular and distinct bedding found in Unit 1B. 2% disseminated pyrite.	*1A*							
49.77	54.74	1AA CARBONACEOUS ARGILLITE Incompetent and broken carbonaceous argillite (poker chip core). Interval is randomly non- to strongly calcareous and is cross-cut by 1% quartz - calcite stringers. Blebs of fine grained pyrite are occasionally observed within these stringers. Pyrite also occurs as fine grained cubes throughout the interval. Overall 1% pyrite.	1AA							
54.74	67.53	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA Amphipora packstone and wackestone with minor massive stromatoporids. Interval ranges from being weakly bleached and dolomitized in the upper 7 metres of the interval, to unaltered in the	MLS1							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		basal 6 metres of the interval. 1-2% calcite stringers and veins up to 5 mm wide cross-cut the interval and cause localised zones of weak to moderate crackle brecciation. Occasionally, blebs of pyrite and lesser sphalerite are found within these veins and replacing limestone adjacent to the veins. A weak foliation, defined by elongated fossils is oriented @ 30-50 degrees to core axis. Stylolites are present throughout the interval and are parallel to the foliation. Overall, trace sphalerite, <1% pyrite.		140566	56.30	57.30	0.00	2.60	0.01	0.01
		56.30-57.30 ALTERED MCDAME LIMESTONE Weakly bleached and mottled looking limestone with 2% blebs and stringers of fine grained pyrite, up to 3 centimetres wide. Pyrite occurs within and adjacent to contorted calcite stringers which cross-cut the interval.		140567	57.30	58.10	0.00	2.40	0.00	0.01
		57.30-58.10 ALTERED MCDAME LIMESTONE Weakly bleached limestone as above but with less pyrite (<1%) Relict amphipora and massive stromatoponds present. Weak foliation @ 65 degrees to core axis.		140568	58.10	58.20	0.00	16.00	0.00	0.98
		58.10-58.20 MINERALIZED VEINED Large clot of calcite up to 10 centimetres wide. This clot contains coarse grained sphalerite and pyrite and appears to have eaten into and replaced previous limestone. Fractures and stylolites adjacent to this clot are lined by calcite and fine grained sulphides. 3% sphalerite, 5% pyrite, 15% calcite, 77% limestone. 58.20-59.20 FLOATSTONE Amphipora / massive stromatoporoid floatstone with a strong foliation @ 45 degrees to core axis (defined by elongated fossils). Interval contains <1% pyrite within contorted calcite stringers. 59.68-60.53 DOLOMITIZED LIMESTONE CRACKLE BRECCIA Brittle, fractured and crackle brecciated dolomitized limestone consisting of 50% broken rubble and 50% intact rock. 2-3% calcite stringers cross-cut and crackle brecciate the dolomite, and occasionally contain pyrite (<1%) as well as trace galena. 60.53-61.67 ALTERED MCDAME LIMESTONE		140569	58.20	59.20	0.00	2.30	0.00	0.00

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Limestone ranging from being locally bleached in the upper 90 centimetres of the interval to unaltered in the basal 25 centimetres of the interval. From 61.28 - 61.37 metres, limestone is bluish-green and strongly strained, possibly as a result of Jurassic deformation. <1% pyrite within calcite stringers.								
67.53	88.50	MCDAME LIMESTONE UNIT 2 Competent, intact and unaltered stromatoporoid floatstone and lesser amphipora packstone. Rare beds of Euryamphipora and Thamnopora are found within the unit. 3% randomly orientated calcite stringers and veins up to 12 centimetres wide cross-cut the interval and cause local weak crackle brecciation. Fine grained pyrite is occasionally found within veins and replacing adjacent limestone. Numerous stylolites, parallel to fossil bedding at 60 - 70 degrees to core axis are present and are rarely lined by fine grained sulphides (dominantly pyrite). From 76.8 - 78.6 metres, stromatoporoid fossils have been partially to completely recrystallized to coarse grained calcite. Overall trace pyrite. 87.50-88.50 FLOATSTONE Hanging wall sample. Unaltered amphipora floatstone with rare stromatoporoids. Interval is cross-cut by 3% calcite stringers and veins up to 7 centimetres wide and at 35 - 50 degrees to core axis. Rare fine grained pyrite is found associated with these stringers and lining stylolites. Basal contact with massive sulfide is irregular, but sharp. Overall trace pyrite.	MLS2	140570	87.50	88.50	0.00	2.30	0.00	0.00
88.50	89.80	LOWER ZONE MASSIVE SULPHIDE / LIMESTONE Ubiquitous red & black sphalerite, pyrite, pyrrhotite rich massive sulfide with 50% unaltered amphipora / stromatoporoid floatstone. Massive sulphide mineralization consists of early fine grained pyrite and magnetic pyrrhotite overprinted by coarse grained red & black sphalerite and pyrite. Chalcopyrite is found in trace amounts lining pyrite masses. Contacts between massive sulfide and limestone are sharp but irregular and are anastomozing in the top 25 centimetres of the interval. 1-2% localized zones of rubble brecciated limestone (up to 2 centimetres wide) are found adjacent to limestone / massive sulfide contacts. Calcite stringers (1%) and stylolites throughout the								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		limestone are lined by fine grained sulphide. Overall 20% sphalerite, 15% pyrite, 14% pyrrhotite, trace galena, trace chalcopyrite, 50% limestone, 1% calcite. 88.50-89.40 MASSIVE SULPHIDE / LIMESTONE Sphalerite, pyrite, pyrrhotite rich massive sulfide, as above, with 70% unaltered amphipora & stromatoporoid floatstone. Overall 15% sphalerite, 10% pyrite, 5% pyrrhotite, trace chalcopyrite, galena, 69% limestone, 1% calcite stringers. 89.40-89.80 PYRITE PYRRHOTITE SPHALERITE MASSIVE SULPHIDE Ubiquitous sphalerite, pyrite & pyrrhotite rich massive sulfide, as above. Upper and lower contacts with limestone are sharp and @ 60 & 20 degrees to core axis respectively. 50% red & black sphalerite, 30% pyrite, 20% magnetic pyrrhotite, trace chalcopyrite.	LZ	140571 140572	88.50 89.40	89.40 89.80	0.00 0.00	212.20 32.60	0.20 0.02	17.65 16.36
89.80	92.83	RECRYSTALLIZED LIMESTONE Variably, partially to completely coarsely recrystallized limestone with relict stromatoporids and amphipora. 3% stringers, veins and clots of calcite up to 6 centimetres wide, cross-cut the interval.. Stylolites are rarely lined by fine grained pyrite. Overall trace pyrite. 89.80-90.80 RECRYSTALLIZED LIMESTONE Footwall sample. Partially, coarsely recrystallized limestone with relict amphipora and stromatoporids. 2-3% irregular clots and stringers of calcite cross-cut the interval. Stylolites, dominantly @ 60 degrees to core axis, are occasionally lined by fine grained pyrite. Overall, trace pyrite.	AMLS	140573	89.80	90.80	0.00	2.30	0.00	0.01
92.83	101.60	MCDAME LIMESTONE UNIT 3 Dense amphipora packstone and floatstone with rare massive stromatoporids, and thamnopora. Interval is cross-cut and locally weakly crackle brecciated by 3-4% calcite stringers and veins up to 1 centimetre wide. Fine grained pyrite is rarely observed within and adjacent to calcite veins. Stylolites are common throughtout and oriented at ~70 degrees to core axis. Trace pyrite is found lining stylolites. 100.60-101.60 FLOATSTONE Hanging wall sample. Completely unaltered and pristine amphipora floatstone. Fossil beds oriented @ 60 degrees to core axis. Basal contact with Lower Zone massive sulfide is sharp, at	MLS3	140574	100.60	101.60	0.00	2.20	0.00	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		50 degrees to core axis.								
101.60	102.40	LOWER ZONE MASSIVE SULPHIDE Partially silicified and strongly banded pyrrhotite, pyrite, sphalerite, galena massive sulfide. Interval is very competent and consists of early fine grained pyrite and pyrrhotite mineralization, overprinted by coarser grained pyrite, sphalerite and galena. Chalcopyrite is found throughout the interval lining pyrite and sphalerite masses. Strong sulphide banding is present throughout @ 70 degrees to core axis. Siderite is found within vugs over the basal 20 centimetres. Overall 40% pyrrhotite, 20% sphalerite, 20% pyrite, 9% galena, trace chalcopyrite, 10% quartz, 1% siderite.	LZ	140575	101.60	102.40	0.00	470.00	8.78	9.80
102.40	107.60	MCDAME LIMESTONE UNIT 3 Amphipora floatstone with rare massive stromatoporids, cross-cut by 1-2% calcite stringers up to 1 centimetre wide and @ 10 - 20 degrees to core axis. Numerous stylolites are oriented parallel to fossil beds, @ 50 - 70 degrees to core axis. Fine grained pyrite is very rare within calcite stringers and lining stylolites. The basal 45 centimetres is strongly crackle brecciated. Overall trace pyrite. 102.40-103.40 FLOATSTONE Footwall sample. Amphipora floatstone with occasional massive stromatoporids. Stylolites and calcite stringers throughout the interval are lined by fine grained pyrite. Upper contact with above lying massive sulfide is sharp, @ 50 degrees to core axis. Overall trace pyrite.	MLS3	140576	102.40	103.40	0.00	2.50	0.01	0.02

*** END OF HOLE *** 107.60

HOLE NO: SUD-00-86 SECTION:77-S GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL 43479.00mN 24878.00mE 1160.00RL

Pre-collar depth: Final depth: 162.50

Purpose of hole: TEST EAST- SILVER CK. SOUTH
Hole status: COMPLETED
Comments: LZ: 100.9-101.2, 139.4-140.6, 148.2-150.7, 153.0-157.0

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 162.50 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	MINI MYTE MODEL 150
Date started:	1/2/00
Date finished:	3/2/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0.0
Water inflow estimate: 0.0

*** SURVEYDATA ***

Survey Method: RELEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	212.00	-65.00
40.54	220.60	-66.00
71.02	222.90	-66.60
101.50	222.80	-67.10
131.98	221.30	-67.50
150.00	212.00	-65.00
162.46	224.70	-68.30

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
37.10	39.40	2.30	3.80	0.01	0.01
99.90	101.80	1.90	80.47	1.26	0.73
138.40	141.60	3.20	14.32	0.12	1.73
147.20	158.00	10.80	54.06	1.07	1.32

*** SUMMARY LOG ***

0.00	13.90	1AA CARBONACEOUS ARGILLITE
13.90	18.00	FAULT ZONE 1AA CARBONACEOUS ARGILLITE
18.00	33.00	1AA CARBONACEOUS ARGILLITE
33.00	36.90	1A/MLS CARBONACEOUS ARGILLITE / LIMESTONE RUBBLE BRECCIA
36.90	38.10	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA
38.10	38.40	LOWER ZONE PYRITE MASSIVE SULPHIDE
38.40	52.50	MCDAME LIMESTONE UNIT 1
52.50	68.80	DOLOMITIZED LIMESTONE BRECCIA
68.80	88.40	MCDAME LIMESTONE UNIT 2
88.40	100.90	MCDAME LIMESTONE UNIT 3

Checked and signed:______________ Date:________

HOLE NO: SUD-00-86	SECTION:77-S	GRID:SILVER CK S.

100.90	101.20	LOWER ZONE MASSIVE SULPHIDE
101.20	101.80	LIMESTONE RUBBLE BRECCIA
101.80	111.50	MCDAME LIMESTONE UNIT 3 CRACKLE BRECCIA
111.50	119.10	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA
119.10	127.40	RECRYSTALLIZED LIMESTONE
127.40	139.40	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA
139.40	140.60	MASSIVE SULPHIDE / LIMESTONE MOSAIC BRECCIA
140.60	148.20	LIMESTONE BRECCIA
148.20	150.70	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA
150.70	153.00	RECRYSTALLIZED LIMESTONE
153.00	157.00	LOWER ZONE / LIMESTONE
157.00	162.50	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA
162.50		END OF HOLE

Checked and signed:________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	13.90	1AA CARBONACEOUS ARGILLITE Black, fine grained, massive to thinly laminated carbonaceous argillite. Brittle, incompetent core with intermittant chip and gouge intervals. Bedding angle varies from 30-45 degrees to core axis. 3% quartz - calcite stringers, 1mm - 2cm, sub-parallel to bedding and cross-cutting @ 60 degrees to core axis. 4% fine grained pyrite as disseminated bands and clots within quartz - calcite stringers. Trace sphalerite + galena also in stringers. - 8.3-8.5m: gouge & chips - 8.8m: 2 centimetres cross-cuttine quartz - galena - pyrite stringer, 60 degrees to core axis. - 9.0m: 2 centimetres cross-cutting quartz - calcite - sphalerite stringer, 55 degrees to core axis. - 9.3-9.6m: gouge and chips	1AA							
13.90	18.00	FAULT ZONE 1AA CARBONACEOUS ARGILLITE Incompetent zone comprised of 25% gouge, 45% argillite + quartz chips and 30% core <10 centimetres in length. Quartz stringers and stockwork throughout, minor cream-colored iron carbonate. Bedding, where discernable, is highly contorted / deformed. 4% pyrite disseminations and clots. Broken upper and lower contact.	FZ							
18.00	33.00	1AA CARBONACEOUS ARGILLITE Similar to the rocks described above the fault zone, comprised of black, fine grained, thinly laminated to massive ar. intermittant sandy lenses (<5mm) occur between 29.0 - 30.0 metres. Bedding varies from 20 - 40 degrees to core axis, occasionally contorted, as are quartz +/- calcite stringers. 4% pyrite clots within the quartz stringers. 5% minor gouge / chip intervals, to 15 centimetres. Lower contact where the argillite is beginning to appear brecciated.	1AA							
33.00	36.90	1A/MLS CARBONACEOUS ARGILLITE / LIMESTONE RUBBLE BRECCIA Rubble brecciated, solution collapse contact zone between the Earn sediments and limestone. Down to 35.2 metres, the clasts are tightly packed angular argillite in a calcite +/- quartz matrix, with 5-7% pyrite clots within the matrix, as well as partial replacement of clasts. Below 35.2 metres, clasts include both argillite + limestone in a matrix varying from coarse grained calcite to fine calcareous pyritic mud towards the base of the breccia. A trace of sphalerite also occurs in the matrix. Sharp lower contact @ 60 degrees.	1A/M LS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		**Note: Lost core from 34.6 - 35.3m.								
36.90	38.10	MCDAME LIMESTONE UNIT 1 CRACKLE BRECCIA Amphipora floatstone with weak crackle breccia, fractures trending 30 degrees to core axis. 2% fine grained pyrite wisps and clots along and extending outward from stylolites. 37.10-38.10 FLOATSTONE CRACKLE BRECCIA Hanging wall sample above the narrow pyritic Lower Zone. As described above. 2% fine grained pyrite.	MLS1	140550	37.10	38.10	0.00	2.30	0.00	0.01
38.10	38.40	LOWER ZONE PYRITE MASSIVE SULPHIDE Narrow band of massive fine grained pyrite in a calcite matrix, with trace - 1% fine grained sphalerite. The upper contact is along a carbonaceous stylolite ~45 degrees and the lower contact is also ~45 degrees to core axis. The sulphides dolomite not appear to be replacing a brecciated limestone, just a quiet, fine grained replacement of unaltered limestone.	LZ	140601	38.10	38.40	0.00	12.50	0.07	0.04
38.40	52.50	MCDAME LIMESTONE UNIT 1 Intact limestone, containing dense packstone, amphipora floatstone and scattered massive stromatoporids. Below 43.8 metres, crackle breccia is weak to moderate. 1-2% fine grained pyrite as small clots and wisps along stylolites. 38.40-39.40 PACKSTONE Footwall sample. Unaltered with 4% calcite - filled fractures, 40 degrees to core axis. 1% wispy fine grained pyrite along stylolites. 41.70-42.40 MATRIX BRECCIA Fissure of fine matrix breccia and carbonaceous stylolites. The upper contact is @ 30 degrees, while the lower contact is irregular. 6% fine grained pyrite, 1% fine grained sphalerite, and trace galena as disseminations in the muddy, calcareous matrix. Very few clasts. 50.50-52.50 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Fine, recrystallized limestone, orientation of stylolites @ 55 degrees, containing a 5 centimetres band of matrix breccia, oriented 15 - 20 degrees. Strong crackle breccia approaching the lower contact. 3% pyrite along stylolites.	MLS1	140602	38.40	39.40	0.00	2.70	0.01	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
52.50	68.80	DOLOMITIZED LIMESTONE BRECCIA Variably recrystallized and brecciated limestone. Upper contact @ 10 degrees, is with a rubble breccia - possibly a fissure-fill, healed with calcite, but quite crumbly down to 54.0 metres. Pyrite occurs as fine grained replacement of small clasts. Below 54.0 metres, dolomitization increases, as dows the crackle breccia - brittle, broken core. 3% fine grained pyrite dominantly along calcite margins within the crackle breccia. Irregular lower contact. - 58.0 - 56.2m: 20 centimetres of possibly a weak cataclastic fault zone comprised of pale, bleached, very finely broken up and at the base, strongly foliated @ 55 degrees to core axis.	MLSD							
68.80	88.40	MCDAME LIMESTONE UNIT 2 Main massive stromatoporoid unit, very fossiliferous with dominantly massive stromatoporoid rudstone and floatstone, locally dense amphipora, minor Euramphipora intercalations, as well as the rugose coral "Tryplasma" throughout. Virtually no visible alteration, minor weak crackle breccia, and two bands of mosaic breccia (calcite veining) between 68.1 - 69.5m, 15 centimetres wide @ 30-40 degrees. Trace - 1% wispy pyrite along fractures and occasional carbonaceous stylolite. 78.00-78.30 LIMESTONE MATRIX BRECCIA 15% fine grained wispy pyrite partially replacing fossils and lime mud matrix within a weak matrix breccia, vague layering ~ 55 degrees.	MLS2							
88.40	100.90	MCDAME LIMESTONE UNIT 3 General Description: Unit 3, marked by the characteristic dense packstone with fine amphipora at the top, is dominated by amphipora which forms rudstone and floatstone. Scattered massive stromatoporids. Unaltered / unbrecciated. 4% calcite stringers to 3 centimetres.	MLS3							
		99.90-100.90 FLOATSTONE Hanging wall sample to stringer Lower Zone below. The only difference from the general description above, is increased stylolites along with associated pyrite (3%). Stylolites are post crackle breccia. Irregular anastomosing lower contact, following a stylolite.		140531	99.90	100.90	0.00	2.60	0.00	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
100.90	101.20	LOWER ZONE MASSIVE SULPHIDE Narrow Lower Zone massive sulfide with a very irregular upper contact and fairly sharp lower contact @ 55 degrees to core axis. Replacement of limestone, first by fine grained pyrite, then by later coarser grained pyrite, sphalerite and minor galena, all cut by late calcite fractures. Lower contact borders a rubble breccia below.	LZ	140532	100.90	101.20	0.00	491.20	7.85	4.40
101.20	101.80	LIMESTONE RUBBLE BRECCIA Partially recrystallized rubble breccia, frequent stylolites in a coarse grained calcite matrix. 2% wispy pyrite rimming stylolites. Carbonaceous stylolites mark the irregular lower contact.	MLS	140533	101.20	101.80	0.00	4.90	0.06	0.09
101.80	111.50	MCDAME LIMESTONE UNIT 3 CRACKLE BRECCIA Continuation of Unit 3, dominantly amphipora packstone and floatstone, patchy partial recrystallization to coarse sparry calcite (~20%). Weak crackle breccia. Main calcite fractures oriented 15-25 degrees to core axis. 1% wispy pyrite along stylolites.	MLS3							
111.50	119.10	MCDAME LIMESTONE UNIT 5 CRACKLE BRECCIA **Note: No Unit 4, Euramphipora, identified in this hole, possibly recrystallized and not identifiable or not present?? Picked 111.5 metres as the top of Unit 5 with the occurrence of very coarse amphipora (to 4mm). Patchy coarse recrystallization downhole of the dense packstone and amphipora floatstone. Crackle breccia also increasing down section. Dominant fractures @ 30 degrees, 1% fine grained pyrite. Sharp lower contact with recrystallized limestone, 45 degrees to core axis.	MLS5'							
119.10	127.40	RECRYSTALLIZED LIMESTONE Nearly complete recrystallization of limestone to either a bleached, coarse mosaic of calcite porphyroblasts or fine grained sucrosic-textured calcite. Only one interval of 50 centimetres remains with identifiable fossils. Dark grey dolomitization and associated crackle breccia occurs in the lower 1.5 metres. 2% pyrite wisps lining and adjacent to stylolites.	AMLS							
127.40	139.40	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Similar to previous unit, but more variable in alteration and breccia. Partial dolomitization in the upper 4 metres is accompanied by strong crackle breccia, grading into mosaic breccia with coarse grained calcite, vuggy, open-space filling. Two 15 centimetres calcite veins, 20 degrees to core axis, have fine grained pyrite lining the margins, trace sphalerite. The dolomitized section is followed by patchy	AMLS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		recrystallization to a bleached, coarse mosaic of calcite porphyroblasts, with intermittant amphipora and massive stromatoporids identifiable. 138.40-139.40 FLOATSTONE STYLOLITIC BRECCIA Hanging wall sample. Abundant stylolites ~ 55 degrees to core axis, within weakly recrystallized amphipora floatstone. 2% pyrite rimming calcite fractures and along stylolites.		140534	138.40	139.40	0.00	2.30	0.00	0.00
139.40	140.60	MASSIVE SULPHIDE / LIMESTONE MOSAIC BRECCIA Broken, incompetent Lower Zone / limestone interval comprised of brecciated limestone, partially replaced by fine grained pyrite (25%) and red-brown sphalerite (20%), trace galena, in a mixed siliceous, calcite matrix. Unreplaced limestone clasts are very dark grey dolomitized.	LZ/LS	140535	139.40	140.60	0.09	34.10	0.31	4.59
140.60	148.20	LIMESTONE BRECCIA General Description: Variably strongly brecciated including crackle, mosaic, rubble and stylolite, with mosaic breccia dominant. Core is fractured frequently, 25 degrees to core axis. 2% fine grained pyrite partially replacing limestone clasts and as wisps along stylolites. 140.60-141.60 LIMESTONE BRECCIA Footwall sample. Sharp upper contact with Lower Zone, 30 degrees to core axis. Strong crackle and stylolitic breccia. 2% fine grained pyrite lining stylolites.	MLS	140536	140.60	141.60	0.00	2.60	0.01	0.03
		147.20-148.20 FLOATSTONE Hanging wall sample. Not as brecciated as the rocks above. Amphipora floatstone with 10% calcite stringers, 25 degrees to core axis, 1-3 centimetres wide, minor to moderate stylolites. Irregular lower contact.		140537	147.20	148.20	0.00	2.00	0.00	0.01
148.20	150.70	LOWER ZONE MASSIVE SULPHIDE RUBBLE BRECCIA General Description: Massive pyrite (30%), sphalerite (40%) and galena (10%) replacing limestone rubble breccia, cut by a post-mineralization fault, 15 degrees to core axis (slickensides, rubbly core). **Interesting in that the zone appears more vertical than horizontal. 148.20-149.20 PYRITE SPHALERITE MASSIVE SULPHIDE RUBBLE BRECCIA The upper 20 centimetres is gradational with irregular stringers and veinlets of pyrite leaking upward through the crackle brecciated limestone. Below 148.4 metres, the zone is very sphalerite - rich + pyrite and marcasite (bladed) has replaced 95%	LZ	140538	148.20	149.20	0.01	95.60	1.15	5.43

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		of rubble breccia limestone, in a calcareous matrix. Core is crumbly with 85% recovery - due to a late cross-cutting fault / slip @ 15 degrees to core axis -> one side is competent massive sulfide, the other crumbly, pebbly core. 50% red & black sphalerite, 30% pyrite (+ marcasite), 5% galena. 149.20-150.30 BASE METAL MASSIVE SULPHIDE Massive to faintly banded pyrite - sphalerite - galena, in a calcareous matrix, with faint to nil relic breccia textures evident. Layering ~ 40 degrees to core axis.		140539	149.20	150.30	0.44	380.00	8.89	7.19
		150.30-150.70 MASSIVE SULPHIDE / LIMESTONE BRECCIA Low angle (10 degrees) pyrite - sphalerite vein, 8 centimetres, cross-cutting the length of the sample, possibly the micro-feeder to the sulphide zone above. Predominantly fine grained pyrite (20%), sphalerite (10%) and 1% galena. Sulphides are also concentrated along stylolites. Rock becoming bleached / recrystallized towards the base.		140540	150.30	150.70	0.12	92.20	1.38	1.86
150.70	153.00	RECRYSTALLIZED LIMESTONE General Description: Bleached, recrystallized limestone with abundant carbonaceous stylolites. 15% calcite stringers and fractures, 15 - 30 degrees to core axis. Only minor fine grained wispy pyrite along stylolites. 150.70-151.90 RECRYSTALLIZED LIMESTONE Footwall sample, as in general description above. 1% fine grained pyrite.	AMLS	140541	150.70	151.90	0.00	2.40	0.01	0.03
		151.90-153.00 RECRYSTALLIZED LIMESTONE Hanging wall sample, as above. Irregular low angle to core axis lower contact with massive sulfide.		140542	151.90	153.00	0.00	1.10	0.00	0.04
153.00	157.00	LOWER ZONE / LIMESTONE General Description: 50% massive pyrite & sphalerite with minor galena, pyrrhotite and chalcopyrite, and 50% recrystallized, crackle breccia limestone, accompanied by abundant carbonaceous stylolites. The sulphide - limestone contact is highly irregular, as the sulphides appear to weave in and out of the limestone a a fairly steep angle (ie low angle to core axis). The sulphide / limestone contacts follow strongly carbonaceous stylolites. The sulphides are predominantly fine to medium grained pyrite, intergrown with fine black sphalerite. Minor pyrrhotite, galena and sphalerite.	LZ/LS							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		153.00-153.90 MASSIVE SULPHIDE / LIMESTONE 60% fine grained, massive pyrite - sphalerite. 40% recrystallized limestone. Anastamosing sulphide contact, sub-parallel to core axis, along very carbonaceous stylolites. Trace chalcopyrite.		140543	153.00	153.90	0.00	8.00	0.00	0.01
		153.90-154.80 MASSIVE SULPHIDE / LIMESTONE 70% massive pyrite - sphalerite with minor pyrrhotite, galena and cp; 30% recrystallized limestone. Lower contact ~35 degrees to core axis.		140544	153.90	154.80	0.01	11.50	0.01	0.01
		154.80-156.00 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Bleached, recrystallized limestone with strong crackle breccia and moderate stylolites. Calcite fractures ~25 degrees to core axis.		140545	154.80	156.00	0.00	1.80	0.00	0.01
		156.00-157.00 MASSIVE SULPHIDE / LIMESTONE Again, a mix of steep, sulphide replacement lenses (50%) along strongly stylolitized, irregular contacts (5-30 degrees) and recrystallized limestone. Increased chalcopyrite (~0.5%); no pyrrhotite detected. 35% pyrite, 15% sphalerite, trace galena, chalcopyrite.		140546	156.00	157.00	0.02	5.85	0.00	0.01
157.00	162.50	RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA General Description: Recrystallized limestone with moderate to strong crackle breccia, and weak to moderate stylolites (dissolution increases in the more intensely recrystallized upper 3 metres, adjacent to the sulphides). Below 160.5 metres, amphipora fossils are visible. 2% fine grained pyrite along calcite selvages and stylolites. **- 161.6m: 5 centimetres sericite - chlorite phyllite, 55 degrees to core axis - YBR?? 157.00-158.00 RECRYSTALLIZED LIMESTONE CRACKLE BRECCIA Footwall sample - as in general description.	AMLS	140549	157.00	158.00	0.00	1.70	0.00	0.00

*** END OF HOLE *** 162.50

HOLE NO: SUD-00-87 SECTION:65C GRID:SILVER CK S

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S
MAP REFERENCE: 104/O-16W
LOCATION :LIARD, MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL 43318.00mN 24958.00mE 1133.00RL

Pre-collar depth: Final depth: 176.20

Purpose of hole: TEST FEEDER MINERALIZATION

Hole status: DRILLED TO DEPTH

Comments: LZ: *100.1-103.5, 108.6-110.3,120.6-135.3,139.7-141.4,158.7-159.1*

*** SURVEYDATA ***

Survey Method: REFLEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-36.00
19.20	253.80	-36.50
49.68	252.80	-37.50
80.16	253.10	-38.30
110.64	254.80	-39.30
141.12	255.20	-39.60
160.00	250.00	-36.00
171.60	256.10	-40.20

*** SUMMARY LOG ***

0.00	17.10	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
17.10	17.70	FAULT ZONE
17.70	46.30	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE
46.30	48.00	FAULT ZONE
48.00	54.90	1B LAMINATED SILTSTONE / SANDSTONE
54.90	61.00	1AA CARBONACEOUS ARGILLITE
61.00	62.50	NO RECOVERY
62.50	63.40	FAULT ZONE CARBONACEOUS ARGILLITE
63.40	94.30	1AA CARBONACEOUS ARGILLITE

*** *DRILLING SUMMARY* ***

DIAMOND DRILL	0.00 176.20 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	3/2/00
Date finished:	5/2/00
Logged by:	C. AKELAITIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation --
Top of fresh rock: 0.0
Water first encountered: NONE
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
99.30	111.30	12.00	89.76	1.02	5.45
119.60	142.40	22.80	296.87	4.75	7.59
157.30	172.70	15.40	39.15	0.28	4.36

Checked and signed: ______________ Date: ________

HOLE NO: SUD-00-87 SECTION:65C GRID:SILVER CK S

94.30	99.30	1AA CARBONACEOUS ARGILLITE CRACKLE BRECCIA
99.30	100.10	MCDAME LIMESTONE ARGILLITE MOSAIC BRECCIA
100.10	103.50	LOWER ZONE MASSIVE SULPHIDE
103.50	103.80	MCDAME LIMESTONE CRACKLE BRECCIA FLOATSTONE
103.80	104.80	1AA LAMINATED SILTSTONE MOSAIC BRECCIA
104.80	108.60	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE
108.60	110.30	LOWER ZONE MASSIVE SULPHIDE
110.30	120.60	MCDAME LIMESTONE MOSAIC BRECCIA
120.60	135.30	LOWER ZONE MASSIVE SULPHIDE
135.30	139.70	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
139.70	141.40	LOWER ZONE MASSIVE SULPHIDE
141.40	156.00	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE
156.00	158.30	RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA
158.30	158.70	MINERALIZED LIMESTONE RUBBLE BRECCIA
158.70	159.10	LOWER ZONE / LIMESTONE RUBBLE BRECCIA
159.10	160.20	MINERALIZED RUBBLE BRECCIA
160.20	164.30	LOWER ZONE MASSIVE SULPHIDE
164.30	165.90	LIMESTONE CRACKLE BRECCIA
165.90	169.90	LOWER ZONE MASSIVE SULPHIDE
169.90	170.60	AMPHIPORA RUDSTONE
170.60	171.80	MINERALIZED HETEROLITHIC RUBBLE BRECCIA
171.80	176.20	LIMESTONE CRACKLE BRECCIA
176.20		END OF HOLE

Checked and signed:____________________ Date:__________

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	17.10	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Relatively competent and intact, laminated black carbonaceous mudstone and siltstone interbedded with coarser grained sandstone. Bedding is at 30 degrees to core axis. Sandstone beds, up to 40 centimetres wide, are randomly non-moderately calcareous and range from being massive to fining upwards. These beds increase in thickness towards the base of the interval. Rare (<1%) quartz-carbonate stringers cross-cut the core from 5 - 20 degrees to core axis, and occasionally contain fine grained pyrite. At 6.9 metres there is a magnetic pyrrhotite nodule surrounded by a quartz pressure shadow. 1 - 2 % pervassive disseminated pyrite is found throughout.	1B							
17.10	17.70	FAULT ZONE 60 % black carbonaceous fault gouge and 40 % sandstone and mudstone rubble. 1 % fine grained pyrite is found throughout.	FZ							
17.70	46.30	1B INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Variably intact and competent to broken rubble of laminated black carbonaceous mudstone and siltstone interbedded with coarser grained sandstone. Bedding is at 30 to core axis. Sandstone beds are up to 30 centimetres wide, are massive to fining upwards, and decrease in thickness and abundance towards the base of the interval. 1-2 % quartz-carbonate stringers and veins cross-cut the interval and are orientated from 15 - 45 degrees to core axis. Pyrite and rarely galena and sphalerite are occasionally found within these veins. Pyrite is also present as disseminated cubes throughout the interval. Overall, 1 - 2 % pyrite, trace sphalerite, trace galena. 17.70-34.90 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE Relatively competent and intact, laminated black carbonaceous mudstone and siltstone interbedded with coarser grained sandstones. Sandstone beds are up to 30 centimetres wide. 35.30-35.50 QUARTZ VEIN 1.5 centimetre quartz-carbonate vein at 30 to core axis, containing pyrite and lesser sphalerite and galena. Overall, the vein contains	1B							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		60 % pyrite, < 1 % galena, < 1 % sphalerite. 35.50-46.30 INTERBEDDED SANDSTONE/SILSTONE/MUDSTONE RUBBLE Incompetent and broken laminated mudstone, siltstone and sandstone rubble, with bedding at 30 - 40 degrees to core axis. Sandstone beds are up to 1.5 centimetres wide and decrease in thickness and abundance towards the base of the interval. 1 - 2 % fine grained disseminated pyrite is found throughout the interval.								
46.30	48.00	FAULT ZONE 40 % grey-black fault gouge and 60 % sandstone, siltstone, and mudstone rubble. 2 - 3 %fine-grained pyrite is found throughout the interval.								
48.00	54.90	1B LAMINATED SILTSTONE / SANDSTONE Weak broken up rubble of laminated carbonaceous mudstone, siltstone and sandstone with beds up to 1 centimetre wide, and at 30 degrees to core axis. Sandstone beds decrease in width and abundance towards the base of the interval. 3 % disseminated pyrite, concentrated in the coarser grained sandstone laminae, is found throughout the interval.	1B							
54.90	61.00	1AA CARBONACEOUS ARGILLITE Weak carbonaceous argillite rubble with 20 % intact rock. 3 % linear and contorted, pyrite and quartz stringers up to 3mm wide, cross-cut the interval and are orientated parallel to laminae, at 30 - 40 to core axis. Pyrite also occurs as fine grained disseminated cubes within the argillite.	1AA							
61.00	62.50	NO RECOVERY Interval was washed away.	NR							
62.50	63.40	FAULT ZONE CARBONACEOUS ARGILLITE Fault zone consisting of 50 % black carbonaceous fault gouge and 50 % very weak and broken carbonaceous argillite rubble. Less than 1 % fine grained disseminated pyrite is present within the interval.	FZ							
63.40	94.30	1AA CARBONACEOUS ARGILLITE Highly incompetent and broken, variably non-moderately calcareous carbonaceous argillite with occasional siltstone laminae at 30 degrees to core axis. 20 % of the interval is intact and has been healed by a carbonate and silica cement. 3 - 4 % linear and contorted calcite and	1AA							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		quartz veinlets are present and are dominantly orientated parallel to laminae. Pyrite is present as disseminated cubes throughout the interval and within calcite and quartz veinlets. Overall, 2 - 3% pyrite, *trace sphalerite.* 75.20-75.60 FAULT ZONE Fault zone consisting of black fault gouge and 50 % black carbonaceous argillite rubble. 1 % disseminated pyrite is found throughout the interval.								
94.30	99.30	1AA CARBONACEOUS ARGILLITE CRACKLE BRECCIA Competent and silicified, non-weakly calcareous, strongly crackle brecciated, carbonaceous argillite. 10 % of the interval is a tightly packed 1AA argillite hydrothermal collapse breccia. Brecciated clasts are up to 3 centimetres wide and have undergone very little rotation or transport. Pyrite is found within quartz and calcite stringers and as disseminated cubes within the argillite. Overall, 2 % pyrite, 3-4 % quartz and calcite stringers.	1AA							
99.30	100.10	MCDAME LIMESTONE ARGILLITE MOSAIC BRECCIA Hanging wall sample. Limestone ranging from a weakly crackle brecciated lime mudstone in the upper 25 centimetres of the interval to a collapse mosaic breccia in the basal 55 centimetres of the interval. Brecciated zone contains clasts of 1AA carbonaceous argillite and limestone up to 5 centimetres wide within a crystalline calcite and quartz matrix. < 1 % pyrite is found within the matrix of this breccia and partially replacing limestone clasts.	MLS	140577	99.30	100.10	0.00	6.30	0.01	0.02
100.10	103.50	LOWER ZONE MASSIVE SULPHIDE Pyrite, sphalerite rich massive sulfide which can be divided into two distinct sub-zones based upon mineralization. Zone 1 : 100.1 - 101.9 metres Competent and silicified pyrite rich massive sulfide with minor galena and sphalerite and 30 % relict limestone. Intervals of unreplaced limestone are up to 30 centimetres wide. Sphalerite and galena are more prevalent towards the base of the interval, and are commonly found adjacent to secondary calcite mineralization. Zone 2: 101.9 - 103.5 metres Incompetent and crumbly black and red sphalerite with lesser								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		pyrite and galena and 7 % relict limestone. Weak sphalerite, pyrite banding is observed from 101.9 metres - 102.0 metres and is orientated at 30 - 40 degrees to core axis. Sphalerite throughout this zone is rimmed by an orange-light green mineral with a grey streak. Sphalerite cores are commonly found within this mineral indicating that it may be a sphalerite alteration product. Overall the interval contains, 20 % limestone, 10 % quartz, 5 % calcite, 5 % galena, 25 % pyrite, 30 % sphalerite, 5 % orange/light green mineral.								
		100.10-100.90 LIMESTONE MASSIVE SULPHIDE Silicified limestone, partially replaced by pyrite and lesser sphalerite and galena. The degree of sulphide replacement increases towards the base of the interval. Styolites, throughout the interval, are at 30 - 40 degrees to core axis and are commonly lined by fine grained sulphide. Sulphide is observed replacing limestone adjacent to these styolites. In addition, the interval is cross-cut by calcite stringers and veins which commonly contain pyrite, sphalerite, and lesser galena. Overall, 50 % limestone, 10 % quartz, 10 % calcite, 25 % pyrite, 5 % sphalerite, trace galena.	LZ	140578	100.10	100.90	0.00	79.30	1.54	2.92
		100.90-101.60 LOWER ZONE MASSIVE SULPHIDE Silicified pyrite rich massive sulfide with lesser sphalerite and galena found over the basal 45 centimetres of the interval. Overall, 70 % pyrite, 10 % sphalerite, 5 % galena, 10 % quartz, 5 % calcite.		140579	100.90	101.60	0.01	596.30	11.06	4.78
		101.60-101.90 AMPHIPORA FLOATSTONE Relict amphipora floatstone with numerous styolites, rarely lined by fine grained sulphide, at 40 degrees to core axis. 2 % pyrite bearing calcite stringers cross-cut the interval. Overall, trace pyrite.		*140580*	*101.60*	*101.90*	*0.00*	*6.50*	*0.02*	*0.04*
		101.90-102.60 LOWER ZONE MASSIVE SULPHIDE Incompetent and crumbly, black sphalerite rich massive sulfide *with lesser pyrite and 20 % relict limestone.* An orange/light green mineral with a grey streak is found rimming sphalerite. The upper contact with the above lying limestone is sharp and at 40 degrees to core axis. Weak sphalerite pyrite banding is found within the		140581	101.90	102.60	0.00	59.10	0.14	26.51

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		upper 5 centimetres of the interval, with bands orientated parallel to this contact. Overall, 56 % sphalerite, 10 % pyrite, trace galena, 10 % orange/light green mineral, 20 % limestone, 2 % quartz, 2 % calcite. 102.60-103.50 LOWER ZONE MASSIVE SULPHIDE Very crumbly, black sphalerite rich massive sulfide as above but with more sphalerite and less relict limestone. Basal 15 centimetres of the interval is rubble brecciated with clasts of sphalerite and pyrite massive sulfide, limestone and argillite up to 4 centimetres wide. The breccia has been healed by a calcite cement. Overall, 70 % sphalerite, 15 % pyrite, 5 % argillite, 5 % limestone, 5 % calcite.		140582	102.60	103.50	0.01	73.10	0.29	33.03
103.50	103.80	MCDAME LIMESTONE CRACKLE BRECCIA FLOATSTONE *Footwall sample. Crackle brecciated amphipora floatstone with minor* massive stromatoporids. Upper contact with above lying lower zone is sharp but irregular (wavy) and orientated at 50 to core axis. Overall, trace sphalerite, trace pyrite.	MLS	140584	103.50	103.80	0.00	9.40	0.04	0.61
103.80	104.80	1AA LAMINATED SILTSTONE MOSAIC BRECCIA Post mineral, hydrothermal collapse mosaic breccia consisting of angular clasts of 1 AA and sub-rounded clasts of limestone and pyrite - sphalerite massive sulfide, from < 1 mm to 5 centimetres wide, within a white crystalline calcite matrix. Overall, 1 % pyrite, 1 % sphalerite, 50 % 1AA, 15 % limestone, 33 % calcite.	MLS	140585	103.80	104.80	0.05	19.60	0.24	2.16
104.80	108.60	MCDAME LIMESTONE UNIT 1 AMPHIPORA PACKSTONE *Competent limestone ranging from amphipora packstones to* floatstones with minor massive stromatoporids. 3 % calcite stringers and veins up to 5 mm wide cross-cut the interval and cause localised zones of weak - moderate crackle brecciation. Trace amounts of fine grained pyrite are found within these veinlets. Numerous styolites, orientated parallel to fossil beds at 50 degrees to core axis are present throughout the interval. Overall, trace pyrite. 104.80-106.70 AMPHIPORA PACKSTONE Weakly crackle brecciated limestone as above. Overall, trace pyrite, 3% calcite stringers.	MLS1	140586	104.80	106.70	0.00	3.90	0.01	0.01
		106.70-108.60 AMPHIPORA PACKSTONE Hanging wall sample. Non-weakely crackle brecciated amphipora		140587	106.70	108.60	0.00	2.70	0.01	0.01

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		packstone as above. Contact with below lying massive sulfide is sharp and irregular (wavy). Overall, trace pyrite, 3 % calcite stringers.								
108.60	110.30	LOWER ZONE MASSIVE SULPHIDE Pyrite rich massive sulfide with lesser sphalerite and minor galena. Interval contains rare (7%) localised zones up to 8 centimetres wide of rubble brecciated pyrite clasts within a pyrite and sphalerite matrix. The interval is calcareous throughout and has been healed by a calcite - quartz cement. 1 % calcite stringers and clots cross-cut the lower zone mineralization at 40 degrees to core axis. Overall, 72 % pyrite, 10 % sphalerite, 1 % galena, 10 % calcite, 5 % quartz, 2 % limestone. 108.60-109.40 LOWER ZONE MASSIVE SULPHIDE Pyrite rich massive sulfide with lesser sphalerite and minor galena. Overall, 74 % pyrite, 10 % sphalerite, 1 % galena, 10 % calcite, 5 % quartz.	LZ	140588	108.60	109.40	0.01	206.05	1.80	5.25
		109.40-110.30 LOWER ZONE MASSIVE SULPHIDE Pyrite rich massive sulfide as above but with 2 % relict limestone. Upper 8 centimetres of the interval has been rubble brecciated and consists of clasts of pyrite up to 1 centimetre wide within a pyrite and sphalerite sulphide matrix. Overall, 73 % pyrite, 10 % sphalerite, trace galena, 10 % calcite, 5 % quartz, 2 % limestone.		140590	109.40	110.30	0.00	308.30	1.27	5.26
110.30	120.60	MCDAME LIMESTONE MOSAIC BRECCIA Hydrothermal collapse mosaic breccia with local zones up to 25 centimetres wide of crackle and rubble brecciated limestone. Breccia's consist of sub-rounded clasts of limestone up to 10 centimetres wide within a crystalline calcite matrix. Rare clasts of Earn are present and are dominantly found from 112.04 metres - 112.4 metres. Sulphide is rare within the interval but is found as clasts within the breccia and replacing brecciated limestone clasts. From 116.7 metres - 118.4 metres the core is fractured with numerous vugs and fracture surfaces lined by euhedral calcite and barite crystals. Overall, trace sphalerite, trace pyrite, 30 % calcite matrix. 110.30-111.30 LIMESTONE MOSAIC BRECCIA	MLS	140591	110.30	111.30	0.00	4.80	0.01	0.04

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		Footwall sample. Strongly crackle to mosaic brecciated limestone with numerous styolites, occasionally lined by fine grained pyrite, *at 50 - 60 degrees to core axis. Relict amphipora and thamnopora* are observed within limestone clasts. Overall, trace pyrite, trace sphalerite, 15 - 20 % calcite. 112.04-112.40 LIMESTONE MOSAIC BRECCIA Hydrothermal collapse mosaic breccia with clasts of limestone, 1AA carbonaceous argillite, and sulphide within a calcite matrix. Overall, 1 % sphalerite, 2 % pyrite. 119.60-120.60 LIMESTONE MOSAIC BRECCIA Hanging wall sample. Hydrothermal collapse mosaic breccia with sub-rounded clasts of limestone up to 8 centimetres wide within a crystalline calcite matrix. Sulphide is rare but is observed within the calcite matrix, lining styolites, and partially replacing limestone clasts. Overall, trace pyrite, trace sphalerite.		140592	119.60	120.60	0.00	8.10	0.03	0.07
120.60	135.30	LOWER ZONE MASSIVE SULPHIDE *Complex and highly variable lower zone mineralization ranging from* fine grained pyrrhotite, pyrite rich massive sulfide to mosaic and rubble brecciated sulphide and limestone. Fine-grained pyrite and pyrrhotite massive sulfide appears to be an early phase of mineralization. This *early stage mineralization* is found associated with a *silica fluid* and has been mosaic and rubble brecciated by later stages of mineralization. Mosaic breccia's are found throughout the interval but are concentrated in the upper 6 metres of the interval. These breccia's are commonly sphalerite and galena rich and consist of clasts of limestone and early fine grained pyrite and pyrrhotite massive sulfide within a coarsely crystalline calcite matrix. Coarse grained sphalerite, galena and pyrite are found within the calcite matrix of these breccia's as well as replacing and overprinting clasts of limestone and fine grained pyrite pyrrhotite massive sulfide. Rubble brecciated zones are concentrated in the basal 7 - 8 metres of the interval and consist of clasts of limestone and early fine grained pyrite and pyrrhotite massive sulfide. Coarse grained pyrite, sphalerite, and galena are found within these breccia's replacing limestone clasts. Overall estimate, 33% pyrite, 15 % sphalerite, 7 % pyrrhotite, 5 % galena, 15 % quartz, 15	LZ	140593	120.80	121.90	0.00	483.10	7.50	6.42

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		% limestone, 10 % calcite.								
		120.60-121.90 LOWER ZONE MOSAIC BRECCIA Lower zone mosaic breccia with clasts of limestone and sulphide up to 5 centimetres wide within a crystalline calcite matrix. Coarse grained sphalerite, pyrite and galena are found within the calcite matrix, replacing limestone clasts and overprinting earlier pyrite and pyrrhotite massive sulfide. Overall, 10 % pyrite, 10 % sphalerite, 10 % galena, 10 % pyrrhotite, 40 % limestone, 10 % calcite, 10 % quartz.		140594	121.90	122.80	0.00	983.80	10.75	12.91
		121.90-122.80 LOWER ZONE MOSAIC BRECCIA Lower zone mosaic breccia with clasts of limestone and sphalerite, pyrite, galena massive sulfide within a crystalline calcite matrix. Sphalerite, pyrite, and galena are also found within the breccia matrix and replacing brecciated limestone clasts. Overall, 25 %pyrite, 20 % sphalerite, 15 % galena, trace pyrrhotite, 20 % limestone, 10 % quartz, 10 % calcite.		140595	122.80	123.80	0.01	89.00	1.07	2.63
		122.80-123.80 LOWER ZONE MASSIVE SULPHIDE Early stage, silicified fine grained pyrite, pyrrhotite massive sulfide. Basal 25 centimetres of the interval has been crackle and mosaic brecciated by calcite veins and clots. In addition, coarse grained red sphalerite and pyrite is found in the basal 25 centimetres of the interval, overprinting earlier pyrite, pyrrhotite massive sulfide. Overall, 50 % pyrrhotite, 30 % pyrite, 5 % *sphalerite, 10 % quartz, 5 % calcite.*		140596	123.80	124.80	0.01	163.90	3.09	9.30
		123.80-124.80 MASSIVE SULPHIDE MOSAIC BRECCIA Massive sulphide mosaic breccia consisting of clasts of early fine grained pyrite up to 10 centimetres wide within a quartz and calcite matrix. Coarse grained pyrite and sphalerite are found within the matrix and replacing brecciated pyrite clasts. Overall, 45 % pyrite, 20 % sphalerite, 15 % calcite, 15 % quartz, 5 % limestone.		140597	124.80	125.80	0.12	27.70	0.20	12.78
		124.80-125.80 MASSIVE SULPHIDE CRACKLE BRECCIA Early stage fine grained pyrite massive sulfide cross-cut and crackle brecciated by calcite and quartz stringers and veins up to 6 centimetres wide. These veins are found to contain coarse grained pyrite and and red sphalerite. Overall, 40 % pyrite, 30 % sphalerite, 10 % calcite, 15 % quartz, 5 % limestone.		140598	125.80	126.80	0.00	39.30	0.38	5.16

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		125.80-126.80 MASSIVE SULPHIDE CRACKLE BRECCIA Early fine grained pyrite massive sulfide crackle brecciated by calcite stringers and veins. Coarse grained sphalerite and pyrite are found within these veins and replacing earlier fine grained pyrite massive sulfide. The basal 30 centimetres of the interval is a								
		massive sulphide mosaic breccia with clasts of early fine grained pyrite up to 3 centimetres wide within a coarsely crystalline calcite and sulphide matrix. Overall, 45% pyrite, 5 % pyrite, 2 % *pyrrhotite, trace galena, 30 % calcite, 15 % quartz, 3 %* limestone. 126.80-127.80 LOWER ZONE MASSIVE SULPHIDE Early fine grained pyrite, pyrrhotite massive sulfide cross-cut and		140600	126.80	127.80	0.01	320.10	5.49	15.45
		weakly crackle brecciated by 5 % calcite veins. Coarse grained red sphalerite, galena and pyrite are found within these veins and are observed partially replacing early fine grained pyrite, pyrrhotite massive sulfide. Overall. 60 % pyrite, 10 % sphalerite, 10 % pyrrhotite, 5 % galena, 10 % quartz, 5 % calcite. 127.80-128.80 MASSIVE SULPHIDE RUBBLE BRECCIA		140651	127.80	128.80	0.01	454.70	7.89	18.61
		Rubble brecciated fine grained pyrite, pyrrhotite massive sulfide. Later stage, coarse grained, sphalerite, pyrite and galena are found in association with open space fill calcite and partially replacing clasts of earlier pyrite and pyrrhotite massive sulfide. Overall, 55 % pyrite, 10 % sphalerite, 10 % galena, 10 % pyrrhotite, 10 % quartz, 5 % calcite. *128.80-129.80 MASSIVE SULPHIDE RUBBLE BRECCIA*		140652	128.80	129.80	0.00	180.30	2.79	9.75
		Rubble brecciated massive sulfide as above. From 129.4 metres - 129.6 metres the interval has been mosaic brecciated, with clasts of fine grained pyrite and coarse grained sphalerite and pyrite massive sulfide within a crystalline calcite matrix. Overall, 50 % pyrite, 10 % sphalerite, 10 % galena, trace pyrrhotite, 15 %		140653	129.80	130.80	0.00	376.30	6.75	12.65
		calcite, 10 % quartz, 5 % limestone. 129.80-130.80 MASSIVE SULPHIDE RUBBLE BRECCIA Rubble brecciated massive sulfide as above. Clasts of relict limestone and early fine grained pyrite massive sulfide have been partially replaced by coarse grained sphalerite, pyrite, galena and		140654	130.80	131.80	0.00	577.80	9.16	11.50

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		calcite mineralization. Overall, 55 % pyrite, 5 % sphalerite, 5 % galena, 15 % calcite, 10 % quartz, 10 % limestone. 130.80-131.80 MASSIVE SULPHIDE RUBBLE BRECCIA								
		Rubble brecciated massive sulfide with clasts of early fine grained pyrite and relict limestone up to 8 centimetres wide within a coarsly crystalline sphalerite, galena, pyrite and calcite matrix. Clasts of early fine grained pyrite and relict limestone are rimmed and partially replaced by later stage sphalerite, galena, and pyrite mineralization. Overall, 40 %pyrite, 15 % sphalerite, 10 % galena,		*140655*	*131.80*	*132.80*	*0.00*	*327.30*	*4.68*	*11.59*
		15 % limestone, 10 % calcite, 10 % quartz. 131.80-132.80 LOWER ZONE MASSIVE SULPHIDE Competent, calcareous and coarsely crystalline sphalerite, pyrite rich massive sulfide. Basal 40 centimetres of the interval has *been* rubble brecciated and contains clasts of limestone and fine		140656	132.80	133.90	0.00	599.80	7.84	11.71
		grained pyrite within a matrix of coarse grained sphalerite, pyrite and galena. Overall, 45 % pyrite, 20 % sphalerite, 5 % galena, 15 % calcite, 10 % limestone, 5 % quartz. 132.80-133.90 MASSIVE SULPHIDE RUBBLE BRECCIA		140657	133.90	134.40	0.00	94.70	1.37	4.26
		Rubble breccia consisting of clasts of limestone and fine grained pyrite up to 8 centimetres wide, which have been completely to partially replaced by coarse grained sphalerite, galena , pyrite and calcite mineralization. Overall, 40 % pyrite, 15 % sphalerite, 5 % galena, 25 % limestone, 15 % calcite. 133.90-134.40 RECRYSTALLIZED LIMESTONE Partially recrystallized limestone, partially replaced by coarse grained sphalerite, galena, and pyrite adjacent to styolites. Overall, 95 % limestone, 2 % sphalerite, 2 % pyrite, 1 % galena. 134.40-135.30 LOWER ZONE / LIMESTONE Limestone, partially replaced by coarse grained sphalerite, pyrite, *and galena mineralization adjacent to styolites. Sulphide forms* large massive blebs from < 1 mm to 18 centimetres wide. Overall, 35 % pyrite, 10 % sphalerite, 5 % galena, 40 % limestone, 10 % calcite.		*140658*	*134.40*	*135.30*	*0.00*	*453.20*	*7.34*	*7.24*
135.30	139.70	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Competent, stromatoporoid floatstones and rudstones with lesser amphipora and rare euryamphipora. Interval contains numerous styolites at 50 - 60 degrees to core axis, which cause local zones up								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		to 10 centimetres wide of styolitic breccias. Red sphalerite, pyrite and galena are found lining styolites and replacing limestone adjacent to styolites. Overall, trace pyrite, trace sphalerite, trace galena.								
		135.30-136.30 STROMATOPOROID FLOATSTONE Footwall sample. Stromatoporoid floatstone as above. 1 % pyrite, < 1 % sphalerite, trace galena.	ML2	140659	135.30	136.30	0.00	34.20	0.36	0.68
		136.30-137 50 STROMATOPOROID FLOATSTONE Stromatoporoid floatstone as above but with only a trace of pyrite.		140660	136.30	137 50	0.00	5.60	0.02	0.02
		137.50-138.70 STROMATOPOROID FLOATSTONE Stromatoporoid floatstone as above but with a trace of pyrite and sphalerite.		*140661*	*137.50*	*138.70*	*0.00*	*5 10*	*0.01*	*0.02*
		138.70-139.70 STROMATOPOROID FLOATSTONE Hanging wall sample. Stromatoporoid floatstone as above. Contact with below lying massive sulfide is sharp and at 40 to core axis. Overall, trace pyrite.		140662	138.70	139.70	0.00	5 60	0.02	0.03
139.70	141.40	LOWER ZONE MASSIVE SULPHIDE Manto type lower zone mineralization consisting of early fine grained pyrite, pyrrhotite rich massive sulfide, partially replaced by coarse grained pyrite, sphalerite, and galena. Later stage mineralization is associated with open space fill calcite and ankerite. The interval contains 2 % relict limestone which is concentrated in the upper 20 centimetres of the interval. Overall, 20 % pyrite, 20 % sphalerite, 17 % galena, 15 % pyrrhotite, 20 % calcite, 5 % quartz, 2 % limestone, 1 % ankerite.	LZ							
		139.70-140.70 LOWER ZONE MASSIVE SULPHIDE Coarse grained sphalerite, galena, pyrite massive sulfide with crystalline calcite and ankerite found filling open space. 5 % relict limestone is observed in the upper 20 centimetres of the interval.		140663	139.70	140.70	0.00	1166.00	23.49	13.77
		Overall, 24 % galena, 20 % pyrite, 20 % sphalerite, 25 % calcite, 5 % limestone, 5 % quartz, 1 % ankerite.		140664	140.70	141.10	0.00	283.40	5.87	7 96
		140.70-141.10 LOWER ZONE MASSIVE SULPHIDE Early fine grained pyrite, pyrrhotite massive sulfide partially replaced by later coarse grained sphalerite, galena, pyrite *massive*								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		sulfide. Ankerite is found filling open space. Overall, 35 % pyrrhotite, 25 % pyrite, 15 % sphalerite, 10 % galena, 10 % quartz, 5 % ankerite. 141.10-141.40 *LOWER ZONE MASSIVE SULPHIDE* Sphalerite, pyrite, galena rich massive sulfide as from 139.7 metres - 140.7 metres. Overall, 30 % pyrite, 30 % galena, 30 % sphalerite, 10 % calcite.		140666	141.10	141.40	0.00	757.20	16.29	14.21
141.40	156.00	MCDAME LIMESTONE UNIT 2 STROMATOPOROID FLOATSTONE Stromatoporoid floatstones and rudstones with lesser amphipora. Numerous styolites throughout the interval, cause local zones of styolitic brecciation up to 15 centimetres wide. Fine-grained sulphide is commonly found lining styolites. From 151.8 metres - 156.0 metres the interval is crackle brecciated by calcite stringers and veins up to 1 centimetre wide. Contact with above lying massive sulfide is sharp *and* at 50 to core axis. Overall, trace sphalerite, trace pyrite, trace galena. 141.40-142.40 STROMATOPOROID FLOATSTONE Footwall sample. Stromatoporoid floatstone with numerous styolites lined by fine grained sulphide. Overall, trace pyrite.	MLS2	140667	141.40	142.40	0.00	16.50	0.21	0.17
156.00	158.30	RECRYSTALLIZED LIMESTONE RUBBLE BRECCIA Rubble brecciated limestone which has subsequently been coarsely recrystallized. In the upper 20 centimetres of the interval very fine (~ 1mm wide) amphipora are preserved, indicating that this may possibly be unit 3. Fine-grained pyrite is present lining styolites and partially replacing brecciated limestone clasts. Overall, trace pyrite. 157.30-158.30 RECRYSTALLIZED LIMESTONE Hanging wall sample. Rubble brecciated and recrystallized limestone as above. Overall, < 1 % pyrite.	MLS	140668	157.30	158.30	0.00	3.60	0.02	0.03
158.30	158.70	MINERALIZED LIMESTONE RUBBLE BRECCIA Rubble brecciated limestone with clasts from < 1 mm - 3 centimetres wide. Interval has been recrystallized and partially replaced by sphalerite, galena, and pyrite mineralizatiaion adjacent to styolites. 2 % pyrite, < 1 % sphalerite, < 1 % galena.	MLS	140669	158.30	158.70	0.14	68.20	1 17	4 27
158.70	159.10	LOWER ZONE / LIMESTONE RUBBLE BRECCIA Pyrite and sphalerite massive sulfide are found selectively replacing clasts and matrix of a limestone rubble breccia. The interval has been healed by a calcite cement. 40 % pyrite, 15 % sphalerite, trace galena, 35 % limestone, 10 % calcite.	LZ	140670	158.70	159.10	0.00	219.80	0.27	3 21

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
159.10	*160.20*	*MINERALIZED RUBBLE BRECCIA* Footwall and hanging wall sample. Rubble and crackle brecciated limestone with clasts up to 9 centimetres wide. Interval has been recrystallized and partially replaced by pyrite, sphalerite and minor galena adjacent to styolites and fractures. 3 % pyrite, 1 % sphalerite, trace galena, 5 % calcite.	*MLS*	140671	159.10	160.20	0.00	10.00	0.05	0.54
160.20	164.30	LOWER ZONE MASSIVE SULPHIDE Pyrite, sphalerite and rare galena massive sulfide found replacing the clasts and matrix of a previous limestone rubble breccia. The interval is competent and has been healed by a quartz and calcite cement. Overall, 34 % pyrite, 15 % sphalerite, 1 % galena, 15 % quartz, 1 % calcite, 25 % limestone.								
		160.20-161.10 LOWER ZONE MASSIVE SULPHIDE *Pyrite, sphalerite and galena massive sulfide healed by calcite* cement. Galena is rare and is concentrated in the upper 20 centimetres of the interval. 55 % pyrite, 10 % sphalerite, 5 % galena, 15 % calcite, 10 % limestone, 5 % quartz.	LZ	*140672*	*160.20*	*161.10*	*0.00*	*184.00*	*2.96*	*9.30*
		161.10-162.10 LOWER ZONE MASSIVE SULPHIDE Black sphalerite and pyrite rich massive sulfide, healed by calcite cement. Relict brecciated clasts of recrystallized limestone are present and have been partially replaced by sphalerite and pyrite. 45 % pyrite, 40 % sphalerite, 10 % calcite, 5 % limestone.		140673	161.10	162.10	0.00	78.40	0.22	18.73
		162.10-162.70 MINERALIZED RUBBLE BRECCIA Rubble brecciated limestone with clasts and matrix partially replaced by pyrite and sphalerite. Interval is competent and has *been healed by a quartz and calcite cement. 30 % pyrite, 5 %* sphalerite, 50 % limestone, 10 % quartz, 5 % calcite.		140674	162.10	162.70	0.00	29.50	0.10	1.13
		162.70-163.20 MINERALIZED RUBBLE BRECCIA Rubble brecciated limestone as above but with more sulphide replacement. 35 % sphalerite, 25 % pyrite, 30 % limestone, 5 % quartz, 5 % calcite.		140675	162.70	163.20	0.00	74.50	0.04	17.05
		163.20-164.30 LOWER ZONE / LIMESTONE RUBBLE BRECCIA Rubble and crackle brecciated limestone partially replaced by pyrite and minor sphalerite mineralization. Interval is competent and has been silicified, 47 % pyrite, 3 % sphalerite, 40 % limestone, 10 % quartz.		140676	163.20	164.30	0.00	35.00	0.02	2.97

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
164.30	165.90	LIMESTONE CRACKLE BRECCIA Crackle brecciated and weakly bleached limestone with numerous styolites at 10 - 50 degrees to core axis. Fine-grained pyrite is commonly found lining styolites and replacing limestone adjacent to styolites. Basal contact with below lying massive sulfide is sharp and at 50 degrees to core axis. Overall, 4 % pyrite.								
		164.30-165.10 LIMESTONE CRACKLE BRECCIA Footwall sample. Crackle brecciated limestone as above but with only a trace of pyrite.	*MLS*	140677	164.30	165.10	0.00	5.60	0.01	0.04
		165.10-165.90 LIMESTONE CRACKLE BRECCIA Hanging wall sample. Crackle brecciated and bleached limestone as above but with 8 % pyrite.		140678	165.10	165.90	0.02	9.80	0.11	0.46
165.90	169.90	LOWER ZONE MASSIVE SULPHIDE Partially silicified, pyrite, sphalerite massive sulfide with 25 % relict crackle brecciated limestone. The interval is competent and has been healed by a quartz and calcite cement. 25 % pyrite, 20 % sphalerite, 25 % limestone, 15 % quartz, 15 % calcite.								
		165.90-166.70 LOWER ZONE MASSIVE SULPHIDE Pyrite and sphalerite massive sulfide with 20 % relict limestone. *The upper 35 centimetres of the interval has been silicified.* Overall, 45 % pyrite, 25 % sphalerite, 20 % limestone, 10 % quartz.	LZ	140679	165.90	166.70	0.01	57.80	0.13	7.67
		166.70-167.50 LIMESTONE CRACKLE BRECCIA Crackle and styolitic brecciated amphipora packstone. The limestone has been partially replaced by pyrite and sphalerite adjacent to styolites, veins, and fractures. 5 % pyrite, 3 % sphalerite.		140680	166.70	167.50	0.02	12.20	0.09	2.78
		167.50-168.60 LOWER ZONE MASSIVE SULPHIDE Competent, partially silicified sphalerite, pyrite massive sulfide with 15 % relict silicified limestone. Overall, 40 % pyrite, 30 % sphalerite, 15 % limestone, 15 % quartz.		140681	167.50	168.60	0.00	21.10	0.05	6.70
		168.60-169.90 LOWER ZONE MASSIVE SULPHIDE *Pyrite and sphalerite massive sulfide as above but with more relict* limestone. Basal contact with below lying limestone is sharp and at 70 degrees to core axis. Overall, 25 % pyrite, 10 % sphalerite, 40 % limestone, 15 % quartz.		140682	168.60	169.90	0.00	19.60	0.21	4.92

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
169.90	170.60	AMPHIPORA RUDSTONE Footwall sample. Amphipora rudstone cross-cut by numerous styolites and occasional calcite veins and stringers. Fine-grained pyrite and sphalerite are found lining styolites and replacing limestone adjacent to styolites. Overall, < 1 % pyrite, trace sphalerite.	MLS	140683	169.90	170.60	0.01	3.40	0.01	0.45
170.60	171.80	MINERALIZED HETEROLITHIC RUBBLE BRECCIA Heterolithic rubble breccia with clasts of limestone, argillite, and light green strongly sericite altered rock(YBR?). Clasts are up to 5 centimetres wide and are found within a lime mud matrix. Pyrite and sphalerite are found throughout the interval selectively replacing the breccia matrix and limestone clasts. Overall, 3 % sphalerite, 10 % pyrite.	MLS	140684	170.60	171.80	0.00	7.30	0.09	0.74
171.80	176.20	LIMESTONE CRACKLE BRECCIA Strongly crackle brecciated limestone with local zones up to 60 centimetres wide of rubble brecciated limestone. Styolites are common throughout the interval and are lined by fine grained sulphide (dominantly pyrite). Overall, trace pyrite, 15 - 20 % calcite stringers and veins. 171.80-172.70 LIMESTONE CRACKLE BRECCIA Footwall sample. Strongly crackle brecciated limestone which has been rubble brecciated in the upper 60 centimetres of the interval. Styolites are common and are lined by fine grained pyrite mineralization. Overall, trace pyrite, 15 - 20 % calcite stringers and veins.	MLS	140685	171.80	172.70	0.02	8.30	0.03	0.26

*** END OF HOLE *** 176.20

HOLE NO: SUD-00-88	SECTION:65-C	GRID:SILVER CK S.

PROJECT CODE :SILVERTIP
TENEMENT :SILVERTIP MINING
PROSPECT :CORPORATION
GRID :SILVER CK S.
MAP REFERENCE: 104/O-16W
LOCATION :LIARD MD, BC
HOLE TYPE :UG

*** COLLAR COORDINATES AND RL ***

NOMINAL	43318.00mN	24958.00mE	1133.00RL

Pre-collar depth: Final depth: 80.20

Purpose of hole: TEST EAST EXTENT OF LZ MIN'N.

Hole status: COMPLETED

Comments: LOWER ZONE: 63.4 - 63.8 M

*** SURVEYDATA ***

Survey Method: RELEX EZ-SHOT

Depth	Azimuth	Inclination
0.00	250.00	-80.00
16.15	251.70	-80.00
46.63	253.10	-80.60
80.16	73.10	-67.40
95.00	250.00	-80.00

*** SUMMARY LOG ***

0.00	31.40	1B SANDSTONE / SILTSTONE
31.40	39.20	FAULT ZONE 1BA
39.20	50.40	1A SILICIFIED ARGILLITE
50.40	63.40	MCDAME LIMESTONE UNIT 2
63.40	63.80	LOWER ZONE MASSIVE SULPHIDE
63.80	77.10	DOLOMITIZED LIMESTONE BRECCIA
77.10	80.20	MCDAME LIMESTONE UNIT 2
80.20		END OF HOLE

*** DRILLING SUMMARY ***

DIAMOND DRILL	0.00 80.20 HQ
Drill contractor:	ADVANCED DRILLING LTD.
Drill rig:	TRACTOR DRILL MODEL 150
Date started:	6/2/00
Date finished:	7/2/00
Logged by:	L. LEWIS
Relogged by:	
Sampled by:	R. NEY

Material left in hole: NONE
Base of complete oxidation 0.0
Top of fresh rock: 0.0
Water first encountered: 0.0
Water inflow estimate: 0.0

*** SIGNIFICANT ASSAYS ***

From	To	Width	Ag g/t	Pb %	Zn %
62.40	64.80	2.40	124.20	1.65	2.52

Checked and signed:__________ Date:______

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
0.00	31.40	1B SANDSTONE / SILTSTONE 0.00-18.30 SANDSTONE / LAMINATED SILTSTONE The usual sequence of interbedded massive to fining upward sandstone (15 - 100 centimetres) and laminated siltstone (to 10 centimetres). Bedding angle 65 degrees to core axis. Sandstone layers are rarely calcareous. Intermittant zones of soft sediment deformation (eg: 10.3 metres). 1% concordant quartz (+/- pyrite) stringers, 1% cross-cutting quartz-calcite stringers, 20 & 40 degrees to core axis, often with pyrite, +/- sphalerite. Trace - 2% pyrite, trace sphalerite, pyrrhotite (pyrrhotite a nodules with calcite pressure shadows). 18.30-31.40 LAMINATED SILTSTONE / SANDSTONE PYRITIC Lose the thick beds of fining upward sandstone and the unit becomes moderately incompetent, breaking frequently along bedding (65 degrees). Laminated to thinly bedded dark grey siltstone, 2mm - 1cm thick, are inter layered with thinly bedded, often pyritic, medium to fine grained sandstone. 3% cross-cutting quartz - calcite stringers, 10 & 50 degrees rca, with fine to coarse pyrite, trace sphalerite. 8% pyrite, finely disseminated, as clots or smears on fractures, and in quartz stringers. - 25.0 - 25.3m: graphitic gouge & chips, poor recovery.	1B							
31.40	39.20	FAULT ZONE 1BA Probable fault zone consisting of 20% carbonaceous gouge, 40% flaky siltstone & sandstone chips, and 40 % laminated siltstone core < 10 centimetres in length. Bedding @ 70 degrees. Moderate to poor recovery. 1-2% quartz - calcite stringers parallel and cross-cutting bedding. 2% disseminated and clotty pyrite.	FZ							
39.20	50.40	1A SILICIFIED ARGILLITE Moderately siliceous, finely laminated siltstone and argillite with sandstone lenses that have slumped in or are rip-up clasts. 5% quartz - calcite stringers, pods and deformed veinlets to 3 centimetres wide, often with fine clotty pyrite. 8% fine pyrite also as disseminations throughout. Broken lower contact. - 41.5m: 20 centimetres gouge and rubble with cross-cutting upper contact, 30 degrees to core axis. - 48.2m: 25 centimetres gouge.	1A							

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
50.40	*63.40*	*MCDAME LIMESTONE UNIT 2* Broken up unit of limestone along frequent low angle to core axis fractures (avg 20 degrees). Fauna consists of abundant massive stromatoporoids (which are intermittantly finely recrystallized), minor amphipora, scattered thamnopora and one excellent rugose coral - *Tryplasma, @ 61.1m. These form floatstone and minor rudstone,* interlayered with lesser dense packstone. Tryplasma is not typically found in Unit 1, therefore classified as Unit 2. Minor crackle with locally moderate calcite stringers and veining. 1-2% fine grained pyrite, locally up to 10% from 61.6 - 62.2m, as fine replacement *following and extending outward from open-space fill calcite.* Irregular quiet replacement front lower contact with Lower Zone. 61.60-62.20 LIMESTONE PYRITIC 10% fine grained pyrite clots in a calcite matrix. *62.40-63.40 RECRYSTALLIZED LIMESTONE* Hanging wall sample. Rubbly, broken interval of partly recrystallized limestone, now finely crystalline. 6% coarse grained calcite filling low angle (to core axis) fractures (10-20 degrees), along which the core breaks. 2% pyrite lining stylolites and as small clots in calcite.	MLS2	140603	62.40	63.40	0.00	6.30	0.01	0.02
63.40	63.80	LOWER ZONE MASSIVE SULPHIDE 63.40-63.80 PYRITE PYRRHOTITE SPHALERITE MASSIVE SULPHIDE Fine granular pyrrhotite overprinted by coarse grained pyrite, *sphalerite (red & black) and galena in a quartz - calcite matrix.* No remnant limestone. Manto-like mineralization, with faint layering subparallel to fossil layering (~65 degrees) with quiet, irregular replacement fronts at upper and lower contact. 30% pyrite, 25% pyrrhotite, 25% sphalerite, 8% galena, 6% calcite, 6% quartz.	LZ	140604	63.40	63.80	0.00	714.20	9.85	15.00
63.80	77.10	DOLOMITIZED LIMESTONE BRECCIA Variable unit comprised of medium crystalline, partial to fully dolomitized, dark grey limestone, lesser bleached, finely recrystallized foliated limestone. Crackle is the dominant breccia with localized *zones of rubble breccia (66.3 - 67.0 metres) and mosaic breccia (67.6* - 67.9 metres). Brittle, broken core with low RQD. A well preserved coral - Tryplasma occurs in the dolostone @ 69.95m. 3-5% fine								

From	To	Geological Log	UNIT	SAMPLE	FROM (m)	TO (m)	Au gm/t	Ag gm/t	Pb %	Zn %
		grained pyrite, trace sphalerite as stringers and lining stylolites. 63.80-64.80 RECRYSTALLIZED LIMESTONE Footwall sample. Parially recrystallized limestone with moderate crackle and 3% fine grained wispy pyrite adjacent to upper contact with sulphides.	MLSD	140605	63.80	64.80	0.00	6.10	0.01	0.02
77.10	80.20	MCDAME LIMESTONE UNIT 2 Probably still Unit 2, containing abundant massive stromatoporids, locally thin layers of dense amphipora. scattered thamnopora and Tryplasma corals. Thin Euramphipora intercalations towards the bottom (79.0 metres). Moderate crackle and local low angle to core axis calcite veining (accompanied by minor breccia). 1-2% fine grained pyrite along carbonaceous stylolites.	MLS2							

*** END OF HOLE *** 80.20

APPENDIX B

Assay Results

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-67		
55.1 - 59.95	4.85	146.52	1.19	5.54
Including				
57.13 - 59.95	2.82	233.12	1.99	7.80
95.85 - 107.5	11.65	322.83	5.20	13.02
95.85 - 104.5	8.65	348.07	5.49	15.60
105.16 - 107.5	2.34	320.56	5.56	7.13

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-68		
56.19 - 57.82	1.63	97.92	0.26	1.86
95.38 - 103.67	8.29	345.94	4.98	13.68
125.96 - 127.11	1.15	925.60	20.14	8.95
183.8 - 187.4	3.60	71.09	0.28	16.50

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-69		
71.3 - 73.7	2.40	190.02	2.00	12.29
99.4 - 106.3	6.90	201.99	3.70	4.20
111.8 - 126.0	14.20	391.19	6.14	7.98

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-70		
109.8 - 113.5	3.70	790.60	17.08	8.93
120.1 - 122.8	2.70	299.87	5.38	8.73
174.4 - 176.0	1.60	253.96	0.65	9.53
191.2 - 192.3	1.10	760.60	14.65	13.48

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-71		
68.7 - 81.8	13.10	284.16	6.30	6.60
including				
68.7 - 73.8	5.10	525.26	12.57	11.63
and				
76.8 - 81.8	5.00	172.20	3.01	3.94
83.8 - 90.0	6.20	98.42	1.24	9.34
including				
87.2 - 90.0	2.80	170.94	2.67	13.21
126.1 - 127.7	1.60	293.29	4.79	4.24
127.1 - 127.7	0.60	596.10	9.56	9.85
131.3 - 132.9	1.60	1008.05	20.34	16.76

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-72		
49.7 - 50.5	0.80	417.29	6.67	3.49
81.0 - 85.1	4.10	418.36	6.62	14.00

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-73		
69.9 - 82.5	12.60	345.52	5.91	10.85
including				
69.9 - 77.3	7.40	219.33	3.28	15.67
and				
79.0 - 82.5	3.50	803.78	14.99	8.10
95.8 - 96.1	0.30	93.50	0.03	15.54

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-74		
60.1 - 72.2	12.10	327.83	6.00	8.76
76.5 - 76.9	0.40	371.50	8.45	7.21

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-75		
182.2 - 183.3	1.10	1028.50	19.33	15.06

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
		SUD-00-78		
78.2 - 78.5	0.30	831.70	10.65	11.14

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-79			
104.5 - 105.0	0.50	127.60	2.17	12.09
120.9 - 124.0	3.10	26.41	0.32	3.71
139.8 - 140.4	0.60	487.80	7.09	11.40
156.5 - 157.0	0.50	92.90	1.70	17.87
174.9 - 176.1	1.20	219.80	3.01	14.73

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-80			
48.2 - 55.1	6.90	310.31	5.04	3.23
including				
48.2 - 50.9	2.70	728.02	12.10	4.24
and				
53.1 - 55.1	2.00	82.35	1.03	5.25
68.6 - 69.6	1.00	274.30	4.68	4.61

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-82			
54.6 - 55.1	0.50	76.70	0.13	9.16

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-83			
47.2 - 48.2	1.00	247.00	1.04	12.11

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-84			
67.3 - 75.2	7.90	428.87	6.41	15.94

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-85			
88.5 - 89.8	1.30	156.94	0.14	17.25
101.6 - 102.4	0.80	470.00	8.78	9.80

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-86			
100.9 - 101.2	0.30	491.20	7.85	4.40
148.2 - 150.7	2.50	220.19	4.59	5.63

Interval in Metres	Interval length in Metres	Ag g/t	Pb %	Zn %
	SUD-00-87			
100.1 - 103.5	3.40	173.52	2.75	15.88
108.6 - 110.3	1.70	249.90	1.84	4.36
120.6 - 141.4	20.80	329.70	5.22	8.34
including				
120.6 - 135.3	14.70	352.71	5.23	10.27
and				
139.7 - 141.4	1.70	953.11	18.49	12.78
158.3 - 163.2	4.90	86.77	0.73	8.14
165.9 - 169.9	4.00	26.17	0.13	5.53

2000 Weighted Averages - Silvertip Project

Interval in Metres	Interval length in Metres		Ag g/t	Pb %	Zn %
		SUD-00-88			
63.4 - 63.8	0.40		714.20	9.85	15.00

Interval in Metres	Interval length in Metres		Ag g/t	Pb %	Zn %
		Resource Average			
63.4 - 63.8	0.40	0.63	325.00	6.40	8.80

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

REPORT: V00-00111.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS

DATE RECEIVED: 22-JAN-00 DATE PRINTED: 8-FEB-00

DATE APPROVED		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000125	1 Wet Au	Partial Ext. Gold	23	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000125	2 Ag	Silver	23	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	3 AgGrav	Silver (Grav.)	16	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000125	4 wt/Ag	Sample Weight	16	0.10 GM		
000125	5 Cu	Copper	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	6 Pb	Lead	23	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	7 Pb	Lead	12	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000125	8 Pb	Lead	3	0.01 PCT		TITRIMETRIC
000125	9 Zn	Zinc	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	10 Zn	Zinc	17	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000125	11 Zn	Zinc	5	0.01 PCT		TITRIMETRIC
000125	12 Mo	Molybdenum	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	13 Ni	Nickel	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	14 Co	Cobalt	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	15 Cd	Cadmium	23	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	16 Bi	Bismuth	23	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	17 As	Arsenic	23	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	18 Sb	Antimony	23	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	19 Fe	Iron	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	20 Mn	Manganese	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	21 Te	Tellurium	23	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	22 Ba	Barium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	23 Cr	Chromium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	24 V	Vanadium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	25 Sn	Tin	23	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	26 W	Tungsten	23	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	27 La	Lanthanum	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	28 Al	Aluminum	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	29 Mg	Magnesium	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	30 Ca	Calcium	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	31 Na	Sodium	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	32 K	Potassium	23	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	33 Sr	Strontium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	34 Y	Yttrium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	35 Ga	Gallium	23	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	36 Li	Lithium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000125	37 Nb	Niobium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000125	38 Sc	Scandium	23	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000125	39 Ta	Tantalum	23	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000125	40 Ti	Titanium	23	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000125	41 Zr	Zirconium	23	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER
D DRILL CORE	23

SIZE FRACTIONS	NUMBER
2 -150	23

SAMPLE PREPARATIONS	NUMBER
CRUSH/SPLIT & PULV.	23
RIVER ROCK CLEANING	23
SILICA CLEANING	23

REMARKS: Please note that there are carryovers to the standards and blanks due to high level of Pb & Zn in the samples. 1/25/2000 Geng
Please note that the high Fe result reported was determined by AAS. Please advise if titrimetric result is required.

REPORT COPIES TO: MR. STEVE ROBERTSON

INVOICE TO: MR. STEVE ROBERTSON

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

REPORT: V00-00111.0 (COMPLETE)
DATE RECEIVED: 22-JAN-00
DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM
199401		<5	1.8			65	51			2491			48	156	13
199402		<5	33.8			247	924			>10000	3.43		27	99	10
199403		<5	9.4			45	836			1226			3	10	<1
199404		<5	186.6	182.4	15.19	534	4122			>10000	8.47		<1	15	2
199405		<5	>200.0	270.4	16.33	1212	>10000	2.26		>10000	7.52		<1	12	2
199406		<5	>200.0	249.6	15.44	1464	>10000	3.57		>10000	7.34		8	10	<1
199407		<5	5.3			12	702			890			2	4	<1
199408		<5	6.2			17	473			1999			4	2	<1
199409		8	175.4	170.8	15.54	1407	5506			>10000	>15.00	18.19	4	5	2
199410		<5	65.2	70.4	15.26	628	2425			>10000	4.85		6	4	<1
199411		37	>200.0	1225.8	15.48	9443	>10000	>15.00	18.39	>10000	>15.00	29.48	6	3	<1
199412		28	>200.0	1251.6	16.22	9094	>10000	>15.00	18.18	>10000	>15.00	29.85	6	3	<1
199413		33	>200.0	870.1	15.77	2121	>10000	>15.00	18.55	>10000	12.60		17	2	<1
199414		397	127.6	116.0	15.58	1441	8570			>10000	8.94		26	6	1
199415		<5	1.4			4	112			178			2	2	<1
199416		308	188.6	177.4	15.72	927	>10000	3.43		>10000	10.27		4	4	<1
199417		323	118.2	111.7	16.64	1711	>10000	1.75		>10000	11.47		4	9	<1
199418		166	177.8	160.9	15.80	2218	>10000	2.87		>10000	>15.00	20.67	<1	7	<1
199419		<5	>200.0	635.6	15.52	4513	>10000	10.43		>10000	>15.00	26.43	<1	4	<1
199420		14	>200.0	252.4	15.78	1270	>10000	4.64		>10000	7.00		10	30	3
199421		141	>200.0	501.8	15.29	2301	>10000	8.46		>10000	9.12		5	17	2
199422		<5	71.4	72.6	15.42	470	>10000	1.30		>10000	3.36		22	39	3
199423		6	3.7			10	360			369			3	3	<1

SAMPLE NUMBER	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199401	14.9	<5	144	22	3.74	622	<10	60	47	107	<20	<20	6	0.75	0.59	>10.00	<.01
199402	134.2	107	1764	88	>10.00	1000	22	16	128	77	<20	53	2	0.53	0.23	5.98	<.01
199403	5.8	22	97	11	0.99	1225	<10	758	7	19	<20	<20	4	0.02	0.18	>10.00	<.01
199404	315.5	558	1787	184	>10.00	556	50	15	52	8	23	139	<1	<.01	0.04	3.02	<.01
199405	306.9	623	3023	457	>10.00	447	50	15	71	7	409	121	<1	<.01	0.02	2.52	<.01
199406	297.9	245	4957	730	>10.00	475	41	16	58	8	626	117	<1	<.01	0.03	2.51	<.01
199407	4.4	6	54	8	0.58	1051	<10	174	5	14	<20	<20	3	<.01	0.17	>10.00	<.01
199408	9.4	12	41	7	1.02	1016	<10	50	4	2	<20	<20	4	<.01	0.81	>10.00	<.01
199409	788.6	726	3373	129	>10.00	885	36	10	55	6	64	283	1	0.05	1.71	2.12	<.01
199410	187.6	322	748	69	>10.00	1104	12	19	29	5	<20	64	3	0.04	5.59	8.11	<.01
199411	1450.2	538	1298	1191	>10.00	1008	50	7	57	2	>2000	518	1	<.01	0.02	1.15	<.01
199412	1411.1	393	1212	1093	>10.00	982	42	6	45	2	>2000	439	1	<.01	0.01	1.25	<.01
199413	683.3	108	7182	1006	>10.00	730	26	9	89	4	550	190	5	<.01	0.05	2.56	<.01
199414	416.8	139	4811	275	>10.00	597	35	17	66	5	264	131	3	<.01	0.02	1.77	<.01
199415	1.0	<5	<5	<5	0.25	154	<10	379	7	1	<20	<20	2	0.04	1.60	>10.00	<.01
199416	539.3	75	5305	314	>10.00	539	31	13	90	4	332	166	9	<.01	0.01	1.66	<.01
199417	596.5	19	7456	264	>10.00	570	27	13	92	3	673	168	14	<.01	0.01	1.78	<.01
199418	1103.7	25	4003	237	>10.00	749	28	10	106	3	1171	294	47	<.01	<.01	0.88	<.01
199419	1346.2	27	2494	622	>10.00	867	29	73	57	3	>2000	386	1	<.01	0.04	0.46	<.01
199420	297.0	35	843	177	8.81	790	15	162	61	22	641	82	2	0.20	1.79	6.08	<.01
199421	424.2	37	3173	494	>10.00	944	21	17	70	11	1232	126	3	0.07	0.82	3.95	<.01
199422	126.0	9	634	64	6.55	1764	<10	77	62	24	204	35	4	0.21	2.10	>10.00	<.01
199423	2.0	<5	25	<5	0.38	3196	<10	28	7	3	<20	<20	5	0.01	0.67	>10.00	<.01

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00111.0 (COMPLETE)
DATE RECEIVED: 22-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 1B(2/ 6)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199401		0.06	193	11	3	5	8	<5	<10	<.010	5
199402		0.04	39	5	17	3	3	<5	<10	<.010	<1
199403		<.01	245	5	<2	<1	<1	<5	<10	<.010	<1
199404		<.01	35	1	22	<1	<1	<5	<10	<.010	<1
199405		<.01	29	<1	31	<1	<1	<5	<10	<.010	<1
199406		<.01	31	<1	37	<1	<1	<5	<10	<.010	<1
199407		<.01	227	2	<2	<1	<1	<5	<10	<.010	<1
199408		<.01	142	3	<2	<1	<1	<5	<10	<.010	<1
199409		0.01	26	1	21	1	<1	<5	<10	<.010	<1
199410		<.01	100	3	6	1	<1	<5	<10	<.010	<1
199411		<.01	11	<1	150	<1	<1	<5	<10	<.010	<1
199412		<.01	10	<1	146	<1	<1	<5	<10	<.010	<1
199413		<.01	19	2	37	<1	<1	<5	<10	<.010	<1
199414		<.01	29	<1	39	<1	<1	<5	<10	<.010	<1
199415		0.01	178	<1	<2	<1	<1	<5	<10	<.010	<1
199416		<.01	21	<1	48	<1	<1	<5	<10	<.010	<1
199417		<.01	20	2	46	<1	<1	<5	<10	<.010	<1
199418		<.01	13	3	80	<1	<1	<5	<10	<.010	<1
199419		<.01	11	<1	132	<1	<1	<5	<10	<.010	<1
199420		0.06	14	2	31	1	<1	<5	<10	<.010	<1
199421		0.02	14	1	40	<1	<1	<5	<10	<.010	<1
199422		0.05	52	3	15	1	<1	<5	<10	<.010	2
199423		<.01	126	5	<2	<1	<1	<5	<10	<.010	<1

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00111.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 22-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 2A(3/ 6)

STANDARD NAME	Wet Au	Ag	AgGrav	wt/Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
UNITS	PPB	PPM	PPM	GM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
OX8 Oxide	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-1	-	0.6	-	-	97	23	-	-	109	-	-	<1	36	21	0.2	<5	7	<5	4.79	723	<10	185	53	117	<20	<20	8	3.45	1.73	1.07	0.06
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.6	-	-	97	23	-	-	109	-	-	<1	36	21	0.2	3	7	3	4.79	723	5	185	53	117	10	10	8	3.45	1.73	1.07	0.06
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	8	0.7	-	-	95	11	-	-	80	-	-	2	40	18	0.1	1	8	1	4.74	720	<1	200	54	133	4	2	5	3.09	1.83	1.08	0.06
OX9 Oxide	457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	457	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	-	<0.2	-	-	<1	3	-	-	17	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.1	-	-	<1	3	-	-	17	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	0.2	<0.1	<0.01	1	2	<0.01	<0.01	1	<0.01	<0.01	1	1	1	0.1	2	5	5	0.05	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01	<.01
CANMET CERTIFIED STD	-	-	-	-	-	-	4.37	-	-	>15.00	19.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	4.37	-	-	15.00	19.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-
CANMET STANDARD	-	-	-	-	-	-	-	64.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	64.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	625.7	-	-	2540	647000	64.70	64.74	44200	4.42	4.42	-	-	-	-	230	560	3600	8.43	-	-	-	-	-	-	-	-	-	-	-	-

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

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STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX8 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
GS91-1		0.32	40	8	5	23	7	10	<10	0.180	10
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.32	40	8	5	23	7	10	5	0.180	10
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		0.32	39	9	4	-	1	18	1	-	9
OX9 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET STANDARD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199402		<5	33.8			247	924			>10000	3.43		27	99	10	134.2	107	1764	88	>10.00	1000	22	16	128	77	<20	53	2	0.53	0.23	5.98	<.01
Duplicate		<5	31.8			242	937			>10000	3.42		25	94	9	121.0	109	1709	87	>10.00	947	17	12	120	78	<20	45	2	0.52	0.21	6.04	<.01
199409		8	175.4	170.8	15.54	1407	5506			>10000	>15.00	18.19	4	5	2	788.6	726	3373	129	>10.00	885	36	10	55	6	64	283	1	0.05	1.71	2.12	<.01
Duplicate												18.26																				
199411		37	>200.0	1225.8	15.48	9443	>10000	>15.00	18.39	>10000	>15.00	29.48	6	3	<1	1450.2	538	1298	1191	>10.00	1008	50	7	57	2	>2000	518	1	<.01	0.02	1.15	<.01
Duplicate				1281.1					18.44																							
199414		397	127.6	116.0	15.58	1441	8570			>10000	8.94		26	6	1	416.8	139	4811	275	>10.00	597	35	17	66	5	264	131	3	<.01	0.02	1.77	<.01
Duplicate											8.96																					
199417		323	118.2	111.7	16.64	1711	>10000	1.75		>10000	11.47		4	9	<1	596.5	19	7456	264	>10.00	570	27	13	92	3	673	168	14	<.01	0.01	1.78	<.01
Prep Duplicate		328	110.1	101.4	16.29	1948	>10000	1.44		>10000	11.79		3	8	1	640.3	21	7464	265	>10.00	613	23	13	83	3	750	152	15	<.01	0.01	1.75	<.01
199420		14	>200.0	252.4	15.78	1270	>10000	4.64		>10000	7.00		10	30	3	297.0	35	843	177	8.81	790	15	162	61	22	641	82	2	0.20	1.79	6.08	<.01
Duplicate			>200.0			1187	>10000	4.65		>10000	6.96		10	30	3	286.3	34	833	174	8.30	763	14	200	61	25	615	73	2	0.23	1.77	5.94	<.01

Intertek Testing Services
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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199402		0.04	39	5	17	3	3	<5	<10	<.010	<1
Duplicate		0.04	40	5	15	3	3	<5	<10	<.010	<1
199409		0.01	26	1	21	1	<1	<5	<10	<.010	<1
Duplicate											
199411		<.01	11	<1	150	<1	<1	<5	<10	<.010	<1
Duplicate											
199414		<.01	29	<1	39	<1	<1	<5	<10	<.010	<1
Duplicate											
199417		<.01	20	2	46	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	20	2	45	<1	<1	<5	<10	<.010	<1
199420		0.06	14	2	31	1	<1	<5	<10	<.010	<1
Duplicate		0.07	15	2	31	1	<1	<5	<10	<.010	1

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00130.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00

DATE APPROVED		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000127	1 Wet Au	Partial Ext. Gold	55	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000127	2 Ag	Silver	55	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	3 AgGrav	Silver (Grav.)	18	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000127	4 wt/Au	Sample weight/grams	55	0.01 GM	NOT APPLICABLE	
000127	5 Cu	Copper	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	6 Pb	Lead	55	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	7 Pb	Lead	10	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000127	8 Pb	Lead	1	0.01 PCT		TITRIMETRIC
000127	9 Zn	Zinc	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	10 Zn	Zinc	21	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000127	11 Zn	Zinc	10	0.01 PCT		TITRIMETRIC
000127	12 Mo	Molybdenum	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	13 Ni	Nickel	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	14 Co	Cobalt	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	15 Cd	Cadmium	55	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	16 Bi	Bismuth	55	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	17 As	Arsenic	55	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	18 Sb	Antimony	55	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	19 Fe	Iron	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	20 Mn	Manganese	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	21 Te	Tellurium	55	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	22 Ba	Barium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	23 Cr	Chromium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	24 V	Vanadium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	25 Sn	Tin	55	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	26 W	Tungsten	55	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	27 La	Lanthanum	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	28 Al	Aluminum	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	29 Mg	Magnesium	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	30 Ca	Calcium	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	31 Na	Sodium	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	32 K	Potassium	55	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	33 Sr	Strontium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	34 Y	Yttrium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	35 Ga	Gallium	55	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	36 Li	Lithium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000127	37 Nb	Niobium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000127	38 Sc	Scandium	55	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000127	39 Ta	Tantalum	55	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000127	40 Ti	Titanium	55	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000127	41 Zr	Zirconium	55	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	55	2 -150	55	CRUSH/SPLIT & PULV.	55
				RIVER ROCK CLEANING	55
				SILICA CLEANING	55
				OVERWEIGHT/KG	129

REMARKS: PLEASE NOTE THAT THERE IS CARRY OVER TO THE STANDARDS DUE TO HIGH LEVELS OF SOME ELEMENTS IN THE SAMPLES.
Zinc concentration >1% will enhance Tungsten results. Therefore, Tungsten concentration would be greater than true value.
Thank you, KAE
Please note that the over-limit Fe result (>10% Fe) was determined by the AAS method.
Please advise if titrimetric result is needed.

REPORT COPIES TO: MR. STEVE ROBERTSON INVOICE TO: MR. STEVE ROBERTSON

Intertek Testing Services
Bondar Clegg

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DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Au GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199351		6	2.9			28	307			774			9	53	8	3.9	<5	75	7	3.22	602	<10	72	175	30	<20	<20	2	2.11	0.74	3.07	0.01
199352		<5	>50.0	87.3	16.31	375	2674			>10000	6.34		<1	16	2	262.2	432	1983	54	>10.00	281	37	35	66	6	31	70	2	0.01	0.07	1.32	<.01
199353		<5	2.5			7	89			785			2	7	<1	3.9	<5	36	<5	2.33	441	<10	147	6	15	<20	<20	4	0.02	0.17	>10.00	<.01
199354		<5	32.5			707	4540			>10000	4.63		2	5	<1	179.3	77	600	47	9.70	546	14	26	14	10	278	48	3	<.01	0.15	>10.00	<.01
199355		<5	4.6			74	640			1460			2	9	<1	7.1	<5	50	6	2.00	568	<10	238	5	16	<20	<20	3	0.02	1.02	>10.00	<.01
199356		<5	1.0			5	50			440			1	4	<1	2.1	<5	13	<5	0.42	333	<10	436	4	12	<20	<20	3	<.01	0.31	>10.00	<.01
199357		<5	>50.0	92.8	15.59	38	2034			1267			<1	12	2	8.0	464	1824	64	>10.00	78	33	52	59	5	28	<20	<1	<.01	0.03	0.69	<.01
199358		<5	>50.0	108.1	16.63	36	2238			1080			<1	11	3	7.1	507	1584	72	>10.00	77	34	52	55	5	<20	<20	<1	<.01	0.05	0.30	<.01
199359		<5	>50.0	102.4	15.19	250	3059			>10000	3.37		<1	11	2	129.9	575	1994	124	>10.00	313	39	19	56	4	32	36	2	<.01	0.05	2.38	<.01
199360		<5	1.6			32	38			7800			1	3	<1	33.5	<5	80	5	1.63	352	<10	98	5	8	<20	<20	5	<.01	0.22	>10.00	<.01
199361		<5	1.0			6	19			76			2	5	2	0.5	<5	5	<5	0.67	188	<10	590	20	9	<20	<20	2	0.31	1.78	>10.00	0.01
199362		12	2.3			9	314			214			3	6	<1	1.3	<5	<5	<5	0.46	483	<10	527	3	14	<20	<20	3	0.02	0.33	>10.00	<.01
199363		<5	1.5			3	223			181			1	4	<1	1.3	<5	33	10	0.23	1043	<10	338	3	14	<20	<20	3	0.02	0.39	>10.00	<.01
199364		<5	31.3			991	789			>10000	2.44		2	5	<1	112.4	86	245	23	6.06	983	11	186	6	9	359	31	3	0.01	0.30	>10.00	<.01
199365		<5	0.8			9	11			292			1	2	<1	1.6	<5	15	<5	0.19	2169	<10	114	3	6	<20	<20	4	<.01	0.30	>10.00	<.01
199366		9	>50.0	658.5	15.08	2620	>10000	13.00		>10000	12.61		2	6	<1	608.7	438	603	785	>10.00	556	36	13	40	5	297	153	4	<.01	0.11	1.61	<.01
199367		<5	>50.0	258.4	15.66	2774	>10000	3.17		>10000	13.89		2	14	<1	613.3	328	1454	547	>10.00	473	37	13	76	5	535	161	4	<.01	0.03	1.11	<.01
199368		122	>50.0	175.4	15.12	1908	>10000	2.07		>10000	7.78		2	10	1	349.3	146	3477	478	>10.00	573	29	13	55	5	316	108	5	<.01	0.04	2.79	<.01
199369		8	>50.0	254.6	16.53	2092	>10000	4.77		>10000	>15.00	17.05	4	11	<1	824.2	41	3419	383	>10.00	442	31	13	54	3	819	173	21	<.01	0.01	0.39	<.01
199370		<5	1.2			5	95			283			2	2	<1	1.7	<5	8	<5	0.21	206	<10	293	4	1	<20	<20	2	0.03	2.17	>10.00	0.03
199371		14	>50.0	664.8	16.39	4578	>10000	13.72		>10000	>15.00	26.93	4	5	<1	1433.5	55	830	826	>10.00	824	33	9	44	3	>2000	335	3	<.01	<.01	0.39	<.01
199372		8	>50.0	472.0	15.45	3439	>10000	9.84		>10000	>15.00	19.61	9	11	1	971.5	112	1737	578	>10.00	681	37	11	72	3	1420	230	3	<.01	0.01	0.81	<.01
199373		<5	>50.0	337.7	15.16	4326	>10000	4.21		>10000	>15.00	22.46	<1	10	<1	1132.2	199	1562	398	>10.00	777	36	11	85	3	1659	276	3	<.01	<.01	0.56	<.01
199374		<5	>50.0	609.9	15.37	5682	>10000	11.58		>10000	>15.00	23.04	<1	6	1	1067.6	190	1243	739	>10.00	819	39	9	69	3	>2000	234	3	<.01	0.07	0.82	<.01
199375		<5	2.9			24	314			1865			2	12	<1	9.5	<5	48	70	4.10	1091	<10	23	13	8	<20	<20	3	<.01	7.40	>10.00	<.01
199376		14	>50.0	162.9	31.06	1054	>10000	4.27		>10000	>15.00	14.20	2	8	<1	663.9	53	900	985	5.90	2575	10	13	18	7	497	146	14	<.01	4.60	8.58	<.01
199377		6	1.0			3	106			277			1	2	<1	1.4	<5	16	6	0.55	1293	<10	29	7	6	<20	<20	3	0.01	7.64	>10.00	0.01
199378		<5	6.7			21	808			799			4	2	<1	4.5	<5	113	30	1.39	1748	<10	35	7	3	<20	<20	4	0.02	5.39	>10.00	<.01
199379		<5	3.2			70	177			4003			1	2	<1	17.9	<5	52	6	0.71	653	<10	45	5	2	<20	<20	3	0.01	1.58	>10.00	<.01
199380		31	36.8			112	7808			8329			2	5	<1	41.5	<5	599	44	6.51	771	<10	73	7	2	<20	<20	3	<.01	0.66	>10.00	<.01

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00130.0 (COMPLETE)
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 1B(2/12)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199351		0.21	21	6	5	4	<1	<5	<10	<.010	11
199352		0.01	26	9	20	<1	<1	<5	<10	<.010	<1
199353		<.01	584	3	<2	<1	<1	<5	<10	<.010	<1
199354		<.01	239	3	17	<1	<1	<5	<10	<.010	<1
199355		0.01	374	3	<2	<1	<1	<5	<10	<.010	<1
199356		<.01	315	5	<2	<1	<1	<5	<10	<.010	<1
199357		<.01	21	1	13	<1	<1	<5	<10	<.010	<1
199358		<.01	19	<1	14	<1	<1	<5	<10	<.010	<1
199359		<.01	30	14	19	<1	<1	<5	<10	<.010	<1
199360		<.01	281	5	<2	<1	<1	<5	<10	<.010	<1
199361		0.04	149	1	<2	2	<1	<5	<10	0.025	<1
199362		<.01	386	2	<2	<1	<1	<5	<10	<.010	<1
199363		0.01	272	2	<2	<1	<1	<5	<10	<.010	<1
199364		<.01	182	2	18	<1	<1	<5	<10	<.010	<1
199365		<.01	196	2	<2	<1	<1	<5	<10	<.010	<1
199366		<.01	20	3	46	<1	<1	<5	<10	<.010	<1
199367		<.01	18	2	54	<1	<1	<5	<10	<.010	<1
199368		<.01	25	3	32	<1	<1	<5	<10	<.010	<1
199369		<.01	16	1	59	<1	<1	<5	<10	<.010	<1
199370		<.01	152	<1	<2	1	<1	<5	<10	<.010	<1
199371		<.01	12	<1	112	<1	<1	<5	<10	<.010	<1
199372		<.01	17	<1	96	<1	<1	<5	<10	<.010	<1
199373		<.01	15	<1	107	<1	<1	<5	<10	<.010	<1
199374		<.01	15	<1	101	<1	<1	<5	<10	<.010	<1
199375		<.01	126	2	<2	2	<1	<5	<10	<.010	<1
199376		<.01	68	9	48	1	<1	<5	<10	<.010	<1
199377		<.01	120	3	<2	2	<1	<5	<10	<.010	<1
199378		<.01	69	4	<2	2	<1	<5	<10	<.010	<1
199379		<.01	147	3	<2	<1	<1	<5	<10	<.010	<1
199380		<.01	154	2	4	<1	<1	<5	<10	<.010	<1

ITS **Intertek Testing Services**
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Geochemical Lab Report
Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00130.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 2A(3/12)

SAMPLE ELEMENT	Wet Au	Ag	AgGrav	wt/Au	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER UNITS	PPB	PPM	PPM	GM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
199381	<5	>50.0	925.6	15.42	324	>10000	>15.00	20.14	>10000	8.95		4	8	1	413.4	20	572	834	>10.00	1075	20	7	39	4	106	99	2	0.01	0.50	6.48	<.01
199382	<5	3.1			11	330			386			2	1	<1	3.2	<5	<5	<5	0.19	883	<10	215	4	2	<20	<20	3	0.02	0.40	>10.00	<.01
199383	<5	3.0			63	324			254			2	<1	<1	1.5	9	56	6	1.30	733	<10	29	7	2	<20	<20	4	0.04	2.04	>10.00	<.01
199384	<5	31.8			3805	284			366			<1	3	1	3.6	408	1458	39	>10.00	575	18	11	39	6	24	<20	1	0.14	3.60	3.50	<.01
199385	<5	13.8			3775	181			301			2	4	<1	2.6	237	1005	31	>10.00	518	23	17	26	7	<20	<20	1	0.15	0.40	4.30	<.01
199386	<5	14.0			5262	168			361			<1	6	2	2.3	748	480	14	>10.00	73	29	20	92	9	<20	<20	<1	0.11	0.15	0.24	<.01
199387	<5	12.6			6618	90			314			<1	7	2	2.0	615	304	16	>10.00	99	29	20	80	8	32	<20	<1	0.02	0.09	0.04	<.01
199388	6	11.8			6058	107			205			<1	6	2	1.3	620	106	12	>10.00	73	33	20	90	8	<20	<20	<1	0.04	0.08	0.08	<.01
199389	<5	7.0			4675	61			174			<1	6	1	1.2	902	325	18	>10.00	171	32	18	91	8	<20	<20	1	0.11	0.40	2.82	<.01
199390	<5	5.5			4327	82			211			2	6	<1	1.8	880	593	51	>10.00	369	24	15	79	8	<20	<20	1	0.14	0.99	2.90	<.01
199391	<5	4.3			6710	63			2541			<1	5	1	12.5	799	747	75	>10.00	82	29	19	69	9	26	<20	<1	0.04	0.08	0.07	<.01
199392	<5	5.3			7748	62			>10000	1.42		<1	5	1	67.2	1139	46	9	>10.00	141	41	23	39	9	<20	<20	<1	0.03	0.08	0.03	<.01
199393	<5	7.7			6554	93			>10000	1.76		<1	4	<1	75.0	991	94	7	>10.00	159	35	19	45	8	<20	<20	<1	0.02	0.06	0.02	<.01
199394	<5	>50.0	81.9	16.83	6614	1553			1775			<1	4	<1	11.1	>2000	1147	52	>10.00	175	42	20	45	7	32	<20	2	0.03	0.13	0.23	<.01
199395	14	0.8			13	18			24			2	2	<1	0.3	<5	<5	<5	0.24	208	<10	222	4	1	<20	<20	2	0.06	1.79	>10.00	<.01
199396	<5	12.4			1213	257			94			1	2	<1	1.0	323	167	10	9.22	495	<10	25	23	2	<20	<20	3	0.09	0.58	>10.00	<.01
199397	12	16.7			1448	1818			2013			4	3	<1	11.0	232	517	36	8.06	781	<10	18	8	3	<20	<20	3	0.15	0.99	>10.00	<.01
199398	6	1.0			18	24			2253			2	<1	<1	10.4	9	18	<5	0.86	641	<10	18	6	1	<20	<20	3	0.02	0.75	>10.00	<.01
199399	<5	31.0			1146	670			>10000	>15.00	16.41	<1	1	<1	645.3	810	1281	42	>10.00	515	36	11	32	4	<20	137	4	0.02	0.12	3.00	<.01
199400	6	39.2			998	853			>10000	14.94		<1	3	<1	674.5	1035	1429	53	>10.00	499	39	12	34	4	<20	122	4	0.03	0.15	2.98	<.01
199451	<5	0.8			9	16			566			2	3	<1	3.0	<5	15	<5	0.58	825	<10	19	5	4	<20	<20	5	0.10	0.81	>10.00	<.01
199452	18	>50.0	60.3	15.43	2843	1009			>10000	>15.00	20.54	3	4	<1	868.1	1078	1281	56	>10.00	493	39	12	113	7	30	146	4	0.14	0.42	1.58	<.01
199453	<5	>50.0	93.0	15.28	3712	5550			>10000	>15.00	17.34	4	6	<1	843.9	957	1000	112	>10.00	354	43	11	170	6	273	135	14	0.02	0.05	0.86	<.01
199454	11	>50.0	127.9	16.66	3782	5489			>10000	>15.00	18.90	5	3	<1	937.5	713	1601	141	>10.00	733	40	13	29	5	118	153	3	0.06	0.25	2.31	<.01
199455	<5	2.4			68	67			3899			3	3	<1	19.0	18	100	6	2.93	1130	<10	13	7	2	<20	<20	4	0.04	2.52	>10.00	<.01

ITS Intertek Testing Services
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Geochemical Lab Report

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REPORT: V00-00130.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 28(4/12)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199381		<.01	40	<1	17	<1	<1	<5	<10	<.010	<1
199382		<.01	170	2	<2	<1	<1	<5	<10	<.010	<1
199383		<.01	159	3	<2	1	<1	<5	<10	<.010	<1
199384		<.01	26	<1	9	1	<1	<5	<10	<.010	<1
199385		0.02	35	<1	14	1	<1	<5	<10	<.010	<1
199386		0.04	22	<1	16	3	<1	<5	11	<.010	<1
199387		<.01	24	<1	17	<1	<1	<5	18	<.010	<1
199388		0.01	22	<1	15	1	<1	<5	11	<.010	<1
199389		0.02	30	<1	15	2	<1	<5	<10	<.010	<1
199390		0.02	28	<1	13	2	<1	<5	<10	<.010	<1
199391		0.01	22	<1	16	1	<1	<5	<10	<.010	<1
199392		0.02	26	<1	20	2	<1	<5	19	<.010	<1
199393		0.01	24	<1	18	1	<1	<5	<10	<.010	<1
199394		<.01	25	<1	17	<1	<1	<5	<10	<.010	<1
199395		0.02	161	1	<2	1	<1	<5	<10	<.010	<1
199396		0.01	161	2	3	<1	<1	<5	<10	<.010	<1
199397		<.01	122	2	4	<1	<1	<5	<10	<.010	<1
199398		<.01	149	2	<2	<1	<1	<5	<10	<.010	<1
199399		<.01	24	<1	32	<1	<1	<5	<10	<.010	<1
199400		<.01	24	<1	32	<1	<1	<5	<10	<.010	<1
199451		<.01	165	3	<2	<1	<1	<5	<10	<.010	<1
199452		0.01	21	<1	28	2	<1	<5	<10	<.010	<1
199453		<.01	15	<1	48	<1	<1	<5	<10	<.010	<1
199454		<.01	23	<1	41	<1	<1	<5	<10	<.010	<1
199455		<.01	91	3	<2	<1	<1	<5	<10	<.010	<1

ITS Intertek Testing Services
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Geochemical Lab Report

Vancouver Branch

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REPORT: V00-00130.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00

STANDARD NAME	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Au GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
OX5 Oxide	856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide	-	-	23.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	23.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET STSD-4	-	<0.2	-	-	67	25	-	-	110	-	-	1	24	11	0.7	<5	15	5	2.88	1201	<10	695	31	47	<20	<20	13	1.23	0.74	1.23	0.04
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.1	-	-	67	25	-	-	110	-	-	1	24	11	0.7	3	15	5	2.88	1201	5	695	31	47	10	10	13	1.23	0.74	1.23	0.04
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	0.3	-	-	66	13	-	-	82	-	-	2	23	11	0.6	-	11	4	2.60	1200	-	-	30	51	-	-	-	-	-	-	-
OX8 Oxide	174	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	174	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	-	<0.2	-	-	<1	<2	-	-	10	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
ANALYTICAL BLANK	-	<0.2	-	-	2	<2	-	-	3	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
Number of Analyses	-	2	-	-	2	2	-	-	2	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	0.1	-	-	1	1	-	-	6	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01
Standard Deviation	-	-	-	-	<1	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	0.2	<0.1	<0.01	1	2	<0.01	<0.01	1	<0.01	<0.01	1	1	1	0.1	2	5	5	0.05	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01	<.01

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STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX5 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX11 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET STSD-4		0.10	55	11	3	9	4	<5	<10	0.078	1
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.10	55	11	3	9	4	3	5	0.078	1
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX8 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2	2	2
Mean Value		<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1

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STANDARD NAME	ELEMENT UNITS Wet Au PPB	Ag PPM	AgGrav PPM	wt/Au GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
OX9 Oxide	477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-1	-	0.7	-	-	96	10	-	-	122	-	-	1	36	21	0.6	<5	8	<5	4.67	700	<10	172	52	110	<20	<20	7	3.24	1.57	0.99	0.05
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.7	-	-	96	10	-	-	122	-	-	1	36	21	0.6	3	8	3	4.67	700	5	172	52	110	10	10	7	3.24	1.57	0.99	0.05
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	8	0.7	-	-	95	11	-	-	80	-	-	2	40	18	0.1	1	8	1	4.74	720	<1	200	54	133	4	2	5	3.09	1.83	1.08	0.06
OX12 Oxide	-	-	9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	9.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	4.33	-	-	>15.00	19.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	4.33	-	-	15.00	19.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-
CANMET STANDARD	-	-	-	-	-	-	-	64.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	64.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	625.7	-	-	2540	647000	64.70	64.74	44200	4.42	4.42	-	-	-	-	230	560	>99	8.43	-	-	-	-	-	-	-	-	-	-	-	-

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STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX9 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
GS91-1		0.27	33	7	4	22	6	8	<10	0.170	10
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.27	33	7	4	22	6	8	5	0.170	10
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		0.32	39	9	4	-	1	18	1	-	9
OX12 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET STANDARD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT UNITS	Wet	Au PPB	Ag PPM	AgGrav PPM	wt/Au GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM
199351			6	2.9			28	307			774			9	53	8
Duplicate			<5	3.1			28	314			789			9	54	8
199352			<5	>50.0	87.3	16.31	375	2674			>10000	6.34		<1	16	2
Prep Duplicate			<5	>50.0	90.6											
Prep Duplicate					71.7	16.22	369	2599			>10000	5.55		<1	18	2
Duplicate												6.48				
199357			<5	>50.0	92.8	15.59	38	2034			1267			<1	12	2
Duplicate					92.8											
199358			<5	>50.0	108.1	16.63	36	2238			1080			<1	11	3
Duplicate					104.8											
199359			<5	>50.0	102.4	15.19	250	3059			>10000	3.37		<1	11	2
Duplicate					99.4											
199366			9	>50.0	658.5	15.08	2620	>10000	13.00		>10000	12.61		2	6	<1
Duplicate					682.5											
199367			<5	>50.0	258.4	15.66	2774	>10000	3.17		>10000	13.89		2	14	<1
Duplicate					259.8											
199368			122	>50.0	175.4	15.12	1908	>10000	2.07		>10000	7.78		2	10	1
Duplicate					167.0											
199369			8	>50.0	254.6	16.53	2092	>10000	4.77		>10000	>15.00	17.05	4	11	<1
Duplicate				>50.0			2096	>10000			>10000		16.98	4	11	<1
199372			8	>50.0	472.0	15.45	3439	>10000	9.84		>10000	>15.00	19.61	9	11	1
Duplicate					474.4				9.87			>15.00				
199374			<5	>50.0	609.9	15.37	5682	>10000	11.58		>10000	>15.00	23.04	<1	6	1
Duplicate			<5													

SAMPLE NUMBER	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199351	3.9	<5	75	7	3.22	602	<10	72	175	30	<20	<20	2	2.11	0.74	3.07	0.01
Duplicate	3.9	<5	71	7	3.32	610	<10	68	182	29	<20	<20	2	2.12	0.76	3.14	0.01
199352	262.2	432	1983	54	>10.00	281	37	35	66	6	31	70	2	0.01	0.07	1.32	<.01
Prep Duplicate																	
Prep Duplicate	235.9	377	2081	51	>10.00	275	36	38	74	7	22	45	2	<.01	0.11	1.13	<.01
Duplicate																	
199357	8.0	464	1824	64	>10.00	78	33	52	59	5	28	<20	<1	<.01	0.03	0.69	<.01
Duplicate																	
199358	7.1	507	1584	72	>10.00	77	34	52	55	5	<20	<20	<1	<.01	0.05	0.30	<.01
Duplicate																	
199359	129.9	575	1994	124	>10.00	313	39	19	56	4	32	36	2	<.01	0.05	2.38	<.01
Duplicate																	
199366	608.7	438	603	785	>10.00	556	36	13	40	5	297	153	4	<.01	0.11	1.61	<.01
Duplicate																	
199367	613.3	328	1454	547	>10.00	473	37	13	76	5	535	161	4	<.01	0.03	1.11	<.01
Duplicate																	
199368	349.3	146	3477	478	>10.00	573	29	13	55	5	316	108	5	<.01	0.04	2.79	<.01
Duplicate																	
199369	824.2	41	3419	383	>10.00	442	31	13	54	3	819	173	21	<.01	0.01	0.39	<.01
Duplicate	813.8	40	3399	379	>10.00	437	30	14	52	4	822	142	19	<.01	0.01	0.40	<.01
199372	971.5	112	1737	578	>10.00	681	37	11	72	3	1420	230	3	<.01	0.01	0.81	<.01
Duplicate																	
199374	1067.6	190	1243	739	>10.00	819	39	9	69	3	>2000	234	3	<.01	0.07	0.82	<.01
Duplicate																	

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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199351		0.21	21	6	5	4	<1	<5	<10	<.010	11
Duplicate		0.20	20	6	5	4	<1	<5	<10	<.010	11
199352		0.01	26	9	20	<1	<1	<5	<10	<.010	<1
Prep Duplicate											
Prep Duplicate		<.01	27	6	21	<1	<1	<5	<10	<.010	<1
Duplicate											
199357		<.01	21	1	13	<1	<1	<5	<10	<.010	<1
Duplicate											
199358		<.01	19	<1	14	<1	<1	<5	<10	<.010	<1
Duplicate											
199359		<.01	30	14	19	<1	<1	<5	<10	<.010	<1
Duplicate											
199366		<.01	20	3	46	<1	<1	<5	<10	<.010	<1
Duplicate											
199367		<.01	18	2	54	<1	<1	<5	<10	<.010	<1
Duplicate											
199368		<.01	25	3	32	<1	<1	<5	<10	<.010	<1
Duplicate											
199369		<.01	16	1	59	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	16	1	60	<1	<1	<5	<10	<.010	<1
199372		<.01	17	<1	96	<1	<1	<5	<10	<.010	<1
Duplicate											
199374		<.01	15	<1	101	<1	<1	<5	<10	<.010	<1
Duplicate											

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SAMPLE	ELEMENT Wet	Au	Ag	AgGrav	wt/Au	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER	UNITS	PPB	PPM	PPM	GM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
199381		<5	>50.0	925.6	15.42	324	>10000	>15.00	20.14	>10000	8.95		4	8	1	413.4	20	572	834	>10.00	1075	20	7	39	4	106	99	2	0.01	0.50	6.48	<.01
Duplicate				924.4					19.95																							
199388		6	11.8			6058	107			205			<1	6	2	1.3	620	106	12	>10.00	73	33	20	90	8	<20	<20	<1	0.04	0.08	0.08	<.01
Duplicate			12.0			5653	104			192			<1	6	1	1.1	654	99	16	>10.00	70	29	19	73	7	<20	<20	<1	0.04	0.08	0.09	<.01
Prep Duplicate		<5	>50.0	71.7	16.22	369	2599			>10000	5.55		<1	18	2	235.9	377	2081	51	>10.00	275	36	38	74	7	22	45	2	<.01	0.11	1.13	<.01
Duplicate				73.7							5.65																					
199394		<5	>50.0	81.9	16.83	6614	1553			1775			<1	4	<1	11.1	>2000	1147	52	>10.00	175	42	20	45	7	32	<20	2	0.03	0.13	0.23	<.01
Prep Duplicate		<5	>50.0	76.1																												
Prep Duplicate				67.5	15.16	6710	1460			1940			<1	5	1	11.9	>2000	1150	47	>10.00	186	44	20	42	8	31	<20	2	0.03	0.14	0.28	<.01
199396		<5	12.4			1213	257			94			1	2	<1	1.0	323	167	10	9.22	495	<10	25	23	2	<20	<20	3	0.09	0.58	>10.00	<.01
Duplicate		6																														
199452		18	>50.0	60.3	15.43	2843	1009			>10000	>15.00	20.54	3	4	<1	868.1	1078	1281	56	>10.00	493	39	12	113	7	30	146	4	0.14	0.42	1.58	<.01
Duplicate				62.3							>15.00																					
199453		<5	>50.0	93.0	15.28	3712	5550			>10000	>15.00	17.34	4	6	<1	843.9	957	1000	112	>10.00	354	43	11	170	6	273	135	14	0.02	0.05	0.86	<.01
Duplicate				99.9																												
199454		11	>50.0	127.9	16.66	3782	5489			>10000	>15.00	18.90	5	3	<1	937.5	713	1601	141	>10.00	733	40	13	29	5	118	153	3	0.06	0.25	2.31	<.01
Duplicate				130.6								18.86																				
199455		<5	2.4			68	67			3899			3	3	<1	19.0	18	100	6	2.93	1130	<10	13	7	2	<20	<20	4	0.04	2.52	>10.00	<.01
Duplicate			2.6			74	67			3871			3	2	<1	19.7	22	103	6	2.98	1139	<10	13	8	2	<20	<20	4	0.04	2.56	>10.00	<.01
Prep Duplicate		<5	>50.0	67.5	15.16	6710	1460			1940			<1	5	1	11.9	>2000	1150	47	>10.00	186	44	20	42	8	31	<20	2	0.03	0.14	0.28	<.01
Duplicate				63.6																												

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00130.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 6B(12/12)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199381		<.01	40	<1	17	<1	<1	<5	<10	<.010	<1
Duplicate											
199388		0.01	22	<1	15	1	<1	<5	11	<.010	<1
Duplicate		0.01	22	<1	15	1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	27	6	21	<1	<1	<5	<10	<.010	<1
Duplicate											
199394		<.01	25	<1	17	<1	<1	<5	<10	<.010	<1
Prep Duplicate											
Prep Duplicate		<.01	26	<1	18	<1	<1	<5	16	<.010	<1
199396		0.01	161	2	3	<1	<1	<5	<10	<.010	<1
Duplicate											
199452		0.01	21	<1	28	2	<1	<5	<10	<.010	<1
Duplicate											
199453		<.01	15	<1	48	<1	<1	<5	<10	<.010	<1
Duplicate											
199454		<.01	23	<1	41	<1	<1	<5	<10	<.010	<1
Duplicate											
199455		<.01	91	3	<2	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	93	3	<2	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	26	<1	18	<1	<1	<5	16	<.010	<1
Duplicate											

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00129.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS
DATE RECEIVED: 24-JAN-00   DATE PRINTED: 8-FEB-00

DATE APPROVED		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000126	1 Wet Au	Partial Ext. Gold	39	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000126	2 Ag	Silver	39	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	3 AgGrav	Silver (Grav.)	25	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000126	4 Wt/Ag	Sample Weight	25	0.10 GM		
000126	5 Cu	Copper	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	6 Pb	Lead	39	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	7 Pb	Lead	21	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000126	8 Pb	Lead	2	0.01 PCT		TITRIMETRIC
000126	9 Zn	Zinc	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	10 Zn	Zinc	27	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000126	11 Zn	Zinc	3	0.01 PCT		TITRIMETRIC
000126	12 Mo	Molybdenum	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	13 Ni	Nickel	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	14 Co	Cobalt	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	15 Cd	Cadmium	39	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	16 Bi	Bismuth	39	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	17 As	Arsenic	39	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	18 Sb	Antimony	39	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	19 Fe	Iron	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	20 Mn	Manganese	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	21 Te	Tellurium	39	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	22 Ba	Barium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	23 Cr	Chromium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	24 V	Vanadium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	25 Sn	Tin	39	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	26 W	Tungsten	39	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	27 La	Lanthanum	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	28 Al	Aluminum	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	29 Mg	Magnesium	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	30 Ca	Calcium	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	31 Na	Sodium	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	32 K	Potassium	39	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	33 Sr	Strontium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	34 Y	Yttrium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	35 Ga	Gallium	39	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	36 Li	Lithium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000126	37 Nb	Niobium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000126	38 Sc	Scandium	39	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000126	39 Ta	Tantalum	39	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000126	40 Ti	Titanium	39	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000126	41 Zr	Zirconium	39	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	39	2 -150	39	CRUSH/SPLIT & PULV.	39
				RIVER ROCK CLEANING	39
				SILICA CLEANING	39

REMARKS: Zinc and Arsenic concentration >1% will enhance Tungsten and Cadmium results respectively. Therefore, Tungsten and Cadmium results would be greater than true values. Thank you, GEN
Please note that there are carryovers to the standards and blanks due to high level of PB ZN in the samples. geng
Please note that the overlimit Fe result (>10%) was determined by AAS. Please advise if titrimetric result is required.

REPORT COPIES TO: MR. STEVE ROBERTSON   INVOICE TO: MR. STEVE ROBERTSON

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00129.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM
199424		17	1.5			31	90			113			19	78	8	0.6	<5
199425		8	>50.0	190.4	15.18	871	>10000	3.38		>10000	2.23		3	14	1	99.5	20
199426		23	>50.0	110.7	15.19	2521	6035			>10000	9.47		<1	14	2	420.6	136
199427		14	>50.0	268.8	15.44	5135	>10000	1.42		>10000	>15.00	29.48	1	12	<1	1351.2	459
199428		6	1.6			14	108			747			30	32	1	3.5	<5
199429		18	1.1			6	43			194			2	3	<1	1.2	<5
199430		11	38.1			94	1813			>10000	2.27		2	9	<1	89.4	250
199431		14	1.0			8	8			56			2	3	<1	0.2	<5
199432		9	2.2			4	331			197			2	4	<1	1.0	<5
199433		6	>50.0	70.3	15.41	340	4003			>10000	4.02		16	46	3	136.5	264
199434		19	42.7			178	2707			>10000	2.75		39	93	3	111.3	156
199435		14	13.1			47	1067			5583			9	19	<1	25.5	30
199436		117	>50.0	867.3	16.39	1235	>10000	>15.00	17.68	>10000	11.10		<1	7	2	658.8	22
199437		34	>50.0	563.7	15.54	1197	>10000	9.46		>10000	8.41		4	10	1	484.6	16
199438		14	>50.0	267.8	15.15	1335	>10000	4.85		>10000	5.88		9	20	1	328.7	18
199439		20	>50.0	87.8	15.03	310	>10000	1.41		>10000	4.10		37	62	3	177.5	95
199440		11	0.9			4	43			138			2	3	<1	0.8	<5
199441		23	23.5			76	3742			3001			4	5	<1	16.2	<5
199442		115	>50.0	378.2	15.42	694	>10000	6.95		>10000	9.21		<1	6	<1	366.2	378
199443		20	>50.0	671.7	15.98	1482	>10000	11.36		>10000	11.70		<1	5	<1	524.1	134
199444		<5	>50.0	259.0	16.02	1641	>10000	4.08		>10000	7.19		<1	11	1	327.9	351
199445		61	>50.0	247.0	16.57	1153	>10000	2.61		>10000	8.42		7	16	1	399.1	378
199446		29	>50.0	538.0	16.67	848	>10000	6.53		>10000	6.49		5	15	1	257.4	659
199447		17	>50.0	1128.6	15.79	847	>10000	>15.00	20.54	>10000	6.58		4	10	<1	311.7	132
199448		9	>50.0	55.6	16.00	329	8247			>10000	6.09		4	12	<1	255.0	18
199449		25	>50.0	172.1	16.12	477	>10000	2.91		>10000	3.68		3	10	<1	162.4	68
199450		<5	>50.0	419.7	15.34	2642	>10000	4.75		>10000	13.95		3	9	<1	601.9	400
199501		30	>50.0	51.8	30.23	125	8694			>10000	1.38		4	11	<1	64.5	47
199502		62	>50.0	260.4	15.28	1103	>10000	3.64		>10000	>15.00	15.59	<1	4	<1	741.0	318
199503		20	>50.0	224.1	15.08	1191	>10000	3.21		>10000	14.23		<1	5	<1	729.7	270

SAMPLE NUMBER	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199424	39	11	1.96	521	<10	93	100	49	<20	<20	4	0.49	1.09	4.14	<.01
199425	7177	914	>10.00	578	21	13	65	15	483	36	1	0.03	0.07	3.15	<.01
199426	8714	85	>10.00	533	32	65	17	10	855	63	<1	0.01	0.02	1.73	<.01
199427	3167	143	>10.00	1180	34	31	25	6	>2000	230	<1	<.01	0.04	0.68	<.01
199428	36	11	1.66	765	<10	155	7	68	<20	<20	5	0.12	0.85	>10.00	<.01
199429	10	<5	0.17	327	<10	390	3	10	<20	<20	3	0.02	0.53	>10.00	<.01
199430	643	45	>10.00	525	17	54	15	12	<20	28	2	<.01	0.42	>10.00	<.01
199431	12	<5	0.21	547	<10	78	4	8	<20	<20	2	0.02	1.38	>10.00	<.01
199432	19	7	0.20	1037	<10	306	4	5	<20	<20	3	0.01	0.31	>10.00	<.01
199433	994	75	>10.00	902	21	12	87	32	111	51	2	0.16	1.05	6.05	<.01
199434	1091	58	>10.00	1234	12	18	102	73	45	36	3	0.14	1.99	7.79	<.01
199435	245	27	2.73	2191	<10	38	10	15	<20	<20	3	0.04	0.47	>10.00	<.01
199436	8118	964	>10.00	413	30	11	20	6	784	152	2	<.01	0.03	2.51	<.01
199437	9736	624	>10.00	424	25	13	47	10	704	119	3	<.01	0.08	2.95	<.01
199438	>10000	692	>10.00	467	25	16	31	9	910	92	9	<.01	0.05	1.36	<.01
199439	5252	150	>10.00	1328	16	11	100	47	162	59	6	0.11	1.33	5.49	<.01
199440	7	<5	0.24	214	<10	138	6	2	<20	<20	2	0.05	2.69	>10.00	<.01
199441	274	26	1.35	1555	<10	104	3	6	<20	<20	4	<.01	0.61	>10.00	<.01
199442	4281	579	>10.00	753	33	12	11	4	181	147	2	<.01	0.07	4.08	<.01
199443	2580	608	>10.00	402	33	13	37	4	649	152	1	<.01	<.01	0.73	<.01
199444	2008	393	>10.00	287	36	23	36	4	282	89	4	<.01	0.02	1.20	<.01
199445	2815	229	>10.00	419	31	20	31	3	319	113	6	<.01	0.02	2.28	<.01
199446	1023	333	>10.00	1170	37	20	20	5	220	75	5	<.01	0.11	9.43	<.01
199447	2487	1084	>10.00	614	28	10	20	4	398	98	6	<.01	0.08	3.58	<.01
199448	6539	70	>10.00	563	26	14	20	4	142	47	15	<.01	0.08	2.51	<.01
199449	1818	197	>10.00	1695	15	37	70	6	147	21	6	<.01	0.61	>10.00	<.01
199450	1035	286	>10.00	1006	36	12	20	4	955	173	9	<.01	0.11	4.69	<.01
199501	631	86	6.22	1498	<10	69	9	4	<20	<20	4	<.01	1.06	>10.00	<.01
199502	707	137	>10.00	703	40	13	24	4	156	200	7	<.01	0.04	0.73	<.01
199503	979	141	>10.00	716	39	14	40	5	171	184	7	<.01	0.05	0.19	<.01

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP | PROJECT: SILVER TIP

REPORT: V00-00129.0 (COMPLETE) | DATE RECEIVED: 24-JAN-00 | DATE PRINTED: 8-FEB-00 | PAGE 1B(2/12)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199424		0.20	85	7	2	2	3	<5	<10	<.010	10
199425		0.02	47	1	20	<1	<1	<5	<10	<.010	<1
199426		0.01	31	1	52	<1	<1	<5	<10	<.010	<1
199427		<.01	17	<1	133	<1	<1	<5	<10	<.010	<1
199428		<.01	317	8	<2	2	4	<5	<10	0.011	1
199429		<.01	151	3	<2	<1	<1	<5	<10	<.010	<1
199430		<.01	93	1	8	<1	<1	<5	<10	<.010	<1
199431		<.01	132	2	<2	1	<1	<5	<10	<.010	<1
199432		<.01	178	2	<2	<1	<1	<5	<10	<.010	<1
199433		0.03	35	2	17	1	<1	<5	<10	<.010	<1
199434		0.02	39	2	10	1	4	<5	<10	<.010	<1
199435		<.01	125	3	<2	<1	<1	<5	<10	<.010	<1
199436		<.01	17	<1	43	<1	<1	<5	<10	<.010	<1
199437		<.01	21	<1	37	<1	<1	<5	<10	<.010	<1
199438		<.01	19	<1	32	<1	<1	<5	<10	<.010	<1
199439		0.02	29	1	17	1	1	<5	<10	<.010	<1
199440		0.02	139	1	<2	1	<1	<5	<10	<.010	<1
199441		<.01	132	3	<2	<1	<1	<5	<10	<.010	<1
199442		<.01	26	<1	35	<1	<1	<5	<10	<.010	<1
199443		<.01	14	<1	49	<1	<1	<5	<10	<.010	<1
199444		<.01	18	1	30	<1	<1	<5	<10	<.010	<1
199445		<.01	15	2	36	<1	<1	<5	<10	<.010	<1
199446		<.01	35	5	23	<1	<1	<5	<10	<.010	<1
199447		<.01	21	1	26	<1	<1	<5	<10	<.010	<1
199448		<.01	23	1	25	<1	<1	<5	<10	<.010	<1
199449		<.01	55	5	14	<1	<1	<5	<10	<.010	<1
199450		<.01	26	12	62	<1	<1	<5	<10	<.010	<1
199501		<.01	115	4	4	<1	<1	<5	<10	<.010	<1
199502		<.01	16	2	46	<1	<1	<5	<10	<.010	<1
199503		<.01	16	1	46	<1	<1	<5	<10	<.010	<1

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

REPORT: V00-00129.0 (COMPLETE)   DATE RECEIVED: 24-JAN-00   DATE PRINTED: 8-FEB-00   PAGE 2A(3/12)

SAMPLE	ELEMENT Wet Au	Ag	AgGrav	wt/Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER	UNITS PPB	PPM	PPM	GM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
199504	<5	1.0			3	58			176			3	3	<1	0.8	<5	<5	<5	0.31	227	<10	297	6	2	<20	<20	2	0.11	3.77	>10.00	<.01
199505	8	45.4			1216	1563			>10000	6.54		<1	5	<1	300.4	131	844	19	>10.00	320	26	15	38	5	163	53	4	<.01	0.02	0.46	<.01
199506	8	>50.0	758.1	15.44	1146	>10000	11.34		>10000	4.26		2	12	1	187.5	247	985	904	>10.00	274	34	16	38	4	176	32	2	<.01	0.05	0.20	<.01
199507	44	>50.0	202.5	16.00	832	>10000	3.19		>10000	7.52		6	11	<1	415.7	78	4562	277	>10.00	1989	25	13	20	3	225	111	6	<.01	0.08	4.29	<.01
199508	15	>50.0	576.1	16.15	1400	>10000	9.24		>10000	>15.00	16.25	7	17	2	958.6	222	4608	619	>10.00	1270	29	10	18	3	614	245	4	<.01	0.66	2.81	<.01
199509	18	>50.0	157.9	20.50	519	>10000	2.63		>10000	4.26		5	7	2	190.7	39	2089	147	>10.00	1431	11	21	19	10	227	48	5	0.31	3.61	>10.00	0.02
199510	<5	11.6			60	1469			4983			4	3	<1	24.0	6	183	15	1.87	2060	<10	18	8	3	<20	<20	3	0.01	5.75	>10.00	<.01
199511	6	4.4			12	286			778			2	3	<1	3.7	<5	76	5	0.70	4370	<10	15	6	3	<20	<20	5	0.01	1.11	>10.00	<.01
199512	71	>50.0	113.0	31.61	395	>10000	2.01		8897			1	3	<1	48.8	13	1093	267	4.06	1512	<10	66	8	3	179	<20	3	<.01	0.29	>10.00	<.01

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199504		0.03	139	1	<2	2	<1	<5	<10	<.010	<1
199505		<.01	18	<1	26	<1	<1	<5	13	<.010	<1
199506		<.01	16	1	18	<1	<1	<5	<10	<.010	<1
199507		<.01	23	2	36	<1	<1	<5	<10	<.010	<1
199508		<.01	18	<1	62	<1	<1	<5	<10	<.010	<1
199509		0.01	54	3	15	1	<1	<5	<10	0.019	<1
199510		<.01	81	3	<2	1	<1	<5	<10	<.010	<1
199511		<.01	110	4	<2	<1	<1	<5	<10	<.010	<1
199512		<.01	125	2	4	<1	<1	<5	<10	<.010	<1

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Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00129.0 (COMPLETE)

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STANDARD NAME	ELEMENT Wet Au UNITS PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
OX11 Oxide	2951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	2951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX12 Oxide	6802	-	10.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	6802	-	10.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-1	-	0.6	-	-	95	17	-	-	89	-	-	1	35	20	0.3	<5	11	<5	4.55	701	<10	169	50	111	<20	<20	6	3.19	1.68	0.98	0.05
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.6	-	-	95	17	-	-	89	-	-	1	35	20	0.3	3	11	3	4.55	701	5	169	50	111	10	10	6	3.19	1.68	0.98	0.05
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	8	0.7	-	-	95	11	-	-	80	-	-	2	40	18	0.1	1	8	1	4.74	720	<1	200	54	133	4	2	5	3.09	1.83	1.08	0.06
ANALYTICAL BLANK	-	<0.2	-	-	<1	6	-	-	34	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
ANALYTICAL BLANK	-	<0.2	-	-	<1	3	-	-	15	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
Number of Analyses	-	2	-	-	2	2	-	-	2	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	0.1	-	-	<1	4	-	-	25	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01
Standard Deviation	-	-	-	-	-	2	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	0.2	<0.1	<0.01	1	2	<0.01	<0.01	1	<0.01	<0.01	1	1	1	0.1	2	5	5	0.05	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01	<.01
CANMET LKSD-2	-	0.3	-	-	37	59	-	-	214	-	-	1	23	16	0.9	<5	11	<5	3.57	1823	<10	202	28	43	<20	<20	49	1.74	0.76	0.69	0.04
Number of Analyses	-	1	-	-	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.3	-	-	37	59	-	-	214	-	-	1	23	16	0.9	3	11	3	3.57	1823	5	202	28	43	10	10	49	1.74	0.76	0.69	0.04
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	0.8	-	-	36	40	-	-	200	-	-	2	23	17	0.8	-	9	1	3.50	1840	-	-	29	48	-	-	-	-	-	-	-

Intertek Testing Services
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Geochemical Lab Report

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STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX11 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX12 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
GS91-1		0.29	32	7	4	22	6	8	<10	0.162	9
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.29	32	7	4	22	6	8	5	0.162	9
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		0.32	39	9	4	-	1	18	1	-	9
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2	2	2
Mean Value		<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1
CANMET LKSD-2		0.27	28	25	4	16	3	<5	<10	0.079	5
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.27	28	25	4	16	3	3	5	0.079	5
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-

ITS Intertek Testing Services
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Geochemical Lab Report

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STANDARD NAME	ELEMENT UNITS Wet Au PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
BCC standard ME89-2	-	-	-	-	-	-	1.38	-	-	6.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	1.38	-	-	6.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	2300	13200	1.32	1.32	67300	6.73	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	-	-	-	-	19.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	-	19.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-
CANMET STANDARD	-	-	-	-	-	-	-	64.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	64.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	625.7	-	-	2540	647000	64.70	64.74	44200	4.42	4.42	-	-	-	-	230	560	3600	8.43	-	-	-	-	-	-	-	-	-	-	-	-

ITS **Intertek Testing Services**
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STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
BCC standard ME89-2		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET STANDARD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-

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Vancouver Branch

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PROJECT: SILVER TIP

DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE	ELEMENT Wet	Au	Ag	AgGrav	Wt/Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER	UNITS	PPB	PPM	PPM	GM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
199425		8	>50.0	190.4	15.18	871	>10000	3.38		>10000	2.23		3	14	1	99.5	20	7177	914	>10.00	578	21	13	65	15	483	36	1	0.03	0.07	3.15	<.01
Duplicate				187.9				3.36			2.18																					
199426		23	>50.0	110.7	15.19	2521	6035			>10000	9.47		<1	14	2	420.6	136	8714	85	>10.00	533	32	65	17	10	855	63	<1	0.01	0.02	1.73	<.01
Duplicate				98.6																												
199427		14	>50.0	268.8	15.44	5135	>10000	1.42		>10000	>15.00	29.48	1	12	<1	1351.2	459	3167	143	>10.00	1180	34	31	25	6	>2000	230	<1	<.01	0.04	0.68	<.01
Duplicate				264.7								29.50																				
199433		6	>50.0	70.3	15.41	340	4003			>10000	4.02		16	46	3	136.5	264	994	75	>10.00	902	21	12	87	32	111	51	2	0.16	1.05	6.05	<.01
Duplicate		<5	>50.0	74.9		341	3902			>10000			17	45	3	143.0	258	999	76	>10.00	911	22	12	89	34	103	54	2	0.16	1.05	6.05	<.01
199436		117	>50.0	867.3	16.39	1235	>10000	>15.00	17.68	>10000	11.10		<1	7	2	658.8	22	8118	964	>10.00	413	30	11	20	6	784	152	2	<.01	0.03	2.51	<.01
Prep Duplicate		97	>50.0	867.2																												
Prep Duplicate				829.6	16.33	1292	>10000	>15.00	17.21	>10000	10.53		2	7	1	581.1	20	7603	960	>10.00	509	19	13	23	7	830	144	2	<.01	0.05	3.05	<.01
Duplicate									17.67																							
199437		34	>50.0	563.7	15.54	1197	>10000	9.46		>10000	8.41		4	10	1	484.6	16	9736	624	>10.00	424	25	13	47	10	704	119	3	<.01	0.08	2.95	<.01
Duplicate				585.3																												
199438		14	>50.0	267.8	15.15	1335	>10000	4.85		>10000	5.88		9	20	1	328.7	18	>10000	692	>10.00	467	25	16	31	9	910	92	9	<.01	0.05	1.36	<.01
Duplicate				250.8																												
199439		20	>50.0	87.8	15.03	310	>10000	1.41		>10000	4.10		37	62	3	177.5	95	5252	150	>10.00	1328	16	11	100	47	162	59	6	0.11	1.33	5.49	<.01
Duplicate								1.41			4.11																					
199443		20	>50.0	671.7	15.98	1482	>10000	11.36		>10000	11.70		<1	5	<1	524.1	134	2580	608	>10.00	402	33	13	37	4	649	152	1	<.01	<.01	0.73	<.01
Duplicate				661.0																												
199446		29	>50.0	538.0	16.67	848	>10000	6.53		>10000	6.49		5	15	1	257.4	659	1023	333	>10.00	1170	37	20	20	5	220	75	5	<.01	0.11	9.43	<.01
Duplicate								6.54			6.53																					
199448		9	>50.0	55.6	16.00	329	8247			>10000	6.09		4	12	<1	255.0	18	6539	70	>10.00	563	26	14	20	4	142	47	15	<.01	0.08	2.51	<.01
Duplicate				57.6																												

ITS Intertek Testing Services
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Geochemical Lab Report

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REPORT: V00-00129.0 (COMPLETE)
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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199425		0.02	47	1	20	<1	<1	<5	<10	<.010	<1
Duplicate											
199426		0.01	31	1	52	<1	<1	<5	<10	<.010	<1
Duplicate											
199427		<.01	17	<1	133	<1	<1	<5	<10	<.010	<1
Duplicate											
199433		0.03	35	2	17	1	<1	<5	<10	<.010	<1
Duplicate		0.03	35	2	16	1	<1	<5	<10	<.010	<1
199436		<.01	17	<1	43	<1	<1	<5	<10	<.010	<1
Prep Duplicate											
Prep Duplicate		<.01	21	<1	42	<1	<1	<5	<10	<.010	<1
Duplicate											
199437		<.01	21	<1	37	<1	<1	<5	<10	<.010	<1
Duplicate											
199438		<.01	19	<1	32	<1	<1	<5	<10	<.010	<1
Duplicate											
199439		0.02	29	1	17	1	1	<5	<10	<.010	<1
Duplicate											
199443		<.01	14	<1	49	<1	<1	<5	<10	<.010	<1
Duplicate											
199446		<.01	35	5	23	<1	<1	<5	<10	<.010	<1
Duplicate											
199448		<.01	23	1	25	<1	<1	<5	<10	<.010	<1
Duplicate											

ITS Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00129.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 24-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 6A(11/12)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	wt/Ag GM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
199449		25	>50.0	172.1	16.12	477	>10000	2.91		>10000	3.68		3	10	<1	162.4	68	1818	197	>10.00	1695	15	37	70	6	147	21	6	<.01	0.61	>10.00	<.01
Duplicate				172.9																												
199450		<5	>50.0	419.7	15.34	2642	>10000	4.75		>10000	13.95		3	9	<1	601.9	400	1035	286	>10.00	1006	36	12	20	4	955	173	9	<.01	0.11	4.69	<.01
Duplicate			>50.0	400.7		2662	>10000			>10000			4	9	<1	585.6	403	1038	298	>10.00	1012	37	13	19	4	963	182	10	<.01	0.11	4.99	<.01
199501		30	>50.0	51.8	30.23	125	8694			>10000	1.38		4	11	<1	64.5	47	631	86	6.22	1498	<10	69	9	4	<20	<20	4	<.01	1.06	>10.00	<.01
Duplicate				50.2							1.34																					
199502		62	>50.0	260.4	15.28	1103	>10000	3.64		>10000	>15.00	15.59	<1	4	<1	741.0	318	707	137	>10.00	703	40	13	24	4	156	200	7	<.01	0.04	0.73	<.01
Duplicate				267.0																												
199503		20	>50.0	224.1	15.08	1191	>10000	3.21		>10000	14.23		<1	5	<1	729.7	270	979	141	>10.00	716	39	14	40	5	171	184	7	<.01	0.05	0.19	<.01
Duplicate				231.8																												
199506		8	>50.0	758.1	15.44	1146	>10000	11.34		>10000	4.26		2	12	1	187.5	247	985	904	>10.00	274	34	16	38	4	176	32	2	<.01	0.05	0.20	<.01
Duplicate		6																														
199507		44	>50.0	202.5	16.00	832	>10000	3.19		>10000	7.52		6	11	<1	415.7	78	4562	277	>10.00	1989	25	13	20	3	225	111	6	<.01	0.08	4.29	<.01
Duplicate								3.24			7.44																					
199509		18	>50.0	157.9	20.50	519	>10000	2.63		>10000	4.26		5	7	2	190.7	39	2089	147	>10.00	1431	11	21	19	10	227	48	5	0.31	3.61	>10.00	0.02
Duplicate				165.7																												

Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00129.0 (COMPLETE)
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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199449		<.01	55	5	14	<1	<1	<5	<10	<.010	<1
Duplicate											
199450		<.01	26	12	62	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	27	13	62	<1	<1	<5	<10	<.010	<1
199501		<.01	115	4	4	<1	<1	<5	<10	<.010	<1
Duplicate											
199502		<.01	16	2	46	<1	<1	<5	<10	<.010	<1
Duplicate											
199503		<.01	16	1	46	<1	<1	<5	<10	<.010	<1
Duplicate											
199506		<.01	16	1	18	<1	<1	<5	<10	<.010	<1
Duplicate											
199507		<.01	23	2	36	<1	<1	<5	<10	<.010	<1
Duplicate											
199509		0.01	54	3	15	1	<1	<5	<10	0.019	<1
Duplicate											

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

REPORT: V00-00157.0 (COMPLETE) REFERENCE:

CLIENT: SILVERTIP MINING CORP SUBMITTED BY: C. AKELAITIS

PROJECT: SILVER TIP DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00

DATE APPROVED		ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000129	1	Wet Au	Partial Ext. Gold	40	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000129	2	AgGrav	Silver (Grav.)	13	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000129	3	wt/Ag	Sample Weight	40	0.10 GM		
000129	4	Ag	Silver	40	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	5	Cu	Copper	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	6	Pb	Lead	40	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	7	Pb	Lead	13	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000129	8	Pb	Lead	5	0.01 PCT		TITRIMETRIC
000129	9	Zn	Zinc	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	10	Zn	Zinc	16	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000129	11	Zn	Zinc	2	0.01 PCT		TITRIMETRIC
000129	12	Mo	Molybdenum	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	13	Ni	Nickel	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	14	Co	Cobalt	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	15	Cd	Cadmium	40	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	16	Bi	Bismuth	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	17	As	Arsenic	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	18	Sb	Antimony	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	19	Fe	Iron	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	20	Mn	Manganese	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	21	Te	Tellurium	40	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	22	Ba	Barium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	23	Cr	Chromium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	24	V	Vanadium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	25	Sn	Tin	40	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	26	W	Tungsten	40	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	27	La	Lanthanum	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	28	Al	Aluminum	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	29	Mg	Magnesium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	30	Ca	Calcium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	31	Na	Sodium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	32	K	Potassium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	33	Sr	Strontium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	34	Y	Yttrium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	35	Ga	Gallium	40	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	36	Li	Lithium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	37	Nb	Niobium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	38	Sc	Scandium	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	39	Ta	Tantalum	40	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	40	Ti	Titanium	40	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	41	Zr	Zirconium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	40	2 -150	40	CRUSH/SPLIT & PULV.	40
				RIVER ROCK CLEANING	40
				SILICA CLEANING	40
				OVERWEIGHT/KG	60

REMARKS: Zinc concentration >1% will enhance Tungsten results. Therefore, Tungsten concentration would be greater than true value. Also, carryover problem on the analytical blank due to high concentrations of Zinc in solution.
1/29 JCA

REPORT COPIES TO: MR. STEVE ROBERTSON INVOICE TO: MR. STEVE ROBERTSON

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

REPORT: V00-00157.0 (COMPLETE)
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199456		<5			1.5	37	73			182			27	92	10	0.9	<5	64	14	1.89	824	<10	113	68	39	<20	<20	4	0.42	1.36	9.99
199457		<5			1.3	9	81			148			7	19	2	0.7	<5	55	11	1.64	729	<10	231	21	12	<20	<20	3	0.05	0.62	>10.00
199458		<5			0.9	9	53			44			4	20	<1	0.4	<5	20	6	9.49	356	<10	22	24	13	<20	<20	2	0.04	1.22	>10.00
199459		<5			0.9	8	35			64			3	18	1	0.4	<5	16	<5	4.97	778	<10	39	21	24	<20	<20	3	0.11	1.03	>10.00
199460		<5			0.8	2	23			57			1	5	<1	0.3	<5	<5	<5	0.19	1326	<10	484	6	19	<20	<20	3	<.01	0.59	>10.00
199461		<5			1.2	4	49			138			3	1	<1	0.7	<5	7	<5	0.15	4429	<10	41	9	1	<20	<20	4	<.01	0.66	>10.00
199462		<5	906.5	15.72	>200.0	1165	>10000	>15.00	21.71	>10000	12.28		5	6	2	557.1	11	1210	914	>10.00	1297	136	9	84	4	121	338	2	<.01	0.11	3.41
199463		6			5.9	6	597			372			7	13	<1	1.8	<5	168	25	4.82	3851	<10	72	15	3	<20	<20	6	<.01	2.30	>10.00
199464		<5	77.7	30.19	89.2	242	>10000	2.13		>10000	1.60		7	9	<1	74.8	<5	166	142	6.05	2538	<10	62	25	3	<20	42	5	<.01	2.69	>10.00
199465		<5	1835.2	15.85	>200.0	1725	>10000	>15.00	37.39	>10000	11.35		5	10	<1	587.2	240	294	1783	>10.00	320	29	6	59	4	468	307	<1	<.01	0.01	0.27
199466		<5	426.9	15.20	>200.0	8666	>10000	7.22		>10000	>15.00	33.53	6	7	<1	1513.7	101	418	501	>10.00	1085	20	6	78	4	>2000	1008	2	<.01	0.02	2.04
199467		23	2341.2	15.32	>200.0	618	>10000	>15.00	54.20	>10000	8.78		4	2	<1	425.6	324	339	>2000	9.73	313	40	5	85	7	400	227	1	0.09	0.29	1.08
199468		<5			1.8	4	231			143			2	4	<1	1.0	<5	6	<5	0.44	380	<10	41	19	4	<20	<20	3	0.20	7.65	>10.00
199469		<5			3.2	10	432			596			3	2	<1	3.0	<5	19	7	0.55	1651	<10	101	18	3	<20	<20	5	0.01	5.25	>10.00
199470		5			2.6	33	320			884			2	2	<1	4.2	<5	24	8	0.43	1226	<10	264	12	3	<20	<20	4	0.01	6.65	>10.00
199471		<5			0.7	1	45			64			1	2	<1	0.4	<5	6	<5	0.29	889	<10	49	16	3	<20	<20	2	<.01	8.81	>10.00
199472		<5			2.4	76	263			7338			2	1	<1	33.7	<5	25	16	0.56	1089	<10	114	16	2	<20	24	3	<.01	7.88	>10.00
199473		9			4.5	239	296			>10000	2.50		3	1	<1	101.6	7	945	35	1.51	1271	<10	37	30	2	<20	67	4	<.01	6.51	>10.00
199474		<5			15.3	536	1538			>10000	3.81		3	2	<1	146.5	22	173	51	1.77	1759	<10	18	18	2	151	86	6	0.01	2.90	>10.00
199475		14			46.8	369	8514			>10000	1.59		3	7	3	66.3	32	71	50	2.72	1369	<10	19	73	11	<20	39	4	0.43	5.46	>10.00
199476		20	1146.7	15.55	>200.0	877	>10000	>15.00	23.68	>10000	13.18		7	3	<1	573.4	137	169	845	5.96	1242	17	7	39	2	285	345	2	0.01	1.66	8.27
199477		<5	78.3	30.21	77.6	421	>10000	1.53		>10000	1.46		3	3	<1	64.8	30	241	113	2.92	1638	<10	15	48	2	<20	39	6	<.01	4.96	>10.00
199478		8	191.2	15.26	178.0	3386	>10000	2.63		>10000	9.17		6	17	3	440.6	104	1434	466	>10.00	803	18	7	101	6	594	283	4	<.01	1.79	3.91
199479		<5	193.1	15.75	>200.0	3077	>10000	2.48		>10000	13.38		3	19	4	631.4	215	1256	437	>10.00	368	26	9	88	4	395	395	2	<.01	0.07	0.45
199480		<5	179.5	15.56	192.0	3084	>10000	2.50		>10000	10.33		1	19	3	476.3	236	1160	416	>10.00	265	27	9	58	3	251	304	2	<.01	0.03	0.12
199481		<5			2.9	28	328			1414			2	2	<1	7.5	<5	24	11	0.53	858	<10	301	21	4	<20	<20	2	0.01	8.34	>10.00
199482		<5			18.8	50	4366			2736			1	1	<1	14.2	<5	65	95	0.48	1021	<10	81	12	1	<20	<20	2	0.01	0.84	>10.00
199483		<5	645.9	16.60	>200.0	4409	>10000	>15.00	22.48	>10000	>15.00	24.96	4	<1	<1	951.9	<5	4314	>2000	>10.00	723	22	6	78	3	1320	573	1	0.01	0.11	3.36
199484		<5			2.0	12	461			368			2	2	<1	2.2	<5	9	79	0.34	320	<10	33	14	3	<20	<20	3	0.13	5.77	>10.00
199485		6			1.3	3	89			98			1	4	<1	0.6	<5	21	13	1.47	1012	<10	63	13	1	<20	<20	3	0.02	0.58	>10.00

ITS Intertek Testing Services
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Geochemical Lab Report

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PROJECT: SILVER TIP

DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00 PAGE 1B(2/12)

SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199456		<.01	0.18	80	8	2	3	3	<5	<10	<.010	8
199457		<.01	0.03	295	4	<2	<1	<1	<5	<10	<.010	<1
199458		<.01	<.01	185	2	4	1	<1	<5	<10	<.010	<1
199459		<.01	<.01	193	2	<2	1	<1	<5	<10	<.010	<1
199460		<.01	<.01	197	3	<2	<1	1	<5	<10	<.010	<1
199461		<.01	<.01	113	3	<2	<1	<1	<5	<10	<.010	<1
199462		<.01	<.01	21	1	20	<1	<1	<5	<10	<.010	<1
199463		<.01	<.01	160	4	2	<1	<1	<5	<10	<.010	<1
199464		<.01	<.01	132	3	3	1	<1	<5	<10	<.010	<1
199465		<.01	<.01	10	<1	50	<1	<1	<5	<10	<.010	<1
199466		<.01	<.01	14	9	181	<1	<1	<5	<10	<.010	<1
199467		<.01	0.10	9	<1	28	17	<1	<5	<10	<.010	<1
199468		0.01	0.06	89	3	<2	5	<1	<5	<10	<.010	<1
199469		<.01	<.01	160	4	<2	2	<1	<5	<10	<.010	<1
199470		0.01	<.01	136	3	<2	2	<1	<5	<10	<.010	<1
199471		0.01	<.01	114	2	<2	2	<1	<5	<10	<.010	<1
199472		0.01	<.01	84	3	2	2	<1	<5	<10	<.010	<1
199473		0.01	<.01	185	3	8	2	<1	<5	<10	<.010	<1
199474		<.01	<.01	100	6	14	1	<1	<5	<10	<.010	<1
199475		0.03	0.02	99	5	5	3	<1	<5	<10	0.024	<1
199476		<.01	<.01	40	2	44	<1	<1	<5	<10	<.010	<1
199477		0.01	<.01	104	6	4	1	<1	<5	<10	<.010	<1
199478		<.01	<.01	28	1	38	<1	<1	<5	<10	<.010	<1
199479		<.01	<.01	16	<1	58	<1	<1	<5	<10	<.010	<1
199480		<.01	<.01	14	<1	43	<1	<1	<5	<10	<.010	<1
199481		0.02	<.01	73	3	<2	2	<1	<5	<10	<.010	<1
199482		<.01	<.01	260	<1	<2	<1	<1	<5	<10	<.010	<1
199483		<.01	<.01	22	<1	118	<1	<1	<5	<10	<.010	<1
199484		0.01	0.04	115	2	<2	4	<1	<5	<10	<.010	<1
199485		<.01	0.01	383	1	<2	<1	<1	<5	<10	<.010	<1

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PROJECT: SILVER TIP

DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00 PAGE 2A(3/12)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199486		<5			0.2	28	56			39			4	17	33	0.4	<5	32	15	>10.00	151	<10	107	68	34	<20	<20	4	0.94	0.58	6.24
199487		<5			17.2	26	3876			1302			2	1	<1	6.8	<5	7	21	0.36	700	<10	30	14	2	<20	<20	9	0.03	0.78	>10.00
199488		14	760.6	30.69	>200.0	2572	>10000	14.65		>10000	13.48		28	4	5	633.7	56	1663	819	>10.00	871	18	8	53	10	1041	400	14	0.17	0.46	7.41
199489		<5			3.5	24	334			1122			2	2	<1	5.7	<5	19	5	0.46	775	<10	34	9	1	<20	<20	3	0.02	0.94	>10.00
199490		<5			1.5	9	244			272			6	2	<1	1.4	<5	47	5	0.32	520	<10	92	7	1	<20	<20	3	0.02	0.34	>10.00
199491		6	480.5	15.32	>200.0	3443	>10000	11.56		>10000	11.86		349	3	<1	474.3	6	>10000	1022	>10.00	767	28	8	56	5	1218	355	4	0.03	0.06	4.55
199492		<5			7.9	46	1055			1384			23	3	<1	6.6	<5	346	32	0.96	1010	<10	22	8	2	<20	<20	3	0.03	1.33	>10.00
199493		<5			1.1	3	32			72			13	3	<1	0.4	<5	30	7	0.65	835	<10	36	12	2	<20	<20	3	0.08	1.02	>10.00
199494		<5			0.4	6	19			37			2	7	12	0.4	<5	11	6	2.51	399	<10	21	22	26	<20	<20	6	0.69	4.94	>10.00
199495		<5			<0.2	11	19			37			3	10	26	0.4	<5	10	7	7.15	161	<10	31	42	44	<20	<20	6	0.91	2.05	5.57

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00157.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199486		0.01	0.50	44	12	7	3	<1	<5	<10	0.013	11
199487		<.01	<.01	219	5	<2	<1	<1	<5	<10	<.010	<1
199488		<.01	0.06	36	7	69	1	<1	<5	<10	<.010	<1
199489		<.01	<.01	277	3	<2	<1	<1	<5	<10	<.010	<1
199490		<.01	<.01	346	2	<2	<1	<1	<5	<10	<.010	<1
199491		<.01	<.01	25	<1	110	<1	<1	<5	<10	<.010	<1
199492		<.01	<.01	140	2	<2	<1	<1	<5	<10	<.010	<1
199493		<.01	0.01	156	3	<2	<1	<1	<5	<10	<.010	<1
199494		0.01	0.27	76	9	<2	4	1	<5	<10	0.048	13
199495		0.02	0.50	34	11	4	3	3	5	<10	0.076	26

Intertek Testing Services
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Vancouver Branch

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STANDARD NAME	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca
ELEMENT UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT
OX8 Oxide	192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2	-	-	-	<0.2	170	23	-	-	161	-	-	2	141	34	0.6	<5	142	<5	7.64	1555	<10	8	242	44	<20	<20	3	2.08	2.71	3.75
Number of Analyses	-	-	-	1	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	-	-	0.1	170	23	-	-	161	-	-	2	141	34	0.6	3	142	3	7.64	1555	5	8	242	44	10	10	3	2.08	2.71	3.75
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	0.2	148	20	-	-	148	-	-	4	135	35	0.2	1	145	1	7.20	1450	<1	6	251	50	5	12	-	1.80	2.70	4.00
OX12 Oxide	-	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX9 Oxide	499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	499	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	-	-	-	<0.2	<1	3	-	-	30	-	-	<1	<1	<1	<0.2	<5	9	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01
ANALYTICAL BLANK	-	-	-	<0.2	<1	<2	-	-	8	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01
Number of Analyses	-	-	-	2	2	2	-	-	2	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	-	-	0.1	<1	2	-	-	19	-	-	<1	<1	<1	0.1	3	6	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01
Standard Deviation	-	-	-	-	-	2	-	-	16	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	<0.1	<0.01	0.2	1	2	<0.01	<0.01	1	<0.01	<0.01	1	1	1	0.1	2	5	5	0.05	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

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REPORT: V00-00157.0 (COMPLETE)

PROJECT: SILVER TIP
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STANDARD NAME	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX8 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
GS91-2		0.01	0.05	80	3	8	23	2	7	<10	<.010	5
Number of Analyses		1	1	1	1	1	1	1	1	1	1	1
Mean Value		0.01	0.05	80	3	8	23	2	7	5	0.005	5
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		0.01	0.04	70	3	-	24	2	6	1	0.003	5
OX12 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
OX9 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<.01	<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<.01	<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2	2	2	2
Mean Value		<.01	<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		<.01	<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1

ITS Intertek Testing Services
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ISO 9002 Vancouver Branch

CLIENT: SILVERTIP MINING CORP
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PROJECT: SILVER TIP

DATE RECEIVED: 28-JAN-00 DATE PRINTED: 23-FEB-00 PAGE 4A(7/12)

STANDARD NAME	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca
ELEMENT UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT
CANMET STSD-4	-	-	-	<0.2	65	15	-	-	83	-	-	1	22	11	0.5	<5	14	5	2.63	1165	<10	973	33	46	<20	<20	12	1.17	0.77	1.30
Number of Analyses	-	-	-	1	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	-	-	0.1	65	15	-	-	83	-	-	1	22	11	0.5	3	14	5	2.63	1165	5	973	33	46	10	10	12	1.17	0.77	1.30
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	0.3	66	13	-	-	82	-	-	2	23	11	0.6	-	11	4	2.60	1200	-	-	30	51	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	4.26	-	-	>15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	4.26	-	-	15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-
CANMET STANDARD	-	-	-	-	-	-	-	64.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	64.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	625.7	2540	647000	64.70	64.74	44200	4.42	4.42	-	-	-	-	230	560	3600	8.43	-	-	-	-	-	-	-	-	-	-	-
Zinc Concentrate CRM	-	-	-	-	-	-	-	-	-	-	50.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	-	50.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	0.11	0.11	-	50.92	50.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intertek Testing Services
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Geochemical Lab Report

Vancouver Branch

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STANDARD NAME	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
CANMET STSD-4		0.05	0.12	72	9	3	10	4	<5	<10	0.078	<1
Number of Analyses		1	1	1	1	1	1	1	1	1	1	1
Mean Value		0.05	0.12	72	9	3	10	4	3	5	0.078	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
CANMET STANDARD		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
Zinc Concentrate CRM		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca
UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT
199461	<5			1.2	4	49			138			3	1	<1	0.7	<5	7	<5	0.15	4429	<10	41	9	1	<20	<20	4	<.01	0.66	>10.00
Prep Duplicate	6			1.2	3	51			120			2	2	<1	0.6	<5	12	<5	0.15	4174	<10	41	12	1	<20	<20	4	0.01	0.64	>10.00
199462	<5	906.5	15.72	>200.0	1165	>10000	>15.00	21.71	>10000	12.28		5	6	2	557.1	11	1210	914	>10.00	1297	136	9	84	4	121	338	2	<.01	0.11	3.41
Duplicate		899.1					>15.00	21.63		12.24																				
199463	6			5.9	6	597			372			7	13	<1	1.8	<5	168	25	4.82	3851	<10	72	15	3	<20	<20	6	<.01	2.30	>10.00
Duplicate	8			6.0	7	655			410			7	13	<1	1.9	<5	163	28	4.56	3801	<10	70	16	3	<20	<20	5	<.01	2.26	>10.00
199464	<5	77.7	30.19	89.2	242	>10000	2.13		>10000	1.60		7	9	<1	74.8	<5	166	142	6.05	2538	<10	62	25	3	<20	42	5	<.01	2.69	>10.00
Duplicate		78.3																												
199465	<5	1835.2	15.85	>200.0	1725	>10000	>15.00	37.39	>10000	11.35		5	10	<1	587.2	240	294	1783	>10.00	320	29	6	59	4	468	307	<1	<.01	0.01	0.27
Duplicate		1841.4																												
199466	<5	426.9	15.20	>200.0	8666	>10000	7.22		>10000	>15.00	33.53	6	7	<1	1513.7	101	418	501	>10.00	1085	20	6	78	4	>2000	1008	2	<.01	0.02	2.04
Duplicate		438.8									33.49																			
199467	23	2341.2	15.32	>200.0	618	>10000	>15.00	54.20	>10000	8.78		4	2	<1	425.6	324	339	>2000	9.73	313	40	5	85	7	400	227	1	0.09	0.29	1.08
Duplicate		2517.7																												
199476	20	1146.7	15.55	>200.0	877	>10000	>15.00	23.68	>10000	13.18		7	3	<1	573.4	137	169	845	5.96	1242	17	7	39	2	285	345	2	0.01	1.66	8.27
Duplicate		1087.8																												
199477	<5	78.3	30.21	77.6	421	>10000	1.53		>10000	1.46		3	3	<1	64.8	30	241	113	2.92	1638	<10	15	48	2	<20	39	6	<.01	4.96	>10.00
Duplicate		78.7					1.51			1.46																				
199480	<5	179.5	15.56	192.0	3084	>10000	2.50		>10000	10.33		1	19	3	476.3	236	1160	416	>10.00	265	27	9	58	3	251	304	2	<.01	0.03	0.12
Duplicate		184.2		187.5	2926	>10000			>10000			2	19	3	483.0	240	1136	409	>10.00	270	32	9	62	3	254	309	2	<.01	0.03	0.19
199486	<5			0.2	28	56			39			4	17	33	0.4	<5	32	15	>10.00	151	<10	107	68	34	<20	<20	4	0.94	0.58	6.24
Duplicate	<5																													
199488	14	760.6	30.69	>200.0	2572	>10000	14.65		>10000	13.48		28	4	5	633.7	56	1663	819	>10.00	871	18	8	53	10	1041	400	14	0.17	0.46	7.41
Duplicate							14.74			12.97																				

ITS Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00157.0 (COMPLETE)

PROJECT: SILVER TIP
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SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199461		<.01	<.01	113	3	<2	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	<.01	123	3	<2	<1	<1	<5	<10	<.010	<1
199462		<.01	<.01	21	1	20	<1	<1	<5	<10	<.010	<1
Duplicate												
199463		<.01	<.01	160	4	2	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	<.01	164	3	<2	<1	<1	<5	<10	<.010	<1
199464		<.01	<.01	132	3	3	1	<1	<5	<10	<.010	<1
Duplicate												
199465		<.01	<.01	10	<1	50	<1	<1	<5	<10	<.010	<1
Duplicate												
199466		<.01	<.01	14	9	181	<1	<1	<5	<10	<.010	<1
Duplicate												
199467		<.01	0.10	9	<1	28	17	<1	<5	<10	<.010	<1
Duplicate												
199476		<.01	<.01	40	2	44	<1	<1	<5	<10	<.010	<1
Duplicate												
199477		0.01	<.01	104	6	4	1	<1	<5	<10	<.010	<1
Duplicate												
199480		<.01	<.01	14	<1	43	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	<.01	15	<1	45	<1	<1	<5	<10	<.010	<1
199486		0.01	0.50	44	12	7	3	<1	<5	<10	0.013	11
Duplicate												
199488		<.01	0.06	36	7	69	1	<1	<5	<10	<.010	<1
Duplicate												

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00157.0 (COMPLETE)

DATE RECEIVED: 28-JAN-00   DATE PRINTED: 23-FEB-00   PAGE 6A(11/12)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199495		<5			<0.2	11	19			37			3	10	26	0.4	<5	10	7	7.15	161	<10	31	42	44	<20	<20	6	0.91	2.05	5.57
Prep Duplicate		6			<0.2	11	22			40			4	11	27	0.4	<5	9	6	7.58	145	<10	31	61	45	<20	<20	6	0.89	1.68	5.05

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SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199495		0.02	0.50	34	11	4	3	3	5	<10	0.076	26
Prep Duplicate		0.02	0.51	31	11	5	3	3	5	<10	0.078	26

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PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS

DATE RECEIVED: 28-JAN-00 DATE PRINTED: 4-FEB-00

DATE APPROVED		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000129	1 Wet Au	Partial Ext. Gold	41	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000129	2 AgGrav	Silver (Grav.)	21	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000129	3 Wt/Ag	Sample Weight	21	0.10 GM		
000129	4 Ag	Silver	41	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	5 Cu	Copper	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	6 Pb	Lead	41	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	7 Pb	Lead	16	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000129	8 Pb	Lead	2	0.01 PCT		TITRIMETRIC
000129	9 Zn	Zinc	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	10 Zn	Zinc	25	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000129	11 Mo	Molybdenum	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	12 Ni	Nickel	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	13 Co	Cobalt	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	14 Cd	Cadmium	41	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	15 Bi	Bismuth	41	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	16 As	Arsenic	41	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	17 Sb	Antimony	41	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	18 Fe	Iron	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	19 Fe	Iron (Total)	24	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000129	20 Mn	Manganese	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	21 Te	Tellurium	41	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	22 Ba	Barium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	23 Cr	Chromium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	24 V	Vanadium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	25 Sn	Tin	41	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	26 W	Tungsten	41	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	27 La	Lanthanum	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	28 Al	Aluminum	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	29 Mg	Magnesium	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	30 Ca	Calcium	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	31 Na	Sodium	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	32 K	Potassium	41	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	33 Sr	Strontium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	34 Y	Yttrium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	35 Ga	Gallium	41	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	36 Li	Lithium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000129	37 Nb	Niobium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	38 Sc	Scandium	41	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	39 Ta	Tantalum	41	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	40 Ti	Titanium	41	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000129	41 Zr	Zirconium	41	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	41	2 -150	41	CRUSH/SPLIT & PULV.	41
				RIVER ROCK CLEANING	41
				SILICA CLEANING	41
				OVERWEIGHT/KG	76

REMARKS: Please note that there are carryovers to the blanks, standards, and prep repeat sample due to the high levels of Pb, Zn and As in the samples. geng 1/29
Zinc and Arsenic concentration >1% will enhance Tungsten and Cadmium results respectively. Therefore, Tungsten and Cadmium results would be greater than true values. Thank you, RRD

REPORT COPIES TO: MR. STEVE ROBERTSON   INVOICE TO: MR. STEVE ROBERTSON

ITS Intertek Testing Services
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Geochemical Lab Report

Vancouver Branch

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PROJECT: SILVER TIP
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 4-FEB-00 PAGE 1A(1/12)

SAMPLE ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca
NUMBER UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT
199513	<5			0.2	35	12			46		5	52	13	0.2	<5	94	<5	3.31		179	<10	85	87	31	<20	<20	10	1.25	0.89	1.30
199514	<5			38.4	72	9924			2944		4	49	14	14.9	35	757	26	>10.00	12.49	465	<10	11	150	25	31	<20	7	0.98	1.25	3.08
199515	<5			<0.2	35	28			97		4	61	13	0.4	<5	146	<5	4.16		190	<10	26	60	34	<20	<20	10	1.54	1.03	1.09
199516	<5			2.2	3	224			102		6	9	<1	0.7	<5	13	6	2.44		508	<10	145	8	3	<20	<20	2	0.01	0.58	>10.00
199517	<5	843.0	15.31	>200.0	2324	>10000	>15.00	20.61	>10000	13.38	4	7	<1	663.7	53	1084	939	>10.00	22.77	636	38	9	53	5	147	347	2	<.01	0.07	1.50
199518	6	489.3	15.66	>200.0	2708	>10000	10.94		>10000	12.82	4	4	<1	631.4	10	2521	655	>10.00	25.17	812	32	9	77	8	591	330	1	0.07	0.11	0.35
199519	<5	545.0	16.79	>200.0	2151	>10000	13.86		>10000	13.62	5	4	<1	681.0	18	2181	770	>10.00	22.76	676	42	7	63	5	219	346	12	<.01	0.05	0.33
199520	6	470.4	15.12	>200.0	2041	>10000	11.75		>10000	11.53	6	5	<1	565.2	15	1761	625	>10.00	24.06	642	44	8	74	5	178	298	5	<.01	0.06	0.26
199521	<5	241.5	15.17	>200.0	1982	>10000	6.28		>10000	12.67	3	6	<1	626.9	<5	1342	382	>10.00	24.50	730	38	10	101	7	187	331	17	<.01	0.05	0.23
199522	<5	535.9	15.44	>200.0	2209	>10000	11.77		>10000	5.65	3	6	2	253.6	13	912	586	>10.00	21.14	286	33	8	105	7	213	136	4	0.01	0.07	1.88
199523	9			1.4	5	138			123		2	3	<1	0.8	<5	<5	<5	0.47		404	<10	24	16	4	<20	<20	3	0.16	7.79	>10.00
199524	<5	85.0	30.44	76.1	871	>10000	1.98		9492		6	7	<1	51.0	17	514	97	>10.00	12.40	1025	16	23	161	7	21	28	3	<.01	0.12	>10.00
199525	<5	61.1	15.77	60.5	1102	9404			>10000	3.67	10	5	<1	161.5	34	899	74	>10.00	17.03	879	19	8	138	6	126	95	2	<.01	0.11	6.34
199526	<5			36.5	617	4845			>10000	2.81	7	5	<1	118.7	55	325	57	6.59		2103	11	36	173	5	67	67	3	<.01	0.17	>10.00
199527	<5	388.1	15.41	>200.0	587	>10000	7.94		>10000	1.76	6	5	<1	86.9	76	432	418	9.32		1066	23	10	160	6	100	43	4	<.01	0.10	>10.00
199528	<5			15.9	93	800			575		10	6	<1	3.0	23	145	12	3.27		2261	<10	19	177	7	<20	<20	3	<.01	0.16	>10.00
199529	<5	125.4	30.11	114.8	694	>10000	2.45		>10000	2.39	9	7	<1	103.3	94	456	99	>10.00	10.44	653	17	14	143	6	58	54	3	<.01	0.09	>10.00
199530	11	229.0	15.41	>200.0	2254	>10000	4.04		>10000	8.02	7	9	<1	381.9	235	974	183	>10.00	17.86	601	35	7	173	7	178	209	5	<.01	0.06	4.89
199531	<5	102.6	15.19	111.8	2145	5154			>10000	7.45	6	10	<1	346.8	258	1020	71	>10.00	18.63	709	25	7	156	6	104	182	4	<.01	0.06	4.63
199532	6			14.0	373	1460			>10000	2.12	17	18	1	107.2	12	1364	107	>10.00	14.53	1824	13	9	127	7	30	55	3	<.01	0.09	9.58
199533	<5			20.6	510	1322			>10000	1.56	16	19	1	75.9	18	1763	95	>10.00	18.06	1642	15	7	180	7	50	44	3	<.01	0.08	7.61
199534	<5			0.9	2	53			36		2	2	<1	0.3	<5	<5	<5	0.31		356	<10	69	20	3	<20	<20	3	0.09	5.48	>10.00
199535	<5			17.4	545	533			>10000	1.90	20	14	<1	88.5	47	553	44	9.60		2184	<10	34	155	8	21	43	4	0.01	0.95	>10.00
199536	<5	57.0	15.15	60.8	1917	740			>10000	4.26	5	7	1	182.2	91	1915	175	>10.00	27.77	439	23	9	112	6	193	116	4	<.01	0.04	3.79
199537	<5			24.1	2431	406			>10000	9.66	4	9	1	445.5	35	2251	49	>10.00	23.81	738	26	8	147	6	193	244	9	<.01	0.06	4.11
199538	37			12.7	1519	182			>10000	3.73	2	6	<1	163.6	49	3284	8	>10.00	28.55	238	21	9	68	6	22	148	5	<.01	0.03	1.47
199539	<5	45.4	15.77	51.0	3210	710			>10000	5.54	2	7	<1	259.7	175	938	22	>10.00	30.57	267	32	10	109	8	141	329	2	<.01	0.04	0.11
199540	8	74.6	15.20	79.2	3110	3881			>10000	11.15	3	7	1	556.6	169	1313	64	>10.00	27.73	465	32	10	116	9	100	283	78	<.01	0.05	0.57
199541	<5	165.3	15.01	189.5	3113	>10000	2.85		>10000	16.08	4	14	<1	768.7	88	1546	396	>10.00	22.78	706	26	9	118	6	778	393	41	<.01	0.06	0.98
199542	<5	298.4	15.43	>200.0	2743	>10000	5.31		>10000	12.19	4	5	<1	583.6	497	669	351	>10.00	20.31	3038	41	9	89	6	658	328	2	<.01	0.10	4.47

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SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199513		<.01	0.36	58	6	4	10	1	<5	<10	<.010	14
199514		<.01	0.40	69	19	8	7	<1	<5	<10	<.010	10
199515		<.01	0.40	53	6	5	13	1	<5	<10	<.010	17
199516		<.01	<.01	200	2	<2	<1	<1	<5	<10	<.010	<1
199517		<.01	<.01	19	<1	32	<1	<1	<5	<10	<.010	<1
199518		0.02	0.02	18	<1	47	<1	<1	<5	<10	<.010	<1
199519		<.01	<.01	13	<1	44	<1	<1	<5	<10	<.010	<1
199520		<.01	<.01	14	<1	37	<1	<1	<5	<10	<.010	<1
199521		<.01	<.01	15	<1	46	<1	<1	<5	<10	<.010	<1
199522		0.01	<.01	19	<1	22	<1	<1	<5	<10	0.019	<1
199523		0.01	0.04	78	3	<2	5	<1	<5	<10	<.010	<1
199524		<.01	<.01	85	1	9	<1	<1	<5	<10	<.010	<1
199525		<.01	<.01	32	1	20	<1	<1	<5	<10	<.010	<1
199526		<.01	<.01	88	1	13	<1	<1	<5	<10	<.010	<1
199527		<.01	<.01	41	1	11	<1	<1	<5	<10	<.010	<1
199528		<.01	<.01	227	4	<2	<1	<1	<5	<10	<.010	<1
199529		<.01	<.01	62	2	14	<1	<1	<5	<10	<.010	<1
199530		<.01	<.01	30	<1	39	<1	<1	<5	<10	<.010	<1
199531		<.01	<.01	51	1	25	<1	<1	<5	<10	<.010	<1
199532		<.01	<.01	116	2	14	<1	<1	<5	<10	<.010	<1
199533		<.01	<.01	98	1	13	<1	<1	<5	<10	<.010	<1
199534		<.01	0.03	117	2	<2	3	<1	<5	<10	<.010	<1
199535		<.01	0.01	76	1	8	1	<1	<5	<10	<.010	<1
199536		<.01	<.01	30	1	20	<1	<1	<5	<10	<.010	<1
199537		<.01	<.01	29	3	36	<1	<1	<5	<10	<.010	<1
199538		<.01	<.01	20	<1	19	<1	<1	<5	<10	<.010	<1
199539		<.01	<.01	20	<1	30	<1	<1	<5	<10	<.010	<1
199540		<.01	<.01	17	2	38	<1	<1	<5	<10	<.010	<1
199541		<.01	<.01	15	2	61	<1	<1	<5	<10	<.010	<1
199542		<.01	<.01	28	<1	52	<1	<1	<5	<10	<.010	<1

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SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199543		<5			7.0	22	335			1189		2	2	<1	6.5	<5	31	17	0.44		11800	<10	22	13	2	<20	<20	6	0.02	0.30	>10.00
199544		<5			2.6	18	158			517		2	5	<1	2.9	<5	135	13	4.20		616	<10	91	29	3	<20	<20	3	<.01	0.54	>10.00
199545		9	111.6	30.61	120.4	261	>10000	1.92		8721		2	5	<1	47.3	<5	148	155	5.12		589	<10	26	34	3	74	23	3	0.01	0.38	>10.00
199546		<5	596.1	15.38	>200.0	1748	>10000	9.56		>10000	9.85	10	17	1	506.3	<5	3760	805	>10.00	18.90	517	19	10	91	6	736	245	2	0.01	0.23	5.23
199547		26			4.5	11	428			1017		3	5	<1	5.8	<5	474	18	1.83		1435	<10	13	18	3	<20	<20	5	0.04	0.69	>10.00
199548		9			1.3	3	66			106		3	4	<1	0.6	<5	45	8	0.39		1077	<10	19	10	2	<20	<20	4	0.02	0.37	>10.00
199549		9			1.0	2	39			113		2	4	<1	0.6	<5	31	7	0.24		1389	<10	20	9	2	<20	<20	4	0.02	0.26	>10.00
199550		<5			1.4	3	83			142		1	2	<1	0.9	<5	20	<5	0.18		1396	<10	25	7	2	<20	<20	4	0.02	0.30	>10.00
199551		9	1553.3	15.38	>200.0	8647	>10000	>15.00	29.12	>10000	11.16	11	2	<1	528.8	126	6854	>2000	>10.00	18.03	581	32	7	41	3	>2000	273	11	<.01	0.01	3.68
199552		12	462.8	15.69	>200.0	6020	>10000	11.57		>10000	22.36	13	3	<1	1016.9	238	>10000	>2000	>10.00	17.89	952	37	7	51	3	>2000	602	141	<.01	0.02	4.34
199553		<5			3.2	41	252			1547		3	3	<1	7.4	<5	99	12	0.33		1178	<10	48	7	2	<20	<20	4	0.04	0.16	>10.00

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SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199543		<.01	<.01	146	4	<2	<1	<1	<5	<10	<.010	<1
199544		<.01	<.01	284	2	<2	<1	<1	<5	<10	<.010	<1
199545		<.01	<.01	206	1	5	<1	<1	<5	<10	<.010	<1
199546		<.01	0.01	29	<1	49	<1	<1	<5	<10	<.010	<1
199547		<.01	<.01	141	4	<2	<1	<1	<5	<10	<.010	<1
199548		<.01	<.01	156	3	<2	<1	<1	<5	<10	<.010	<1
199549		<.01	<.01	157	2	<2	<1	<1	<5	<10	<.010	<1
199550		<.01	<.01	172	4	<2	<1	<1	<5	<10	<.010	<1
199551		<.01	<.01	22	1	93	<1	<1	<5	<10	<.010	<1
199552		<.01	<.01	20	5	162	<1	<1	<5	<10	<.010	<1
199553		<.01	0.01	141	3	<2	<1	<1	<5	<10	<.010	<1

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STANDARD ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca
NAME UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT
OX9 Oxide	538	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	538	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide	3000	23.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	3000	23.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET STSD-4	-	-	-	<0.2	69	17	-	-	107	-	2	25	12	0.6	<5	13	<5	3.16	-	1257	<10	1016	33	53	<20	<20	14	1.40	0.83	1.45
Number of Analyses	-	-	-	1	1	1	-	-	1	-	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	-	-	0.1	69	17	-	-	107	-	2	25	12	0.6	3	13	3	3.16	-	1257	5	1016	33	53	10	10	14	1.40	0.83	1.45
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	0.3	66	13	-	-	82	-	2	23	11	0.6	-	11	4	2.60	-	1200	-	-	30	51	-	-	-	-	-	-
ANALYTICAL BLANK	-	-	-	<0.2	<1	<2	-	-	8	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	-	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	0.02
ANALYTICAL BLANK	-	-	-	<0.2	<1	<2	-	-	15	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	-	1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01
Number of Analyses	-	-	-	2	2	2	-	-	2	-	2	2	2	2	2	2	2	2	-	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	-	-	0.1	<1	1	-	-	11	-	<1	<1	<1	0.1	3	3	3	<0.01	-	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	0.01
Standard Deviation	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	0.01
Accepted Value	1	<0.1	<0.01	0.2	1	2	<0.01	<0.01	1	<0.01	1	1	1	0.1	2	5	5	0.05	<0.01	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01
OX12 Oxide	-	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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STANDARD NAME	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX9 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
CANMET STSD-4		0.05	0.11	68	11	3	9	4	<5	<10	0.085	<1
Number of Analyses		1	1	1	1	1	1	1	1	1	1	1
Mean Value		0.05	0.11	68	11	3	9	4	3	5	0.085	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<.01	<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<.01	<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2	2	2	2
Mean Value		<.01	<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		<.01	<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1
OX12 Oxide		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-

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STANDARD NAME	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
GS91-1	-	-	-	1.0	98	76	-	-	189	-	1	36	21	0.4	<5	18	<5	4.92	-	735	<10	190	54	119	<20	<20	7	3.44	1.75	1.22
Number of Analyses	-	-	-	1	1	1	-	-	1	-	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	-	-	1.0	98	76	-	-	189	-	1	36	21	0.4	3	18	3	4.92	-	735	5	190	54	119	10	10	7	3.44	1.75	1.22
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	8	-	-	0.7	95	11	-	-	80	-	2	40	18	0.1	1	8	1	4.74	-	720	<1	200	54	133	4	2	5	3.09	1.83	1.08
CANMET CERTIFIED STD	-	-	-	-	-	-	4.36	-	-	19.28	-	-	-	-	-	-	-	-	6.06	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	4.36	-	-	19.28	-	-	-	-	-	-	-	-	6.06	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.32	4.33	-	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-
CANMET STANDARD	-	-	-	-	-	-	-	64.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	64.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	625.7	2540	647000	64.70	64.74	44200	4.42	-	-	-	-	230	560	3600	8.43	8.43	-	-	-	-	-	-	-	-	-	-	-

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STANDARD NAME	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
GS91-1		0.05	0.30	42	7	4	22	8	9	<10	0.193	9
Number of Analyses		1	1	1	1	1	1	1	1	1	1	1
Mean Value		0.05	0.30	42	7	4	22	8	9	5	0.193	9
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		0.06	0.32	39	9	4	-	1	18	1	-	9
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-
CANMET STANDARD		-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199514		<5			38.4	72	9924			2944		4	49	14	14.9	35	757	26	>10.00	12.49	465	<10	11	150	25	31	<20	7	0.98	1.25	3.08
Duplicate																				12.48											
199517		<5	843.0	15.31	>200.0	2324	>10000	>15.00	20.61	>10000	13.38	4	7	<1	663.7	53	1084	939	>10.00	22.77	636	38	9	53	5	147	347	2	<.01	0.07	1.50
Duplicate			843.1						20.73																						
199518		6	489.3	15.66	>200.0	2708	>10000	10.94		>10000	12.82	4	4	<1	631.4	10	2521	655	>10.00	25.17	812	32	9	77	8	591	330	1	0.07	0.11	0.35
Duplicate			471.5																												
199519		<5	545.0	16.79	>200.0	2151	>10000	13.86		>10000	13.62	5	4	<1	681.0	18	2181	770	>10.00	22.76	676	42	7	63	5	219	346	12	<.01	0.05	0.33
Duplicate			557.7																												
199520		6	470.4	15.12	>200.0	2041	>10000	11.75		>10000	11.53	6	5	<1	565.2	15	1761	625	>10.00	24.06	642	44	8	74	5	178	298	5	<.01	0.06	0.26
Duplicate			474.9																												
199521		<5	241.5	15.17	>200.0	1982	>10000	6.28		>10000	12.67	3	6	<1	626.9	<5	1342	382	>10.00	24.50	730	38	10	101	7	187	331	17	<.01	0.05	0.23
Duplicate		<5	242.9		>200.0	1919	>10000			>10000		3	5	<1	642.5	<5	1335	382	>10.00		739	38	9	95	7	202	329	18	<.01	0.05	0.25
199522		<5	535.9	15.44	>200.0	2209	>10000	11.77		>10000	5.65	3	6	2	253.6	13	912	586	>10.00	21.14	286	33	8	105	7	213	136	4	0.01	0.07	1.88
Duplicate			514.0																												
199524		<5	85.0	30.44	76.1	871	>10000	1.98		9492		6	7	<1	51.0	17	514	97	>10.00	12.40	1025	16	23	161	7	21	28	3	<.01	0.12	>10.00
Duplicate			82.5																												
199526		<5			36.5	617	4845			>10000	2.81	7	5	<1	118.7	55	325	57	6.59		2103	11	36	173	5	67	67	3	<.01	0.17	>10.00
Duplicate											2.79																				
199529		<5	125.4	30.11	114.8	694	>10000	2.45		>10000	2.39	9	7	<1	103.3	94	456	99	>10.00	10.44	653	17	14	143	6	58	54	3	<.01	0.09	>10.00
Duplicate			114.6																												
199531		<5	102.6	15.19	111.8	2145	5154			>10000	7.45	6	10	<1	346.8	258	1020	71	>10.00	18.63	709	25	7	156	6	104	182	4	<.01	0.06	4.63
Prep Duplicate		6	91.0	15.70	103.2	1983	4006			>10000	6.74	8	11	1	321.5	242	1091	66	>10.00	18.93	692	33	8	185	8	93	163	3	<.01	0.06	4.76
199532		6			14.0	373	1460			>10000	2.12	17	18	1	107.2	12	1364	107	>10.00	14.53	1824	13	9	127	7	30	55	3	<.01	0.09	9.58
Duplicate											2.12									14.05											

SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199514		<.01	0.40	69	19	8	7	<1	<5	<10	<.010	10
Duplicate												
199517		<.01	<.01	19	<1	32	<1	<1	<5	<10	<.010	<1
Duplicate												
199518		0.02	0.02	18	<1	47	<1	<1	<5	<10	<.010	<1
Duplicate												
199519		<.01	<.01	13	<1	44	<1	<1	<5	<10	<.010	<1
Duplicate												
199520		<.01	<.01	14	<1	37	<1	<1	<5	<10	<.010	<1
Duplicate												
199521		<.01	<.01	15	<1	46	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	<.01	16	<1	45	<1	<1	<5	<10	<.010	<1
199522		0.01	<.01	19	<1	22	<1	<1	<5	<10	0.019	<1
Duplicate												
199524		<.01	<.01	85	1	9	<1	<1	<5	<10	<.010	<1
Duplicate												
199526		<.01	<.01	88	1	13	<1	<1	<5	<10	<.010	<1
Duplicate												
199529		<.01	<.01	62	2	14	<1	<1	<5	<10	<.010	<1
Duplicate												
199531		<.01	<.01	51	1	25	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	<.01	55	1	25	<1	<1	<5	<10	<.010	<1
199532		<.01	<.01	116	2	14	<1	<1	<5	<10	<.010	<1
Duplicate												

Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00158.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 4-FEB-00 PAGE 6A(11/12)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT
199538		37			12.7	1519	182			>10000	3.73	2	6	<1	163.6	49	3284	8	>10.00	28.55	238	21	9	68	6	22	148	5	<.01	0.03	1.47
Duplicate					12.8	1515	174			>10000	3.67	3	4	1	162.5	48	3058	8	>10.00	27.84	235	19	9	63	6	27	141	5	<.01	0.03	1.50
199539		<5	45.4	15.77	51.0	3210	710			>10000	5.54	2	7	<1	259.7	175	938	22	>10.00	30.57	267	32	10	109	8	141	329	2	<.01	0.04	0.11
Duplicate			44.0																												
199540		8	74.6	15.20	79.2	3110	3881			>10000	11.15	3	7	1	556.6	169	1313	64	>10.00	27.73	465	32	10	116	9	100	283	78	<.01	0.05	0.57
Duplicate			72.2																												
199541		<5	165.3	15.01	189.5	3113	>10000	2.85		>10000	16.08	4	14	<1	768.7	88	1546	396	>10.00	22.78	706	26	9	118	6	778	393	41	<.01	0.06	0.98
Duplicate			164.3																												
199542		<5	298.4	15.43	>200.0	2743	>10000	5.31		>10000	12.19	4	5	<1	583.6	497	669	351	>10.00	20.31	3038	41	9	89	6	658	328	2	<.01	0.10	4.47
Duplicate			260.5																												
199544		<5			2.6	18	158			517		2	5	<1	2.9	<5	135	13	4.20		616	<10	91	29	3	<20	<20	3	<.01	0.54	>10.00
Duplicate		<5																													
199545		9	111.6	30.61	120.4	261	>10000	1.92		8721		2	5	<1	47.3	<5	148	155	5.12		589	<10	26	34	3	74	23	3	0.01	0.38	>10.00
Duplicate			115.2					1.95																							
199546		<5	596.1	15.38	>200.0	1748	>10000	9.56		>10000	9.85	10	17	1	506.3	<5	3760	805	>10.00	18.90	517	19	10	91	6	736	245	2	0.01	0.23	5.23
Duplicate			588.7																												
199551		9	1553.3	15.38	>200.0	8647	>10000	>15.00	29.12	>10000	11.16	11	2	<1	528.8	126	6854	>2000	>10.00	18.03	581	32	7	41	3	>2000	273	11	<.01	0.01	3.68
Duplicate			1531.9																												
Prep Duplicate		6	91.0	15.70	103.2	1983	4006			>10000	6.74	8	11	1	321.5	242	1091	66	>10.00	18.93	692	33	8	185	8	93	163	3	<.01	0.06	4.76
Duplicate			90.2																												
199552		12	462.8	15.69	>200.0	6020	>10000	11.57		>10000	22.36	13	3	<1	1016.9	238	>10000	>2000	>10.00	17.89	952	37	7	51	3	>2000	602	141	<.01	0.02	4.34
Prep Duplicate		6	462.7	15.69	>200.0	6953	>10000	13.34		>10000	20.92	13	3	<1	959.6	273	>10000	>2000	>10.00	17.91	895	34	7	71	4	>2000	554	94	<.01	0.02	3.68
Prep Duplicate		6	462.7	15.69	>200.0	6953	>10000	13.34		>10000	20.92	13	3	<1	959.6	273	>10000	>2000	>10.00	17.91	895	34	7	71	4	>2000	554	94	<.01	0.02	3.68
Duplicate								13.50			20.71									18.60											

ITS Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00158.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 4-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199538		<.01	<.01	20	<1	19	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	<.01	20	<1	18	<1	<1	<5	<10	<.010	<1
199539		<.01	<.01	20	<1	30	<1	<1	<5	<10	<.010	<1
Duplicate												
199540		<.01	<.01	17	2	38	<1	<1	<5	<10	<.010	<1
Duplicate												
199541		<.01	<.01	15	2	61	<1	<1	<5	<10	<.010	<1
Duplicate												
199542		<.01	<.01	28	<1	52	<1	<1	<5	<10	<.010	<1
Duplicate												
199544		<.01	<.01	284	2	<2	<1	<1	<5	<10	<.010	<1
Duplicate												
199545		<.01	<.01	206	1	5	<1	<1	<5	<10	<.010	<1
Duplicate												
199546		<.01	0.01	29	<1	49	<1	<1	<5	<10	<.010	<1
Duplicate												
199551		<.01	<.01	22	1	93	<1	<1	<5	<10	<.010	<1
Duplicate												
Prep Duplicate		<.01	<.01	55	1	25	<1	<1	<5	<10	<.010	<1
Duplicate												
199552		<.01	<.01	20	5	162	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	<.01	20	3	147	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	<.01	20	3	147	<1	<1	<5	<10	<.010	<1
Duplicate												

ITS Intertek Testing Services
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Geochemical Lab Report

REPORT: V00-00159.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS
DATE RECEIVED: 28-JAN-00   DATE PRINTED: 11-FEB-00

DATE APPROVED	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000203	1 SiO2	Silica (SiO2)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	2 TiO2	Titanium (TiO2)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	3 Al2O3	Alumina (Al2O3)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	4 Fe2O3*	Total Iron (Fe2O3)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	5 MnO	Manganese (MnO)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	6 MgO	Magnesium (MgO)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	7 CaO	Calcium (CaO)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	8 Na2O	Sodium (Na2O)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	9 K2O	Potassium (K2O)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	10 P2O5	Phosphorous (P2O5)	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE
000203	11 LOI	Loss on Ignition	1	-2.00 PCT	Ignition 1000 Deg.	GRAVIMETRIC
000203	12 Total	Whole Rock Total	1	0.01 PCT		
000203	13 Cr2O3	Chromium Oxide	1	0.01 PCT	BORATE FUSION	XRAY FLUORESCENCE

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	1	2 -150	1	CRUSH/SPLIT & PULV.	1
				RIVER ROCK CLEANING	1
				SILICA CLEANING	1

NOTES: s indicates See Obs Remarks

REMARKS: A low whole rock total was obtained for sample 199496. A retest gave similar results. CLF

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Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00159.0 (COMPLETE)
DATE RECEIVED: 28-JAN-00 DATE PRINTED: 11-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	SiO2 PCT	TiO2 PCT	Al2O3 PCT	Fe2O3* PCT	MnO PCT	MgO PCT	CaO PCT	Na2O PCT	K2O PCT	P2O5 PCT	LOI PCT	Total PCT	Cr2O3 PCT
199496		47.71	3.78	13.75	9.34	0.02	2.13	5.49	0.14	3.83	0.56	9.11	95.88s	0.02

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Geochemical Lab Report

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PROJECT: SILVER TIP

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DATE RECEIVED: 28-JAN-00 DATE PRINTED: 11-FEB-00

STANDARD ELEMENT	SiO2	TiO2	Al2O3	Fe2O3*	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total	Cr2O3
NAME UNITS	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
CANMET SO-2 REF STD	51.76	1.37	14.59	7.70	0.09	0.84	2.60	2.40	2.82	0.69	14.21	84.85	<0.01
Number of Analyses	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	51.76	1.37	14.59	7.70	0.09	0.84	2.60	2.40	2.82	0.69	14.21	84.85	<0.01
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	51.70	1.38	14.75	7.69	0.09	0.87	2.64	2.48	2.85	0.67	14.26	-	<0.01
CANMET STSD-2	53.71	0.75	15.66	7.33	0.14	3.04	4.19	1.70	2.14	0.32	10.11	89.00	0.02
Number of Analyses	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	53.71	0.75	15.66	7.33	0.14	3.04	4.19	1.70	2.14	0.32	10.11	89.00	0.02
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	53.70	0.79	15.75	7.25	0.14	3.11	4.00	1.72	2.12	0.32	10.30	-	0.01

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00177.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS

DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

DATE APPROVED	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000202	1 Wet Au	Partial Ext. Gold	48	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000202	2 Ag	Silver	48	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	3 AgGrav	Silver (Grav.)	30	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000202	4 Cu	Copper	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	5 Pb	Lead	48	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	6 Pb	Lead	17	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000202	7 Pb	Lead	5	0.01 PCT		TITRIMETRIC
000202	8 Zn	Zinc	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	9 Zn	Zinc	28	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000202	10 Mo	Molybdenum	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	11 Ni	Nickel	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	12 Co	Cobalt	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	13 Cd	Cadmium	48	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	14 Bi	Bismuth	48	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	15 As	Arsenic	48	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	16 Sb	Antimony	48	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	17 Fe	Iron	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	18 Mn	Manganese	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	19 Te	Tellurium	48	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	20 Ba	Barium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	21 Cr	Chromium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	22 V	Vanadium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	23 Sn	Tin	48	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	24 W	Tungsten	48	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	25 La	Lanthanum	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	26 Al	Aluminum	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	27 Mg	Magnesium	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	28 Ca	Calcium	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	29 Na	Sodium	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	30 K	Potassium	48	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	31 Sr	Strontium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	32 Y	Yttrium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	33 Ga	Gallium	48	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	34 Li	Lithium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	35 Nb	Niobium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	36 Sc	Scandium	48	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000202	37 Ta	Tantalum	48	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000202	38 Ti	Titanium	48	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000202	39 Zr	Zirconium	48	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	48	2 -150	48	CRUSH/SPLIT & PULV.	48
				RIVER ROCK CLEANING	48
				SILICA CLEANING	48
				OVERWEIGHT/KG	84

REMARKS: PLEASE NOTE THAT THERE IS CARRY OVER DUE TO HIGH LEVELS OF SOME ELEMENTS IN THE SAMPLES.
2/02/2000 KAE.
Arsenic concentration >1% will enhance Cadmium results. Therefore, Cadmium concentration would be greater than true value.
Thank you, KAE

REPORT COPIES TO: MR. STEVE ROBERTSON

INVOICE TO: MR. STEVE ROBERTSON

ITS Intertek Testing Services
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Vancouver Branch

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00177.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 1A(1/14)

SAMPLE NUMBER / ELEMENT	Wet Au	Ag	AgGrav	Cu	Pb	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
UNITS	PPB	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
140451	<5	99.6	91.0	3157	2284			>10000	9.51	4	22	3	349.3	204	1765	1615	>10.00	744	18	<1	19	<1	237	<20	3	<.01	0.03	1.82	<.01	<.01	8
140452	69	111.4	124.3	1393	2783			>10000	14.54	6	18	3	581.8	199	5146	449	>10.00	676	27	<1	16	<1	108	<20	6	<.01	0.01	1.47	<.01	<.01	8
140453	<5	84.0	83.4	3236	4609			>10000	22.86	5	14	4	818.5	103	1505	160	>10.00	1244	34	<1	30	1	233	<20	11	<.01	0.05	0.61	<.01	<.01	4
140454	<5	>200.0	233.4	2287	>10000	3.86		>10000	12.85	6	15	4	490.0	141	515	288	>10.00	849	30	<1	61	2	139	<20	6	<.01	0.04	0.45	<.01	<.01	3
140455	6	180.2	194.3	1172	>10000	3.99		>10000	7.00	4	11	3	300.0	44	643	336	>10.00	707	33	1	50	<1	99	<20	17	<.01	0.03	4.49	<.01	<.01	22
140456	<5	143.1	141.2	2876	>10000	2.80		>10000	13.73	4	17	3	503.1	13	938	241	>10.00	573	24	<1	34	<1	279	<20	6	<.01	0.03	0.13	<.01	<.01	1
140457	<5	154.9	166.3	2615	>10000	2.94		>10000	16.15	6	16	3	609.3	20	1204	390	>10.00	638	34	<1	50	<1	215	<20	7	<.01	0.03	0.14	<.01	<.01	1
140458	<5	81.9	80.3	2491	>10000	1.49		>10000	21.18	2	15	3	756.2	26	659	253	>10.00	698	35	<1	40	<1	261	<20	5	<.01	0.05	0.17	<.01	<.01	1
140459	<5	53.0	49.8	2138	5608			>10000	4.90	4	16	3	178.2	51	1647	164	>10.00	290	<10	<1	45	1	49	<20	42	<.01	0.03	0.10	<.01	<.01	1
140460	6	48.8		1611	3248			>10000	5.15	5	12	3	203.9	56	1637	151	>10.00	870	<10	<1	41	<1	146	<20	19	<.01	0.04	2.80	<.01	<.01	12
140461	<5	168.6	187.4	1654	>10000	4.03		>10000	6.41	2	12	4	252.2	9	963	264	>10.00	868	25	<1	36	<1	234	<20	4	<.01	0.02	3.42	<.01	<.01	19
140462	5	>200.0	198.0	2495	>10000	12.28		>10000	5.80	3	11	3	214.2	392	1057	502	>10.00	569	41	<1	37	<1	561	<20	3	<.01	0.02	2.89	<.01	<.01	14
140463	<5	>200.0	1357.4	3992	>10000	>15.00	22.03	>10000	5.95	5	13	4	212.8	952	1016	1001	>10.00	716	49	<1	43	<1	1424	<20	3	<.01	0.07	0.54	<.01	<.01	4
140464	<5	>200.0	1276.2	5490	>10000	>15.00	20.25	>10000	13.96	2	10	4	492.2	976	783	1029	>10.00	651	76	<1	21	<1	>2000	<20	1	<.01	0.04	0.83	<.01	<.01	5
140465	<5	5.8		10	653			285		2	3	<1	1.2	<5	5	<5	0.43	379	<10	64	9	3	<20	<20	4	0.10	6.42	>10.00	0.01	0.03	126
140466	8	18.2		79	900			1515		2	3	<1	8.6	22	507	13	2.93	3535	<10	27	12	3	<20	<20	5	<.01	1.52	>10.00	<.01	<.01	104
140467	<5	4.9		15	417			1438		1	2	<1	5.3	<5	30	<5	0.83	477	<10	55	3	3	<20	<20	4	0.02	0.76	>10.00	<.01	<.01	164
140468	<5	98.7	93.5	3494	256			>10000	15.54	3	16	3	467.5	1317	1061	119	>10.00	488	45	<1	32	<1	<20	<20	1	<.01	0.04	1.75	<.01	<.01	8
140469	<5	3.1		37	62			4129		1	2	<1	14.6	<5	27	9	0.76	911	<10	80	7	2	<20	<20	4	0.02	0.38	>10.00	<.01	<.01	175
199497	<5	2.3		2	84			111		7	69	4	0.7	<5	30	<5	>10.00	341	<10	<1	13	6	<20	<20	2	<.01	0.52	6.36	<.01	<.01	68
199498	<5	3.5		5	201			356		13	10	<1	1.6	<5	46	12	1.91	1432	<10	102	4	4	<20	<20	3	<.01	7.19	>10.00	0.01	<.01	103
199499	<5	>200.0	704.5	3994	>10000	12.51		>10000	13.75	9	16	4	440.6	130	443	855	>10.00	514	<10	<1	17	1	1324	<20	4	<.01	0.04	0.92	<.01	<.01	4
199500	<5	145.0	140.5	3917	8701			>10000	9.95	6	16	3	342.8	239	386	89	>10.00	657	15	<1	29	<1	227	<20	5	<.01	0.04	0.46	<.01	<.01	3
199578	<5	5.3		133	381			7568		22	3	1	27.8	10	647	15	3.07	1446	<10	28	4	1	<20	<20	6	0.03	1.71	>10.00	<.01	<.01	226
199579	26	61.4	51.8	8257	526			6050		267	14	4	67.3	762	8528	233	>10.00	543	<10	<1	28	<1	767	<20	2	0.08	0.27	2.56	<.01	<.01	19
199580	<5	25.1		203	121			528		55	3	<1	15.6	38	309	29	1.35	837	<10	112	4	1	<20	<20	6	0.08	0.16	>10.00	<.01	<.01	227
199581	29	>200.0	1028.5	6265	>10000	>15.00	19.33	>10000	15.06	95	18	4	621.7	31	>10000	1555	>10.00	664	46	<1	10	<1	>2000	<20	10	0.03	0.03	2.56	<.01	<.01	11
199582	84	>200.0	1082.1	5990	>10000	>15.00	22.41	>10000	17.61	64	15	4	702.9	<5	>10000	1686	>10.00	696	61	<1	19	<1	>2000	<20	5	0.01	0.04	2.71	<.01	<.01	10
199583	<5	2.2		2	148			144		2	2	<1	0.6	<5	16	<5	0.21	262	<10	220	4	2	<20	<20	3	0.14	2.87	>10.00	0.02	0.05	157
199584	6	4.9		45	382			1979		2	2	<1	10.2	<5	568	7	0.39	611	<10	419	<1	<1	<20	<20	4	0.05	0.82	>10.00	<.01	0.01	147

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SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140451		<1	<2	<1	<1	<5	<10	<.010	<1
140452		<1	16	<1	<1	<5	<10	<.010	<1
140453		<1	25	<1	<1	<5	<10	<.010	<1
140454		<1	15	<1	<1	<5	<10	<.010	<1
140455		2	11	<1	<1	<5	<10	<.010	<1
140456		<1	4	<1	<1	<5	<10	<.010	<1
140457		<1	12	<1	<1	<5	10	<.010	<1
140458		<1	34	<1	<1	<5	<10	<.010	<1
140459		2	<2	<1	<1	<5	<10	<.010	<1
140460		2	<2	<1	<1	<5	<10	<.010	<1
140461		<1	5	<1	<1	<5	<10	<.010	<1
140462		<1	3	<1	<1	<5	<10	<.010	<1
140463		<1	4	<1	<1	<5	<10	<.010	<1
140464		<1	36	<1	<1	<5	<10	<.010	<1
140465		2	<2	4	<1	<5	<10	<.010	<1
140466		5	<2	<1	<1	<5	<10	<.010	<1
140467		4	<2	<1	<1	<5	<10	<.010	<1
140468		<1	<2	<1	<1	<5	<10	<.010	<1
140469		3	<2	<1	<1	<5	<10	<.010	<1
199497		<1	<2	<1	<1	<5	<10	<.010	<1
199498		3	<2	1	<1	<5	<10	<.010	<1
199499		<1	29	<1	<1	<5	<10	<.010	<1
199500		<1	<2	<1	<1	<5	<10	<.010	<1
199578		2	<2	<1	<1	<5	<10	<.010	<1
199579		<1	<2	<1	<1	<5	<10	<.010	<1
199580		3	3	<1	<1	<5	<10	<.010	<1
199581		<1	77	<1	<1	<5	<10	<.010	<1
199582		<1	103	<1	<1	<5	<10	<.010	<1
199583		2	<2	2	<1	<5	<10	<.010	1
199584		3	<2	<1	<1	<5	<10	<.010	<1

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SAMPLE NUMBER	ELEMENT	Wet Au	Ag	AgGrav	Cu	Pb	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
	UNITS	PPB	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
199601		<5	11.9		64	1513			1297		18	57	9	9.1	<5	401	37	6.40	335	<10	12	106	21	36	<20	3	0.40	0.35	2.90	<.01	0.16	51
199602		<5	53.3	49.8	1738	4314			3163		9	30	4	19.0	144	1624	111	>10.00	109	<10	6	20	1	<20	<20	<1	<.01	0.04	0.30	<.01	<.01	2
199603		<5	>200.0	900.6	3045	>10000	>15.00	16.17	>10000	5.40	5	19	4	196.4	246	2838	711	>10.00	126	13	<1	44	<1	1984	<20	2	<.01	<.01	0.02	<.01	<.01	1
199604		<5	131.3	127.3	2155	9650			>10000	2.35	6	28	4	82.6	198	2380	83	>10.00	87	<10	<1	24	<1	182	<20	<1	<.01	0.01	0.07	<.01	<.01	1
199605		<5	56.5	48.3	345	2695			1555		7	14	4	30.7	198	4141	70	>10.00	54	<10	22	38	<1	87	<20	2	<.01	<.01	1.25	<.01	<.01	8
199606		6	58.9	54.8	883	1305			>10000	2.06	5	18	4	73.4	232	1317	222	>10.00	254	<10	<1	29	<1	<20	<20	1	<.01	0.04	2.76	<.01	<.01	14
199607		<5	2.4		2	24			80		2	4	<1	0.5	<5	42	13	0.24	401	<10	1105	4	13	<20	<20	4	0.01	0.22	>10.00	<.01	<.01	207
199608		9	1.8		<1	41			46		6	22	2	0.3	<5	17	<5	8.04	292	<10	31	<1	3	<20	<20	4	<.01	0.33	>10.00	<.01	<.01	121
199609		<5	2.0		6	24			83		4	12	2	0.4	<5	15	<5	2.62	510	<10	215	12	13	<20	<20	3	0.30	0.57	>10.00	0.04	0.03	122
199610		<5	1.8		<1	25			38		6	4	<1	<0.2	<5	9	<5	0.29	822	<10	188	2	4	<20	<20	6	<.01	0.30	>10.00	<.01	<.01	138
199611		<5	56.7	49.5	128	4558			>10000	1.58	8	8	2	56.9	76	285	34	5.49	1128	11	57	4	5	<20	<20	5	<.01	4.48	>10.00	<.01	<.01	91
199612		<5	>200.0	693.2	2275	>10000	14.31		>10000	15.15	12	17	4	533.7	416	1454	504	>10.00	609	50	<1	23	<1	483	<20	2	0.02	0.11	0.78	<.01	0.01	7
199613		<5	>200.0	627.8	4391	>10000	11.46		>10000	14.66	6	13	4	484.6	164	721	612	>10.00	473	53	<1	25	<1	1970	<20	<1	<.01	0.03	0.27	<.01	<.01	2
199614		<5	2.4		3	140			218		3	3	<1	0.8	<5	<5	<5	0.33	364	<10	231	1	3	<20	<20	4	0.09	5.67	>10.00	0.01	0.03	140
199615		<5	>200.0	801.1	4477	>10000	12.03		>10000	18.89	3	14	3	631.3	670	1212	651	>10.00	549	61	<1	13	<1	>2000	<20	<1	<.01	0.02	0.06	<.01	<.01	<1
199616		<5	>200.0	913.8	4558	>10000	12.81		>10000	19.31	5	14	3	679.7	1122	1295	753	>10.00	592	57	<1	32	<1	>2000	<20	<1	<.01	0.02	0.05	<.01	<.01	<1
199617		<5	149.3	152.2	2953	3797			>10000	20.95	5	15	5	697.3	1225	1688	294	>10.00	805	63	<1	17	<1	153	<20	3	0.01	0.04	1.25	<.01	<.01	6
199618		<5	3.0		5	112			497		3	1	<1	1.9	<5	21	<5	0.50	1085	<10	25	2	3	<20	<20	4	0.02	5.49	>10.00	0.01	<.01	116

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SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199601		6	<2	1	<1	<5	<10	<.010	13
199602		<1	<2	<1	<1	<5	<10	<.010	<1
199603		<1	3	<1	<1	<5	<10	<.010	<1
199604		<1	<2	<1	<1	<5	<10	<.010	<1
199605		<1	<2	<1	<1	<5	<10	<.010	<1
199606		<1	<2	<1	<1	<5	<10	<.010	<1
199607		3	<2	<1	<1	<5	<10	<.010	<1
199608		2	<2	<1	<1	<5	<10	<.010	<1
199609		2	<2	2	<1	<5	<10	0.021	<1
199610		8	<2	<1	<1	<5	<10	<.010	<1
199611		4	<2	<1	<1	<5	<10	<.010	<1
199612		<1	10	<1	<1	<5	<10	<.010	<1
199613		<1	43	<1	<1	<5	<10	<.010	<1
199614		2	<2	3	<1	<5	<10	<.010	<1
199615		<1	51	<1	<1	<5	<10	<.010	<1
199616		<1	45	<1	<1	<5	<10	<.010	<1
199617		1	<2	<1	<1	<5	<10	<.010	<1
199618		4	<2	2	<1	<5	<10	<.010	<1

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STANDARD NAME	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
OX12 Oxide		-	-	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX12 Oxide		-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX8 Oxide		177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		177	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2		-	0.4	-	155	18	-	-	173	-	4	147	36	1.6	<5	148	<5	7.57	1535	<10	5	209	45	<20	<20	4	1.99	2.38	3.48	0.01	0.05	78
Number of Analyses		-	1	-	1	1	-	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value		-	0.4	-	155	18	-	-	173	-	4	147	36	1.6	3	148	3	7.57	1535	5	5	209	45	10	10	4	1.99	2.38	3.48	0.01	0.05	78
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	0.2	-	148	20	-	-	148	-	4	135	35	0.2	1	145	1	7.20	1450	<1	6	251	50	5	12	-	1.80	2.70	4.00	0.01	0.04	70
OX9 Oxide		477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide		3285	-	24.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		3285	-	24.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX12 Oxide		-	-	-	-	-	-	-	-
OX12 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
OX8 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
GS91-2		3	<2	22	2	7	<10	<.010	7
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		3	1	22	2	7	5	0.005	7
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		3	-	24	2	6	1	0.003	5
OX9 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
OX11 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-

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STANDARD NAME	Wet Au	Ag	AgGrav	Cu	Pb	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
ELEMENT UNITS	PPB	PPM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
ANALYTICAL BLANK	-	<0.2	-	<1	<2	-	-	4	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
ANALYTICAL BLANK	-	<0.2	-	<1	2	-	-	71	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
Number of Analyses	-	2	-	2	2	-	-	2	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	0.1	-	<1	2	-	-	37	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01	<.01	<1
Standard Deviation	-	-	-	-	1	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	0.2	<0.1	1	2	<0.01	<0.01	1	<0.01	1	1	1	0.1	2	5	5	0.05	1	<1	<1	1	1	<1	<1	<1	<.01	<.01	<0.01	<.01	<.01	<1
CANMET STSD-4	-	0.5	-	63	68	-	-	221	-	2	25	10	0.8	<5	13	<5	2.81	1234	<10	842	30	48	<20	<20	13	1.20	0.63	1.04	0.04	0.10	61
Number of Analyses	-	1	-	1	1	-	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.5	-	63	68	-	-	221	-	2	25	10	0.8	3	13	3	2.81	1234	5	842	30	48	10	10	13	1.20	0.63	1.04	0.04	0.10	61
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	0.3	-	66	13	-	-	82	-	2	23	11	0.6	-	11	4	2.60	1200	-	-	30	51	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	4.36	-	-	19.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	4.36	-	-	19.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	4.32	4.33	-	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	-	-	-	-

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00177.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2
Mean Value		<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		<1	<1	<1	<1	<1	<1	<.001	<1
CANMET STSD-4		11	<2	9	4	<5	<10	0.079	<1
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		11	1	9	4	3	5	0.079	<1
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-

ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00177.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 5A(9/14)

SAMPLE NUMBER	ELEMENT UNITS	Wet	Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140451			<5	99.6	91.0	3157	2284			>10000	9.51	4	22	3	349.3	204	1765	1615	>10.00	744	18	<1	19	<1	237	<20	3	<.01	0.03	1.82	<.01	<.01	8
Duplicate					90.9						9.66																						
140452			69	111.4	124.3	1393	2783			>10000	14.54	6	18	3	581.8	199	5146	449	>10.00	676	27	<1	16	<1	108	<20	6	<.01	0.01	1.47	<.01	<.01	8
Duplicate					109.2																												
140453			<5	84.0	83.4	3236	4609			>10000	22.86	5	14	4	818.5	103	1505	160	>10.00	1244	34	<1	30	1	233	<20	11	<.01	0.05	0.61	<.01	<.01	4
Duplicate					79.8																												
140454			<5	>200.0	233.4	2287	>10000	3.86		>10000	12.85	6	15	4	490.0	141	515	288	>10.00	849	30	<1	61	2	139	<20	6	<.01	0.04	0.45	<.01	<.01	3
Duplicate					230.6																												
140455			6	180.2	194.3	1172	>10000	3.99		>10000	7.00	4	11	3	300.0	44	643	336	>10.00	707	33	1	50	<1	99	<20	17	<.01	0.03	4.49	<.01	<.01	22
Duplicate					189.7																												
140456			<5	143.1	141.2	2876	>10000	2.80		>10000	13.73	4	17	3	503.1	13	938	241	>10.00	573	24	<1	34	<1	279	<20	6	<.01	0.03	0.13	<.01	<.01	1
Duplicate					145.2																												
140457			<5	154.9	166.3	2615	>10000	2.94		>10000	16.15	6	16	3	609.3	20	1204	390	>10.00	638	34	<1	50	<1	215	<20	7	<.01	0.03	0.14	<.01	<.01	1
Duplicate					161.4																												
140458			<5	81.9	80.3	2491	>10000	1.49		>10000	21.18	2	15	3	756.2	26	659	253	>10.00	698	35	<1	40	<1	261	<20	5	<.01	0.05	0.17	<.01	<.01	1
Duplicate			<5	76.9		2258	>10000			>10000		2	15	4	741.4	30	620	236	>10.00	653	45	<1	38	<1	239	<20	5	<.01	0.05	0.17	<.01	<.01	1
140460			6	48.8		1611	3248			>10000	5.15	5	12	3	203.9	56	1637	151	>10.00	870	<10	<1	41	<1	146	<20	19	<.01	0.04	2.80	<.01	<.01	12
Duplicate											5.09																						
140461			<5	168.6	187.4	1654	>10000	4.03		>10000	6.41	2	12	4	252.2	9	963	264	>10.00	868	25	<1	36	<1	234	<20	4	<.01	0.02	3.42	<.01	<.01	19
Duplicate					181.5																												
140463			<5	>200.0	1357.4	3992	>10000	>15.00	22.03	>10000	5.95	5	13	4	212.8	952	1016	1001	>10.00	716	49	<1	43	<1	1424	<20	3	<.01	0.07	0.54	<.01	<.01	4
Duplicate									21.96																								
140468			<5	98.7	93.5	3494	256			>10000	15.54	3	16	3	467.5	1317	1061	119	>10.00	488	45	<1	32	<1	<20	<20	1	<.01	0.04	1.75	<.01	<.01	8
Duplicate					90.5						15.34																						

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00177.0 (COMPLETE)
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00 PAGE 58(10/14)

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140451		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140452		<1	16	<1	<1	<5	<10	<.010	<1
Duplicate									
140453		<1	25	<1	<1	<5	<10	<.010	<1
Duplicate									
140454		<1	15	<1	<1	<5	<10	<.010	<1
Duplicate									
140455		2	11	<1	<1	<5	<10	<.010	<1
Duplicate									
140456		<1	4	<1	<1	<5	<10	<.010	<1
Duplicate									
140457		<1	12	<1	<1	<5	10	<.010	<1
Duplicate									
140458		<1	34	<1	<1	<5	<10	<.010	<1
Duplicate		<1	32	<1	<1	<5	<10	<.010	<1
140460		2	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140461		<1	5	<1	<1	<5	<10	<.010	<1
Duplicate									
140463		<1	4	<1	<1	<5	<10	<.010	<1
Duplicate									
140468		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate									

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00177.0 (COMPLETE)
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
199579		26	61.4	51.8	8257	526			6050		267	14	4	67.3	762	8528	233	>10.00	543	<10	<1	28	<1	767	<20	2	0.08	0.27	2.56	<.01	<.01	19
Duplicate			60.0		8484	473			6055		264	14	4	68.5	689	8655	223	>10.00	529	<10	<1	25	<1	773	<20	2	0.07	0.26	2.48	<.01	<.01	19
199581		29	>200.0	1028.5	6265	>10000	>15.00	19.33	>10000	15.06	95	18	4	621.7	31	>10000	1555	>10.00	664	46	<1	10	<1	>2000	<20	10	0.03	0.03	2.56	<.01	<.01	11
Duplicate				1018.6			>15.00			14.97																						
199582		84	>200.0	1082.1	5990	>10000	>15.00	22.41	>10000	17.61	64	15	4	702.9	<5	>10000	1686	>10.00	696	61	<1	19	<1	>2000	<20	5	0.01	0.04	2.71	<.01	<.01	10
Duplicate				1073.9																												
199601		<5	11.9		64	1513			1297		18	57	9	9.1	<5	401	37	6.40	335	<10	12	106	21	36	<20	3	0.40	0.35	2.90	<.01	0.16	51
Duplicate		<5																														
199602		<5	53.3	49.8	1738	4314			3163		9	30	4	19.0	144	1624	111	>10.00	109	<10	6	20	1	<20	<20	<1	<.01	0.04	0.30	<.01	<.01	2
Duplicate				50.1																												
199603		<5	>200.0	900.6	3045	>10000	>15.00	16.17	>10000	5.40	5	19	4	196.4	246	2838	711	>10.00	126	13	<1	44	<1	1984	<20	2	<.01	<.01	0.02	<.01	<.01	1
Duplicate				901.1																												
199606		6	58.9	54.8	883	1305			>10000	2.06	5	18	4	73.4	232	1317	222	>10.00	254	<10	<1	29	<1	<20	<20	1	<.01	0.04	2.76	<.01	<.01	14
Duplicate				59.2																												
199608		9	1.8		<1	41			46		6	22	2	0.3	<5	17	<5	8.04	292	<10	31	<1	3	<20	<20	4	<.01	0.33	>10.00	<.01	<.01	121
Prep Duplicate		6	1.7		<1	34			37		6	19	2	0.2	<5	13	<5	6.75	295	<10	35	9	3	<20	<20	4	<.01	0.32	>10.00	<.01	<.01	125
199614		<5	2.4		3	140			218		3	3	<1	0.8	<5	<5	<5	0.33	364	<10	231	1	3	<20	<20	4	0.09	5.67	>10.00	0.01	0.03	140
Duplicate			2.4		3	129			245		2	3	<1	0.8	<5	<5	<5	0.33	352	<10	238	4	3	<20	<20	4	0.10	5.65	>10.00	0.01	0.03	136
199615		<5	>200.0	801.1	4477	>10000	12.03		>10000	18.89	3	14	3	631.3	670	1212	651	>10.00	549	61	<1	13	<1	>2000	<20	<1	<.01	0.02	0.06	<.01	<.01	<1
Prep Duplicate		<5	>200.0	782.3																												
Prep Duplicate				820.1	4521	>10000	11.99		>10000	18.10	4	16	4	608.1	738	1335	683	>10.00	516	56	<1	95	<1	>2000	<20	<1	<.01	0.02	0.04	<.01	<.01	<1
Duplicate							12.09			19.01																						
199616		<5	>200.0	913.8	4558	>10000	12.81		>10000	19.31	5	14	3	679.7	1122	1295	753	>10.00	592	57	<1	32	<1	>2000	<20	<1	<.01	0.02	0.05	<.01	<.01	<1
Duplicate				907.2																												

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00177.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199579		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate		<1	<2	<1	<1	<5	<10	<.010	<1
199581		<1	77	<1	<1	<5	<10	<.010	<1
Duplicate									
199582		<1	103	<1	<1	<5	<10	<.010	<1
Duplicate									
199601		6	<2	1	<1	<5	<10	<.010	13
Duplicate									
199602		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
199603		<1	3	<1	<1	<5	<10	<.010	<1
Duplicate									
199606		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
199608		2	<2	<1	<1	<5	<10	<.010	<1
Prep Duplicate		2	<2	<1	<1	<5	<10	<.010	<1
199614		2	<2	3	<1	<5	<10	<.010	<1
Duplicate		2	<2	3	<1	<5	<10	<.010	<1
199615		<1	51	<1	<1	<5	<10	<.010	<1
Prep Duplicate									
Prep Duplicate		<1	44	<1	<1	<5	<10	<.010	<1
Duplicate									
199616		<1	45	<1	<1	<5	<10	<.010	<1
Duplicate									

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00177.0 (COMPLETE)

DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet	Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
Prep Duplicate			<5	>200.0	820.1	4521	>10000	11.99		>10000	18.10	4	16	4	608.1	738	1335	683	>10.00	516	56	<1	95	<1	>2000	<20	<1	<.01	0.02	0.04	<.01	<.01	<1
Duplicate					782.0																												

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00177.0 (COMPLETE)
DATE RECEIVED: 31-JAN-00 DATE PRINTED: 8-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
Prep Duplicate		<1	44	<1	<1	<5	<10	<.010	<1
Duplicate									

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00233.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: C. AKELAITIS
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 22-FEB-00

DATE APPROVED		ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000211	1 Wet Au	Partial Ext. Gold	28	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000211	2 Ag	Silver	28	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	3 AgGrav	Silver (Grav.)	15	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000211	4 Cu	Copper	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	5 Pb	Lead	28	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	6 Pb	Lead	26	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000211	7 Zn	Zinc	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	8 Zn	Zinc	28	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000211	9 Zn	Zinc	1	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000211	10 Mo	Molybdenum	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	11 Ni	Nickel	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	12 Co	Cobalt	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	13 Cd	Cadmium	28	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	14 Bi	Bismuth	28	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	15 As	Arsenic	28	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	16 Sb	Antimony	28	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	17 Fe	Iron	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	18 Mn	Manganese	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	19 Te	Tellurium	28	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	20 Ba	Barium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	21 Cr	Chromium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	22 V	Vanadium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	23 Sn	Tin	28	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	24 W	Tungsten	28	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	25 La	Lanthanum	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	26 Al	Aluminum	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	27 Mg	Magnesium	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	28 Ca	Calcium	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	29 Na	Sodium	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	30 K	Potassium	28	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	31 Sr	Strontium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	32 Y	Yttrium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	33 Ga	Gallium	28	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	34 Li	Lithium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	35 Nb	Niobium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	36 Sc	Scandium	28	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	37 Ta	Tantalum	28	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000211	38 Ti	Titanium	28	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000211	39 Zr	Zirconium	28	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	28	2 -150	28	CRUSH/SPLIT & PULV.	28
				RIVER ROCK CLEANING	28
				SILICA CLEANING	28
				OVERWEIGHT/KG	70

REMARKS: PLEASE NOTE THAT THERE IS CARRY OVER TO THE STANDARDS DUE TO HIGH LEVELS OF SOME ELEMENTS IN THE SAMPLES. 2/11/2000 KAE.

REPORT COPIES TO: MR. STEVE ROBERTSON
MR. PAT MCANDLESS

INVOICE TO: MR. STEVE ROBERTSON

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00233.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 22-FEB-00 PAGE 1A(1/ 8)

SAMPLE NUMBER	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM
140470	15	8.6		19	419	0.05	2048	0.21		8	14	2	7.4	7	131	25	3.08	1856	<10	47	5	6	<20	<20	7	0.01	3.69	>20.00	<.01	<.01	117	5	<2
140471	17	49.5		339	3218	0.35	>20000	4.15		7	16	5	147.8	240	647	254	13.36	1509	27	23	31	5	<20	94	6	<.01	2.92	16.54	<.01	<.01	76	5	<2
140472	<5	5.2		1	147	0.01	552	0.05		4	5	1	2.1	<5	92	13	1.32	1901	<10	52	6	5	<20	<20	6	<.01	5.51	>20.00	0.01	<.01	167	6	<2
199554	<5	12.5		2	1488	0.16	200	0.02		6	8	1	0.9	<5	42	10	0.88	6013	<10	145	6	8	<20	<20	5	<.01	1.22	>20.00	<.01	<.01	128	4	<2
199555	6	315.5	316.1	1668	>20000	6.26	>20000	5.82		4	19	9	212.5	26	1225	426	>20.00	263	38	<1	99	3	152	159	2	<.01	<.01	0.98	<.01	<.01	3	<1	<2
199556	6	189.4	182.9	713	>20000	2.75	17044	1.62		6	20	12	63.7	149	1718	123	>20.00	91	<10	4	55	5	87	112	1	<.01	<.01	0.18	<.01	0.01	2	<1	<2
199557	<5	229.3	230.8	3386	>20000	3.45	>20000	4.17		2	14	9	146.4	54	1317	335	>20.00	210	25	<1	92	2	203	102	4	<.01	<.01	0.99	<.01	<.01	5	<1	<2
199558	23	335.9	347.9	1678	>20000	6.20	>20000	6.13		1	15	9	231.9	14	1845	408	>20.00	232	39	<1	68	3	189	159	5	<.01	<.01	0.58	<.01	<.01	5	<1	<2
199559	6	158.0	159.8	1047	>20000	3.48	9423	0.92		6	17	9	36.8	30	1638	182	>20.00	309	<10	<1	105	5	177	22	3	<.01	0.09	0.65	<.01	<.01	4	<1	<2
199560	87	305.6	307.4	2062	>20000	5.77	>20000	4.75		2	16	9	175.3	5	2659	498	>20.00	136	34	<1	93	3	341	118	5	<.01	<.01	0.28	<.01	<.01	2	<1	<2
199561	144	378.2	398.1	1509	>20000	7.90	>20000	4.67		5	16	8	172.3	<5	3342	487	>20.00	148	23	<1	91	4	373	125	3	<.01	<.01	0.44	<.01	<.01	2	<1	2
199562	21	>400.0	719.2	4044	>20000	8.57	>20000	>15.00	15.83	<1	12	7	536.7	<5	619	839	>20.00	443	57	<1	47	3	1445	442	2	<.01	0.01	0.05	<.01	<.01	<1	<1	53
199563	<5	5.4		7	465	0.04	347	0.02		2	2	<1	1.5	<5	<5	6	0.20	305	<10	120	9	3	<20	<20	6	0.08	3.12	>20.00	0.01	0.03	156	2	<2
199564	18	299.5	306.1	3020	>20000	6.54	>20000	8.20		2	15	10	264.8	<5	997	394	>20.00	315	44	<1	71	5	751	227	3	<.01	0.03	0.40	<.01	<.01	2	<1	18
199565	30	>400.0	655.1	2290	>20000	13.74	>20000	12.48		3	14	7	445.6	87	824	690	>20.00	409	76	6	61	4	609	315	2	<.01	0.02	0.74	<.01	<.01	3	<1	34
199566	<5	232.4	228.5	3215	>20000	4.97	>20000	14.68		<1	15	7	516.1	<5	848	354	>20.00	550	73	<1	76	4	1013	410	9	<.01	0.03	1.17	<.01	<.01	5	<1	53
199567	28	284.6	291.2	2698	>20000	5.89	>20000	9.92		4	17	9	344.7	<5	1422	408	>20.00	374	50	<1	98	5	353	264	8	<.01	0.01	0.64	<.01	<.01	3	<1	20
199568	27	324.4	337.6	2455	>20000	6.45	>20000	9.87		2	15	7	376.0	21	1258	435	>20.00	539	63	<1	86	3	333	242	6	<.01	0.03	2.39	<.01	<.01	11	1	11
199569	319	65.8	61.0	1045	10897	1.13	>20000	11.97		5	19	8	467.4	7	4682	170	>20.00	778	79	<1	103	4	119	338	6	<.01	0.01	2.79	<.01	<.01	10	<1	27
199570	18	5.2		9	323	0.03	1202	0.13		2	2	1	6.1	<5	183	<5	1.10	3628	<10	30	13	2	<20	<20	9	<.01	0.21	>20.00	<.01	<.01	142	4	<2
199571	<5	3.9		<1	146	0.02	195	<0.01		2	2	<1	0.9	<5	20	<5	0.12	4998	<10	32	5	3	<20	<20	8	<.01	0.15	>20.00	<.01	<.01	129	4	<2
199572	6	3.8		<1	71		163	<0.01		2	2	<1	0.5	<5	18	<5	0.23	3388	<10	62	6	4	<20	<20	7	<.01	0.53	>20.00	<.01	<.01	143	4	<2
199573	35	8.7		5	649	0.07	1011	0.10		2	6	2	5.6	<5	295	5	3.46	2722	<10	89	9	4	<20	<20	8	<.01	0.68	>20.00	<.01	<.01	148	5	<2
199574	6	328.1	371.5	948	>20000	8.45	>20000	7.21		3	12	5	266.4	9	729	369	14.08	923	51	18	57	5	45	164	5	0.09	0.28	13.22	0.02	0.02	61	2	<2
199575	6	4.3		<1	243	0.01	392	0.03		2	4	<1	1.6	<5	37	<5	0.71	1825	<10	104	12	7	<20	<20	6	0.01	4.91	>20.00	<.01	<.01	254	5	<2
199576	<5	6.0		55	116	0.01	13453	1.44		3	5	2	47.1	36	408	18	4.17	1450	<10	37	21	3	<20	30	4	0.01	8.94	19.60	0.02	0.01	89	2	<2
199577	<5	3.6		<1	33		180	<0.01		2	1	<1	0.7	<5	18	<5	0.31	1019	<10	43	8	2	<20	<20	8	<.01	2.55	>20.00	<.01	<.01	260	4	<2
199585	15	2.1		73	473	0.05	568	0.05		2	53	16	2.9	<5	237	8	5.29	549	<10	116	101	11	<20	<20	9	0.53	0.77	2.04	<.01	0.25	66	7	<2

Intertek Testing Services
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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140470		1	<1	<5	<10	<.010	<1
140471		1	<1	<5	<10	<.010	<1
140472		2	<1	<5	<10	<.010	<1
199554		<1	<1	<5	<10	<.010	<1
199555		<1	<1	<5	<10	<.010	<1
199556		2	<1	<5	<10	<.010	<1
199557		<1	<1	<5	<10	<.010	<1
199558		<1	<1	<5	10	<.010	<1
199559		<1	<1	<5	<10	<.010	<1
199560		<1	<1	<5	<10	<.010	<1
199561		<1	<1	<5	<10	<.010	<1
199562		<1	<1	<5	<10	<.010	<1
199563		2	<1	<5	<10	<.010	<1
199564		<1	<1	<5	<10	<.010	<1
199565		<1	<1	<5	<10	<.010	<1
199566		<1	<1	<5	<10	<.010	<1
199567		<1	<1	<5	13	<.010	<1
199568		<1	<1	<5	<10	<.010	<1
199569		<1	<1	<5	<10	<.010	<1
199570		<1	<1	<5	<10	<.010	<1
199571		<1	<1	<5	<10	<.010	<1
199572		<1	<1	<5	<10	<.010	<1
199573		<1	<1	<5	<10	<.010	<1
199574		2	<1	<5	<10	<.010	<1
199575		1	<1	<5	<10	<.010	<1
199576		3	<1	<5	<10	<.010	<1
199577		<1	<1	<5	<10	<.010	<1
199585		2	<1	<5	<10	<.010	9

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STANDARD NAME	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM
OX11 Oxide		2956	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		2956	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX12 Oxide		6766	-	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		6766	-	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2		-	1.1	-	154	83	-	437	-	-	3	146	39	1.7	<5	154	<5	7.35	1512	<10	5	209	49	<20	<20	7	1.94	2.38	3.47	0.01	0.04	80	3	<2
Number of Analyses		-	1	-	1	1	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value		-	1.1	-	154	83	-	437	-	-	3	146	39	1.7	3	154	3	7.35	1512	5	5	209	49	10	10	7	1.94	2.38	3.47	0.01	0.04	80	3	1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	0.2	-	148	20	-	148	-	-	4	135	35	0.2	1	145	1	7.20	1450	<1	6	251	50	5	12	-	1.80	2.70	4.00	0.01	0.04	70	3	-
ANALYTICAL BLANK		-	0.4	-	<1	41	-	3	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1	<1	<2
Number of Analyses		-	1	-	1	1	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value		-	0.4	-	<1	41	-	3	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	1	<1	10	10	<1	<.01	<.01	<0.01	<.01	<.01	<1	<1	1
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		1	<0.1	<0.1	<1	<1	<0.01	<1	<0.01	<0.01	<1	<1	<1	<0.1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<.01	<.01	<0.01	<.01	<.01	<1	<1	<1
BCC standard ME89-2		-	-	-	-	-	1.34	-	6.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	1.34	-	6.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	1.32	-	6.73	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

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STANDARD NAME	ELEMENT UNITS	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX11 Oxide		-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-
Mean Value		-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-
OX12 Oxide		-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-
Mean Value		-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-
GS91-2		20	1	7	<10	<.010	5
Number of Analyses		1	1	1	1	1	1
Mean Value		20	1	7	5	0.005	5
Standard Deviation		-	-	-	-	-	-
Accepted Value		24	2	6	1	0.006	5
ANALYTICAL BLANK		<1	<1	<5	<10	<.010	<1
Number of Analyses		1	1	1	1	1	1
Mean Value		<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-
Accepted Value		<1	<1	<1	<1	<.001	<1
BCC standard ME89-2		-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-
Mean Value		-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT Wet UNITS	Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM
140470		15	8.6		19	419	0.05	2048	0.21		8	14	2	7.4	7	131	25	3.08	1856	<10	47	5	6	<20	<20	7	0.01	3.69	>20.00	<.01	<.01	117	5	<2
Duplicate							0.05		0.21																									
199554		<5	12.5		2	1488	0.16	200	0.02		6	8	1	0.9	<5	42	10	0.88	6013	<10	145	6	8	<20	<20	5	<.01	1.22	>20.00	<.01	<.01	128	4	<2
Duplicate		<5	12.2		2	1504		214			7	7	<1	1.4	<5	40	<5	0.85	5882	<10	141	9	6	<20	<20	5	<.01	1.20	>20.00	<.01	<.01	105	3	<2
199555		6	315.5	316.1	1668	>20000	6.26	>20000	5.82		4	19	9	212.5	26	1225	426	>20.00	263	38	<1	99	3	152	159	2	<.01	<.01	0.98	<.01	<.01	3	<1	<2
Duplicate				319.1																														
199556		6	189.4	182.9	713	>20000	2.75	17044	1.62		6	20	12	63.7	149	1718	123	>20.00	91	<10	4	55	5	87	112	1	<.01	<.01	0.18	<.01	0.01	2	<1	<2
Duplicate				186.9																														
199557		<5	229.3	230.8	3386	>20000	3.45	>20000	4.17		2	14	9	146.4	54	1317	335	>20.00	210	25	<1	92	2	203	102	4	<.01	<.01	0.99	<.01	<.01	5	<1	<2
Duplicate				225.7																														
199558		23	335.9	347.9	1678	>20000	6.20	>20000	6.13		1	15	9	231.9	14	1845	408	>20.00	232	39	<1	68	3	189	159	5	<.01	<.01	0.58	<.01	<.01	5	<1	<2
Duplicate				348.5																														
199559		6	158.0	159.8	1047	>20000	3.48	9423	0.92		6	17	9	36.8	30	1638	182	>20.00	309	<10	<1	105	5	177	22	3	<.01	0.09	0.65	<.01	<.01	4	<1	<2
Duplicate				164.1																														
199560		87	305.6	307.4	2062	>20000	5.77	>20000	4.75		2	16	9	175.3	5	2659	498	>20.00	136	34	<1	93	3	341	118	5	<.01	<.01	0.28	<.01	<.01	2	<1	<2
Duplicate				306.0			5.83		4.79																									
199561		144	378.2	398.1	1509	>20000	7.90	>20000	4.67		5	16	8	172.3	<5	3342	487	>20.00	148	23	<1	91	4	373	125	3	<.01	<.01	0.44	<.01	<.01	2	<1	2
Prep Duplicate		142	381.4	410.0																														
Prep Duplicate				387.2	1687	>20000	7.35	>20000	4.31		6	18	10	161.5	<5	3460	499	>20.00	163	22	<1	111	5	407	116	4	<.01	<.01	0.50	<.01	<.01	4	<1	<2
199565		30	>400.0	655.1	2290	>20000	13.74	>20000	12.48		3	14	7	445.6	87	824	690	>20.00	409	76	6	61	4	609	315	2	<.01	0.02	0.74	<.01	<.01	3	<1	34
Duplicate							13.75		12.26																									
199569		319	65.8	61.0	1045	10897	1.13	>20000	11.97		5	19	8	467.4	7	4682	170	>20.00	778	79	<1	103	4	119	338	6	<.01	0.01	2.79	<.01	<.01	10	<1	27
Duplicate				61.8																														

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00233.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 22-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140470		1	<1	<5	<10	<.010	<1
Duplicate							
199554		<1	<1	<5	<10	<.010	<1
Duplicate		<1	<1	<5	<10	<.010	<1
199555		<1	<1	<5	<10	<.010	<1
Duplicate							
199556		2	<1	<5	<10	<.010	<1
Duplicate							
199557		<1	<1	<5	<10	<.010	<1
Duplicate							
199558		<1	<1	<5	10	<.010	<1
Duplicate							
199559		<1	<1	<5	<10	<.010	<1
Duplicate							
199560		<1	<1	<5	<10	<.010	<1
Duplicate							
199561		<1	<1	<5	<10	<.010	<1
Prep Duplicate							
Prep Duplicate		<1	<1	<5	12	<.010	<1
199565		<1	<1	<5	<10	<.010	<1
Duplicate							
199569		<1	<1	<5	<10	<.010	<1
Duplicate							

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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00233.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 22-FEB-00 PAGE 4A(7/ 8)

SAMPLE NUMBER	ELEMENT UNITS	Wet	Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM
199570			18	5.2		9	323	0.03	1202	0.13		2	2	1	6.1	<5	183	<5
Duplicate								0.03		0.12								
199571			<5	3.9		<1	146	0.02	195	<0.01		2	2	<1	0.9	<5	20	<5
Duplicate				4.1		<1	132		172			2	3	<1	1.0	<5	16	<5
199574			6	328.1	371.5	948	>20000	8.45	>20000	7.21		3	12	5	266.4	9	729	369
Duplicate					377.6													
199575			6	4.3		<1	243	0.01	392	0.03		2	4	<1	1.6	<5	37	<5
Duplicate								<0.01		0.02								
199577			<5	3.6		<1	33		180	<0.01		2	1	<1	0.7	<5	18	<5
Duplicate			<5															
Prep Duplicate			142	381.4	387.2	1687	>20000	7.35	>20000	4.31		6	18	10	161.5	<5	3460	499
Duplicate					377.5													

SAMPLE NUMBER	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	Y PPM	Ga PPM
199570	1.10	3628	<10	30	13	2	<20	<20	9	<.01	0.21	>20.00	<.01	<.01	142	4	<2
Duplicate																	
199571	0.12	4998	<10	32	5	3	<20	<20	8	<.01	0.15	>20.00	<.01	<.01	129	4	<2
Duplicate	0.11	4949	<10	33	5	2	<20	<20	6	<.01	0.15	>20.00	<.01	<.01	117	3	<2
199574	14.08	923	51	18	57	5	45	164	5	0.09	0.28	13.22	0.02	0.02	61	2	<2
Duplicate																	
199575	0.71	1825	<10	104	12	7	<20	<20	6	0.01	4.91	>20.00	<.01	<.01	254	5	<2
Duplicate																	
199577	0.31	1019	<10	43	8	2	<20	<20	8	<.01	2.55	>20.00	<.01	<.01	260	4	<2
Duplicate																	
Prep Duplicate	>20.00	163	22	<1	111	5	407	116	4	<.01	<.01	0.50	<.01	<.01	4	<1	<2
Duplicate																	

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

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PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 22-FEB-00 PAGE 4B(8/ 8)

SAMPLE NUMBER	ELEMENT UNITS	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199570		<1	<1	<5	<10	<.010	<1
Duplicate							
199571		<1	<1	<5	<10	<.010	<1
Duplicate		<1	<1	<5	<10	<.010	<1
199574		2	<1	<5	<10	<.010	<1
Duplicate							
199575		1	<1	<5	<10	<.010	<1
Duplicate							
199577		<1	<1	<5	<10	<.010	<1
Duplicate							
Prep Duplicate		<1	<1	<5	12	<.010	<1
Duplicate							

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00234.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: R. NEG
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

DATE APPROVED	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000211	1 Wet Au	Partial Ext. Gold	45	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000211	2 Ag	Silver	45	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	3 AgGrav	Silver (Grav.)	9	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000211	4 Cu	Copper	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	5 Pb	Lead	45	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	6 Pb	Lead	36	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000211	7 Zn	Zinc	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	8 Zn	Zinc	39	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000211	9 Zn	Zinc	1	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000211	10 Mo	Molybdenum	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	11 Ni	Nickel	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	12 Co	Cobalt	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	13 Cd	Cadmium	45	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	14 Bi	Bismuth	45	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	15 As	Arsenic	45	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	16 Sb	Antimony	45	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	17 Fe	Iron	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	18 Mn	Manganese	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	19 Te	Tellurium	45	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	20 Ba	Barium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	21 Cr	Chromium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	22 V	Vanadium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	23 Sn	Tin	45	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	24 W	Tungsten	45	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	25 La	Lanthanum	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	26 Al	Aluminum	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	27 Mg	Magnesium	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	28 Ca	Calcium	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	29 Na	Sodium	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	30 K	Potassium	45	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	31 Sr	Strontium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	32 Y	Yttrium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	33 Ga	Gallium	45	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	34 Li	Lithium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	35 Nb	Niobium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	36 Sc	Scandium	45	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000211	37 Ta	Tantalum	45	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000211	38 Ti	Titanium	45	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000211	39 Zr	Zirconium	45	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	45	2 -150	45	CRUSH/SPLIT & PULV.	45
				RIVER ROCK CLEANING	45
				SILICA CLEANING	45
				OVERWEIGHT/KG	87

REMARKS: Zinc concentration >1% will enhance Tungsten results. Therefore, Tungsten concentration would be greater than true value.
There is carryover to the blanks and standards due to the high levels of lead, zinc and cadmium in the samples. RRD 2/11/00

REPORT COPIES TO: MR. STEVE ROBERTSON
MR. PAT MCANDLESS

INVOICE TO: MR. STEVE ROBERTSON

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00234.0 (COMPLETE)
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 1A(1/12)

SAMPLE NUMBER	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140473	<5	1.6		4	81		148	0.02		5	4	<1	0.9	<5	60	8	0.61	1954	<10	153	12	8	<20	<20	4	0.02	1.79	>20.00	<.01	<.01	168
140474	9	>400.0	831.7	2385	>20000	10.65	>20000	11.14		9	6	<1	632.2	<5	7180	>4000	17.46	4504	28	29	43	8	>4000	269	15	<.01	0.24	12.92	<.01	<.01	61
140475	<5	3.0		10	282	0.01	316	0.02		5	10	<1	1.6	<5	51	28	1.28	873	<10	722	3	5	<20	<20	4	0.01	0.63	>20.00	<.01	<.01	208
140476	11	2.7		20	301	0.03	225	0.02		6	17	<1	1.0	<5	179	43	>20.00	628	14	27	76	5	<20	<20	2	<.01	4.77	9.88	<.01	<.01	91
140477	<5	1.8		7	1567	0.16	10756	1.16		12	7	<1	18.0	<5	115	127	0.77	507	<10	82	8	2	<20	31	3	0.06	0.31	>20.00	<.01	0.02	211
140478	20	165.1	178.2	790	>20000	4.31	>20000	3.61		21	12	1	151.6	<5	2729	887	9.42	809	19	71	56	4	355	71	20	0.08	0.11	>20.00	<.01	0.04	96
140479	11	2.8		10	840	0.09	2194	0.23		6	4	<1	9.1	<5	75	29	0.40	632	<10	268	5	2	<20	<20	4	0.04	0.45	>20.00	<.01	<.01	182
140501	8	1.7		43	116	0.01	2888	0.30		2	2	<1	14.6	<5	286	<5	2.23	7380	<10	9	17	1	<20	<20	8	0.05	0.40	>20.00	<.01	0.02	168
140502	116	7.0		156	1308	0.13	1745	0.18		4	3	<1	9.4	<5	991	17	6.69	4717	<10	131	60	3	<20	<20	6	0.03	0.89	>20.00	<.01	<.01	150
140503	41	13.6		413	2460	0.26	11789	1.37		1	<1	<1	66.2	10	758	53	7.58	3342	10	137	34	2	37	32	6	0.03	0.60	>20.00	<.01	<.01	151
140504	<5	7.5		55	2060	0.21	3186	0.33		3	3	<1	17.4	<5	147	17	1.91	3048	<10	6	16	2	<20	<20	6	0.04	5.67	>20.00	0.01	0.02	106
140505	11	4.4		311	642	0.07	1769	0.19		2	1	<1	8.7	14	252	19	4.64	6787	<10	6	21	1	<20	<20	8	0.02	2.12	>20.00	<.01	0.01	154
140506	5	4.6		54	774	0.08	4271	0.45		3	<1	<1	21.5	<5	109	9	1.53	8078	<10	7	9	<1	<20	20	6	0.03	0.68	>20.00	<.01	0.02	238
140507	27	16.4		134	2010	0.21	12062	1.34		2	2	<1	62.7	16	296	76	5.45	9028	<10	8	27	2	<20	36	6	0.08	0.99	>20.00	<.01	0.03	189
140508	6	11.2		20	1936	0.20	5450	0.56		2	2	<1	42.6	<5	14	24	0.39	6554	<10	15	6	<1	<20	<20	5	0.05	0.68	>20.00	<.01	0.02	251
140509	18	>400.0	487.8	937	>20000	7.09	>20000	11.40		4	2	<1	548.1	98	1213	554	13.73	2039	30	9	72	4	224	271	5	0.02	0.19	12.75	<.01	0.01	91
140510	20	29.3		36	3240	0.32	2999	0.30		2	2	<1	16.2	<5	165	39	1.44	8806	<10	11	15	1	<20	<20	7	0.03	0.85	>20.00	<.01	<.01	233
140511	12	2.0		2	383	0.04	81			2	2	<1	0.4	<5	<5	<5	0.21	1129	<10	17	9	2	<20	<20	5	0.18	1.06	>20.00	<.01	0.07	239
140512	30	51.9	60.8	514	9748	1.01	>20000	9.10		1	3	<1	438.5	6	2960	91	>20.00	1016	29	12	112	5	222	216	6	0.07	0.44	8.57	<.01	0.06	67
140513	<5	0.9		2	31		163	0.02		2	2	<1	0.9	<5	<5	<5	0.23	1477	<10	40	10	2	<20	<20	4	0.16	0.80	>20.00	<.01	0.05	235
140514	<5	1.1		5	132	0.01	873	0.09		4	5	<1	5.7	<5	47	<5	0.51	8026	<10	11	21	4	<20	<20	6	0.27	4.05	>20.00	0.01	0.03	121
140515	<5	89.8	92.9	905	16643	1.70	>20000	>15.00	17.87	3	3	<1	1152.5	15	8323	427	>20.00	2220	29	14	79	4	513	458	29	0.01	0.04	2.54	<.01	0.01	18
140516	8	4.7		10	937	0.10	2022	0.21		3	5	<1	12.2	<5	203	9	0.98	2552	<10	20	24	2	<20	<20	7	0.13	0.58	>20.00	<.01	0.03	160
140517	<5	1.2		3	124	0.01	249	0.02		6	2	<1	1.3	<5	11	<5	0.56	1840	<10	7	14	4	<20	<20	4	0.07	6.21	19.49	<.01	<.01	117
140518	17	188.6	219.8	1329	>20000	3.01	>20000	14.73		4	3	<1	699.3	523	3022	218	19.23	597	39	13	100	4	522	377	3	0.10	0.78	3.59	<.01	0.03	30
140519	<5	1.4		6	114	<0.01	597	0.05		4	2	<1	2.8	<5	7	<5	0.27	1269	<10	8	11	<1	<20	<20	4	0.04	0.33	>20.00	<.01	0.01	250
140520	<5	0.7		3	28		167	0.01		4	2	<1	0.9	<5	7	<5	0.37	1475	<10	6	51	2	<20	<20	4	0.06	2.42	>20.00	<.01	0.01	157
140521	<5	0.7		2	49		95			4	4	<1	0.5	<5	<5	5	0.82	1771	<10	5	28	4	<20	<20	4	0.07	6.51	18.10	0.01	0.02	131
140522	5	40.7		178	11391	1.19	12140	1.40		7	9	<1	72.9	<5	235	77	19.45	1391	11	11	35	7	72	34	3	0.16	4.81	11.35	0.01	0.02	67
140523	5	0.8		4	92		92			9	9	<1	0.5	<5	63	<5	1.42	1074	<10	10	11	8	<20	<20	4	0.28	6.86	18.76	0.01	0.03	149

Bondar Clegg & Company Ltd., 130 Pemberton Avenue, North Vancouver, B.C., V7P 2R5, (604) 985-0681

Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00   DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140473		3	<2	1	<1	<5	<10	<.010	<1
140474		5	51	<1	<1	<5	<10	<.010	<1
140475		3	<2	<1	<1	<5	<10	<.010	<1
140476		1	8	1	<1	<5	<10	<.010	<1
140477		2	<2	<1	<1	<5	<10	<.010	1
140478		2	16	<1	<1	<5	<10	<.010	<1
140479		2	<2	<1	<1	<5	<10	<.010	<1
140501		4	<2	<1	<1	<5	<10	<.010	<1
140502		3	2	1	<1	<5	<10	<.010	<1
140503		3	7	<1	<1	<5	<10	<.010	<1
140504		5	<2	2	<1	<5	<10	<.010	<1
140505		6	<2	<1	<1	<5	<10	<.010	<1
140506		3	<2	<1	<1	<5	<10	<.010	<1
140507		3	4	1	<1	<5	<10	<.010	<1
140508		2	<2	<1	<1	<5	<10	<.010	<1
140509		3	37	<1	<1	<5	<10	<.010	<1
140510		4	<2	<1	<1	<5	<10	<.010	<1
140511		3	<2	3	<1	<5	<10	<.010	1
140512		3	49	3	<1	<5	<10	<.010	<1
140513		3	<2	2	<1	<5	<10	<.010	<1
140514		3	<2	5	<1	<5	<10	<.010	1
140515		1	85	<1	<1	<5	<10	<.010	<1
140516		3	<2	1	<1	<5	<10	<.010	<1
140517		3	<2	2	<1	<5	<10	<.010	<1
140518		<1	53	<1	<1	<5	<10	<.010	<1
140519		3	<2	<1	<1	<5	<10	<.010	<1
140520		3	<2	1	<1	<5	<10	<.010	<1
140521		3	<2	4	<1	<5	<10	<.010	<1
140522		4	9	4	<1	<5	<10	<.010	<1
140523		7	<2	6	<1	<5	<10	<.010	1

ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP PROJECT: SILVER TIP
REPORT: V00-00234.0 (COMPLETE) DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 2A(3/12)

SAMPLE	ELEMENT Wet Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
NUMBER	UNITS PPB	PPM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
199586	8	2.1		16	70		386	0.04		4	9	<1	1.8	<5	26	6	1.01	551	<10	46	14	7	<20	<20	4	0.10	0.51	>20.00	<.01	0.03	274
199587	22	118.8	127.6	2745	>20000	2.17	>20000	12.09		2	2	<1	580.4	297	593	209	>20.00	966	31	33	70	6	456	320	3	0.06	0.13	11.33	<.01	0.02	81
199588	5	11.8		235	2898	0.30	5991	0.66		5	5	<1	28.8	<5	336	41	3.50	1090	<10	17	15	3	<20	24	4	0.05	1.01	>20.00	<.01	0.01	162
199589	<5	39.4		2915	4676	0.49	>20000	3.63		11	27	4	152.0	212	1457	263	>20.00	1084	24	17	65	6	66	92	8	0.08	0.99	15.64	<.01	0.02	72
199590	<5	1.1		24	93		113	<0.01		5	14	<1	0.5	<5	119	15	2.59	1085	<10	27	19	4	<20	<20	5	0.07	3.89	>20.00	<.01	0.01	132
199591	<5	1.0		11	15		27			3	2	<1	<0.2	<5	98	<5	0.88	377	<10	10	12	<1	<20	<20	3	0.03	0.67	>20.00	<.01	0.01	260
199592	35	72.1	73.2	3068	7655	0.81	2032	0.22		1	4	8	11.0	2083	1869	945	>20.00	393	27	13	85	5	263	<20	8	<.01	0.18	15.56	<.01	<.01	79
199593	27	1.8		14	230	0.03	45			3	2	<1	0.3	<5	122	<5	1.11	680	<10	10	13	2	<20	<20	4	0.04	0.56	>20.00	<.01	0.02	170
199594	5	3.0		19	395	0.04	79			3	2	<1	0.6	7	424	25	4.20	1858	<10	34	19	3	<20	<20	5	0.05	1.50	>20.00	<.01	0.01	158
199595	17	9.2		55	1442	0.14	3913	0.42		3	3	<1	19.6	<5	174	17	2.52	4187	<10	27	21	1	<20	<20	7	0.02	0.33	>20.00	<.01	<.01	155
199596	190	66.9	72.1	381	11048	1.15	>20000	4.07		3	2	<1	204.4	43	2304	146	18.45	2525	21	11	114	4	37	105	11	0.05	0.25	10.53	<.01	0.01	34
199597	131	13.4		202	1357	0.14	19887	2.25		<1	1	<1	109.8	14	1840	26	13.57	7496	15	9	48	3	<20	66	10	0.01	0.34	>20.00	<.01	<.01	71
199598	100	8.5		226	778	0.08	17731	1.97		3	2	<1	95.6	9	1248	26	12.43	8848	13	11	86	2	<20	56	13	0.02	0.40	>20.00	<.01	<.01	73
199599	<5	1.0		2	71		120	<0.01		3	2	<1	0.8	<5	<5	6	0.21	324	<10	76	8	1	<20	<20	3	0.06	3.23	>20.00	<.01	0.02	154
199600	59	11.8		492	752	0.08	>20000	2.96		1	1	<1	163.8	16	1236	49	18.22	3048	15	9	74	3	<20	80	7	0.02	2.62	14.22	<.01	0.02	48

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 2B(4/12)

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
199586		3	<2	<1	<1	<5	<10	<.010	1
199587		1	34	<1	<1	<5	<10	<.010	<1
199588		4	<2	<1	<1	<5	<10	<.010	<1
199589		6	14	1	<1	<5	<10	<.010	<1
199590		4	<2	2	<1	<5	<10	<.010	<1
199591		2	<2	<1	<1	<5	<10	<.010	<1
199592		4	13	<1	<1	<5	<10	<.010	<1
199593		2	<2	<1	<1	<5	<10	<.010	<1
199594		3	<2	1	<1	<5	<10	<.010	<1
199595		3	<2	<1	<1	<5	<10	<.010	<1
199596		2	16	<1	<1	<5	<10	<.010	<1
199597		3	11	<1	<1	<5	<10	<.010	<1
199598		4	10	<1	<1	<5	<10	<.010	<1
199599		1	<2	2	<1	<5	<10	<.010	<1
199600		4	15	1	<1	<5	<10	<.010	<1

Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00234.0 (COMPLETE)
DATE RECEIVED: 09-FEB-00
DATE PRINTED: 28-FEB-00

STANDARD ELEMENT	Wet Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
NAME UNITS	PPB	PPM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
OX12 Oxide	7668	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	7668	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET STSD-4	-	0.3	-	71	30	-	161	-	-	1	25	11	0.8	<5	13	<5	2.92	1240	<10	1160	32	46	<20	<20	14	1.29	0.78	1.25	0.06	0.12	86
Number of Analyses	-	1	-	1	1	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.3	-	71	30	-	161	-	-	1	25	11	0.8	3	13	3	2.92	1240	5	1160	32	46	10	10	14	1.29	0.78	1.25	0.06	0.12	86
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	0.3	-	66	13	-	82	-	-	2	23	11	0.6	-	11	4	2.60	1200	-	-	30	51	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	<5	<0.2	-	<1	2	-	1	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
ANALYTICAL BLANK	-	<0.2	-	<1	<2	-	<1	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
Number of Analyses	1	2	-	2	2	-	2	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	3	0.1	-	<1	2	-	1	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01	<.01	<1
Standard Deviation	-	-	-	-	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	1	<0.1	<0.1	<1	<1	<0.01	<1	<0.01	<0.01	<1	<1	<1	<0.1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<.01	<.01	<0.01	<.01	<.01	<1
OX11 Oxide	-	-	23.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	23.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	4.36	-	>15.00	18.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	4.33	-	>15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	2	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	4.34	-	15.00	18.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00234.0 (COMPLETE)
DATE RECEIVED: 09-FEB-00
DATE PRINTED: 28-FEB-00

STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX12 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
CANMET STSD-4		10	2	10	4	<5	<10	0.095	<1
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		10	2	10	4	3	5	0.095	<1
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2
Mean Value		<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		<1	<1	<1	<1	<1	<1	<.001	<1
OX11 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00234.0 (COMPLETE)
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

STANDARD NAME / ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
Accepted Value	-	-	-	-	-	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX5 Oxide	990	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	990	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-1	-	0.6	-	91	12	-	112	-	-	<1	36	21	0.6	<5	8	<5	4.71	734	<10	204	56	113	<20	<20	6	3.24	1.74	1.16	0.06	0.32	39
Number of Analyses	-	1	-	1	1	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	0.6	-	91	12	-	112	-	-	<1	36	21	0.6	3	8	3	4.71	734	5	204	56	113	10	10	6	3.24	1.74	1.16	0.06	0.32	39
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	8	0.7	-	95	11	-	80	-	-	2	40	18	0.1	1	8	1	4.74	720	<1	200	54	133	4	2	5	3.09	1.83	1.08	0.06	0.32	39

ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
Accepted Value		-	-	-	-	-	-	-	-
OX5 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
GS91-1		7	4	22	7	8	<10	0.210	10
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		7	4	22	7	8	5	0.210	10
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		9	4	-	1	18	1	-	9

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP

REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM
140473		<5	1.6		4	81		148	0.02		5	4	<1	0.9	<5	60	8
Duplicate									0.01								
140474		9	>400.0	831.7	2385	>20000	10.65	>20000	11.14		9	6	<1	632.2	<5	7180	>4000
Duplicate				830.0													
140477		<5	1.8		7	1567	0.16	10756	1.16		12	7	<1	18.0	<5	115	127
Duplicate		<5	1.6		8	1565		10668			12	7	<1	18.1	<5	107	124
140478		20	165.1	178.2	790	>20000	4.31	>20000	3.61		21	12	1	151.6	<5	2729	887
Duplicate				180.8													
140503		41	13.6		413	2460	0.26	11789	1.37		1	<1	<1	66.2	10	758	53
Duplicate							0.26		1.35								
140508		6	11.2		20	1936	0.20	5450	0.56		2	2	<1	42.6	<5	14	24
Duplicate							0.19		0.56								
140509		18	>400.0	487.8	937	>20000	7.09	>20000	11.40		4	2	<1	548.1	98	1213	554
Duplicate				457.0													
140512		30	51.9	60.8	514	9748	1.01	>20000	9.10		1	3	<1	438.5	6	2960	91
Duplicate				52.3													
140513		<5	0.9		2	31		163	0.02		2	2	<1	0.9	<5	<5	<5
Duplicate									0.02								
140515		<5	89.8	92.9	905	16643	1.70	>20000	>15.00	17.87	3	3	<1	1152.5	15	8323	427
Duplicate			87.2	92.3	844	16754		>20000			3	3	<1	1181.8	15	8526	428
140517		<5	1.2		3	124	0.01	249	0.02		6	2	<1	1.3	<5	11	<5
Prep Duplicate		<5	1.6		2	180	0.02	286	0.03		5	3	<1	1.5	<5	7	<5
140518		17	188.6	219.8	1329	>20000	3.01	>20000	14.73		4	3	<1	699.3	523	3022	218
Duplicate							3.02		14.64								

SAMPLE NUMBER	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140473	0.61	1954	<10	153	12	8	<20	<20	4	0.02	1.79	>20.00	<.01	<.01	168
Duplicate															
140474	17.46	4504	28	29	43	8	>4000	269	15	<.01	0.24	12.92	<.01	<.01	61
Duplicate															
140477	0.77	507	<10	82	8	2	<20	31	3	0.06	0.31	>20.00	<.01	0.02	211
Duplicate	0.71	500	<10	84	7	2	<20	36	3	0.06	0.29	>20.00	<.01	0.02	216
140478	9.42	809	19	71	56	4	355	71	20	0.08	0.11	>20.00	<.01	0.04	96
Duplicate															
140503	7.58	3342	10	137	34	2	37	32	6	0.03	0.60	>20.00	<.01	<.01	151
Duplicate															
140508	0.39	6554	<10	15	6	<1	<20	<20	5	0.05	0.68	>20.00	<.01	0.02	251
Duplicate															
140509	13.73	2039	30	9	72	4	224	271	5	0.02	0.19	12.75	<.01	0.01	91
Duplicate															
140512	>20.00	1016	29	12	112	5	222	216	6	0.07	0.44	8.57	<.01	0.06	67
Duplicate															
140513	0.23	1477	<10	40	10	2	<20	<20	4	0.16	0.80	>20.00	<.01	0.05	235
Duplicate															
140515	>20.00	2220	29	14	79	4	513	458	29	0.01	0.04	2.54	<.01	0.01	18
Duplicate	>20.00	2250	41	13	80	4	524	497	31	<.01	0.04	2.68	<.01	0.01	17
140517	0.56	1840	<10	7	14	4	<20	<20	4	0.07	6.21	19.49	<.01	<.01	117
Prep Duplicate	0.61	1665	<10	7	11	4	<20	<20	3	0.06	6.30	>20.00	<.01	<.01	113
140518	19.23	597	39	13	100	4	522	377	3	0.10	0.78	3.59	<.01	0.03	30
Duplicate															

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 5B(10/12)

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140473		3	<2	1	<1	<5	<10	<.010	<1
Duplicate									
140474		5	51	<1	<1	<5	<10	<.010	<1
Duplicate									
140477		2	<2	<1	<1	<5	<10	<.010	1
Duplicate		2	2	<1	<1	<5	<10	<.010	1
140478		2	16	<1	<1	<5	<10	<.010	<1
Duplicate									
140503		3	7	<1	<1	<5	<10	<.010	<1
Duplicate									
140508		2	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140509		3	37	<1	<1	<5	<10	<.010	<1
Duplicate									
140512		3	49	3	<1	<5	<10	<.010	<1
Duplicate									
140513		3	<2	2	<1	<5	<10	<.010	<1
Duplicate									
140515		1	85	<1	<1	<5	<10	<.010	<1
Duplicate		1	85	<1	<1	<5	<10	<.010	<1
140517		3	<2	2	<1	<5	<10	<.010	<1
Prep Duplicate		3	<2	2	<1	<5	<10	<.010	<1
140518		<1	53	<1	<1	<5	<10	<.010	<1
Duplicate									

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM
140521		<5	0.7		2	49		95			4	4	<1	0.5
Duplicate		<5												
199587		22	118.8	127.6	2745	>20000	2.17	>20000	12.09		2	2	<1	580.4
Duplicate				136.6			2.18		12.07					
199592		35	72.1	73.2	3068	7655	0.81	2032	0.22		1	4	8	11.0
Duplicate							0.81		0.21					
199596		190	66.9	72.1	381	11048	1.15	>20000	4.07		3	2	<1	204.4
Duplicate			65.2		369	10976		>20000			2	3	<1	203.4
199597		131	13.4		202	1357	0.14	19887	2.25		<1	1	<1	109.8
Prep Duplicate		134	14.9		235	1450	0.16	>20000	2.55		2	2	<1	117.5
199600		59	11.8		492	752	0.08	>20000	2.96		1	1	<1	163.8
Duplicate							0.08		2.97					

SAMPLE NUMBER	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140521	<5	<5	5	0.82	1771	<10	5	28	4	<20	<20	4	0.07	6.51	18.10	0.01	0.02	131
Duplicate																		
199587	297	593	209	>20.00	966	31	33	70	6	456	320	3	0.06	0.13	11.33	<.01	0.02	81
Duplicate																		
199592	2083	1869	945	>20.00	393	27	13	85	5	263	<20	8	<.01	0.18	15.56	<.01	<.01	79
Duplicate																		
199596	43	2304	146	18.45	2525	21	11	114	4	37	105	11	0.05	0.25	10.53	<.01	0.01	34
Duplicate	41	2231	136	18.12	2482	22	10	113	4	37	104	10	0.05	0.25	10.49	<.01	0.01	33
199597	14	1840	26	13.57	7496	15	9	48	3	<20	66	10	0.01	0.34	>20.00	<.01	<.01	71
Prep Duplicate	13	1811	35	14.38	6831	15	10	75	3	<20	69	10	0.01	0.35	19.36	<.01	<.01	58
199600	16	1236	49	18.22	3048	15	9	74	3	<20	80	7	0.02	2.62	14.22	<.01	0.02	48
Duplicate																		

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00234.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 09-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140521		3	<2	4	<1	<5	<10	<.010	<1
Duplicate									
199587		1	34	<1	<1	<5	<10	<.010	<1
Duplicate									
199592		4	13	<1	<1	<5	<10	<.010	<1
Duplicate									
199596		2	16	<1	<1	<5	<10	<.010	<1
Duplicate		2	16	<1	<1	<5	<10	<.010	<1
199597		3	11	<1	<1	<5	<10	<.010	<1
Prep Duplicate		3	12	<1	<1	<5	<10	<.010	<1
199600		4	15	1	<1	<5	<10	<.010	<1
Duplicate									

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00292.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

SUBMITTED BY: R. NEY

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

DATE APPROVED	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000218	1 Wet Au	Partial Ext. Gold	43	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000218	2 AgGrav	Silver (Grav.)	21	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000218	3 wt/Ag	Sample Weight	21	0.10 GM		
000218	4 Ag	Silver	43	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	5 Cu	Copper	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	6 Pb	Lead	43	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	7 Pb	Lead	37	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000218	8 Pb	Lead	3	0.01 PCT		TITRIMETRIC
000218	9 Zn	Zinc	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	10 Zn	Zinc	42	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000218	11 Zn	Zinc	4	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000218	12 Mo	Molybdenum	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	13 Ni	Nickel	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	14 Co	Cobalt	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	15 Cd	Cadmium	43	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	16 Bi	Bismuth	43	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	17 As	Arsenic	43	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	18 Sb	Antimony	43	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	19 Fe	Iron	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	20 Mn	Manganese	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	21 Te	Tellurium	43	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	22 Ba	Barium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	23 Cr	Chromium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	24 V	Vanadium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	25 Sn	Tin	43	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	26 W	Tungsten	43	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	27 La	Lanthanum	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	28 Al	Aluminum	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	29 Mg	Magnesium	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	30 Ca	Calcium	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	31 Na	Sodium	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	32 K	Potassium	43	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	33 Sr	Strontium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	34 Y	Yttrium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	35 Ga	Gallium	43	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	36 Li	Lithium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	37 Nb	Niobium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	38 Sc	Scandium	43	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	39 Ta	Tantalum	43	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	40 Ti	Titanium	43	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	41 Zr	Zirconium	43	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	43	2 -150	43	CRUSH/SPLIT & PULV.	43
				RIVER ROCK CLEANING	43
				SILICA CLEANING	43
				OVERWEIGHT/KG	75

REMARKS: Zinc concentration >1% will enhance Tungsten results. Therefore, Tungsten concentration would be greater than true value.
There is carryover to the blanks and standards due to the high levels of copper, lead and zinc in the samples. RRD 2/18/00
Please note that the reported over-limit Zn was determined by AAS. Please advise if titration result is required.

REPORT COPIES TO: MR. STEVE ROBERTSON
MR. PAT MCANDLESS

INVOICE TO: MR. STEVE ROBERTSON

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00292.0 (COMPLETE)

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 1A(1/14)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
140480		<5			1.8	74	203	0.03		1240	0.15		45	147	15	5.5	<5	54	16	5.20	248	<10	64	99	180	<20	<20	4	0.86	0.38	2.27	<.01
140481		<5	1077.1	15.63	>400.0	3670	>20000	>15.00	17.24	>20000	4.73		<1	13	5	236.0	404	2669	964	>20.00	357	49	71	100	6	1945	<20	<1	0.04	0.03	3.39	<.01
140482		<5	898.7	15.39	>400.0	5226	>20000	14.18		>20000	9.03		<1	13	7	448.1	249	2010	867	>20.00	484	52	24	76	6	3040	<20	<1	0.04	0.03	3.77	<.01
140483		<5	1392.5	15.13	>400.0	2390	>20000	>15.00	23.95	>20000	8.26		<1	10	4	418.5	487	1787	1321	>20.00	317	46	17	120	4	1333	<20	<1	0.04	0.03	1.71	<.01
140484		<5			2.7	24	161	0.02		79			2	2	<1	<0.2	<5	<5	<5	0.27	318	<10	154	3	3	<20	<20	1	0.16	4.80	>20.00	0.01
140485		<5			4.4	59	404	0.04		454	0.04		9	93	4	1.8	<5	88	21	9.90	1020	<10	125	69	43	<20	<20	2	0.22	0.34	14.59	<.01
140486		<5	466.4	15.64	>400.0	2544	>20000	6.96		>20000	7.49		2	26	5	344.8	363	1367	424	>20.00	875	57	115	95	19	1272	<20	2	0.13	0.12	9.34	<.01
140487		<5			2.9	22	90			213	0.02		2	2	<1	0.5	<5	7	<5	0.16	273	<10	680	1	11	<20	<20	1	0.01	0.41	>20.00	<.01
140488		<5			6.9	54	243	0.03		2264	0.25		3	5	<1	10.5	17	61	12	0.73	625	<10	595	4	9	<20	<20	3	0.11	0.38	>20.00	<.01
140489		<5	75.4	15.62	80.6	1015	5580	0.55		>20000	11.46		1	11	1	524.6	332	1320	144	17.41	883	44	46	69	15	103	<20	3	0.09	0.23	14.48	<.01
140490		<5			9.1	155	195	0.02		10624	1.11		4	9	<1	49.1	51	151	14	2.19	1089	<10	160	13	13	<20	<20	3	0.05	0.45	>20.00	<.01
140491		<5	175.9	15.17	172.0	935	>20000	2.77		>20000	2.85		6	21	3	143.2	77	359	170	5.35	1054	13	205	70	17	573	<20	3	0.13	0.61	>20.00	<.01
140492		<5			5.0	150	345	0.03		6966	0.67		5	5	<1	33.0	14	192	37	1.97	779	<10	280	3	7	80	<20	2	0.03	0.21	>20.00	<.01
140493		<5			17.9	125	2538	0.24		4357	0.44		4	15	2	21.1	23	106	21	1.92	2275	<10	336	23	7	41	<20	4	0.13	0.26	>20.00	<.01
140494		<5	49.9	15.65	50.6	363	7417	0.74		13102	1.34		7	32	5	62.7	60	218	69	4.73	906	<10	155	74	18	177	<20	4	0.31	0.53	13.93	<.01
140495		<5			20.1	136	2867	0.28		4422	0.43		4	13	2	21.0	21	75	21	2.01	1625	<10	382	20	10	59	<20	3	0.11	0.31	>20.00	<.01
140496		<5	55.2	15.45	64.6	192	10996	1.10		10390	1.08		6	26	4	50.6	85	146	63	3.31	1269	<10	83	47	15	88	<20	3	0.20	0.33	18.66	<.01
140497		<5	146.0	15.14	146.6	641	>20000	2.43		>20000	3.53		5	28	4	158.9	143	485	125	11.24	631	17	89	104	18	218	<20	3	0.25	0.31	9.72	<.01
140498		<5	787.5	15.89	>400.0	252	>20000	13.68		>20000	8.92		<1	6	1	447.7	112	1534	754	>20.00	210	51	17	109	5	73	<20	<1	0.02	0.02	0.54	<.01
140499		<5	41.2	15.17	63.6	684	9445	0.93		>20000	3.54		8	41	5	160.5	42	509	59	9.46	479	22	43	109	26	281	<20	3	0.25	0.51	5.93	<.01
140500		6			11.3	501	231	0.02		953	0.10		8	84	8	4.6	73	321	104	13.99	292	<10	47	134	18	<20	<20	4	0.32	0.27	3.68	<.01
140551		<5			12.6	69	1560	0.15		3676	0.38		8	26	3	18.7	16	234	21	3.78	804	10	268	50	18	21	<20	3	0.27	2.08	15.03	<.01
140552		<5			5.6	84	319	0.03		284	0.04		<1	53	24	3.3	15	1128	<5	18.19	542	<10	39	161	22	<20	<20	5	0.88	0.99	2.93	0.01
140553		<5			5.8	28	982	0.10		208	0.04		2	1	<1	0.8	6	123	7	1.46	519	<10	60	2	3	<20	<20	2	0.01	3.15	>20.00	<.01
140554		<5	315.4	15.64	333.6	2906	10286	0.99		>20000	>15.00	21.21	<1	7	2	1030.3	2029	586	104	>20.00	626	110	15	41	8	31	<20	<1	0.09	0.19	1.10	<.01
140555		<5	151.4	15.77	157.3	801	>20000	2.22		>20000	7.38		<1	2	<1	320.3	262	205	111	11.40	521	<10	48	18	5	<20	<20	2	0.04	0.56	>20.00	<.01
140556		<5	669.3	15.74	>400.0	4162	>20000	12.98		>20000	14.98		<1	4	3	710.1	164	457	641	>20.00	411	45	6	85	4	1517	<20	3	0.03	0.05	0.48	<.01
140557		<5	902.3	15.60	>400.0	5926	>20000	>15.00	16.11	>20000	>15.00	21.39	<1	4	6	1047.5	244	293	1033	>20.00	548	43	4	69	3	3212	<20	2	0.01	0.04	0.11	<.01
140558		<5	365.8	15.73	378.6	3954	>20000	4.47		>20000	>15.00	19.31	<1	4	3	923.3	427	666	427	>20.00	539	45	5	63	4	1268	<20	2	0.02	0.04	0.07	<.01
140559		<5	373.6	15.50	372.1	3225	>20000	4.62		>20000	9.50		<1	1	2	479.6	421	257	237	>20.00	359	48	4	55	5	87	<20	1	0.03	0.03	0.02	<.01

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00292.0 (COMPLETE)
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 1B(2/14)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140480		0.04	46	7	<2	6	14	<5	<10	0.035	16
140481		<.01	9	1	14	<1	<1	<5	<10	<.010	<1
140482		<.01	11	1	41	<1	<1	<5	<10	<.010	<1
140483		<.01	7	<1	32	<1	<1	<5	<10	<.010	<1
140484		0.04	125	2	<2	2	<1	<5	<10	<.010	1
140485		0.02	86	4	<2	2	2	<5	<10	<.010	<1
140486		0.03	26	3	21	<1	<1	<5	<10	<.010	<1
140487		<.01	202	3	<2	<1	1	<5	<10	<.010	<1
140488		0.02	114	4	<2	<1	<1	<5	<10	<.010	1
140489		0.01	58	4	16	<1	<1	<5	<10	<.010	<1
140490		<.01	117	5	<2	<1	<1	<5	<10	<.010	1
140491		0.03	74	4	6	<1	<1	<5	<10	<.010	<1
140492		<.01	120	5	3	<1	<1	<5	<10	<.010	<1
140493		0.04	97	8	<2	<1	<1	<5	<10	<.010	2
140494		0.11	76	6	<2	1	<1	<5	<10	<.010	2
140495		0.03	100	6	<2	<1	<1	<5	<10	<.010	2
140496		0.05	70	6	<2	<1	<1	<5	<10	<.010	4
140497		0.08	39	4	7	<1	<1	<5	<10	<.010	<1
140498		<.01	3	<1	21	<1	<1	<5	<10	<.010	<1
140499		0.09	58	4	11	<1	<1	<5	<10	<.010	2
140500		0.11	34	11	<2	1	<1	<5	<10	<.010	2
140551		0.10	66	5	<2	<1	<1	<5	<10	<.010	2
140552		0.33	69	8	<2	4	<1	<5	<10	<.010	4
140553		<.01	109	4	<2	<1	<1	<5	<10	<.010	<1
140554		0.04	4	<1	24	5	<1	<5	<10	<.010	<1
140555		0.02	75	4	<2	<1	<1	<5	<10	<.010	<1
140556		<.01	2	<1	59	<1	<1	<5	<10	<.010	<1
140557		<.01	<1	<1	104	<1	<1	<5	<10	<.010	<1
140558		<.01	<1	<1	71	<1	<1	<5	<10	<.010	<1
140559		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1

ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00292.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 2A(3/14)

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM
140560		<5	491.8	15.94	>400.0	3148	>20000	5.87		>20000	9.40		<1	2	2
140561		<5	187.9	15.92	196.6	4106	>20000	2.45		>20000	12.96		<1	2	3
140562		<5	489.9	15.19	>400.0	5159	>20000	9.61		>20000	>15.00	19.38	<1	5	4
140563		<5			2.5	10	93			197	<0.01		1	2	<1
140564		<5			7.4	30	967	0.10		946	0.08		1	2	<1
140565		<5			2.0	12	205	0.02		2945	0.29		1	9	<1
199619		<5			1.6	36	92			273	0.02		19	65	7
199620		<5			6.6	161	337	0.04		2036	0.20		66	217	20
199621		<5	76.7	15.89	75.2	1351	1359	0.13		>20000	9.16		6	61	4
199622		<5			3.1	51	87			731	0.07		39	135	13
199623		<5			2.4	13	68			596	0.05		7	24	1
199624		<5			4.6	25	117	0.01		185	<0.01		5	59	2
199625		<5			2.1	27	75			215	<0.01		5	36	4

SAMPLE NUMBER	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
140560	473.7	598	189	265	>20.00	342	42	5	37	6	82	<20	<1	0.03	0.03	0.02	<.01
140561	633.8	262	246	122	>20.00	426	17	5	63	6	789	331	1	0.03	0.02	0.02	<.01
140562	887.1	93	143	574	>20.00	551	28	9	74	6	1641	<20	<1	0.03	0.05	0.13	<.01
140563	0.6	<5	<5	<5	0.24	288	<10	370	4	3	<20	<20	1	0.13	4.17	>20.00	0.01
140564	4.5	<5	10	9	0.66	310	<10	135	5	3	<20	<20	2	0.02	0.83	>20.00	<.01
140565	7.4	<5	31	16	11.56	650	<10	98	12	5	<20	<20	1	0.02	5.79	>20.00	0.01
199619	1.0	<5	71	10	2.01	335	<10	119	185	49	<20	<20	2	0.48	0.42	4.02	<.01
199620	9.7	37	271	31	9.19	377	<10	62	92	121	<20	<20	7	0.68	0.19	7.88	<.01
199621	427.7	704	548	139	>20.00	268	45	58	154	10	<20	<20	<1	0.06	0.05	2.08	<.01
199622	3.4	6	85	25	2.47	264	<10	249	142	82	<20	<20	7	0.61	0.36	3.04	<.01
199623	2.6	<5	51	9	1.72	601	<10	376	5	23	<20	<20	2	0.07	0.19	>20.00	<.01
199624	0.3	<5	64	28	>20.00	1290	<10	28	25	29	<20	<20	2	0.07	1.27	13.18	<.01
199625	<0.2	<5	188	45	14.01	1209	11	128	209	10	<20	<20	3	0.04	0.21	>20.00	<.01

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00292.0 (COMPLETE)
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140560		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
140561		<.01	<1	<1	29	<1	<1	<5	<10	<.010	<1
140562		<.01	<1	<1	87	<1	<1	<5	<10	<.010	<1
140563		0.04	129	2	<2	2	<1	<5	<10	<.010	<1
140564		<.01	144	4	<2	<1	<1	<5	<10	<.010	<1
140565		<.01	127	3	<2	1	<1	<5	<10	<.010	<1
199619		0.04	32	4	<2	4	4	<5	<10	<.010	9
199620		0.06	119	13	<2	5	8	<5	<10	<.010	13
199621		0.01	6	2	5	<1	<1	<5	<10	<.010	<1
199622		0.14	27	6	<2	3	6	<5	<10	<.010	14
199623		0.02	134	5	<2	<1	2	<5	<10	<.010	2
199624		<.01	57	5	<2	<1	<1	<5	<10	<.010	<1
199625		<.01	118	4	<2	<1	<1	<5	<10	<.010	<1

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP PROJECT: SILVER TIP

REPORT: V00-00292.0 (COMPLETE) DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

STANDARD ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NAME UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
OX9 Oxide	467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide	2874	25.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	2874	25.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET LKSD-2	-	-	-	0.8	45	88	-	-	297	-	-	1	23	17	1.0	<5	10	<5	3.56	1863	<10	230	32	43	<20	<20	53	1.69	0.61	0.61	0.04
Number of Analyses	-	-	-	1	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	-	-	-	0.8	45	88	-	-	297	-	-	1	23	17	1.0	3	10	3	3.56	1863	5	230	32	43	10	10	53	1.69	0.61	0.61	0.04
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	0.8	36	40	-	-	200	-	-	2	23	17	0.8	-	9	1	3.50	1840	-	-	29	48	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	4.40	-	-	>15.00	18.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	4.41	-	-	>15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	2	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	4.40	-	-	15.00	18.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	-	-	-	<0.2	9	6	-	-	38	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
ANALYTICAL BLANK	-	-	-	<0.2	6	4	-	-	17	-	-	<1	<1	<1	<0.2	<5	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01
Number of Analyses	-	-	-	2	2	2	-	-	2	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	-	-	-	0.1	7	5	-	-	28	-	-	<1	<1	<1	0.1	3	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01
Standard Deviation	-	-	-	-	2	2	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX9 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX11 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET LKSD-2		0.23	26	28	<2	15	4	5	<10	0.087	3
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.23	26	28	1	15	4	5	5	0.087	3
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2	2	2
Mean Value		<.01	<1	<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-	-	-

STANDARD NAME	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
Accepted Value		1	<0.1	<0.01	<0.1	<1	<1	<0.01	<0.01	<1	<0.01	<0.01	<1	<1	<1	<0.1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<.01	<.01	<0.01	<.01
OX12 Oxide		6808	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		6808	10.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2		-	-	-	0.2	170	20	-	-	161	-	-	2	147	39	0.3	<5	144	<5	7.61	1572	<10	10	238	55	<20	<20	5	2.06	2.62	3.85	0.02
Number of Analyses		-	-	-	1	1	1	-	-	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value		-	-	-	0.2	170	20	-	-	161	-	-	2	147	39	0.3	3	144	3	7.61	1572	5	10	238	55	10	10	5	2.06	2.62	3.85	0.02
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	0.2	148	20	-	-	148	-	-	4	135	35	0.2	1	145	1	7.20	1450	<1	6	251	50	5	12	-	1.80	2.70	4.00	0.01

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00292.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 4B(8/14)

STANDARD NAME	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
Accepted Value		<.01	<1	<1	<1	<1	<1	<1	<1	<.001	<1
OX12 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
GS91-2		0.06	76	4	<2	22	2	9	<10	<.010	4
Number of Analyses		1	1	1	1	1	1	1	1	1	1
Mean Value		0.06	76	4	1	22	2	9	5	0.005	4
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		0.04	70	3	-	24	2	6	1	0.006	5

Intertek Testing Services
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Geochemical Lab Report

Vancouver Branch

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PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
140480	<5			1.8	74	203	0.03		1240	0.15		45	147	15	5.5	<5	54	16	5.20	248	<10	64	99	180	<20	<20	4	0.86	0.38	2.27	<.01
Duplicate							0.02			0.13																					
140481	<5	1077.1	15.63	>400.0	3670	>20000	>15.00	17.24	>20000	4.73		<1	13	5	236.0	404	2669	964	>20.00	357	49	71	100	6	1945	<20	<1	0.04	0.03	3.39	<.01
Duplicate		1122.4						17.25																							
140482	<5	898.7	15.39	>400.0	5226	>20000	14.18		>20000	9.03		<1	13	7	448.1	249	2010	867	>20.00	484	52	24	76	6	3040	<20	<1	0.04	0.03	3.77	<.01
Duplicate	<5	890.6		>400.0	4892	>20000			>20000			<1	13	7	433.0	252	2010	872	>20.00	465	51	24	78	7	3041	<20	<1	0.04	0.03	3.60	<.01
140483	<5	1392.5	15.13	>400.0	2390	>20000	>15.00	23.95	>20000	8.26		<1	10	4	418.5	487	1787	1321	>20.00	317	46	17	120	4	1333	<20	<1	0.04	0.03	1.71	<.01
Duplicate		1378.4																													
140486	<5	466.4	15.64	>400.0	2544	>20000	6.96		>20000	7.49		2	26	5	344.8	363	1367	424	>20.00	875	57	115	95	19	1272	<20	2	0.13	0.12	9.34	<.01
Duplicate		467.5																													
140489	<5	75.4	15.62	80.6	1015	5580	0.55		>20000	11.46		1	11	1	524.6	332	1320	144	17.41	883	44	46	69	15	103	<20	3	0.09	0.23	14.48	<.01
Duplicate		76.7					0.55			11.48																					
140491	<5	175.9	15.17	172.0	935	>20000	2.77		>20000	2.85		6	21	3	143.2	77	359	170	5.35	1054	13	205	70	17	573	<20	3	0.13	0.61	>20.00	<.01
Duplicate		171.9																													
140494	<5	49.9	15.65	50.6	363	7417	0.74		13102	1.34		7	32	5	62.7	60	218	69	4.73	906	<10	155	74	18	177	<20	4	0.31	0.53	13.93	<.01
Duplicate		47.7					0.75			1.34																					
140498	<5	787.5	15.89	>400.0	252	>20000	13.68		>20000	8.92		<1	6	1	447.7	112	1534	754	>20.00	210	51	17	109	5	73	<20	<1	0.02	0.02	0.54	<.01
Duplicate		811.7																													
140499	<5	41.2	15.17	63.6	684	9445	0.93		>20000	3.54		8	41	5	160.5	42	509	59	9.46	479	22	43	109	26	281	<20	3	0.25	0.51	5.93	<.01
Duplicate				61.8	692	9562	0.92		>20000	3.52		7	40	5	160.6	42	509	58	9.63	486	21	53	112	28	284	<20	3	0.27	0.52	6.00	<.01
140554	<5	315.4	15.64	333.6	2906	10286	0.99		>20000	>15.00	21.21	<1	7	2	1030.3	2029	586	104	>20.00	626	110	15	41	8	31	<20	<1	0.09	0.19	1.10	<.01
Duplicate							1.01			>15.00	21.25																				
140555	<5	151.4	15.77	157.3	801	>20000	2.22		>20000	7.38		<1	2	<1	320.3	262	205	111	11.40	521	<10	48	18	5	<20	<20	2	0.04	0.56	>20.00	<.01
Duplicate	<5																														

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00292.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140480		0.04	46	7	<2	6	14	<5	<10	0.035	16
Duplicate											
140481		<.01	9	1	14	<1	<1	<5	<10	<.010	<1
Duplicate											
140482		<.01	11	1	41	<1	<1	<5	<10	<.010	<1
Duplicate		<.01	11	1	37	<1	<1	<5	<10	<.010	<1
140483		<.01	7	<1	32	<1	<1	<5	<10	<.010	<1
Duplicate											
140486		0.03	26	3	21	<1	<1	<5	<10	<.010	<1
Duplicate											
140489		0.01	58	4	16	<1	<1	<5	<10	<.010	<1
Duplicate											
140491		0.03	74	4	6	<1	<1	<5	<10	<.010	<1
Duplicate											
140494		0.11	76	6	<2	1	<1	<5	<10	<.010	2
Duplicate											
140498		<.01	3	<1	21	<1	<1	<5	<10	<.010	<1
Duplicate											
140499		0.09	58	4	11	<1	<1	<5	<10	<.010	2
Duplicate		0.10	60	4	10	<1	<1	<5	<10	<.010	2
140554		0.04	4	<1	24	5	<1	<5	<10	<.010	<1
Duplicate											
140555		0.02	75	4	<2	<1	<1	<5	<10	<.010	<1
Duplicate											

Intertek Testing Services
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Geochemical Lab Report

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PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT
140556		<5	669.3	15.74	>400.0	4162	>20000	12.98		>20000	14.98		<1	4	3	710.1	164	457	641	>20.00	411	45	6	85	4	1517	<20	3	0.03	0.05	0.48	<.01
Duplicate			686.3																													
140557		<5	902.3	15.60	>400.0	5926	>20000	>15.00	16.11	>20000	>15.00	21.39	<1	4	6	1047.5	244	293	1033	>20.00	548	43	4	69	3	3212	<20	2	0.01	0.04	0.11	<.01
Duplicate			922.5																													
140558		<5	365.8	15.73	378.6	3954	>20000	4.47		>20000	>15.00	19.31	<1	4	3	923.3	427	666	427	>20.00	539	45	5	63	4	1268	<20	2	0.02	0.04	0.07	<.01
Duplicate			370.1																													
140559		<5	373.6	15.50	372.1	3225	>20000	4.62		>20000	9.50		<1	1	2	479.6	421	257	237	>20.00	359	48	4	55	5	87	<20	1	0.03	0.03	0.02	<.01
Duplicate			363.5					4.54			9.40																					
140560		<5	491.8	15.94	>400.0	3148	>20000	5.87		>20000	9.40		<1	2	2	473.7	598	189	265	>20.00	342	42	5	37	6	82	<20	<1	0.03	0.03	0.02	<.01
Duplicate			500.0																													
140561		<5	187.9	15.92	196.6	4106	>20000	2.45		>20000	12.96		<1	2	3	633.8	262	246	122	>20.00	426	17	5	63	6	789	331	1	0.03	0.02	0.02	<.01
Duplicate			188.5																													
140562		<5	489.9	15.19	>400.0	5159	>20000	9.61		>20000	>15.00	19.38	<1	5	4	887.1	93	143	574	>20.00	551	28	9	74	6	1641	<20	<1	0.03	0.05	0.13	<.01
Duplicate			523.2																													
140563		<5			2.5	10	93			197	<0.01		1	2	<1	0.6	<5	<5	<5	0.24	288	<10	370	4	3	<20	<20	1	0.13	4.17	>20.00	0.01
Duplicate											<0.01																					
199619		<5			1.6	36	92			273	0.02		19	65	7	1.0	<5	71	10	2.01	335	<10	119	185	49	<20	<20	2	0.48	0.42	4.02	<.01
Prep Duplicate		<5			1.5	34	80			307	0.02		19	64	7	1.2	6	68	10	1.85	340	<10	150	99	43	<20	<20	3	0.37	0.41	4.15	<.01
199621		<5	76.7	15.89	75.2	1351	1359	0.13		>20000	9.16		6	61	4	427.7	704	548	139	>20.00	268	45	58	154	10	<20	<20	<1	0.06	0.05	2.08	<.01
Duplicate			72.9																													
Prep Duplicate		<5			1.5	34	80			307	0.02		19	64	7	1.2	6	68	10	1.85	340	<10	150	99	43	<20	<20	3	0.37	0.41	4.15	<.01
Duplicate					1.4	32	75			258			19	64	7	0.9	6	68	9	1.82	338	<10	152	94	46	<20	<20	3	0.35	0.40	4.22	<.01
199624		<5			4.6	25	117	0.01		185	<0.01		5	59	2	0.3	<5	64	28	>20.00	1290	<10	28	25	29	<20	<20	2	0.07	1.27	13.18	<.01
Prep Duplicate		<5			4.8	30	130	0.01		197	<0.01		6	65	2	0.3	<5	65	25	>20.00	1251	<10	25	261	30	<20	<20	2	0.06	1.40	12.71	<.01

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
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SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140556		<.01	2	<1	59	<1	<1	<5	<10	<.010	<1
Duplicate											
140557		<.01	<1	<1	104	<1	<1	<5	<10	<.010	<1
Duplicate											
140558		<.01	<1	<1	71	<1	<1	<5	<10	<.010	<1
Duplicate											
140559		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate											
140560		<.01	<1	<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate											
140561		<.01	<1	<1	29	<1	<1	<5	<10	<.010	<1
Duplicate											
140562		<.01	<1	<1	87	<1	<1	<5	<10	<.010	<1
Duplicate											
140563		0.04	129	2	<2	2	<1	<5	<10	<.010	<1
Duplicate											
199619		0.04	32	4	<2	4	4	<5	<10	<.010	9
Prep Duplicate		0.03	37	4	<2	3	3	<5	<10	<.010	8
199621		0.01	6	2	5	<1	<1	<5	<10	<.010	<1
Duplicate											
Prep Duplicate		0.03	37	4	<2	3	3	<5	<10	<.010	8
Duplicate		0.03	40	5	<2	4	3	<5	<10	<.010	8
199624		<.01	57	5	<2	<1	<1	<5	<10	<.010	<1
Prep Duplicate		<.01	59	4	<2	<1	<1	<5	<10	<.010	<1

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00292.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00

SAMPLE	ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na
NUMBER	UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT
Duplicate								0.01			<0.01																					

Intertek Testing Services
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Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00292.0 (COMPLETE)
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 28-FEB-00 PAGE 7B(14/14)

SAMPLE NUMBER	ELEMENT UNITS	K PCT	Sr PPM	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
Duplicate											

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

REPORT: V00-00293.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

SUBMITTED BY: R. NEY
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00

DATE APPROVED	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000218	1 Wet Au	Partial Ext. Gold	40	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000218	2 AgGrav	Silver (Grav.)	8	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000218	3 Wt/Ag	Sample Weight	8	0.10 GM		
000218	4 Ag	Silver	40	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	5 Cu	Copper	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	6 Pb	Lead	40	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	7 Pb	Lead	16	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000218	8 Zn	Zinc	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	9 Zn	Zinc	30	0.01 PCT	HF-HNO3-HCLO4-HCL	AAS LOW LEVEL ASSAY
000218	10 Zn	Zinc	2	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000218	11 Mo	Molybdenum	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	12 Ni	Nickel	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	13 Co	Cobalt	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	14 Cd	Cadmium	40	0.2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	15 Bi	Bismuth	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	16 As	Arsenic	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	17 Sb	Antimony	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	18 Fe	Iron	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	19 Mn	Manganese	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	20 Te	Tellurium	40	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	21 Ba	Barium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	22 Cr	Chromium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	23 V	Vanadium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	24 Sn	Tin	40	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	25 W	Tungsten	40	20 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	26 La	Lanthanum	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	27 Al	Aluminum	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	28 Mg	Magnesium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	29 Ca	Calcium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	30 Na	Sodium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	31 K	Potassium	40	0.01 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	32 Sr	Strontium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	33 Y	Yttrium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	34 Ga	Gallium	40	2 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	35 Li	Lithium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	36 Nb	Niobium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASMA
000218	37 Sc	Scandium	40	5 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	38 Ta	Tantalum	40	10 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	39 Ti	Titanium	40	0.010 PCT	HCL:HNO3 (3:1)	INDUC. COUP. PLASM
000218	40 Zr	Zirconium	40	1 PPM	HCL:HNO3 (3:1)	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER
D DRILL CORE	40

SIZE FRACTIONS	NUMBER
2 -150	40

SAMPLE PREPARATIONS	NUMBER
CRUSH/SPLIT & PULV.	40
RIVER ROCK CLEANING	40
SILICA CLEANING	40
OVERWEIGHT/KG	71

REMARKS: There is carryover to the blanks and standards due to the high levels of copper, zinc and lead in the samples. RRD 2/18/00
Please note tha the Zn over-limit result reported was determined by AAS. Please advise if titration result is required.

REPORT COPIES TO: MR. STEVE ROBERTSON
MR. PAT MCANDLESS

INVOICE TO: MR. STEVE ROBERTSON

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
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PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00 PAGE 1A(1/12)

SAMPLE	ELEMENT Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
NUMBER	UNITS PPB	PPM	GM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
140524	<5			3.9	9	518	0.06	1062	0.11		3	3	<1	6.2	<5	32	<5	0.25	1806	<10	63	32	3	<20	<20	2	<.01	0.27	>20.00	<.01	<.01	85
140525	<5			12.3	74	682	0.08	8293	0.83		6	5	<1	41.3	20	585	18	3.14	1323	<10	66	52	2	<20	<20	1	<.01	0.14	13.65	<.01	<.01	49
140526	11	247.0	15.32	246.7	1937	10975	1.04	>20000	12.11		1	5	2	610.3	685	5384	389	>20.00	715	59	9	59	2	337	<20	<1	0.02	0.06	3.33	<.01	<.01	11
140527	<5	305.3	15.31	308.7	1551	13267	1.28	>20000	11.72		<1	4	2	578.6	1032	5499	408	>20.00	832	43	12	27	3	253	<20	<1	0.01	0.12	4.98	<.01	<.01	17
140528	31			38.1	526	2428	0.24	>20000	2.47		7	6	<1	123.1	73	5835	159	6.98	3033	17	59	32	6	113	<20	2	0.01	3.07	>20.00	<.01	<.01	77
140529	<5			2.2	7	37		250	0.02		2	<1	<1	0.7	<5	24	<5	0.22	326	<10	129	13	3	<20	<20	1	0.06	4.86	>20.00	<.01	0.02	121
140530	<5			1.5	14	83		554	0.05		1	4	<1	2.3	<5	78	<5	0.41	2447	<10	13	155	3	<20	<20	1	0.02	0.63	18.88	<.01	<.01	77
140531	<5			2.6	4	29		64			2	2	<1	<0.2	<5	52	<5	0.34	544	<10	32	5	2	<20	<20	<1	0.02	0.62	>20.00	<.01	<.01	150
140532	<5	491.2	15.78	>400.0	677	>20000	7.85	>20000	4.40		5	6	2	213.7	248	1384	429	>20.00	620	14	10	171	5	255	<20	1	0.02	0.13	11.51	<.01	<.01	39
140533	<5			4.9	9	431	0.06	874	0.09		4	1	<1	3.9	6	65	11	0.45	2659	<10	11	11	1	<20	<20	1	0.02	0.33	>20.00	<.01	<.01	102
140534	<5			2.3	3	23		34			1	<1	<1	<0.2	<5	10	<5	0.10	637	<10	64	7	<1	<20	<20	<1	0.02	0.37	>20.00	<.01	<.01	214
140535	89			34.1	477	3106	0.31	>20000	4.59		3	7	<1	258.2	45	5178	134	14.13	3290	30	12	131	3	47	<20	9	0.02	0.14	13.91	<.01	<.01	53
140536	<5			2.6	5	63		271	0.03		2	2	<1	1.1	<5	33	<5	0.33	1417	<10	335	9	2	<20	<20	1	0.03	0.88	>20.00	<.01	<.01	143
140537	<5			2.0	3	28		66			1	3	<1	<0.2	<5	12	<5	0.41	304	<10	60	7	2	<20	<20	2	0.18	1.20	>20.00	<.01	0.03	176
140538	11	95.6	16.17	95.8	1338	12270	1.15	>20000	5.43		4	22	3	394.6	94	>20000	381	>20.00	698	11	14	28	5	129	<20	7	0.20	0.25	8.09	<.01	0.03	35
140539	437	380.0	15.55	374.5	657	>20000	8.89	>20000	7.19		7	12	2	498.4	25	13541	619	>20.00	805	25	7	39	2	353	<20	4	0.03	0.13	4.62	<.01	<.01	13
140540	121	92.2	15.51	94.9	1167	14111	1.38	17979	1.86		<1	11	2	106.0	205	3675	201	16.09	747	16	18	16	3	138	<20	4	0.08	0.18	>20.00	<.01	0.02	83
140541	<5			2.4	5	68		166	0.03		1	3	<1	0.6	<5	57	<5	0.35	967	<10	21	2	1	<20	<20	2	0.03	0.18	>20.00	<.01	0.01	128
140542	<5			1.1	8	22		479	0.04		<1	1	<1	2.6	<5	30	<5	0.18	4957	<10	24	2	1	<20	<20	1	0.02	0.19	>20.00	<.01	<.01	117
140543	<5			8.0	5289	41		233	0.01		4	10	1	10.6	514	5912	367	>20.00	698	16	13	28	<1	<20	<20	<1	0.06	0.06	12.70	<.01	<.01	31
140544	11			11.5	5103	79		207	0.01		<1	2	1	1.2	421	614	188	>20.00	269	<10	9	25	<1	<20	<20	<1	0.03	0.07	13.68	<.01	<.01	49
140545	<5			1.8	10	27		92			1	1	<1	<0.2	<5	12	<5	0.18	1750	<10	22	6	<1	<20	<20	<1	0.02	0.17	>20.00	<.01	<.01	103
140546	11			6.5	4336	28		195	0.01		<1	7	1	2.4	80	1251	127	16.84	1145	<10	22	25	1	<20	<20	2	0.05	0.11	>20.00	<.01	0.01	71
140547	28			5.2	2050	58		181	0.01		1	5	<1	1.6	52	796	91	13.77	1431	<10	20	28	1	<20	<20	2	0.03	0.14	>20.00	<.01	<.01	82
140548	<5			2.0	8	35		89			2	2	<1	<0.2	<5	17	<5	0.28	344	<10	137	9	3	<20	<20	1	0.09	5.67	>20.00	0.01	0.02	122
140549	<5			1.7	5	10		46			<1	1	<1	<0.2	<5	10	<5	0.17	2690	<10	1135	2	<1	<20	<20	<1	0.02	0.20	>20.00	<.01	<.01	121
140550	<5			2.3	4	26		60			4	6	<1	<0.2	<5	7	<5	0.44	430	<10	912	8	14	<20	<20	1	0.02	0.24	>20.00	<.01	<.01	136
140566	<5			2.6	7	124	0.01	167	0.01		9	11	<1	<0.2	<5	7	<5	3.34	366	<10	137	2	7	<20	<20	1	0.01	0.98	>20.00	<.01	<.01	193
140567	<5			2.4	11	30		127	<0.01		11	5	<1	<0.2	<5	16	<5	1.26	239	<10	409	4	5	<20	<20	2	0.02	0.63	>20.00	<.01	<.01	131
140568	<5			16.0	1564	36		9431	0.98		3	2	3	43.6	<5	106	<5	1.07	376	<10	169	11	5	1221	<20	4	0.02	0.81	>20.00	0.01	<.01	145

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SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140524		2	<2	<1	<1	<5	<10	<.010	<1
140525		2	2	<1	<1	<5	<10	<.010	<1
140526		<1	37	<1	<1	<5	<10	<.010	<1
140527		<1	35	<1	<1	<5	<10	<.010	<1
140528		4	<2	<1	<1	<5	<10	<.010	<1
140529		2	<2	2	<1	<5	<10	<.010	<1
140530		2	<2	<1	<1	<5	<10	<.010	<1
140531		<1	<2	<1	<1	<5	<10	<.010	<1
140532		1	11	<1	<1	<5	<10	<.010	<1
140533		4	<2	<1	<1	<5	<10	<.010	<1
140534		2	<2	<1	<1	<5	<10	<.010	<1
140535		3	5	<1	<1	<5	<10	<.010	<1
140536		2	<2	<1	<1	<5	<10	<.010	<1
140537		2	<2	2	<1	<5	<10	<.010	<1
140538		2	3	1	<1	<5	<10	<.010	<1
140539		2	8	<1	<1	<5	<10	<.010	<1
140540		4	<2	<1	<1	<5	<10	<.010	<1
140541		2	<2	<1	<1	<5	<10	<.010	<1
140542		1	<2	<1	<1	<5	<10	<.010	<1
140543		1	<2	<1	<1	<5	<10	<.010	<1
140544		<1	<2	<1	<1	<5	<10	<.010	<1
140545		1	<2	<1	<1	<5	<10	<.010	<1
140546		2	<2	<1	<1	<5	<10	<.010	<1
140547		2	<2	<1	<1	<5	<10	<.010	<1
140548		2	<2	2	<1	<5	<10	<.010	<1
140549		2	<2	<1	<1	<5	<10	<.010	<1
140550		3	<2	<1	<1	<5	<10	<.010	<1
140566		3	<2	<1	<1	<5	<10	<.010	<1
140567		3	<2	<1	<1	<5	<10	<.010	<1
140568		8	<2	<1	<1	<5	<10	<.010	<1

ITS Intertek Testing Services
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PROJECT: SILVER TIP

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00

SAMPLE ELEMENT	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
NUMBER UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
140569	<5			2.3	6	16		48			2	<1	<1	<0.2	<5	<5	<5	0.14	317	<10	245	6	4	<20	<20	2	0.02	1.67	>20.00	0.01	<.01	103
140570	<5			2.3	5	8		27			1	2	<1	<0.2	<5	<5	<5	0.47	243	<10	113	4	4	<20	<20	1	0.05	0.84	>20.00	<.01	0.03	171
140571	<5	212.2	15.16	204.2	693	1934	0.20	>20000	>15.00	17.65	<1	3	<1	749.3	2011	43	71	9.07	665	68	49	11	2	<20	<20	1	0.06	0.54	>20.00	<.01	0.04	93
140572	<5			32.6	2763	195	0.02	>20000	>15.00	16.36	<1	6	<1	820.2	467	467	157	>20.00	492	<10	24	40	2	<20	<20	2	0.05	0.23	7.03	<.01	0.03	21
140573	<5			2.3	4	7		157	<0.01		1	<1	<1	<0.2	5	5	<5	0.18	205	<10	47	4	2	<20	<20	<1	0.02	0.58	>20.00	<.01	0.01	127
140574	<5			2.2	8	10		75			1	3	<1	<0.2	<5	18	<5	0.48	316	<10	63	2	2	<20	<20	<1	0.04	0.43	>20.00	<.01	0.02	211
140575	<5	470.0	15.72	>400.0	3489	>20000	8.78	>20000	9.80		<1	2	2	463.1	160	447	444	>20.00	329	32	8	39	4	646	<20	6	0.03	0.16	1.67	<.01	0.01	7
140576	<5			2.5	6	93		104	0.02		2	<1	<1	<0.2	<5	<5	<5	0.18	243	<10	45	2	2	<20	<20	<1	0.04	1.03	>20.00	<.01	0.02	158
140601	<5			12.5	61	649	0.07	441	0.04		21	121	3	1.9	<5	369	55	>20.00	745	<10	132	24	14	27	<20	2	0.05	0.42	10.44	<.01	<.01	80
140602	<5			2.7	4	74		111	0.01		1	4	<1	<0.2	<5	8	<5	0.36	525	<10	831	2	14	<20	<20	2	<.01	0.19	>20.00	<.01	<.01	114

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SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140569		3	<2	<1	<1	<5	<10	<.010	<1
140570		3	<2	<1	<1	<5	<10	<.010	<1
140571		2	7	2	<1	<5	<10	<.010	<1
140572		2	22	4	<1	<5	<10	<.010	<1
140573		2	<2	<1	<1	<5	<10	<.010	<1
140574		2	<2	<1	<1	<5	<10	<.010	<1
140575		1	28	<1	<1	<5	<10	<.010	<1
140576		2	<2	<1	<1	<5	<10	<.010	<1
140601		2	<2	<1	<1	<5	<10	<.010	<1
140602		4	<2	<1	1	<5	<10	<.010	<1

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STANDARD NAME	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM
OX11 Oxide		2738	22.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		2738	22.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2		-	-	-	<0.2	163	23	-	166	-	-	2	145	39	0.4	<5
Number of Analyses		-	-	-	1	1	1	-	1	-	-	1	1	1	1	1
Mean Value		-	-	-	0.1	163	23	-	166	-	-	2	145	39	0.4	3
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	0.2	148	20	-	148	-	-	4	135	35	0.2	1
OX12 Oxide		6474	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		6474	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK		-	-	-	<0.2	3	4	-	45	-	-	<1	<1	<1	<0.2	<5
ANALYTICAL BLANK		-	-	-	<0.2	3	3	-	23	-	-	<1	<1	<1	<0.2	<5
Number of Analyses		-	-	-	2	2	2	-	2	-	-	2	2	2	2	2
Mean Value		-	-	-	0.1	3	3	-	34	-	-	<1	<1	<1	0.1	3
Standard Deviation		-	-	-	-	<1	<1	-	16	-	-	-	-	-	-	-
Accepted Value		1	<0.1	<0.01	<0.1	<1	<1	<.01	<1	<0.01	<0.01	<1	<1	<1	<0.1	<1
CANMET STSD-4		-	-	-	0.2	69	15	-	100	-	-	1	25	11	0.3	<5
Number of Analyses		-	-	-	1	1	1	-	1	-	-	1	1	1	1	1
Mean Value		-	-	-	0.2	69	15	-	100	-	-	1	25	11	0.3	3
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	0.3	66	13	-	82	-	-	2	23	11	0.6	-

STANDARD NAME	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
OX11 Oxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GS91-2	145	<5	7.42	1551	<10	9	239	53	<20	<20	4	1.98	2.59	3.78	0.02	0.05	72
Number of Analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	145	3	7.42	1551	5	9	239	53	10	10	4	1.98	2.59	3.78	0.02	0.05	72
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	145	1	7.20	1450	<1	6	251	50	5	12	-	1.80	2.70	4.00	0.01	0.04	70
OX12 Oxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANALYTICAL BLANK	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
ANALYTICAL BLANK	<5	<5	<0.01	<1	<10	<1	<1	<1	<20	<20	<1	<.01	<.01	<0.01	<.01	<.01	<1
Number of Analyses	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mean Value	3	3	<0.01	<1	5	<1	<1	<1	10	10	<1	<.01	<.01	<0.01	<.01	<.01	<1
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	<1	<1	<0.01	<1	<1	<1	<1	<1	<1	<1	<1	<.01	<.01	<0.01	<.01	<.01	<1
CANMET STSD-4	12	<5	2.82	1253	<10	1230	34	50	<20	<20	12	1.16	0.64	1.13	0.04	0.09	54
Number of Analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mean Value	12	3	2.82	1253	5	1230	34	50	10	10	12	1.16	0.64	1.13	0.04	0.09	54
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	11	4	2.60	1200	-	-	30	51	-	-	-	-	-	-	-	-	-

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STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
OX11 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
GS91-2		3	<2	20	2	8	<10	<.010	3
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		3	1	20	2	8	5	0.005	3
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		3	-	24	2	6	1	0.006	5
OX12 Oxide		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
ANALYTICAL BLANK		<1	<2	<1	<1	<5	<10	<.010	<1
Number of Analyses		2	2	2	2	2	2	2	2
Mean Value		<1	1	<1	<1	3	5	0.005	<1
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		<1	<1	<1	<1	<1	<1	<.001	<1
CANMET STSD-4		10	<2	8	4	<5	<10	0.077	2
Number of Analyses		1	1	1	1	1	1	1	1
Mean Value		10	1	8	4	3	5	0.077	2
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-

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STANDARD NAME	Wet Au	AgGrav	wt/Ag	Ag	Cu	Pb	Pb	Zn	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	Te	Ba	Cr	V	Sn	W	La	Al	Mg	Ca	Na	K	Sr
ELEMENT UNITS	PPB	PPM	GM	PPM	PPM	PPM	PCT	PPM	PCT	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PPM
BCC standard ME89-2	-	-	-	-	-	-	1.34	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	1.34	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	1.32	-	6.73	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	-	-	-	-	-	-	-	-	19.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	-	-	-	-	-	-	-	-	-	19.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	4.33	-	19.02	19.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00293.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00

STANDARD NAME	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
BCC standard ME89-2		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-

ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00293.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140524		<5			3.9	9	518	0.06	1062	0.11		3	3	<1	6.2	<5	32	<5	0.25	1806	<10	63	32	3	<20	<20	2	<.01	0.27	>20.00	<.01	<.01	85
Duplicate								0.06		0.11																							
140526		11	247.0	15.32	246.7	1937	10975	1.04	>20000	12.11		1	5	2	610.3	685	5384	389	>20.00	715	59	9	59	2	337	<20	<1	0.02	0.06	3.33	<.01	<.01	11
Duplicate			245.6																														
140527		<5	305.3	15.31	308.7	1551	13267	1.28	>20000	11.72		<1	4	2	578.6	1032	5499	408	>20.00	832	43	12	27	3	253	<20	<1	0.01	0.12	4.98	<.01	<.01	17
Duplicate		<5	334.6		294.6	1547	13253		>20000			<1	4	2	577.5	1020	5518	410	>20.00	827	58	14	31	<1	255	<20	<1	0.01	0.12	4.99	<.01	<.01	18
140532		<5	491.2	15.78	>400.0	677	>20000	7.85	>20000	4.40		5	6	2	213.7	248	1384	429	>20.00	620	14	10	171	5	255	<20	1	0.02	0.13	11.51	<.01	<.01	39
Duplicate			464.5																														
140534		<5			2.3	3	23		34			1	<1	<1	<0.2	<5	10	<5	0.10	637	<10	64	7	<1	<20	<20	<1	0.02	0.37	>20.00	<.01	<.01	214
Prep Duplicate		<5			2.1	2	21		28			1	<1	<1	<0.2	<5	11	<5	0.12	833	<10	53	5	<1	<20	<20	<1	0.01	0.34	>20.00	<.01	<.01	186
140535		89			34.1	477	3106	0.31	>20000	4.59		3	7	<1	258.2	45	5178	134	14.13	3290	30	12	131	3	47	<20	9	0.02	0.14	13.91	<.01	<.01	53
Duplicate								0.30		4.57																							
140538		11	95.6	16.17	95.8	1338	12270	1.15	>20000	5.43		4	22	3	394.6	94	>20000	381	>20.00	698	11	14	28	5	129	<20	7	0.20	0.25	8.09	<.01	0.03	35
Duplicate			98.6																														
140539		437	380.0	15.55	374.5	657	>20000	8.89	>20000	7.19		7	12	2	498.4	25	13541	619	>20.00	805	25	7	39	2	353	<20	4	0.03	0.13	4.62	<.01	<.01	13
Duplicate			391.8																														
140540		121	92.2	15.51	94.9	1167	14111	1.38	17979	1.86		<1	11	2	106.0	205	3675	201	16.09	747	16	18	16	3	138	<20	4	0.08	0.18	>20.00	<.01	0.02	83
Duplicate			91.0																														
140541		<5			2.4	5	68		166	0.03		1	3	<1	0.6	<5	57	<5	0.35	967	<10	21	2	1	<20	<20	2	0.03	0.18	>20.00	<.01	0.01	128
Duplicate										0.02																							
140544		11			11.5	5103	79		207	0.01		<1	2	1	1.2	421	614	188	>20.00	269	<10	9	25	<1	<20	<20	<1	0.03	0.07	13.68	<.01	<.01	49
Duplicate					11.8	5044	75		238			<1	2	1	1.4	439	615	184	>20.00	266	12	9	24	<1	<20	<20	<1	0.03	0.07	14.07	<.01	<.01	42
140547		28			5.2	2050	58		181	0.01		1	5	<1	1.6	52	796	91	13.77	1431	<10	20	28	1	<20	<20	2	0.03	0.14	>20.00	<.01	<.01	82
Duplicate										0.01																							

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00293.0 (COMPLETE)

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140524		2	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140526		<1	37	<1	<1	<5	<10	<.010	<1
Duplicate									
140527		<1	35	<1	<1	<5	<10	<.010	<1
Duplicate		<1	38	<1	<1	<5	<10	<.010	<1
140532		1	11	<1	<1	<5	<10	<.010	<1
Duplicate									
140534		2	<2	<1	<1	<5	<10	<.010	<1
Prep Duplicate		2	<2	<1	<1	<5	<10	<.010	<1
140535		3	5	<1	<1	<5	<10	<.010	<1
Duplicate									
140538		2	3	1	<1	<5	<10	<.010	<1
Duplicate									
140539		2	8	<1	<1	<5	<10	<.010	<1
Duplicate									
140540		4	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140541		2	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140544		<1	<2	<1	<1	<5	<10	<.010	<1
Duplicate		<1	<2	<1	<1	<5	<10	<.010	<1
140547		2	<2	<1	<1	<5	<10	<.010	<1
Duplicate									

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

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PROJECT: SILVER TIP

DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00 PAGE 6A(11/12)

SAMPLE NUMBER / ELEMENT UNITS	Wet Au PPB	AgGrav PPM	wt/Ag GM	Ag PPM	Cu PPM	Pb PPM	Pb PCT	Zn PPM	Zn PCT	Zn PCT	Mo PPM	Ni PPM	Co PPM	Cd PPM	Bi PPM
140550	<5			2.3	4	26		60			4	6	<1	<0.2	<5
Duplicate	<5														
140571	<5	212.2	15.16	204.2	693	1934	0.20	>20000	>15.00	17.65	<1	3	<1	749.3	2011
Duplicate		208.4													
140572	<5			32.6	2763	195	0.02	>20000	>15.00	16.36	<1	6	<1	820.2	467
Duplicate							0.02		>15.00	16.26					
140602	<5			2.7	4	74		111	0.01		1	4	<1	<0.2	<5
Prep Duplicate	<5			2.4	5	96		147	0.01		2	5	<1	0.3	<5
Duplicate				2.3	5	67		117	<0.01		2	4	<1	<0.2	<5

SAMPLE NUMBER / ELEMENT UNITS	As PPM	Sb PPM	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPM	W PPM	La PPM	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM
140550	7	<5	0.44	430	<10	912	8	14	<20	<20	1	0.02	0.24	>20.00	<.01	<.01	136
Duplicate																	
140571	43	71	9.07	665	68	49	11	2	<20	<20	1	0.06	0.54	>20.00	<.01	0.04	93
Duplicate																	
140572	467	157	>20.00	492	<10	24	40	2	<20	<20	2	0.05	0.23	7.03	<.01	0.03	21
Duplicate																	
140602	8	<5	0.36	525	<10	831	2	14	<20	<20	2	<.01	0.19	>20.00	<.01	<.01	114
Prep Duplicate	14	<5	0.37	531	<10	991	3	15	<20	<20	2	<.01	0.19	>20.00	<.01	<.01	113
Duplicate	10	<5	0.37	545	<10	872	2	15	<20	<20	2	<.01	0.20	>20.00	<.01	<.01	118

Intertek Testing Services
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CLIENT: SILVERTIP MINING CORP
REPORT: V00-00293.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 16-FEB-00 DATE PRINTED: 29-FEB-00 PAGE 6B(12/12)

SAMPLE NUMBER	ELEMENT UNITS	Y PPM	Ga PPM	Li PPM	Nb PPM	Sc PPM	Ta PPM	Ti PCT	Zr PPM
140550		3	<2	<1	<1	<5	<10	<.010	<1
Duplicate									
140571		2	7	2	<1	<5	<10	<.010	<1
Duplicate									
140572		2	22	4	<1	<5	<10	<.010	<1
Duplicate									
140602		4	<2	<1	1	<5	<10	<.010	<1
Prep Duplicate		4	<2	<1	1	<5	<10	<.010	<1
Duplicate		4	<2	<1	1	<5	<10	<.010	<1

ITS Intertek Testing Services
Bondar Clegg

Vancouver Branch

Geochemical Lab Report

REPORT: V00-00338.0 (COMPLETE)

REFERENCE:

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

SUBMITTED BY: R. NEG

DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00

DATE APPROVED		ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION	EXTRACTION	METHOD
000301	1	Wet Au	Partial Ext. Gold	62	5 PPB	ASH/AQ REG/DIBK	ATOMIC ABSORPTION
000301	2	Ag	Silver	62	0.7 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	3	AgGrav	Silver (Grav.)	8	0.7 PPM	FIRE ASSAY	FIRE ASSAY-GRAV
000301	4	Cu	Copper	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	5	Pb	Lead	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	6	Pb	Lead	2	0.01 PCT		TITRIMETRIC
000301	7	Zn	Zinc	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	8	Zn	Zinc	7	0.01 PCT	HF-HNO3-HCLO4-HCL	ATOMIC ABSORPTION
000301	9	Mo	Molybdenum	62	0.001 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	10	Ni	Nickel	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	11	Co	Cobalt	62	0.005 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	12	Cd	Cadmium	62	0.005 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	13	Bi	Bismuth	62	0.005 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	14	As	Arsenic	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	15	Sb	Antimony	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	16	Fe	Iron	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	17	Mn	Manganese	62	0.005 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	18	V	Vanadium	62	0.005 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	19	Al	Aluminum	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	20	Mg	Magnesium	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	21	Ca	Calcium	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	22	Na	Sodium	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	23	K	Potassium	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	24	Sr	Strontium	62	1 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	25	In	Indium	62	10 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	26	Ti	Titanium	62	0.01 PCT	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	27	Ga	Gallium	62	10 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	28	Nb	Niobium	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	29	La	Lanthanum	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	30	W	Tungsten	62	20 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	31	Cr	Chrome	62	2 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	32	Te	Tellurium	62	25 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	33	Sc	Scandium	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	34	Ta	Tantalum	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	35	Y	Yttrium	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	36	Zr	Zirconium	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASMA
000301	37	Sn	Tin	62	20 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASM
000301	38	Li	Lithium	62	2 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASM
000301	39	Ba	Barium	62	5 PPM	HF-HNO3-HCLO4-HCL	INDUC. COUP. PLASM

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
D DRILL CORE	62	2 -150	62	CRUSH/SPLIT & PULV.	62
				RIVER ROCK CLEANING	62
				SILICA CLEANING	62
				OVERWEIGHT/KG	106

REMARKS: Please note that the following elements were analyzed using IC50 digestion method instead of the standard IC30/IC31 digestion method: Cr, Ti, Ba, Ga, La, Li, Nb, Sc, Sr, Ta, Y, Zr, In, Sn, Te and W. The detection limits for these elements are higher than the standard method. Due to solublity and digestion limitation the above mentioned elements should not be considered quantative. -pdr March 1/2000

REPORT COPIES TO: MR. STEVE ROBERTSON
MR. PAT MCANDLESS

INVOICE TO: MR. STEVE ROBERTSON

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This report must not be reproduced except in full. The data presented in this report is specific to those samples identified under "Sample Number" and is applicable only to the samples as received expressed on a dry basis unless otherwise indicated

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ITS **Intertek Testing Services**
Bondar Clegg

Geochemical Lab Report
Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00338.0 (COMPLETE)
DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00

SAMPLE NUMBER	ELEMENT Wet Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	V	Al	Mg	Ca	Na	K	Sr	In	Ti	Ga	Nb	La
UNITS	PPB	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PCT	PPM	PPM	PPM
140577	<5	6.3		<.01	0.01		0.02		0.004	<.01	<0.005	<0.005	<0.005	<.01	<.01	2.46	0.130	0.024	2.33	2.00	>20.00	0.07	0.72	469	<100	0.12	<50	<50	<50
140578	<5	79.3		0.02	1.54		2.92		0.001	<.01	<0.005	0.014	0.008	0.58	0.01	>20.00	0.176	<0.005	0.09	0.37	9.25	0.06	0.07	106	<100	<.01	<50	<50	<50
140579	6	>500.0	596.3	0.02	11.06		4.78		<.001	<.01	<0.005	0.020	0.040	0.25	0.04	>20.00	0.029	<0.005	0.02	0.07	0.80	0.06	0.04	<50	<100	<.01	<50	<50	<50
140580	<5	6.5		<.01	0.02		0.04		0.002	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.75	0.063	<0.005	0.10	0.21	>20.00	0.06	0.06	212	<100	<.01	<50	<50	<50
140581	<5	59.1		0.10	0.14		>15.00	26.51	<.001	<.01	<0.005	0.121	0.026	0.05	0.03	14.87	0.092	<0.005	0.06	0.12	6.91	0.06	0.05	73	297	<.01	87	<50	<50
140582	6	73.1		0.07	0.29		>15.00	33.03	<.001	<.01	<0.005	0.142	0.024	0.06	0.02	16.79	0.097	<0.005	0.12	0.24	4.03	0.06	0.06	66	431	<.01	98	<50	<50
140583	<5	5.8		<.01	<0.01		0.06		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.17	0.024	<0.005	0.13	2.85	>20.00	0.06	0.07	185	<100	<.01	<50	<50	<50
140584	<5	9.4		<.01	0.04		0.61		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.71	0.103	<0.005	0.10	0.31	>20.00	0.06	0.07	170	<100	<.01	<50	<50	<50
140585	50	19.6		<.01	0.24		2.16		0.001	<.01	<0.005	0.008	<0.005	0.06	<.01	4.64	0.149	0.012	1.14	1.25	17.70	0.07	0.43	103	<100	0.06	<50	<50	<50
140586	<5	3.9		<.01	0.01		0.01		0.003	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.19	0.054	<0.005	0.06	1.26	>20.00	0.06	0.03	162	<100	<.01	<50	<50	<50
140587	<5	2.7		<.01	<0.01		0.01		0.002	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.18	0.071	<0.005	0.07	1.04	>20.00	0.06	0.04	187	<100	<.01	<50	<50	<50
140588	<5	184.2		0.02	2.49		3.35		0.002	<.01	<0.005	0.013	0.027	0.18	<.01	>20.00	0.034	<0.005	0.02	0.14	6.01	0.06	0.05	59	<100	<.01	<50	<50	<50
140589	12	227.9		0.05	1.10		7.16		0.002	<.01	<0.005	0.029	0.068	0.17	<.01	>20.00	0.054	<0.005	0.04	0.14	4.38	0.05	0.04	57	<100	<.01	<50	<50	<50
140590	<5	308.3		0.02	1.27		5.26		0.001	<.01	<0.005	0.022	0.139	0.17	0.02	>20.00	0.036	<0.005	0.04	0.06	3.45	0.05	0.03	64	<100	<.01	<50	<50	<50
140591	<5	4.8		<.01	<0.01		0.04		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.38	0.125	<0.005	0.08	0.33	>20.00	0.05	0.06	165	<100	<.01	<50	<50	<50
140592	<5	8.1		<.01	0.03		0.07		0.002	<.01	<0.005	<0.005	<0.005	0.01	<.01	1.01	0.122	<0.005	0.15	0.64	>20.00	0.11	0.02	199	<100	<.01	<50	<50	<50
140593	<5	483.1		0.09	7.50		6.42		0.001	<.01	<0.005	0.028	0.025	0.20	0.05	>20.00	0.114	<0.005	0.09	0.44	13.74	0.05	0.03	97	<100	<.01	<50	<50	<50
140594	<5	>500.0	983.8	0.16	10.75		12.91		<.001	<.01	<0.005	0.065	0.075	0.16	0.07	17.43	0.094	<0.005	0.04	0.34	9.35	0.06	0.05	75	180	<.01	54	<50	<50
140595	12	89.0		0.09	1.07		2.63		<.001	<.01	<0.005	0.013	0.011	0.24	<.01	>20.00	0.021	<0.005	<.01	0.05	1.94	0.06	0.03	<50	<100	<.01	<50	<50	<50
140596	6	163.9		0.09	3.09		9.30		0.001	<.01	<0.005	0.047	<0.005	0.42	0.04	>20.00	0.069	<0.005	0.02	0.05	3.93	0.06	0.04	65	110	<.01	<50	<50	<50
140597	119	27.7		0.04	0.20		12.78		<.001	<.01	<0.005	0.074	<0.005	0.67	0.01	>20.00	0.061	<0.005	0.03	0.02	2.82	0.06	0.03	62	<100	<.01	<50	<50	<50
140598	<5	39.3		0.05	0.38		5.16		0.001	<.01	<0.005	0.028	<0.005	0.57	0.02	>20.00	0.087	<0.005	0.02	0.06	9.43	0.06	0.03	68	<100	<.01	<50	<50	<50
140599	<5	6.2		<.01	<0.01		0.02		<.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.29	0.034	<0.005	0.15	4.81	>20.00	0.06	0.07	192	<100	<.01	<50	<50	<50
140600	6	320.1		0.17	5.49		>15.00	15.45	0.001	<.01	<0.005	0.083	0.006	0.41	0.05	>20.00	0.058	<0.005	0.02	0.04	2.08	0.05	0.02	52	106	<.01	55	<50	<50
140603	<5	6.3		<.01	<0.01		0.02		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.26	0.032	<0.005	0.02	0.23	>20.00	0.05	0.02	205	<100	<.01	<50	<50	<50
140604	<5	>500.0	714.2	0.22	9.85		>15.00	15.00	<.001	<.01	<0.005	0.075	0.097	0.06	0.04	>20.00	0.054	<0.005	0.01	0.08	10.83	0.06	0.03	99	163	<.01	<50	<50	<50
140605	<5	6.1		<.01	0.01		0.02		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.29	0.039	<0.005	0.03	0.91	>20.00	0.06	0.03	197	<100	<.01	<50	<50	<50
140651	9	454.7		0.21	7.89		>15.00	18.61	<.001	<.01	<0.005	0.092	0.008	0.21	0.07	>20.00	0.056	<0.005	0.02	0.04	0.47	0.05	0.03	50	<100	<.01	71	<50	<50
140652	<5	180.3		0.09	2.79		9.75		<.001	<.01	<0.005	0.045	<0.005	0.36	0.02	>20.00	0.048	<0.005	0.02	0.03	3.78	0.06	0.03	56	143	<.01	<50	<50	<50
140653	<5	376.3		0.10	6.75		12.65		<.001	<.01	<0.005	0.061	0.007	0.32	0.03	>20.00	0.062	<0.005	0.03	0.05	2.65	0.05	0.03	<50	<100	<.01	74	<50	<50

Intertek Testing Services
Bondar Clegg

Vancouver Branch

Geochemical Lab Report

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00338.0 (COMPLETE)
DATE RECEIVED: 23-FEB-00
DATE PRINTED: 3-MAR-00

SAMPLE NUMBER	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
140577		<200	56	<200	<50	<50	<50	<50	<200	<50	>2000
140578		<200	70	<200	<50	<50	<50	<50	<200	<50	565
140579		<200	153	<200	<50	<50	<50	<50	<200	<50	<50
140580		<200	<50	<200	<50	<50	<50	<50	<200	<50	158
140581		<200	<50	298	<50	<50	<50	<50	<200	<50	<50
140582		<200	<50	283	<50	52	<50	<50	<200	<50	50
140583		<200	<50	<200	<50	<50	<50	<50	<200	<50	146
140584		<200	<50	<200	<50	<50	<50	<50	<200	<50	421
140585		<200	61	<200	<50	<50	<50	<50	<200	<50	1513
140586		<200	<50	<200	<50	<50	<50	<50	<200	<50	361
140587		<200	<50	<200	<50	<50	<50	<50	<200	<50	254
140588		<200	131	<200	<50	<50	<50	<50	<200	<50	<50
140589		<200	153	<200	<50	<50	<50	<50	<200	<50	<50
140590		<200	148	<200	<50	<50	<50	<50	<200	<50	<50
140591		<200	<50	<200	<50	71	<50	<50	<200	<50	80
140592		<200	59	<200	<50	<50	<50	<50	<200	<50	247
140593		<200	65	<200	<50	54	<50	<50	388	<50	62
140594		<200	80	<200	<50	<50	<50	<50	1126	<50	<50
140595		<200	108	<200	<50	<50	<50	<50	<200	<50	<50
140596		<200	136	<200	<50	<50	<50	<50	347	<50	<50
140597		<200	154	<200	<50	<50	<50	<50	<200	<50	<50
140598		<200	76	<200	<50	<50	<50	<50	<200	<50	<50
140599		<200	<50	<200	<50	52	<50	<50	<200	<50	324
140600		<200	146	<200	<50	<50	<50	<50	1105	<50	<50
140603		<200	<50	<200	<50	<50	<50	<50	<200	<50	220
140604		<200	54	269	<50	<50	<50	<50	<200	<50	56
140605		<200	<50	<200	<50	<50	<50	<50	<200	<50	126
140651		<200	124	<200	<50	<50	<50	<50	1495	<50	<50
140652		<200	195	<200	<50	<50	<50	<50	431	<50	<50
140653		<200	179	<200	<50	<50	<50	<50	792	<50	<50

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00338.0 (COMPLETE)

DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 2A(3/14)

SAMPLE NUMBER	ELEMENT Wet Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	V	Al	Mg	Ca	Na	K	Sr	In	Ti	Ga	Nb	La
UNITS	PPB	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PCT	PPM	PPM	PPM
140654	<5	>500.0	577.8	0.15	9.16		11.50		<.001	<.01	<0.005	0.046	0.028	0.31	0.04	>20.00	0.056	<0.005	0.04	1.37	4.83	0.06	0.04	76	132	<.01	58	<50	<50
140655	<5	327.3		0.09	4.66		11.59		<.001	<.01	<0.005	0.044	0.058	0.29	0.04	>20.00	0.051	<0.005	0.07	0.23	3.42	0.06	0.03	78	107	<.01	<50	<50	<50
140656	<5	>500.0	599.8	0.14	7.84		11.71		<.001	<.01	<0.005	0.048	0.060	0.31	0.04	>20.00	0.064	<0.005	0.02	0.29	6.73	0.05	0.04	86	<100	<.01	<50	<50	<50
140657	<5	94.7		0.04	1.37		4.26		0.001	<.01	<0.005	0.019	<0.005	0.07	<.01	4.27	0.113	<0.005	0.05	4.18	>20.00	0.06	0.03	139	<100	<.01	<50	<50	<50
140658	<5	453.2		0.08	7.34		7.24		0.002	<.01	<0.005	0.031	0.014	0.22	0.03	>20.00	0.074	<0.005	0.07	0.82	11.36	0.06	0.05	75	131	<.01	<50	<50	<50
140659	<5	34.2		<.01	0.36		0.68		<.001	<.01	<0.005	<0.005	0.005	0.02	<.01	2.81	0.112	<0.005	0.07	0.58	>20.00	0.06	0.04	138	<100	<.01	<50	<50	<50
140660	<5	5.6		<.01	0.02		0.02		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.19	0.393	<0.005	0.07	0.85	>20.00	0.06	0.04	150	<100	<.01	<50	<50	<50
140661	<5	5.1		<.01	0.01		0.02		0.002	<.01	<0.005	<0.005	<0.005	0.01	<.01	0.53	0.251	<0.005	0.09	0.77	>20.00	0.05	0.05	176	<100	<.01	<50	<50	<50
140662	<5	5.6		<.01	0.02		0.03		<.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.26	0.483	<0.005	0.08	0.55	>20.00	0.05	0.04	184	<100	<.01	<50	<50	<50
140663	<5	>500.0	1166.0	0.03	>15.00	23.49	13.77		<.001	<.01	<0.005	0.066	0.024	0.07	0.09	15.36	0.091	<0.005	0.07	0.24	7.60	0.05	0.04	74	346	<.01	<50	<50	<50
140664	<5	>500.0	567.8	0.06	7.65		9.22		<.001	<.01	<0.005	0.040	0.079	0.05	0.03	>20.00	0.047	<0.005	0.02	0.16	0.31	0.05	0.03	<50	<100	<.01	<50	<50	<50
140665	<5	473.6		0.07	4.09		6.71		0.001	<.01	<0.005	0.028	0.097	0.05	0.02	>20.00	0.037	<0.005	0.01	0.14	0.24	0.06	0.03	<50	<100	<.01	<50	<50	<50
140666	<5	>500.0	757.2	0.02	>15.00	16.29	14.21		0.001	<.01	<0.005	0.063	0.026	0.14	0.05	>20.00	0.060	<0.005	0.05	0.20	1.48	0.05	0.05	68	115	<.01	<50	<50	<50
140667	<5	16.5		<.01	0.21		0.17		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.66	0.261	<0.005	0.18	0.76	>20.00	0.06	0.08	203	<100	<.01	<50	<50	<50
140668	<5	3.6		<.01	0.02		0.03		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.51	0.097	<0.005	0.03	1.37	>20.00	0.06	0.02	215	<100	<.01	<50	<50	<50
140669	141	68.2		0.04	1.17		4.27		0.002	<.01	<0.005	0.021	<0.005	0.13	<.01	5.23	0.097	<0.005	0.12	6.29	>20.00	0.05	0.06	253	<100	<.01	<50	<50	<50
140670	<5	219.8		0.80	0.27		3.21		0.001	<.01	<0.005	0.013	0.269	0.20	0.03	>20.00	0.075	<0.005	0.11	3.83	12.87	0.05	0.03	134	<100	<.01	<50	<50	<50
140671	<5	10.0		0.03	0.05		0.54		0.001	<.01	<0.005	<0.005	<0.005	0.04	<.01	6.66	0.120	<0.005	0.04	9.25	>20.00	0.05	0.02	204	<100	<.01	<50	<50	<50
140672	<5	184.0		0.50	2.96		9.30		0.002	<.01	<0.005	0.037	0.167	0.23	0.04	>20.00	0.058	<0.005	0.08	0.71	6.04	0.05	0.03	67	144	<.01	<50	<50	<50
140673	<5	78.4		0.63	0.22		>15.00	18.73	<.001	<.01	<0.005	0.087	0.219	0.13	0.04	>20.00	0.054	<0.005	0.01	0.03	2.93	0.04	0.02	<50	<100	<.01	79	<50	<50
140674	<5	29.5		0.33	0.10		1.13		0.002	<.01	<0.005	<0.005	0.117	0.19	0.03	>20.00	0.079	<0.005	0.10	6.42	12.64	0.06	0.02	146	<100	<.01	<50	<50	<50
140675	<5	74.5		0.99	0.04		>15.00	17.05	<.001	<.01	<0.005	0.063	0.062	0.15	0.04	16.07	0.109	<0.005	0.09	3.92	11.83	0.05	0.03	108	319	<.01	56	<50	<50
140676	<5	35.0		0.80	0.02		2.97		<.001	<.01	<0.005	0.011	0.016	0.23	0.03	>20.00	0.039	<0.005	0.05	1.94	5.78	0.06	0.02	85	<100	<.01	<50	<50	<50
140677	<5	5.6		<.01	<0.01		0.04		0.002	<.01	<0.005	<0.005	<0.005	0.01	<.01	0.71	0.098	<0.005	0.04	0.96	>20.00	0.05	0.02	207	<100	<.01	<50	<50	<50
140678	24	9.8		0.03	0.11		0.46		0.002	<.01	<0.005	<0.005	0.007	0.06	<.01	3.84	0.128	<0.005	0.07	3.22	>20.00	0.06	0.03	197	<100	<.01	<50	<50	<50
140679	6	57.8		0.50	0.13		7.67		0.005	<.01	<0.005	0.033	0.165	0.73	0.03	>20.00	0.047	<0.005	0.15	0.39	4.62	0.05	0.03	54	116	<.01	<50	<50	<50
140680	15	12.2		0.11	0.09		2.78		0.003	<.01	<0.005	0.011	0.020	0.09	<.01	8.91	0.081	<0.005	0.10	0.38	>20.00	0.05	0.02	171	<100	<.01	<50	<50	<50
140681	<5	21.1		0.37	0.05		6.70		<.001	<.01	<0.005	0.026	0.092	0.17	0.02	>20.00	0.031	<0.005	0.07	0.08	4.37	0.05	0.02	<50	<100	<.01	<50	<50	<50
140682	<5	19.6		0.37	0.21		4.92		<.001	<.01	<0.005	0.019	0.055	0.09	<.01	>20.00	0.053	<0.005	0.10	0.24	8.33	0.05	0.02	88	115	<.01	<50	<50	<50
140683	12	3.4		0.03	<0.01		0.45		<.001	<.01	<0.005	<0.005	<0.005	0.05	<.01	4.00	0.140	<0.005	0.07	1.61	>20.00	0.05	0.03	156	<100	<.01	<50	<50	<50

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP

REPORT: V00-00338.0 (COMPLETE)

PROJECT: SILVER TIP

DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 2B(4/14)

SAMPLE NUMBER	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
140654		<200	149	<200	<50	<50	<50	<50	1234	<50	<50
140655		<200	155	<200	<50	<50	<50	<50	528	<50	<50
140656		<200	148	<200	<50	59	<50	<50	1176	<50	<50
140657		<200	<50	<200	<50	<50	<50	<50	355	<50	65
140658		<200	120	<200	<50	<50	<50	<50	619	<50	<50
140659		<200	<50	<200	<50	<50	<50	<50	<200	<50	50
140660		<200	<50	<200	<50	<50	<50	<50	<200	<50	53
140661		<200	<50	<200	<50	<50	<50	<50	<200	<50	58
140662		<200	<50	<200	<50	64	<50	<50	<200	<50	55
140663		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
140664		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
140665		<200	73	<200	<50	<50	<50	<50	<200	<50	<50
140666		<200	99	<200	<50	<50	<50	<50	<200	<50	<50
140667		<200	51	<200	<50	<50	<50	<50	<200	<50	81
140668		<200	<50	<200	<50	<50	<50	<50	<200	<50	83
140669		<200	<50	<200	<50	56	<50	<50	303	<50	160
140670		<200	62	<200	<50	<50	<50	<50	<200	<50	67
140671		<200	<50	<200	<50	<50	<50	<50	<200	<50	86
140672		<200	95	<200	<50	<50	<50	<50	942	<50	<50
140673		<200	<50	<200	<50	<50	<50	<50	1251	<50	<50
140674		<200	63	<200	<50	<50	<50	<50	<200	<50	50
140675		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
140676		<200	69	<200	<50	<50	<50	<50	<200	<50	<50
140677		<200	<50	<200	<50	<50	<50	<50	<200	<50	70
140678		<200	<50	<200	<50	83	<50	<50	<200	<50	62
140679		<200	101	<200	<50	<50	<50	<50	<200	<50	<50
140680		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
140681		<200	108	<200	<50	<50	<50	<50	<200	<50	<50
140682		<200	109	<200	<50	<50	<50	<50	<200	<50	<50
140683		<200	<50	<200	<50	<50	<50	<50	<200	<50	50

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

ISO 9002 Vancouver Branch

CLIENT: SILVERTIP MINING CORP
REPORT: V00-00338.0 (COMPLETE)

PROJECT: SILVER TIP
DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 3A(5/14)

SAMPLE	ELEMENT	Wet	Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd
NUMBER	UNITS		PPB	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT
140684			<5	7.3		0.10	0.09		0.74		0.003	<.01	<0.005	<0.005
140685			18	8.3		0.02	0.03		0.26		0.004	<.01	<0.005	<0.005

SAMPLE	Bi	As	Sb	Fe	Mn	V	Al	Mg	Ca	Na	K	Sr	In	Ti	Ga	Nb	La
NUMBER	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PCT	PPM	PPM	PPM
140684	0.013	0.24	<.01	12.12	0.112	0.007	0.99	2.19	15.69	0.05	0.32	107	<100	0.07	<50	<50	<50
140685	<0.005	0.04	<.01	2.64	0.120	<0.005	0.41	2.08	>20.00	0.05	0.13	167	<100	0.03	<50	<50	<50

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP
REPORT: V00-00338.0 (COMPLETE)
DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 3B(6/14)

SAMPLE NUMBER	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
140684		<200	75	<200	<50	<50	<50	<50	<200	<50	79
140685		<200	58	<200	<50	<50	<50	<50	<200	<50	137

ITS Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

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PROJECT: SILVER TIP
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STANDARD ELEMENT NAME UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PCT	Pb PCT	Pb PCT	Zn PCT	Zn PCT	Mo PCT	Ni PCT	Co PCT	Cd PCT	Bi PCT	As PCT	Sb PCT	Fe PCT	Mn PCT	V PCT	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	In PPM	Ti PCT	Ga PPM	Nb PPM	La PPM
MISC STD	-	154.5	-	1.53	1.61	-	1.61	-	>.400	1.52	>1.000	>1.000	>1.000	1.63	1.87	1.64	1.606	>1.000	1.71	1.53	1.70	1.61	1.63	301	-	2.31	<50	<50	<50
MISC STD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	303	-	2.34	<50	<50	<50
Number of Analyses	-	1	-	1	1	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	-	2	2	2	2
Mean Value	-	154.5	-	1.53	1.61	-	1.61	-	0.400	1.52	1.000	1.000	1.000	1.63	1.87	1.64	1.606	1.000	1.71	1.53	1.70	1.61	1.63	302	-	2.33	25	25	25
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	0.02	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OX9 Oxide	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value	432	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD	-	68.9	-	1.44	4.42	-	>15.00	18.78	0.030	<.01	<0.005	0.063	0.037	0.80	0.01	6.19	0.054	<0.005	1.77	0.02	1.49	0.05	0.12	-	-	-	-	-	-
CANMET CERTIFIED STD	-	70.0	-	1.45	4.36	-	>15.00	-	0.030	<.01	<0.005	0.066	0.028	0.83	0.01	6.33	0.055	<0.005	1.77	0.02	1.48	0.05	0.12	-	-	-	-	-	-
Number of Analyses	-	2	-	2	2	-	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-
Mean Value	-	69.5	-	1.45	4.39	-	15.00	18.78	0.030	<.01	0.003	0.064	0.032	0.81	0.01	6.26	0.054	0.003	1.77	0.02	1.49	0.05	0.12	-	-	-	-	-	-
Standard Deviation	-	0.8	-	0.01	0.04	-	-	-	0.001	-	-	0.002	0.006	0.02	<.01	0.10	0.001	-	-	<.01	0.01	<.01	<.01	-	-	-	-	-	-
Accepted Value	-	69.6	-	1.44	4.33	4.33	19.02	19.02	0.029	-	-	-	0.030	-	-	6.20	-	-	-	0.02	-	-	-	-	-	-	-	-	-
CANMET Cert. Std.	-	4.1	-	0.94	<0.01	-	0.05	-	<.001	1.21	0.039	<0.005	<0.005	<.01	<.01	>20.00	0.104	0.012	5.57	2.51	3.50	1.47	0.86	-	-	-	-	-	-
CANMET Cert. Std.	-	4.3	-	0.94	0.01	-	0.05	-	<.001	1.23	0.040	<0.005	<0.005	<.01	<.01	>20.00	0.104	0.012	5.49	2.66	3.39	1.35	0.85	-	-	-	-	-	-
Number of Analyses	-	2	-	2	2	-	2	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-
Mean Value	-	4.2	-	0.94	0.01	-	0.05	-	0.001	1.22	0.040	0.003	0.003	<.01	<.01	20.00	0.104	0.012	5.53	2.58	3.45	1.41	0.85	-	-	-	-	-	-
Standard Deviation	-	0.1	-	-	<0.01	-	<0.01	-	-	0.01	0.001	-	-	-	-	-	<.001	<0.001	0.06	0.11	0.08	0.09	0.01	-	-	-	-	-	-

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP
PROJECT: SILVER TIP

REPORT: V00-00338.0 (COMPLETE)
DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 4B(8/14)

STANDARD NAME	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
MISC STD		<200	379	<200	55	<50	<50	<50	<200	<50	62
MISC STD		<200	380	<200	54	<50	<50	50	<200	<50	63
Number of Analyses		2	2	2	2	2	2	2	2	2	2
Mean Value		100	380	100	55	25	25	38	100	25	63
Standard Deviation		-	<1	-	<1	-	-	18	-	-	<1
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX9 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET Cert. Std.		-	-	-	-	-	-	-	-	-	-
CANMET Cert. Std.		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-

ITS Intertek Testing Services
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Geochemical Lab Report

Vancouver Branch

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PROJECT: SILVER TIP

DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00 PAGE 5A(9/14)

STANDARD NAME	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PCT	Pb PCT	Pb PCT	Zn PCT	Zn PCT	Mo PCT	Ni PCT	Co PCT	Cd PCT	Bi PCT	As PCT	Sb PCT	Fe PCT	Mn PCT	V PCT	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	In PPM	Ti PCT	Ga PPM	Nb PPM	La PPM
Accepted Value		-	4.1	-	0.97	0.01	0.01	-	-	-	1.23	0.041	-	-	-	-	20.00	-	-	-	-	-	-	-	-	-	-	-	-	-
OX11 Oxide		3003	-	26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		3003	-	26.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CANMET MRG-1 REF STD		-	<0.7	-	0.02	<0.01	-	0.03	-	<.001	0.02	0.008	<0.005	<0.005	<.01	<.01	13.81	0.139	0.055	4.48	8.13	10.48	0.60	0.19	-	-	-	-	-	-
CANMET MRG-1 REF STD		-	<0.7	-	0.02	<0.01	-	0.03	-	<.001	0.03	0.008	<0.005	<0.005	<.01	<.01	14.00	0.140	0.053	4.46	8.22	10.57	0.55	0.19	-	-	-	-	-	-
Number of Analyses		-	2	-	2	2	-	2	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-
Mean Value		-	0.4	-	0.02	<0.01	-	0.03	-	0.001	0.02	0.008	0.003	0.003	<.01	<.01	13.91	0.140	0.054	4.47	8.17	10.53	0.57	0.19	-	-	-	-	-	-
Standard Deviation		-	-	-	<.01	-	-	<0.01	-	-	<.01	<0.001	-	-	-	-	0.13	0.001	0.001	0.01	0.06	0.06	0.03	<.01	-	-	-	-	-	-
Accepted Value		-	-	-	0.01	<0.01	<0.01	0.02	0.02	-	-	-	-	-	-	<.01	-	-	-	4.48	8.17	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	<0.7	-	<.01	0.01	-	0.01	-	<.001	<.01	<0.005	<0.005	<0.005	0.64	3.60	3.00	0.024	0.009	5.21	0.59	0.93	0.12	1.76	-	-	-	-	-	-
Number of Analyses		-	1	-	1	1	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-
Mean Value		-	0.4	-	<.01	0.01	-	0.01	-	0.001	<.01	0.003	0.003	0.003	0.64	3.60	3.00	0.024	0.009	5.21	0.59	0.93	0.12	1.76	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	<.01	0.02	0.02	-	-	-	-	-	-	-	0.66	3.57	2.80	-	-	5.55	0.60	-	-	-	-	-	-	-	-	-
OX12 Oxide		6372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mean Value		6372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

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CLIENT: SILVERTIP MINING CORP
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STANDARD NAME	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX11 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET MRG-1 REF STD		-	-	-	-	-	-	-	-	-	-
CANMET MRG-1 REF STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
CANMET CERTIFIED STD		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-
OX12 Oxide		-	-	-	-	-	-	-	-	-	-
Number of Analyses		-	-	-	-	-	-	-	-	-	-
Mean Value		-	-	-	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-	-	-
Accepted Value		-	-	-	-	-	-	-	-	-	-

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SAMPLE NUMBER	ELEMENT UNITS	Wet Au PPB	Ag PPM	AgGrav PPM	Cu PCT	Pb PCT	Pb PCT	Zn PCT	Zn PCT	Mo PCT	Ni PCT	Co PCT	Cd PCT	Bi PCT	As PCT	Sb PCT	Fe PCT	Mn PCT	V PCT	Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Sr PPM	In PPM	Ti PCT	Ga PPM	Nb PPM	La PPM
140579		6	>500.0	596.3	0.02	11.06		4.78		<.001	<.01	<0.005	0.020	0.040	0.25	0.04	>20.00	0.029	<0.005	0.02	0.07	0.80	0.06	0.04	<50	<100	<.01	<50	<50	<50
Duplicate				576.8																										
140584		<5	9.4		<.01	0.04		0.61		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.71	0.103	<0.005	0.10	0.31	>20.00	0.06	0.07	170	<100	<.01	<50	<50	<50
Duplicate			9.8		<.01	0.05		0.61		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.72	0.101	<0.005	0.10	0.33	>20.00	0.05	0.06	194	<100	<.01	<50	<50	<50
140585		50	19.6		<.01	0.24		2.16		0.001	<.01	<0.005	0.008	<0.005	0.06	<.01	4.64	0.149	0.012	1.14	1.25	17.70	0.07	0.43	103	<100	0.06	<50	<50	<50
Duplicate		36																												
140591		<5	4.8		<.01	<0.01		0.04		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.38	0.125	<0.005	0.08	0.33	>20.00	0.05	0.06	165	<100	<.01	<50	<50	<50
Duplicate			4.8		<.01	<0.01		0.03		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.36	0.124	<0.005	0.08	0.36	>20.00	0.06	0.05	174	<100	<.01	<50	<50	<50
140592		<5	8.1		<.01	0.03		0.07		0.002	<.01	<0.005	<0.005	<0.005	0.01	<.01	1.01	0.122	<0.005	0.15	0.64	>20.00	0.11	0.02	199	<100	<.01	<50	<50	<50
Prep Duplicate		<5	7.0		<.01	0.03		0.07		0.002	<.01	<0.005	<0.005	<0.005	0.02	<.01	1.09	0.130	<0.005	0.10	0.76	>20.00	0.07	0.02	201	118	<.01	<50	<50	<50
140598		<5	39.3		0.05	0.38		5.16		0.001	<.01	<0.005	0.028	<0.005	0.57	0.02	>20.00	0.087	<0.005	0.02	0.06	9.43	0.06	0.03	68	<100	<.01	<50	<50	<50
Duplicate			42.1		0.05	0.39		5.15		0.001	<.01	<0.005	0.028	<0.005	0.58	0.03	>20.00	0.088	<0.005	0.03	0.06	9.41	0.06	0.02						
140604		<5	>500.0	714.2	0.22	9.85		>15.00	15.00	<.001	<.01	<0.005	0.075	0.097	0.06	0.04	>20.00	0.054	<0.005	0.01	0.08	10.83	0.06	0.03	99	163	<.01	<50	<50	<50
Duplicate				716.2																										
140654		<5	>500.0	577.8	0.15	9.16		11.50		<.001	<.01	<0.005	0.046	0.028	0.31	0.04	>20.00	0.056	<0.005	0.04	1.37	4.83	0.06	0.04	76	132	<.01	58	<50	<50
Duplicate				565.8																										
140655		<5	327.3		0.09	4.66		11.59		<.001	<.01	<0.005	0.044	0.058	0.29	0.04	>20.00	0.051	<0.005	0.07	0.23	3.42	0.06	0.03	78	107	<.01	<50	<50	<50
Duplicate		<5																												
140656		<5	>500.0	599.8	0.14	7.84		11.71		<.001	<.01	<0.005	0.048	0.060	0.31	0.04	>20.00	0.064	<0.005	0.02	0.29	6.73	0.05	0.04	86	<100	<.01	<50	<50	<50
Duplicate				586.5																										
140663		<5	>500.0	1166.0	0.03	>15.00	23.49	13.77		<.001	<.01	<0.005	0.066	0.024	0.07	0.09	15.36	0.091	<0.005	0.07	0.24	7.60	0.05	0.04	74	346	<.01	<50	<50	<50
Duplicate			>500.0	1155.2	0.03	>15.00	23.49	13.71		<.001	<.01	<0.005	0.066	0.018	0.07	0.10	15.17	0.090	<0.005	0.05	0.20	7.49	0.05	0.03	86	<100	<.01	<50	<50	<50
140664		<5	>500.0	567.8	0.06	7.65		9.22		<.001	<.01	<0.005	0.040	0.079	0.05	0.03	>20.00	0.047	<0.005	0.02	0.16	0.31	0.05	0.03	<50	<100	<.01	<50	<50	<50
Duplicate				567.0																										

ITS Intertek Testing Services
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SAMPLE NUMBER	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
140579		<200	153	<200	<50	<50	<50	<50	<200	<50	<50
Duplicate											
140584		<200	<50	<200	<50	<50	<50	<50	<200	<50	421
Duplicate		<200	<50	<200	<50	54	<50	<50	<200	<50	442
140585		<200	61	<200	<50	<50	<50	<50	<200	<50	1513
Duplicate											
140591		<200	<50	<200	<50	71	<50	<50	<200	<50	80
Duplicate		<200	<50	<200	<50	<50	<50	<50	<200	<50	78
140592		<200	59	<200	<50	<50	<50	<50	<200	<50	247
Prep Duplicate		<200	<50	<200	<50	<50	<50	<50	<200	<50	235
140598		<200	76	<200	<50	<50	<50	<50	<200	<50	<50
Duplicate											
140604		<200	54	269	<50	<50	<50	<50	<200	<50	56
Duplicate											
140654		<200	149	<200	<50	<50	<50	<50	1234	<50	<50
Duplicate											
140655		<200	155	<200	<50	<50	<50	<50	528	<50	<50
Duplicate											
140656		<200	148	<200	<50	59	<50	<50	1176	<50	<50
Duplicate											
140663		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
Duplicate		<200	<50	218	<50	<50	<50	<50	<200	<50	<50
140664		<200	<50	<200	<50	<50	<50	<50	<200	<50	<50
Duplicate											

Intertek Testing Services
Bondar Clegg

Geochemical Lab Report

Vancouver Branch

CLIENT: SILVERTIP MINING CORP

PROJECT: SILVER TIP

REPORT: V00-00338.0 (COMPLETE)

DATE RECEIVED: 23-FEB-00 DATE PRINTED: 3-MAR-00

SAMPLE ELEMENT	Wet	Au	Ag	AgGrav	Cu	Pb	Pb	Zn	Zn	Mo	Ni	Co	Cd	Bi	As	Sb	Fe	Mn	V	Al	Mg	Ca	Na	K	Sr	In	Ti	Ga	Nb	La
NUMBER UNITS		PPB	PPM	PPM	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PCT	PPM	PPM	PCT	PPM	PPM	PPM
140667		<5	16.5		<.01	0.21		0.17		0.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.66	0.261	<0.005	0.18	0.76	>20.00	0.06	0.08	203	<100	<.01	<50	<50	<50
Prep Duplicate		<5	13.5		<.01	0.21		0.17		<.001	<.01	<0.005	<0.005	<0.005	<.01	<.01	0.66	0.295	<0.005	0.12	0.62	>20.00	0.05	0.07	205	<100	<.01	<50	<50	<50
140670		<5	219.8		0.80	0.27		3.21		0.001	<.01	<0.005	0.013	0.269	0.20	0.03	>20.00	0.075	<0.005	0.11	3.83	12.87	0.05	0.03	134	<100	<.01	<50	<50	<50
Duplicate			218.7		0.81	0.31		3.27		0.003	<.01	<0.005	0.012	0.270	0.18	0.04	>20.00	0.074	<0.005	0.10	3.74	12.87	0.05	0.04	129	<100	<.01	<50	<50	<50
140677		<5	5.6		<.01	<0.01		0.04		0.002	<.01	<0.005	<0.005	<0.005	0.01	<.01	0.71	0.098	<0.005	0.04	0.96	>20.00	0.05	0.02	207	<100	<.01	<50	<50	<50
Duplicate		<5	4.7		<.01	0.01		0.04		<.001	<.01	<0.005	<0.005	<0.005	0.01	<.01	0.74	0.098	<0.005	0.04	0.98	>20.00	0.05	0.03						

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SAMPLE NUMBER	ELEMENT UNITS	W PPM	Cr PPM	Te PPM	Sc PPM	Ta PPM	Y PPM	Zr PPM	Sn PPM	Li PPM	Ba PPM
140667		<200	51	<200	<50	<50	<50	<50	<200	<50	81
Prep Duplicate		<200	<50	<200	<50	<50	<50	<50	<200	<50	71
140670		<200	62	<200	<50	<50	<50	<50	<200	<50	67
Duplicate		<200	72	<200	<50	<50	<50	<50	<200	<50	60
140677		<200	<50	<200	<50	<50	<50	<50	<200	<50	70
Duplicate											


YUKON T.
B.C.
429000 E
430000 E
435000 E
N
6650000 N
6645000 N
6640000 N
6635000 N
WAY 9
WAY 8
WAY 7
WAY 3
WAY 35 Fr
WAY 2
WAY 1
WAY 34 Fr
WAY 33 Fr
WAY 12
WAY 11
WAY 10
WAY 6
WAY 32 Fr
WAY 5
WAY 4
WAY 31 Fr
Way 27 Fr
BULL 7
BULL 12 Fr
BULL 8
BULL 28 Fr
BULL 5
BULL 1
Trailer Camp
BULL 2
WAY 18
WAY 17
WAY 30 Fr
WAY 16
WAY 29 Fr
WAY 25 Fr
BULL 25 Fr
BULL 4 Fr
BULL 24 Fr
Drill Camp
Shop
Camp
BULL 26 Fr
WAY 23
WAY 22
WAY 26 Fr
WAY 21
WAY 20
WAY 19
BULL 22
BULL 23
BULL 16
BULL 17
BULL 10
CLIMAX 12
BULL 21
BULL 20
BULL 19
BULL 18
TOOTS 4
WAY 24 Fr
BULL 11 Fr
Claim Boundary (within B.C.)
BULL 27 Fr
BULL 15 Fr
STAR 2 Fr
BETH 4
CLIMAX 7
CLIMAX 1
BETH 1
RENEE 1
CLIMAX 11
STAR 3
CLIMAX 14 Fr
CLIMAX 2
BETH 2
BETH 3
CLIMAX 6
CLIMAX 3
CLIMAX 4
CLIMAX 5
CLIMAX 13
CLIMAX 16
CLIMAX 15
CLIMAX 8
CLIMAX 9
CLIMAX 10
POST 14
POST 16
POST 4 Fr
POST 1
POST 2
POST 5 Fr
POST 15
POST 3
POST 11
POST 12
POST 13
1500
1700
26,240
Roads
Legal Corner Post of claim
PROFESSIONAL
PROVINCE OF
C. J. REES
BRITISH COLUMBIA
GEOSCIENTIST
Coordinates are given in NAD 27 UTM. It is possible that the Yukon data is not transformed to NAD 27, and possibly explains the discrepancy at the BC–Yukon border.
SILVERTIP MINING CORPORATION
Silvertip Property
Claim Map
Map 1
SCALE 1 : 20000
0
800m
1600m
FILE: midcomp_20000.dwg
PLOT FILE: Mid20.plt
DRAWN BY: C. Craig
DATE: December 14, 1998