



31M04SE0020 17 CASSELS

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Diamond Drilling

Township of CASSELS

Report No 17

Work performed by: Silver Leader Mines Limited

Claim No	Hole No	Footage	Date	Note
T 61898	SL-1	38.0'	1969	
	SL-2	200.0'	1969	
	SL-3	163.0'	1969	
	SL-4	203.0'	1969	
	SL-5	406.0'	1969	
	SL-7	194.0'	1969	
	SL-8	208.0'	1969	
	T 58973	SL-6	405.5'	1969

Notes:

PROPERTY: Silver Leader Mines Limited
Cassels Twp. T 61898

Location: L13N, 317' W, 38' N⁷⁸ Hole No. SL 1
 Lat: Dip -70°
 Dep: Strike S 60° W mag.
 Elev: 1120.7' Depth 38.0 feet

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0 - 6.0	<u>CASING</u>			
6.0 -38.0	<u>KEEWATIN</u> hard light-grey siliceous rhyolite volcanics, variable; laminated sections at core angle of 40°; porphyritic sections, some buff-red, some grey-white; sparse pyrite disseminated throughout. 38.0 END OF HOLE SL 1. Logged by: <i>Campbell P. Eng.</i> Drilled by: <i>R. Barron Diamond Drilling Ltd.,</i> <i>Haleybury, Ont.</i>			

PROPERTY: Silver Leader Mines Limited
Cassels Twp. T 61898

Location: L 13 N, W 149', S 5'
 Lat: Dip -35°
 Dep: Strike N 30° W mag.
 Elev: 1122.4' Depth 200.0 feet

Hole No. SL 2

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0- 12.0	<u>CASING</u> Boulders; no trouble collaring hole.			
12.0- 43.0	<u>HURONIAN</u> Conglomerate; first 1.2 feet of light buff quartzite may be a boulder; conglomerate has dark grey-green greywacke matrix, very fine grained; pebbles of mostly red granite up to 1½ inches down to grit size; faint wavy bedding at 23 feet @ 35°; sparse uneven fine black spotting; fine sparse disseminated pyrite, visible only by a glass. @ 41.0 1/16" calcite seam 15°			
43.0- 63.0	<u>HURONIAN</u> Greywacke; dark, grey-green fine grained, massive; chlorite blotches up to ½" unevenly distributed; very fine grained sparse pyrite.			
63.0- 92.0	<u>HURONIAN</u> Conglomerate, grey quartzitic ground - mass; basal, has pebbles up to 2" of rhyolitic volcanics; moderate chloritic spotting, some with small grains of pyrite at their centres; sections with gritty matrix show moderate chloritic alteration; one pebble of 60% sulphides, py, po, @ 69.9 feet. Contact with Keewatin shows an abrupt change, dark to light rock.			
92.0-130.0	<u>KEEWATIN</u> Rhyolitic volcanics, complex containing mostly tuff with laminations lined with dull buff-red seams; bleached for 4 feet, then becoming variably darker; very hard to drill; other sections tightly laminated alternating black and light buff 70°; some fragmental with fragments of rhyolite up to 2"; moderate epidote alteration irregularly distributed. @ 113.0 ½" quartz, broken core			
130.0-164.5	<u>KEEWATIN</u> Dark grey, massive greywacke or tuff containing 2" to 8" sections of dull, siliceous buff-red rhyolite; this is a conglomerate or a volcanic fragmental, with no small fragments; sparse irregular calcite seams.			
164.5-200.0	<u>KEEWATIN</u> Rhyolite volcanics as above but with short, 4" sections of the greywacke - tuff persisting; predominantly dark grey with 20% buff red laminae. @ 199.7 2" section of fine disseminated reddish brown mineral which is possibly sphalerite. 200.0 END OF HOLE SL 2.			

SLUDGE SAMPLING, SL 2

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. All samples ran nil or trace.

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E. E. Campbell, P.Eng.

PROPERTY: Silver Leader Mines Limited

Location: L13N, W 149', S 5'
 Lot: Dip -69°
 Dep: Strike N 30° W (mag.)
 Elev: 1122.4' Depth 163 feet

Hole No. SL 3

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0 - 9.0	<u>CASING</u> Boulders.			
9.0 - 30.3	<u>HURONIAN</u> Greywacke - conglomerate, as in SL 2 12 - 43'			
30.3 - 60.5	<u>HURONIAN</u> Greywacke, massive; dark mottled irregular spots of black chloritic alteration irregularly distributed; several short (14") sections of gritty conglomerate; very sparsely distributed pebbles, 0.2", throughout the rest; very sparse fine pyrite.			
60.5 - 83.0	<u>HURONIAN</u> Conglomerate, gritty, quartzitic gravel matrix; pebbles a mixture of local Keewatin rocks and some granite; irregularly distributed black chlorite spotting; the sections with the most gritty matrix are dark from similar chloritic alteration; sparse pyrite, disseminated.			
83.0 - 88.5	<u>HURONIAN</u> Basal conglomerate, a complex mixture of rhyolite volcanic types of rock.			
88.5 -163.0	<u>KEEWATIN</u> Rhyolite volcanics, mostly tuff, laminated light and dark grey with some laminae of red-buff material, fragmental inclusions; possibly red-brown sphalerite associated with pyrite at end of section. 163.0 END OF HOLE SL 3.			

SLUDGE SAMPLING, SL 3

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. With the following exceptions, all of these samples ran nil or trace:

120 - 130	0.15 oz. Ag per ton
130 - 140	0.05
140 - 150	0.10
150 - 160	0.10

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PROPERTY: Silver Leader Mines Limited
Cassels Twp. T 61898

Location: L 15 N, 88' W, 27' N
 Lot: Dip -35°
 Dep: Strike S 60° W (mag.)
 Elev: 1101.9' Depth 203.0 feet

Hole No. SL 4

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0- 8.0	<u>CASING</u> Boulders.			
8.0- 39.0	<u>HURONIAN</u> Greywacke conglomerate to 17.0'; then conglomerate with gravel matrix; layering of pebbles at 18.0'. @ 45°; very fine, very sparse disseminated pyrite; rusty fractures and broken core 19 - 20, 28 - 29.			
39.0- 74.0	<u>HURONIAN</u> Basal conglomerate; fragments of rhyolite in fine grained greywacke matrix; rusty fractures in blocky core 54-61; badly broken core 57-58.5, 60-63, 64.5-66, 68-69, 74-76. @ 66.8 small smear of galena with sparse pyrite.			
74.0-163.0	<u>KEEWATIN</u> Rhyolite volcanics, variable, streaked and layered with different shades of grey, 45°; pyrite - pyrrhotite content irregularly distributed. @ 82.5 py - po = 5%, trace of chalcopryite, 6". @ 95.5 py - po = 10%, 2". @ 127.6 ¼" quartz, carbonate, and green chlorite, 35°. @ 137.0 1/8" quartz, carbonate, 35°. 144.0 - 165.0 sparse sphalerite associated with the disseminated pyrite mineralization.			
163.0-203.0	<u>KEEWATIN</u> Massive tuff, darker than rhyolite; change to tuff is not sharp, there is interfingering of the two; probable composition of dacite; sparse disseminated pyrite persists.			
	203.0 END OF HOLE SL 4			
	<u>GENERAL COMMENT</u> Complete absence of veins in Huronian. The disseminated sulphide mineralization in the Huronian is anomalous. That in the Keewatin is not, but the occurrence of sphalerite is encouraging from a local economic point of view.			

SLUDGE SAMPLING, SL 4

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. With the following exceptions, all of these samples ran nil or trace:

20 - 30	0.04 oz. Ag per ton
180 - 190	0.15 " " " "
190 - 200	0.35 " " " "

The coincidence of the assays from 180 - 190 and 190 - 200, with a change of rock type from rhyolite to massive tuff, is noteworthy.


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PROPERTY:

Location:

Hole No. SL 5

Lot: Dip

Dep: Strike

Elev: Depth

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
293.2-385.5	<p><u>HURONIAN</u> Cont'd.</p> <p>@ 365 Bedding at 5°; interbedded coarse and fine; laminae over pebble show bedding flatter than hole.</p>			
385.5-406.0	<p><u>HURONIAN</u> Conglomerate, gritty matrix, some granite pebbles, but most are rhyolitic; contact is abrupt at 20°, and chert-like laminae at contact are undisturbed suggesting that this conglomerate lies below the grey-wacke; light spotting.</p> <p>406.0 END OF HOLE SL 5.</p> <p><u>GENERAL COMMENTS:</u> The calcite - quartz veins, in Huronian and hence of Nipissing age, the well developed spotting, and the hematite staining can be regarded as economically promising.</p>			

PROPERTY: Silver Leader Mines Limited
Cassels Twp. T 61898

Location: L15N, 140' W, 18' N
 Lot: Dip -33°
 Dep: Strike S 30° E
 Elev: Depth 406 Feet

Hole No. SL 5

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0- 6.0	<u>CASING</u>			
6.0-226.6	<p><u>HURONIAN</u> Conglomerate, coarse gritty matrix, dark grey; pebbles contain some granite up to 18 inches; some rusty core breaks; disseminated pyrite; @ 80 granite pebbles have ceased to appear; large pebbles up to 12 inches of a variety of rhyolite volcanics, roughly rounded.</p> <p>135 - 140 Loss of sludge; section drops up to 5" of sand on subsequent sections</p> <p>@ 154.0 ½" quartz, 70°; usual disseminated pyrite.</p> <p>@ 154.5 1½" quartz, chloritized wall rock and 2 x 1/8" red-buff stringers; surrounding rock black and altered; 75°; usual disseminated pyrite.</p> <p>Core blocky in this section; 2 foot pulls.</p> <p>@ 167 12" granite boulder</p> <p>@ 175 pebbles become more rounded, matrix coarser and grittier.</p> <p>@ 190.2 1/16" calcite, 20°</p> <p>195 - 208 Section of greywacke, bedding 15°</p> <p>@ 197.8 1½" quartz and epidote 55° pronounced bit scour. Core breaks from here on distinctly stained with hematite.</p> <p>@ 205.2 1½" white calcite plus 3/4" grey quartz and epidote, 60°</p> <p>@ 212.3 2 x 1/8" red-buff feldspathic seams, 35°.</p> <p>@ 219 red granite 12" boulder</p>	SL 2	5" (153')	Nil
226.6-293.2	<p><u>HURONIAN</u> Greywacke conglomerate; matrix is fine grained dark green-grey, uniform black spotting (0.2 inches), variety of small pebbles including granite, some hairline calcite seams.</p> <p>@ 280, spotting is intense in lighter coloured greywacke.</p> <p>@ 264.0 ½" vuggy quartz, calcite, stained with hematite 20°.</p>			
293.2-385.5	<p><u>HURONIAN</u> Greywacke, slate-grey in colour, nearly massive, faint bedding at 10°; no more hematite stains, no more spotting; 1-2 foot lines of pebbles.</p> <p>@ 316.0 15" very fine lace work of calcite - filled breccia seams, some opaque leucoxene; rock is dark and altered.</p> <p>351 - 353 Intense spotting.</p>			

SLUDGE SAMPLING, SL 5

Sludge samples were collected every even
10 feet throughout the hole and assayed for silver.
With one exception, all of these samples ran nil or
trace:

8 - 20

0.04 ox. Ag per ton

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PROPERTY: Silver Leader Mines Limited
Cassels Twp. T 58973

Location: L 4 NE, 450' N, 35' @ S ^{30°} 60° E
 Lot: Dip -35°
 Dep: Strike S 30° E
 Elev: Depth 405.5 feet

Hole No. SL 6

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0- 6.0	<u>CASING</u>			
6.0- 75.2	<u>HURONIAN</u> Conglomerate, fine dark grey gritty matrix; bedding @ 35°; variety of pebbles, some of granite up to 7" 67.6 - 72.8 Medium grained epidotized, igneous or metamorphic rock, no chilled contacts; must be a diorite boulder; frequency of pebbles diminishes.			
75.2-192.8	<u>HURONIAN</u> Greywacke, a few sparse small pebbles; grey in colour; becomes irregularly buff or basic from 165 - 178. 182.8 - 184.5 25 calcite seams, mostly @ 45° black and green chlorite, sparse blebs of chalcopryrite.			
192.8-214.4	<u>HURONIAN</u> Conglomerate, both fine and gritty matrix, rhyolite and granite pebbles.			
214.4-405.5	<u>KEEWATIN</u> Massive dark grey rock with plentiful 0.1 mm white opaque spots, fine disseminated pyrite, pyrrhotite, and chalcopryrite; rhyolitic or dacitic dark matrix with metamorphic textures; @ 225 a few 1" - 3" indistinct inclusions of buff rhyolite; rock is a tuff with fragmental phases; @ 235 rock is laminated @ 10° by shearing. @ 275 white spotting was all but vanished. From 257 rock contains on an average of one calcite seam per foot, and more clearly has the appearance of a rhyolite fragmental, with blebs and seams of epidote becoming prominent @ 45°. @ 308 prominent disseminated sulphides (1%) pyrite, red sphalerite and chalcopryrite. @ 370 Epidote seams cease to appear; disseminated sulphides continue to include sphalerite. 405.5 END OF HOLE SL 6.			

SLUDGE SAMPLING, SL 6

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. All of these samples ran nil or trace with the following exceptions:

60 - 70	0.30 oz. Ag per ton
70 - 80	0.25 oz. Ag per ton
330 - 340	0.55 oz. Ag per ton

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SLUDGE SAMPLING, SL 7

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. All of these samples ran nil or trace.

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SLUDGE SAMPLING, SL 8

Sludge samples were collected every even 10 feet throughout the hole and assayed for silver. All of these samples ran nil or trace.

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PROPERTY: Silver Leader Mines Limited
 Cassels Twp. T 61898 & T 58973

Location: L 10 N, 100' E Hole No. SL 8
 Lot: Dip -35°
 Dep: Strike East
 Elev: Depth 208 Feet

FOOTAGE	DESCRIPTION	SAMPLE NO.	WIDTH	ASSAY
0- 18.0	<u>CASING</u> Sand and boulders.			
18.0-208.0	<p><u>NIPISSING</u> Diabase; medium grained, even textured, grey-green, typical. Very broken and rubbed core.</p> <p>@ 30 feet, bad flow of sand, cement.</p> <p>@ 35.0 Diabase blackened locally by chlorite alteration around cracks.</p> <p>@ 48.0 Cave in hole.</p> <p>48-60 Diabase irregularly blackened on numerous slips and small faults; very broken.</p> <p>@ 80.8 prominent slip, 1" wide, diabase blackened and chloritized for 3 feet on each side.</p> <p>@ 86.0 Calcite thread 30°</p> <p>@ 95 Bad cave</p> <p>@ 101 Rods drop 6"</p> <p>94.0 - 102.2 Core sheared, chloritized and very broken; 6 core blocks.</p> <p>@ 102.6 1/8" greenish carbonate 65°</p> <p>@ 113.5 1/4" greenish carbonate chip</p> <p>130.0 - 142.0 Section of broken and rubbed core with frequent grey, white and buff calcite seams, promising chlorite alteration.</p> <p>@ 144.0 1/8" red and white calcite 25°</p> <p>@ 148.1 1/4" red and white calcite 20° along shearing</p> <p>161 - 166 5' lost core</p> <p>@ 175.6 1/4" pink and white streaked calcite, 15°</p> <p>@ 177.2 1/8" grey calcite 20°</p> <p>@ 178.3 fine lacework of iron oxide over 1/2", 65°</p> <p>@ 179.7 1/8" pink calcite, 5°</p> <p>@ 184.9 1/8" grey calcite 65°</p> <p>@ 185.5 1/8" Grey calcite 50°</p> <p>170 - 208 Core more massive, less broken</p> <p>208.0 END OF HOLE SL 8.</p>			

