

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STM 1	Project	
Hole Type	DD	Tenement No	
Year	2000	Prospect	
Geologist	KPD	Date	6/8/2000

Depth	Lithology Code Colour	Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation
					mm	80	60	40	20			
25	1638									20.8-26.00m Fine grained, finely bedded siliceous siltstone. Boulders + clasts of quartz & red siltstone particularly at 20.8-21.8m. Shaly siltstone.	Si	
30	81 82 83 84									26.00-30.9m Banded massive sulfide		
35	85	30.9								30.9-31.7m weakly bedded fine grained sulfide		
40										31.7-40.5m Fine grained siliceous siltstone. Siltstone altered. Sulfidation zone to 6m. Sulfide zone to 2m. Sulfide mineralization. 30m horizontal channel at 32.6m. Sulfide facing downward.		

40.5m

40.5-40.5m

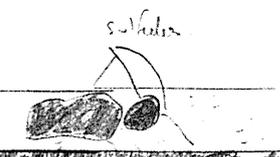
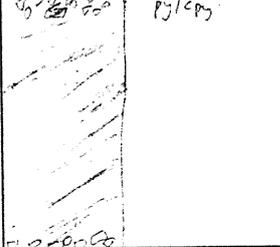
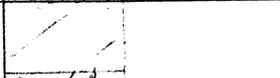
Siliceous siltstone
altered to have pyrite speckles
veinlets.

Si

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Hole ID	STM 1	Project	
Hole Type		Tenement No	
Year		Prospect	
Geologist		Date	

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation										
	Code	Colour																	
25						<table border="1"> <tr> <th colspan="5">mm</th> </tr> <tr> <td>0.0</td> <td>0.5</td> <td>2</td> <td>0</td> <td>10</td> </tr> </table>	mm					0.0	0.5	2	0	10			
mm																			
0.0	0.5	2	0	10															
26							<p>26.0-26.45-</p> <p>sulfide to 10cm in a matrix of pyrite mineral fine grained sediment</p>												
27							<p>26.45-28.2-</p> <p>Massive galena/sphalerite</p>												
28							<p>breccia? surrounded by coarse pyrite with minor sediment. Breccia matrix is supported by rotation of breccia in situ</p>												
29							<p>28.2-30.6m</p> <p>banded zone with massive sulfide, pale brown 4.5m - bands of sphalerite with 1m bands of galena. Pyrite - chalcopyrite rich bands/veins particularly at 28.2-28.3m + 30-</p>												
30																			
31							<p>30.6-30.8m</p> <p>sphalerite, galena, pyrite - cpy mineral fine grained sediment</p>												

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STM 1	Project	1/3
Hole Type	DIAMOND	Tenement No	
Year	2000	Prospect	Southern Territory
Geologist	KPD	Date	6/8/00

Depth	Lithology		Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation
	Code	Colour				mm							
						100	50	2	1	1/2			
5											<p>0.5 - 11.0m Green grey pebbled pumice breccias. Subrounded pebbles are 2-10mm diameter, at 2-3m the cavities are filled with white clay - alk carbonate? The pumice are typically flat and</p>		
10													
15											<p>11.0 - 20.8m Pale green pumice breccia with 50mm dia - radii of fine cement fragments to 20mm 26.4m. The alteration that has produced</p>		
20											<p>The pebbles in the above unit are all obvious in this unit.</p>		

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STM2	Project	
Hole Type	DP	Tenement No	
Year	2000	Prospect	Southern Trend
Geologist	KDP	Date	6/8/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
5							0-6m Grey-green pebbled Diverse breccia		
10							6-18.2m Lenticular breccia with clasts of massive sericite altered	Se Qtz Chl	spiffy
15							* 18.8 5cm peg fault	Se	
20							* 24.4 30cm granite siliceous brecciated dike = in this interval is being altered to 0-6m 18.2-24.4m brecciated siliceous brecciated fine grained sediment locally brecciated	Si	Qtz Kfs Anhydrite sph

DIAMOND DRILL HOLE LOG

Hole ID	STM 2	Project	
Hole Type		Tenement No	
Year		Prospect	
Geologist		Date	6/8

PASMINCO EXPLORATION

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
20							bedded	Si	spl
25							24.4-31.5m sericite altered	Se	
			27.4 887 27.7				like pumice breccia. Lithic clasts are silicified? to Am, altered pumice in a pale grey matrix From 25.2-25.65m silicified of the breccia gives it an appearance of being fine grained.	Se	massive fine silicates
30			32.3 808 32.6				31.5-33.0m sharply silicified breccia as above, - mostly disrupted massive sulfides. 33.0-37.5m like pumice breccia with large to fine rounded lithic clasts, some with no massive sulfide out pyrite spherulite veined silicified - as above. These clasts must have been in an alluvial environment - 37.5m (EOM)	Si +	30.3m
35								Se	

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

14	14
Hole ID	STM 3
Project	
Hole Type	DD
Tenement No	
Year	2000
Prospect	Southern Trenches
Geologist	KPD
Date	11/8/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
0							<p>0.5 - 9.8m</p> <p>Scientific and moderately silicified feldspar porphyry breccia.</p> <p>No Lithics</p>	↑	
5								Se+	
10							<p>9.8 - 13.0m.</p> <p>Strongly silicified and variably sericitized fine ashly sediment and porphyry breccia. Is the silicification totally texture destructive</p>	Se+	
15							<p>13.0 - 22.2m strongly sericite altered feldspar porphyry breccia. Lithics are prominent in the basal part of this unit.</p>		
20									

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

14	Project
_____	Tenement No
_____	Prospect
_____	Date
_____	Geologist
_____	Year
_____	_____
_____	_____
_____	_____
_____	_____

Depth	Lithology		Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation
	Code	Colour				mm							
						0	0.5	1	2	5			
20													
											21.2-28.3m sphaerulite veined 2-3mm, strongly silicified fairly bedded fine grained - medium grained ashy volcanic	Se ₃	Se ₃
25													
											28.3-31.8m - Mottled green-grey breccia. Green matrix altered dark and grey silicified chert in a grey silicified matrix.	Se ₃	Se ₃
30											31.4-32.5m - Strongly silicified ashy volcanic, with massive sulfides relicts breccia 31.8-32.5 - 32.5-36.0m Massive Sulfide - see over	Se ₃	Se ₃
			31.8										
			889										
			33										
			890										
35			891										
			892										
											36.0-45.6m Strongly silicified and variably sericite altered lith. pumice breccia with massive sulfide at 36.7-36.8m, 40.1-40.3m, 42.95-43.1m and coarse sphaerulite gabbro relicts and relicts/sphaerulite gr. ll and a breccia appearance	Se ₃	Se ₃
40													100 banded rhyolite

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STM4	Project	
Hole Type	DD	Tenement No	
Year	2000	Prospect	Southern Transvaal
Geologist	KPD	Date	11/8/2000

Depth	Lithology		Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation
	Code	Colour				mm							
						0.0	0.5	1	2	3			
0													
5													
10													
15													
20													

0.0 - 24.2m
 Sericite and generally
 silicified talcspan, quartz breccia
 lithics become important in the
 lower part of the unit.
 Cavities/poche from 0.0-11m
 as elsewhere. Minor base metal
 veins/bleds.

Ser
 Siz.

Siz

↓ lithics

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	STM 4	Project
Hole Type		Tenement No
Year		Prospect
Geologist		Date

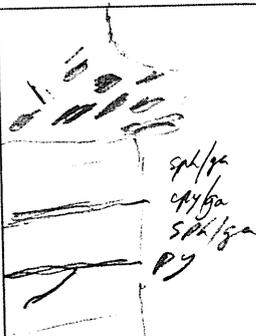
Depth	Lithology		Cu	Pb	Zn	Graphic Log					Comments	Alteration	Mineralisation	
	Code	Colour				mm								
						80	50	20	10	5				
20														
25											24.2 - 28.2m finely banded (Po?)		945/30h	
											Silicified shaly volcanic. Fin 26.8-28.2m the unit is stockworked with BM scoria giving the unit a brecciated appearance.	Six	945/30h scoria	
	894		28.2								28.2 - 33.4m Massive + semi massive sulfide - see over.			
	895		29.2											
	896		30.2											
30														
	897		31.2											
	898		32.2											
	899		33.4								33.4 - 36.6m Silicified and sericitized feldspar porphyry alteration.	See 4		
35											36.25 - 38.45m - massive PY (Po?)			
											36.6 - 38.3m Sparry silicified feldspar porphyry, altered breccia clasts are semi altered.	Six	945/30h	
											38.3 - 40.5m As at 33.4 - 36.6	See 4		
40														

-405

DIAMOND DRILL HOLE LOG

PASMINCO EXPLORATION

Hole ID	S1M4	Project
Hole Type		Tenement No
Year		Prospect
Geologist		Date

Depth	Lithology		Cu	Pb	Zn	Graphic Log	Comments	Alteration	Mineralisation
	Code	Colour							
	mm								
						80 0 0 2 0 25			
27									
28							27 - 29.0m silicified arhy volcanic, abundant coarse ga, sph, py verulite - breccia from 28.2-29.0m		25mm py
29							29.0-33.4m coarsely banded light brown sphulcite with bands + patches to 25mm separated by 2-5mm dark fine grained ga with (?) bands. localized patches of at 29.45-29.55m of coarse galena / cpv/py		
30									
31									
32									
33									

