

ASX Release

21 December 2009



ASX Code : STB
Berlin : SO3-Ber
Frankfurt : SO3-Fra

Share Price: 26 cents

Market Cap: \$14.5M

Shares on issue: 55.7M

Cash at Bank: \$2.0M

ASX/TSX listed shares: \$2.0M

Top 20 shareholders – 48%

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LISTED EQUITY HOLDINGS

(ASX: MZM) - 3.957m shares
(ASX: MZMO) - 1.037m options
(ASX: IXR) - 1.325m shares
(ASX: AVZ) - 0.400m shares
(ASX: BUX) - 1.000m shares
(ASX: AGO) - 12,490 shares
(ASX: UNX) - 0.700m shares
(CDNX: CNI.V) - 130,000 shares
Auvex (Pte) - 1.0m options

MASSIVE & MATRIX NICKEL COPPER PGE SULPHIDES INTERSECTED AT ROSIE WITH STRONG, COINCIDENT TEM CONDUCTORS AT DEPTH

South Boulder Mines Ltd (ASX: STB) is pleased to announce that drilling by JV partner Independence Group NL at the Rosie Prospect has intersected nickel- copper- PGE sulphides on all four sections drilled to date over a 400m strike length. Highlights are as follows:

HOLE TBDD080

- 4.13m @ 2.06% Ni, 0.22% Cu, 2.78g/t Pt/Pd from 205m including;
- 0.76m @ 4.98%Ni, 0.25%Cu, 6.98g/t Pt/Pd from 207.84m

TBDD080 intersected the zone 25m down contact from previously announced TBRC070 which intersected

- 20m @ 1.32 % Ni (0.23% Cu, 1.54g/t Pt/Pd) from 184m including;
- 7m @ 2.61% Ni (0.42% Cu, 3.75g/t Pt/Pd) from 190m.

HOLE TBDD073

- 6m @ 0.83% Ni, 0.28% Cu, 0.70g/t Pt/Pd from 146m
- 4m @ 1.27% Ni, 0.10% Cu, 0.83g/t Pt/Pd from 154m including;
- 2m @ 1.78% Ni, 0.09% Cu, 1.11g/t Pt/Pd from 154m

TBDD073 intersected the zone 200m east of TBDD080

- Six conductors have been interpreted from the DHTeM surveys, and they are located below the previously drilled holes.
- Further drilling to commence at the Rosie prospect in late January.
- Bulge C2 assay results expected in late December.

DUKETON NICKEL JOINT VENTURE

ROSIE PROSPECT

A total of 7 drill holes for 1694m were completed recently at the Rosie prospect. Six of the holes were RC only, and one hole, (TBDD080) consisted of a 191m RC pre-collar with a 43m diamond tail. Drill hole locations and azimuths are listed in Table 2.

The holes tested 400m of strike on 100m spaced sections. The drilling programme was a success, with additional nickel, copper and PGE mineralisation intersected on all four sections.

TBRC080 intersected massive sulphides which included 4.13m @ 2.06% Ni, 0.22% Cu, 2.78g/t Pt/Pd, 545ppm Co and 0.08 g/t Au from 205.76m including a **maximum grade of 4.98% Ni, 6.93 g/t Pt+Pd, 0.25% Cu, 0.21 g/t Au and 1250ppm Co over 0.76m from 207.84m**. This hole intersected the nickel mineralisation 25m 'down contact' from TBRC070, which intersected a best interval of **20m @ 1.32 % Ni, 0.23% Cu, 1.54g/t Pt+Pd, 365ppm Co and 0.14 g/t Au** from 184m including; **7m @ 2.61% Ni, 0.42% Cu, 3.75g/t Pt+Pd, 686ppm Co and 0.21 g/t Au** from 190m.



Figure 1: Massive brecciated Ni-Cu-PGE sulphides

Hole ID	From	To	Interval	Ni (%)	Cu (%)	Co (ppm)	Pt (ppm)	Pd (ppm)	As (ppm)	S (%)
TBRC069	192	196	4	0.64	0.11	120	0.065	0.11	368	
TBRC070	186	188	2	1.30	0.35	295	-0.01	0.16	2	10.8
	190	197	7	2.61	0.42	686	1.11	2.64	1305	11.1
	184	204	20	1.32	0.23	365	0.47	1.07	944	6.5
TBRC073	146	152	6	0.83	0.28	272	0.33	0.38	322	7.00
	154	158	4	1.27	0.10	285	0.48	0.34	402	9.54
	154	156	2	1.77	0.09	368	0.74	0.38	398	13.40
TBRC075	171	176	5	0.77	0.14	266	0.47	0.83	86	5.11
TBDD080	205	209.1	4.13	2.06	0.22	545	0.959	1.82	1744	9.50
		3								
	205.7	209.1	3.37	2.38	0.26	622	1.119	2.20	2085	10.93
	Including; and;	6 4	3 208.6	0.76	4.98	0.25	1250	2.27	4.66	3020

Table 1: Assay results from drilling programme.

Note: Samples were collected as 1m split samples for RC drill hole and half core samples for diamond drill holes. Nickel and copper values have been assayed using ICP-AES mixed acid digest. Some very high Platinum and Palladium values have been assayed using the Fire Assay Method (FA40) with ICP-AES Quantification. Significant assay results are tabulated if Ni \geq 0.40%, over a minimum 2m interval. Maximum internal waste allowed is 2m. Intersections are quoted as down-hole widths.

Prospect	HOLE_ID	Easting	Northing	Azimuth	Dip	Depth
Rosie	TBRC069	402450	6944190	180	60	250
Rosie	TBRC070	402550	6944110	180	60	250
Rosie	TBRC071	402650	6944085	180	60	300
Rosie	TBRC073	402750	6943855	0	60	202
Rosie	TBRC074	402560	6944030	0	60	250
Rosie	TBRC075	402650	6943860	0	60	208
Rosie	TBDD080	402550	6943888	0	62	234
					Total	1694
					RC	1651
					DD	43

Table 2: Drill hole locations and orientations for recently completed program

Downhole EM

Downhole EM surveys have been completed and an interpretation of the data has been received. Data quality was good with six conductors interpreted from the results. The conductors are interpreted as being coincident or proximal to the ultramafic-dolerite contact, one of the key target locations for massive sulphide mineralisation. The locations of these conductors are shown in Figure 3 on the accompanying diagram and their interpreted parameters are tabulated below, table 3:

Conductor	TBRC069_A	TBRC070-080_A	TBRC071_A	TBRC073_JC_A	TBRC073_B	TBRC075A
Easting (centre top edge)	402424	402543	402579	402731	402748	402647
Northing	6944110	6944016	6943988	6943960	6943822	6943942
RL (550m at surface)	280	354	312	423	384	385
Dip (°)	78	89	76	48	65	73
Dip Direction (°)	222	47	235	175	216	217
Plunge (° and direction)	29.8 West	1.2 West	17.1 West	12.6 West	0	17.6 West
Strike Length (m)	255	100	153	70	150	20
Depth Extent (m)	200	150	200	260	128	90
Conductance (Siemens)	10000	11000	5000	900	600	5000

Table 1 – Rosie Prospect DHEM conductor modelled parameters

The tops of the conductors are located below or approximately coincident with the massive sulphides intersected in the recent drilling. A thin sulphide-rich sediment was also intersected on the basalt-dolerite contact for the two eastern sections drilled at the Rosie prospect. The DHEM results are regarded as highly encouraging, with follow up drilling to test the geophysical anomalies as well as other geological target positions slated for January 2010.

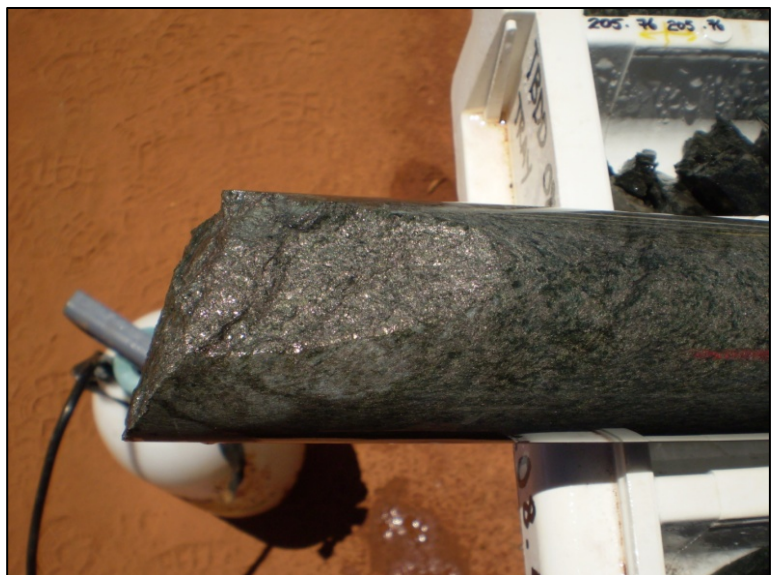


Figure 2: Rosie Prospect Matrix Ni-Cu-PGE Mineralisation

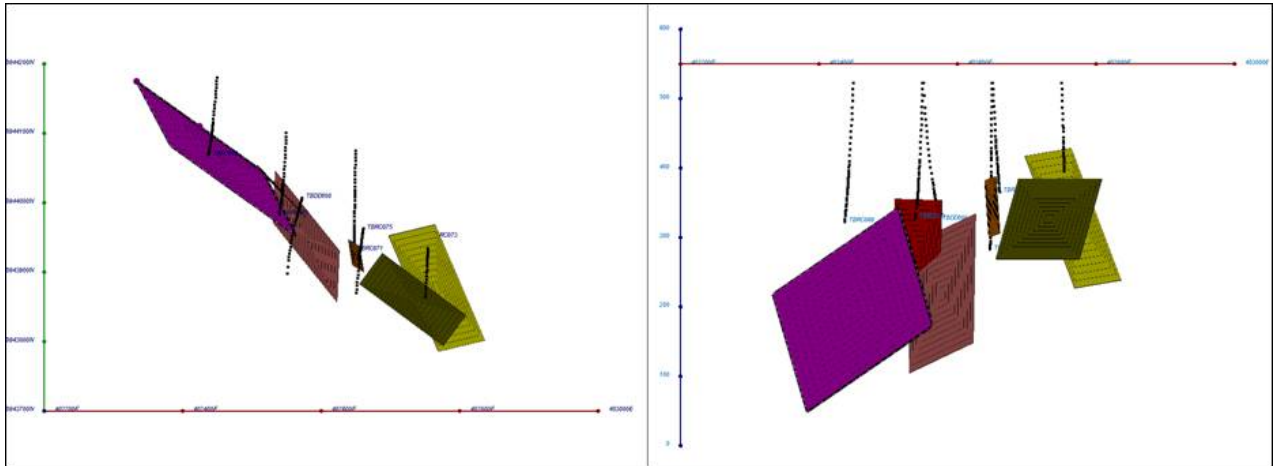


Figure 3: Current filament model for the Rosie prospect, viewed in plan (left) and from the south showing location of the recent drill holes (black traces) and plates as tabled above (solid shapes).

In addition to the results at Rosie, drilling has also been completed at the C2 prospect, with assays expected late December. It is anticipated that compilation and interpretation of these results will be available in early January.

About the Joint Venture

In early 2004, South Boulder entered a farm-out Joint Venture (JV) Agreement with Independence, whereby Independence can earn a 70% interest in the nickel rights on tenements held by South Boulder in the Duketon Project, by the completion of a Bankable Feasibility Study within 5 years of the grant of the relevant tenement. The data, interpretation and diagrams that form this ASX release have been provided courtesy of Independence.

About South Boulder Mines Ltd

Listed in 2003, South Boulder Mines (ASX: STB) is a diversified explorer primarily focused on gold, nickel, potash and phosphate.

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This ASX release has been compiled by Lorry Hughes using information on exploration results supplied by Independence Group who are the operator of the Duketon Nickel JV. Lorry Hughes is a member of the Australian Institute of Mining and Metallurgy. Mr Hughes is a geologist and he has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Lorry Hughes consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.