

# Tonsina Ni-Cu-PGE Prospect

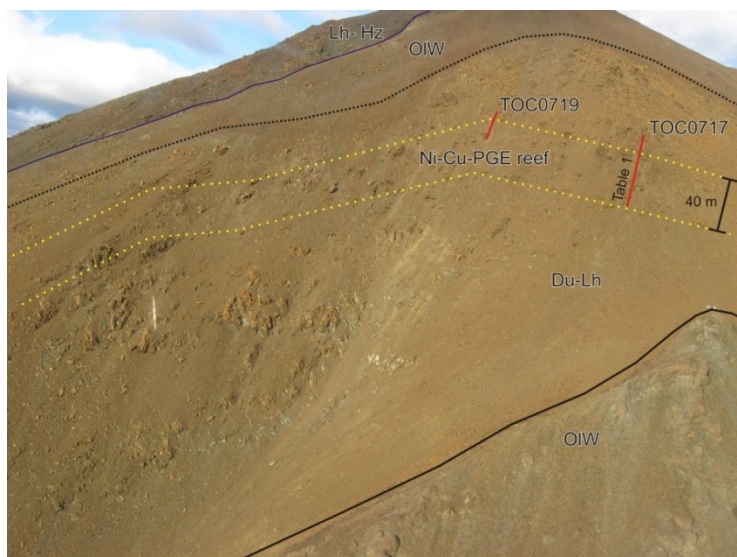
## Avalon Development Corporation Summary Report 2015

- Drill ready Ni-Cu-PGE reef style target with 0.96% Ni, 0.58% Cu, 2.4 g/t Pt, and 2.4 g/t Pd
- Prospect is within 3 km of a paved highway and electric transmission line
- Prospect on State of Alaska land with multiple PGE targets
- Mineralized reef identified in outcrop for 850 m along strike and a 40 m true thickness
- Reef mineralization is open to the west, east, north, and at depth
- Separate style of chromite mineralization contains PGE up to 2.8 g/t Pt and 2.5 g/t Pd
- Known PGE mineralization covers a distance of 9 km across the prospect

The Tonsina Ni-Cu-PGE prospect (red oval) is located in the northeastern Chugach Mountains 120 road km north of the port city of Valdez. The prospect is within 3 km of Alaska's first highway and a major electric power line. Recent exploration has defined stratabound Ni-Cu-PGE mineralization within the steeply dipping magmatic layers of Sheep Hill. Pyrrhotite, pentlandite, chalcopyrite, and bornite occur in blebs and net textured segregations associated with disseminated to banded chromite. This "reef" is hosted in a 150 m thick, steeply north dipping, layer of dunite and lherzolite (Du-Lh).



The mineralized horizon has been identified in outcrop sampling for 850 m along strike and a 40 m true thickness. PGE values are strongly correlated with the chromite rich portions of the mineralized horizon, while Ni and Cu are strongly correlated with sulfide rich portions of the mineralized horizon. Metal grades are regular over multiple meter intervals: 6 meters grading 804 ppb platinum and 1018 ppb palladium, and 12 meters grading 5938 ppm nickel. The extent of Ni-Cu-PGE mineralization has not been tested by drilling.



Additionally, two areas of banded chromite hosted in dunite and harzburgite (Lh-Hz) on Bernard Mountain host multiple ppm PGE. A sample of chromite hosted in the olivine websterite unit (OIW) contains 5.3 ppm Pt + Pd. Outcrop sampling has returned values of 16-9660 ppm Ni, 0.5-5800 ppm Cu, 0-2800 ppb Pt, 0-2540 ppb Pd. PGE profiles of Tonsina prospect outcrop profiles of Tonsina prospect outcrop samples are similar to PGE profiles from layered intrusions such as Stillwater and the Great Dyke. Additional sulfide mineral identified in thin section include millerite,

diginite, covellite, and chalcocite.

Table 1: Select Chip Channel TOC0717 Geochemical Analysis Results

Chip Channel TOC0717 was designed to cross the mineralized horizon and test the vertical grade of the exposed mineralization. Results from the chip channel show that copper and nickel are positively correlated with sulfur, and that PGE are positively correlated with chromium.

From m	To m	Rock Unit	Mineralization	Pt ppb	Pd ppb	Cr ppm	Cu ppm	Ni ppm	S pct
36	38	Lh	dis cr, sulf	171	114	2510	1215	3230	0.20
38	40	Lh	dis cr, sulf	192	202	2260	1635	4210	0.46
40	42	Lh	dis cr, sulf	250	371	2200	1390	4530	0.47
42	44	Lh	dis cr, sulf	93	122	2230	1405	5810	0.53
44	46	Lh	dis cr, sulf	798	1120	2760	557	3110	0.22
46	48	Lh	dis cr	750	839	6290	496	2490	0.10
48	50	Lh	dis cr, sulf	864	1095	7200	781	2570	0.25
50	52	Lh	dis cr	341	418	2650	442	1830	0.14
52	54	Lh	dis cr, sulf	116	164	2090	2620	4570	0.70
54	56	Lh	dis cr, sulf	131	151	996	1205	4250	0.66
56	58	Lh	dis cr, sulf	17	22	393	1340	3580	0.75
58	60	Lh	dis cr, sulf	31	53	831	1175	3650	0.73
60	62	Lh	dis cr, sulf	113	133	3860	1195	3690	0.43
62	64	Lh	dis cr, sulf	333	481	4760	1935	4230	0.55
64	66	Lh	dis cr, sulf	33	42	1360	2930	7540	0.76
66	68	Lh	dis cr, sulf	28	35	697	2040	6820	0.75
68	70	Lh	dis cr, sulf	36	43	1460	1775	5120	0.66
70	72	Lh	dis cr, sulf	28	55	1500	2500	6470	0.69
72	74	Lh	dis cr, sulf	50	88	1350	2220	5450	0.72
74	76	Lh	dis cr, sulf	108	149	1810	1260	3300	0.37

Table 2: Select Ni-Cu-PGE Reef Grab Sample Geochemical Analysis Results

Results from grab samples show that copper and nickel are positively correlated with sulfur, and that PGE are positively correlated with chromium.

Rock Unit	Mineralization	Pt ppb	Pd ppb	Cr ppm	Cu ppm	Ni ppm	S pct
Lh	10-15 % po	173	124	1820	1820	8230	0.97
Lh	5% cr, 10% po	284	569	1830	5800	9660	0.84
Lh, Du	10% po	507	691	3850	1350	4930	0.65
Lh Du	40% cr, 5% po	2300	1610	10000	1450	3720	0.35
Lh	15% cr, 6% po	880	1260	7320	2130	4920	0.56
Lh	5% po	5	14	2150	1520	4940	0.59
Du	30% cr, 2% po	799	835	10000	1190	3200	0.22
Du	20% cr, 3% po	640	1070	1285	328	2370	0.07

The Tonsina prospect is an under explored highly prospective Ni-Cu-PGE target that warrants follow-up surface mapping and sampling to expand the known Ni-Cu-PGE mineralization and diamond core drilling to determine the ultimate size and grade of the layered mineralization outlined to date. Avalon Development Corporation (ADC) is well situated to implement future exploration on the Tonsina prospect. ADC has over 20 years of experience in this region of SE Alaska, including all of the recent work conducted on the Tonsina prospect. The company has conducted exploration programs for gold, platinum, copper, and nickel, and has established a logistical network of contractors, personnel experienced in the wet weather and steep terrain, and a good working relationship with State and Federal regulatory permitting agencies.

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