



# MIKI FJORD DYKE & KANGERLUSSUAQ ALKALINE COMPLEX, EAST GREENLAND

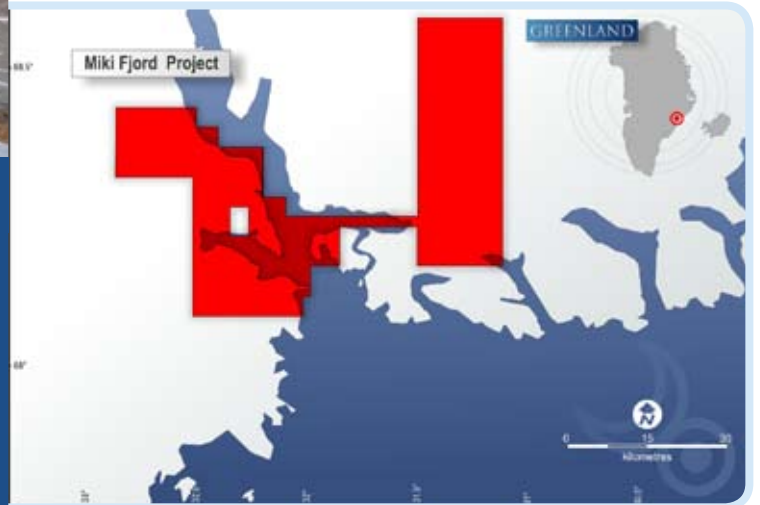
Platina Resources 100%  
EL2009/09

- Located on the East Coast of Greenland, adjacent to Platina's Skaergaard Project
- Licence covers 1,346km<sup>2</sup>, prospective for precious and base metals
- Licence contains Miki Fjord Dyke, Kangerlussuaq Alkaline Complex and numerous other intrusions
- Miki Fjord Dyke grades up to 3.2g/t palladium, 0.16g/t gold, 2.2% copper and 0.7% nickel
- Precious and base metal mineralisation at Kangerlussuaq Alkaline Complex with grades up to 2.5g/t gold, 1,583g/t silver, 7.7% copper, 1.2% molybdenum, 10.0% lead and 6.1% zinc.

## Location and Access

Exploration Licence 2009/09 is located on the East Coast of Greenland, at 68° latitude and 31° longitude (abutting Platina's Skaergaard and Kap Edvard Holm licences).

The Exploration Licence is owned 100% by Platina and covers 1,346km<sup>2</sup>. The Exploration Licence is home to Platina's 20-man field camp and 600m airstrip, with access to site via aircraft from Iceland. Within the tenement all transportation is via helicopter and on foot.

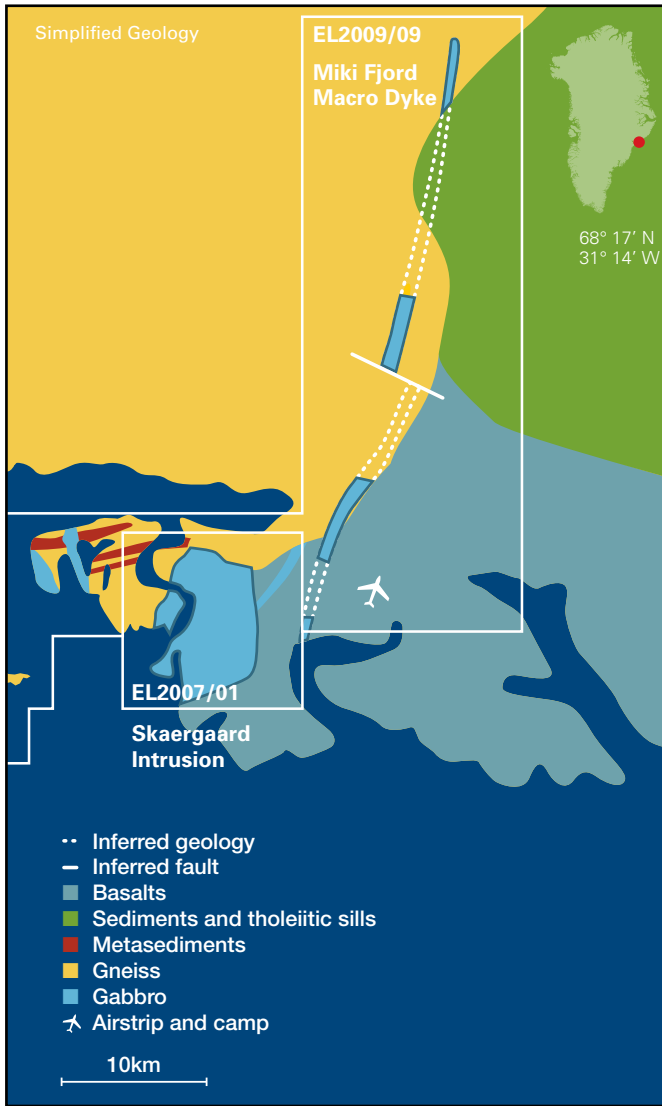


## Regional Geology

The Kangerlussuaq region belongs to the Palaeogene North Atlantic Igneous Province. Situated in the East Greenland volcanic rifted margin, the gabbros and tholeiites developed in two separate phases - the first 61-58 million years ago (Ma) relates to plume impact beneath central Greenland and generated lower basalts and Urbjerget formations; the second of voluminous tholeiitic Plateau basalts erupted briefly between 56-55Ma due to decompressional melting relating to continental break up and rifting of the North Atlantic. This was followed by three younger phases, producing mainly gabbroic and syenitic intrusions, between 50-47Ma, 37-35Ma and 14-13Ma; inferred to be a result of the rifted margin passing over the Iceland Plume Axis.

Today, the northern portion of the Kangerlussuaq Fjord is dominated by more than 6km of Palaeogene plateau basalts and Palaeogene to Mesozoic sediments overlying the early continental rift basalts and underlain by Precambrian basement (gneiss). To the southwest of the Kangerlussuaq Fjord, Precambrian gneiss and Palaeogene intrusives dominate. The Province is host to some 28 intrusions and complexes. The intrusions were emplaced at the interface between the basement gneiss and overlying plateau basalts. Significant erosion of the basalts (some 4 – 8km) has resulted in the exposures seen today. A broad spectrum of intrusive lithologies are present, including ultramafic, mafic subalkaline, ultramafic alkaline, granitic, syenitic and carbonatites.

The three largest intrusions in the region are located at the mouth of the Kangerlussuaq Fjord - the Kap Edvard Holm Complex, the Skaergaard intrusion (both layered gabbros) and the Kangerlussuaq Alkaline Complex. The Kangerlussuaq Alkaline Complex is the largest intrusion in the locality and is surrounded and intruded upon by smaller intrusions, namely the Kaerven Syenite intrusion, Peak 2005 Syenite intrusion, Kangerlussuaq Augite Syenite Intrusion, Snout Series complex, Bagnaesset Syenite, Flammebjerg Diatreme, Cirque1320, and Amdrup Fjord Biotite/Granite Intrusion.



## Geology and Exploration History

### Miki Fjord Dyke Geology

The Miki Fjord Dyke is a linear NNE-trending, steeply dipping, layered gabbroic dyke. Width varies between 20m to 600m, becoming increasingly narrow to the north and extending in excess of 55km. The dyke is compositionally similar and temporally related to the Skaergaard intrusion and intruded into Pre-Cambrian basement gneiss and Tertiary Basalts. The mineralisation occurs at the margins of the dyke and is characterised by disseminated and massive cupriferous sulphides.

Selected Miki Fjord Rock-Chip Results				
Sample ID	Pd g/t	Ag g/t	Ni %	Cu%
NY 15	3.3	1.9	0.04	0.52
MFM 282	2.2	4	0.11	1.10
MFM 340	2.1	4	0.62	2.05
MFM 195	1.8	2	0.02	0.60
MFM 384	1.4	3	0.68	2.21
MFM 382	0.9	3	0.74	2.01
MFM 192	0.8	2	0.03	0.64
MFM 119	0.8	1	0.11	0.45
MFM 383	0.7	3	0.80	2.04
MFM 224	0.7	2	0.02	0.58
NY 17	0.7	0.5	0.01	0.04
MFM 364	0.6	2	0.10	0.82
NY 39	0.6	1.1	0.03	0.22
MFM 369	0.6	2	0.12	0.99
MFM 266	0.6	1	0.01	0.17
MFM 362	0.6	2	0.08	0.63
NY 16	0.6	0.8	0.01	0.10
MFM 231	0.6	2	0.03	0.46
MFM 276	0.5	2	0.05	0.60
MFM 350	0.5	2	0.01	0.58
MFM 112	0.5	3	0.09	0.50

### Exploration History

The Miki Fjord Dyke was economically evaluated by Platinova Resources Ltd in 1986, 1987 and 1996. Activities in these three field seasons focused on the southern-most extent of the dyke and consisted of mapping, outcrop sampling and localised magnetometer/ Induced Polarisation (IP) / Time domain Electro-Magnetics (TEM) and magnetic surveys. The geophysical surveys were largely unsuccessful, however, three magnetic conductors were identified at the margin of the dyke. Outcrop sampling identified two areas of distinct interest - the 'South Showing', 100 x 50m of rusty gabbro outcrop grading up to 120ppb Au and 2.1g/t Pd; and the 'Cliff Showing', a 20m wide zone of sporadic sulphide mineralisation extending for in-excess of 400m and grading up to 286ppb Au and 2.2g/t Pd, further to the south.



Miki Fjord Dyke, looking south



Platina embarked on its maiden field season at the Miki Fjord Dyke in 2008, in conjunction with activities at Skaergaard. Reconnaissance was successful in extending the known mineralised extent of the dyke, extending the strike length to in excess of 55km. Limited sampling of the new extension graded up to 3.0g/t silver, 1.0g/t palladium, 0.02g/t platinum, 0.11% cobalt, 2.09% copper and 0.74% nickel. Mineralisation is hosted along the base of the dyke in a persistent 5m zone of sulphide enrichment. Analytical results for samples collected from the Miki Fjord Dyke in 2008 are detailed in Table 1 (using a 0.5ppm cut-off grade for Pd).



## Kangerlussuaq Alkaline Complex

### Geology

The Kangerlussuaq Alkaline Complex comprises an 850km<sup>2</sup> area of circular zoned syenite with an outer ring of nordmarkite grading inwards to pulaskite and finally foyaite within its central core (or upper dome). Modal layering and igneous laminations are developed, though there are no internal intrusive contacts. The sequence of crystallisation is hypothesised to be from bottom up in an open magmatic system. The bulk of the Complex is covered by glaciers and was emplaced into Precambrian gneisses with sharp contacts in some areas and a zone of mixed, hybrid rocks (the Snout Group) in others. Within the Complex are a number of other intrusives, such as the Cirque 1320, Flammebjerg, and Peak 2005 Syenite Intrusions.

### Exploration History

The Complex itself was investigated in the 1970's by Nordisk Mineselskab and found to contain veins with up to 5% Rare Earth Element (REE) minerals, however reported assays were appreciably lower. In 1986, Platino carried out multi element assays and stream sediment samples in and around the intrusion exploring for REE. The results were not encouraging and 1987 activities focused solely on the precious metals (Au, Pd and Pt).

A month-long field reconnaissance program was conducted in the SE cordon of the Complex by GEUS (Danish and Greenland Geological Survey) in 2000. In-situ vein hosted precious metal concentrations of up to 7.5g/t Au and 70g/t Ag were obtained. No consequent field work has been conducted.

In 2009 Platina conducted sampling in the vicinity with highly anomalous results returned from the south-eastern portion of the Complex. The program consisted of ground-based sampling conducted by two teams of helicopter-supported geologists and mountaineers, based out of Platina's Sødalen field camp which services the Skaergaard Project. Sampling was of both in situ outcrop and float, with activities biased toward epithermal veins of both regional and local scale. A total of 120 samples were collected with a preference for in situ material, although float was also sampled due to the rugged nature of some locations. Highly encouraging assay results have been received from this sampling program, as summarised in the table the following page.



Molybdenite mineralisation within EL2009/09

SAMPLE ID	Easting	Northing	Au g/t	Ag g/t	Cu%	Mo%	Ph%	Zn%
90221	527542	7569946	0.2	38	0.02	0.00	2.40	0.02
90242	526518	7571189	0.0	0	0.04	0.00	0.00	0.01
90244	526744	7571195	0.0	36	0.01	0.01	5.17	1.96
90245	526743	7571202	0.0	22	0.01	0.00	2.25	2.53
90246	526749	7571193	0.0	7	0.01	0.00	0.68	1.70
90252	526314	7570954	0.0	215	0.02	0.00	10.12	0.92
90253	526279	7570975	0.0	58	0.00	0.00	4.54	0.29
90256	526328	7571007	0.0	13	0.01	0.00	1.33	0.09
90261	526335	7571007	0.1	100	0.01	0.03	8.74	12.21
90265	526504	7570532	0.2	77	0.07	0.00	1.72	1.07
90292	526425	7570297	0.0	22	0.02	0.00	1.83	1.59
90293	526437	7570268	0.0	82	0.11	0.00	5.90	9.66
90298	529179	7575325	0.0	0	0.05	0.45	0.00	0.01
90299	529178	7575338	0.0	1	0.00	4.34	0.00	0.01
90304	525151	7571571	0.1	4	0.01	0.00	0.05	1.94
90305	525158	7571567	0.1	20	0.01	0.00	0.41	1.22
90306	525158	7571566	0.2	8	0.03	0.00	0.07	4.56
90311	524936	7571163	0.0	27	0.03	0.00	3.03	3.66
90329	531660	7571422	0.0	0	0.01	1.12	0.00	0.01
90331	531653	7571420	0.0	0	0.01	1.20	0.00	0.01
90339	531689	7569455	1.1	5	0.06	0.00	0.02	0.02
90340	531689	7569454	1.7	15	0.46	0.00	0.03	0.02
90341	531687	7569454	1.3	17	0.39	0.00	0.03	0.02
90342	531684	7569453	2.5	9	0.01	0.00	0.28	0.04
90367	528624	7574033	0.9	742	1.01	0.00	9.98	6.10
90368	528628	7574029	0.4	1583	7.67	0.00	1.95	0.74
90369	528626	7574021	0.4	92	0.11	0.00	3.69	1.22
90539	526702	7573536	0.0	59	0.01	0.00	4.15	0.91
90542	56846	7573894	0.4	1	0.01	0.02	0.01	0.01
90606	529158	7575295	0.0	0	0.01	1.24	0.00	0.01

Selected rock-chip assay results from the 2009 Kangerlussuaq sampling program

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