

PROSPECTORS AIRWAYS COMPANY LIMITED

MILES CREEK * ENGER OPTION YUKON TERRITORY

Summary of Diamond Drilling for April and May 1953

fill
y 3/15a

<u>April</u>	<u>From</u>	<u>To</u>	<u>Started</u>	<u>Completed</u>	<u>Remarks</u>
Hole S-1	0	46.0	April 25	April 27 End.	Bedrock not reached due to seizing and breaking of the casing.
Hole S-1A	0	263.0	Apr. 28	May 5 End.	Sulphide intersections of note obtained in the section from 39.0 to 93.0; from 110.0 to 120.0; 206.5 to 211.5.
<u>May</u>					
Hole S-2	0	98.0	May 7	May 9 End.	Drilled to complete cross-section of mineralization obtained in Hole S-1A. The main sulphide intersections occur between 39.0 at bedrock and 52.2; 62.6 to 76.0; 83.1 to 89.1. Hole ends in barren lava at 98.0/
Hole S-3	0	52.0	May 11	May 12 End.	Hole abandoned in overburden due to seizing and breaking of casing.
Hole S-3A	0	373.0	May 14	May 22 End.	Sulphide intersections of note from 30.0 to 62.0; 142.5 to 145.0; 151.5 to 155.0; scattered sections of sulphide between 164.0 to 221.0 where core loss was high. From 254.5 to 326.6, isolated sections of sulphide between sections of lost core. Sludge assays taken between 200.0 and 310.0.
Hole S-4	0	323.0	May 23	continuing at end of month.	Proposed depth of 500 to test ground to south of previous holes and to bracket space between them. Sulphide in assayable amounts obtained from 90.5 to 194.0; 248.0 to 260.5.



Miles Creek - Enger Option D. Drilling April & May 1953, cont'd.

Past 323.0 in Hole S-4 to drilling to date on June 4th, the section from 346.0 to 361.0 contains about 15% sulphide and the section from 362.0 to 365.0 contains about 5% sulphide. Considerable lost core has occurred from 370 to 450, the present depth of hole.

Footage contracted: 3000.0

Footage drilled to end of May: 1155.0

Balance of contract May 31st.: 1845.0

Proposed Drilling:

To cross-section the ground southward from the present hole (S-4) to a peridotite intrusive which appears to be the parent rock of the sulphide mineralization. This course of action was decided upon during the visit of Mr. C.L. Coleman to the property on May 24th.

It is planned to drill the first hole of this cross-section to test the peak of a magnetic high found in the magnetometer survey. The location of this hole is shown on the plan of the magnetics being sent under separate cover. The location of the collar relative to that of Hole S-4 is 480' at 149° azimuth, or on the grid map sent from Toronto, the coordinates of the collar are 10,000E and 8,800 N. The direction of the hole is due south at a dip of 45°.

Re the position of the shoreline in the area west of Hole S-5, the compass-tape survey appears to have been pulled off due to the proximity of the peridotite. The collar is slightly over 200' east of the river's edge.


R.W. Baker,

Koidern, Yukon Territory,
June 4, 1953.

1.

115F

2/15/6

PROSPECTORS AIRWAYS COMPANY LIMITED

MILES CREEK - ENGER OPTION YUKON TERRITORY

Summary of Diamond Drilling for June 1953

<u>Hole</u>	<u>From</u>	<u>To</u>	<u>Total</u>	<u>Started</u>	<u>Completed</u>	<u>Remarks</u>
S-4	323.0	483.0	160.0	May 23	June 4	Drilled partly in May and partly in June.
S-5	0.0	285.0	285.0	June 8	June 13	Peridotite
S-6	0.0	386.0	386.0	June 15	June 25	Cross-section completed.
S-7	0.0	185.0	185.0	June 27	Drilling at end of month.	

Footage for June 1016 feet

Balance of contract May 31st.: 1845.0 feet

Balance of contract June 30th: 1845.0 - 1016.0 = 829.0 feet

Hole S-4

The hole was drilled to test the interbedded lava and pyroclastic south of the previous drilling and to narrow the space between the holes to 100 feet along the postulated E-W strike of the zone. Averages of note are as follows:

From 114.0 to 134.0 (including 0.5 feet of lost core and 3.2 feet of barren core) $\frac{0.06 \% \text{ Cu; } 1.63 \% \text{ Ni.}}{20.0}$

From 163.0 to 180.5 (including 3.0 feet of barren core)
 $\frac{0.07 \% \text{ Cu; } 1.41 \% \text{ Ni.}}{17.5}$

From 192.4 to 194.0 $\frac{0.09 \% \text{ Cu; } 1.23 \% \text{ Ni.}}{1.6}$

From 407.6 to 410.0 $\frac{2.70 \% \text{ Cu; } 0.08 \% \text{ Ni}}{2.4}$

Sludge - 410 to 420:
 $\frac{0.75\% \text{ Cu; } 0.10\% \text{ Ni}}{10.0}$

From 419.0 to 421.3 $\frac{2.05 \% \text{ Cu; } 0.03 \% \text{ Ni}}{2.3}$)

) Sludge - 420 to 430:
 $\frac{1.20\% \text{ Cu; } 0.11\% \text{ Ni}}{10.0}$

From 425.0 to 426.0 $\frac{1.06 \% \text{ Cu; } 0.01 \% \text{ Ni}}{1.0}$)

Hole S-5

This hole was drilled to test a strong magnetic "dipole" anomaly south of the previous drilling; it is also the farthest south hole in the cross-sectioning of the possible mineralized zone. The hole was entirely in peridotite and the anomaly was found to be due to secondary magnetite in the serpentized peridotite.

Hole S-6

The gap between the peridotite and Hole S-4 was closed by this one. Samples sent for assay are not high in pyrrhotite

the best of the longer sections being from 106.2 to 111.0 and containing an estimated 5% fine pyrrhotite. From 159.0 to 160.0 there is an estimated 10% pyrrhotite.

Hole S-7

The drilling of this hole is in progress at the end of the month. It is designed to check the possible eastward extension of the values obtained in Hole S-4. At 185 feet on the morning of July 1st., no sulphide intersections comparable to those in Hole S-4 have as yet been obtained.

Proposed Drilling:

The self-potential survey shows that a sulphide anomaly coincident with the drilling to date (with the exception of Hole S-5) extends eastward from the river up a slope which has a mantle of gravel showing sharp variations in depth. The width of the anomaly is between three and four hundred feet. Profiles on lines 3 and 5 show two maximum negative peaks which might be interpreted as sulphide zones extending E-W parallel to the anomaly, or introductions of sulphide in NW-SE tension fractures in the major E-W break. The self-potential survey did not show comparable anomalies either south to the peridotite contact or in the peridotite.

It is proposed to cross-section the self-potential anomaly on either Line 5 or Line 7 to test the quality of sulphide eastward from the drilling done to date, subsequent to the completion of Hole S-7.

Koidern Y.T.
July 1, 1953.


R.W. Baker

PROSPECTORS AIRWAYS COMPANY LIMITED

115 F

MILES CREEK - ENGER OPTION

YUKON TERRITORY

Summary of Diamond Drilling for July 1953

<u>Hole No.</u>	<u>From</u>	<u>To</u>	<u>Total</u>	<u>Started</u>	<u>Completed</u>	<u>Remarks</u>
S-7	185.0	301.0	116.0	June 27	July 2	To test the self-potential anomaly adjacent to line 3 and east of Hole S-4.
S-8	0.0	429.0	429.0	July 4	July 15	To cross-section the self-potential anomaly on line 5, 175' east of holes S-3A and S-7.
S-9	0.0	358.5	358.5	July 17	July 26	To cross-section self-potential anomaly on line 7, 200' east of Hole S-8.

Total footage for July: 903.5

Balance left on 3000' contract at the end of June: 829.0

Contract with EX core was completed on July 26th at 3074.5 feet.

From July 26th to the end of the month the drill crew was engaged in skidding in a new diamond drill from the Alaska Hwy for further drilling with AX equipment; other preparations for the change-over to the larger core size were also made.

A		N
	A.D.	
✓	J.I.	✓
✓	G.C.A.	✓
✓	G.E.	✓
✓	C.L.C.	✓
	M.H.F.	
	R.D.S.	



Miles Creek - Enger Option I.T.
Diamond Drilling Summary for July 1953.

115F

Hole S-7

Coords. of collar: 9,210N. Elevation of collar: 2,766 feet.
10,352E.

Holes S-7 and S-3A form a cross-section of the self-potential anomaly adjacent to line 3. Hole S-7 was drilled in the interbedded fine grained pyroclastic and intermediate lava; typical of the rock in which the sulphide has been found in other holes.

Intersections of note are as follows:

From 190.0 to 194.7 - $\frac{1.48\% \text{ Cu; Trace Ni.}}{4.7}$

From 210.0 to 261.5 - $\frac{0.04\% \text{ Cu; 2.05\% Ni.}}{51.5}$

The latter intersection, when projected to surface at a dip of $77^{\circ} 30'$ S., is in line with the values cut at bedrock by hole S-3A, i.e. $\frac{0.04\% \text{ Cu; 2.01\% Ni.}}{17.4}$.

Hole S-8

Coords. of collar (unsurveyed): 9,308 N. Elevation of collar: 2,849 feet.
10,522 E.

This hole was drilled to cross-section the self-potential anomaly on

line 5. The rock is the typical pyroclastic containing short irregular sections of pale grey lava.

From 110.7 to 118.5 heavy sulphide mineralization was cut; the pyrrhotite proved to be of a non-nickeliferous variety, the average for the section being $\frac{0.98\% \text{ Cu; Trace Ni.}}{7.8}$

From 338.0 to 348.0 there is between 20 and 30% sulphide which did not react to the dimethyl test although it is dominantly pyrrhotite; assays are pending for this section.

Miles Creek - Enger Option Y.T.
Diamond Drilling Summary for July 1953.

Hole S-9

Coords. of collar: (unsurveyed) 9,405 N. Elevation of collar: 2,916 feet.
10,700 E.

This hole was drilled to cross-section the self-potential anomaly on line 7. From 185.0 to 222.2 and from 259.5 to 307.0 there are sections of sulphide, mainly pyrrhotite, which are negative to weakly positive to the dimethyl test. Samples of split core have been submitted for assay.

Proposed Drilling

Subject to confirmation by assays, dimethyl spot testing indicates that the nickel content of the pyrrhotite diminishes eastward from Hole S-7 in the two cross-sections made by Holes S-8 and S-9. As the westward extension under the river has not been tested, Hole S-10 has been spotted to cross-section the mineralized zones adjacent to the river bank. The unsurveyed coordinates of the collar are 9,678 N and 10,080 E ; the direction of the hole is S-15°-W. Although the hole will be drilled concordant with the dip of the sulphide zones which are at 77° S, it is expected that a hole dip of 45° will cross both zones. As the hole can not be drilled north due to a bend in the river, the collar location of the hole has to be necessarily on the north side of the sulphide zones. Hole S-10 and subsequent ones will be of AX core size.

During the visit to the property of Mr.C.L.Coleman, Holes S-11 and S-12 were laid out to check the mineralized zones farther out under the river; Hole S-13 has been proposed to cut the mineralization at a deeper horizon beneath Hole S-7.


R.W. Baker,
Koidern Y.T.,
August 7, 1953.

115 F

PROSPECTORS AIRWAYS COMPANY LIMITEDMILES CREEK - ENGER OPTIONYUKON TERRITORYSummary of Diamond Drilling for August 1953

<u>Hole No.</u>	<u>From</u>	<u>To</u>	<u>Total</u>	<u>Started</u>	<u>Completed</u>	<u>Remarks</u>
S-10	0.0	496.0	496.0	August 4	August 17	To explore westward extension of mineralization, adjacent to river.
S-11	0.0	496.0	496.0	August 19	August 26	To explore extension of north zone beneath river.
S-12	0.0	313.0	313.0	August 26	Drilling at end of month.	To explore extension of south zone beneath river.

Total footage for August: 1305.0

Footage for contract with EX core - completed July 26th: 3074.5

" " " " AX " - for month of August: 1305.0

Cumulative total of footage drilled on property: 4379.5
(at end of August)

file
y 3/15b

A		N
	A.D.	
✓	J.I.	✓
✓	G.C.A.	✓
✓	G.E.	✓
✓	C.L.C.	✓
	M.H.F.	
	R.D.S.	



Miles Creek - Enger Option Y.T.
Diamond Drilling Summary for August 1953.

Hole S-10

Coordinates of collar: 9,768 N, 10,072 E, Elev. of collar: 2701'.
(Subject to transit survey)

Hole S-10 was drilled at S-15°-W to cross-section the mineralization adjacent to the river bank. The extension of the north zone was cut, but the south zone was not. Hole S-12 is being drilled to further check the latter zone beneath the river. Nineteen samples of split core have been sent for assay.

Hole S-11

Coordinates of collar: 9,678 N, 10,070 E, Elev. of collar: 2701'.
(Subject to transit survey)

Hole S-11 was drilled from the same collar position as Hole S-10, at S-45°-W, to cut the north mineralized zone beneath the river. It was also designed to explore for other possible mineralization which might exist toward the junction of the peridotite and the E-W break in which the known mineralization occurs. The north zone was cut at an obtuse angle to the dip, and for this reason the length of mineralized core is greater than the true width of the zone. Massive pyrrhotite was cut from 133.0 to 138.0; this is sample No. 252. Thirty-four samples are being split for assay. No mineralization worthy of assay is present in the hole past 217.0.

Hole S-12

Coordinates of collar: 9500 N, 10,081 E, Elev. of collar: 2740'
(Subject to transit survey)

Hole S-12 is at S-45°-W, designed to test the south zone beneath the river. Up to 321 ft., on the morning of Sept. 2nd, no mineralization worthy of assay had been cut.



Proposed Drilling

Following the completion of Hole S-12, a hole due south from the same collar is proposed. This hole would fill in a gap in the south zone between Holes S-12 and S-4, reducing the interval to about 175'. Should Hole S-12 prove to be free of mineralization, Hole S-13, as proposed above, would also test the ground closer to Hole S-4 which showed nickel values in the sulphide.

Subsequent to Hole S-13, a hole to cut the mineralization at a deeper horizon beneath Hole S-7 will be drilled. This hole was scheduled to be drilled after Hole S-12, but as the machine is in a good position to drill Hole 13 noted above, at the present time, the deep hole beneath S-7 will be Hole S-14.



R.W. Baker, Koidern Y.T.,

September 2, 1953.



PROSPECTORS AIRWAYS COMPANY LIMITEDMILES CREEK - ENGER OPTIONYUKON TERRITORYSummary of Diamond Drilling for Sept.1 to Sept.22, 1953. (completion)

<u>Hole No.</u>	<u>From</u>	<u>To</u>	<u>Total</u>	<u>Started</u>	<u>Completed</u>	<u>Remarks</u>
S-12	313.0	500.0	187.0	August 26	Sept.4	Drilled to cross-section the south mineralized zone beneath the White River.
S-13	0.0	433.0	433.0	Sept.6	Sept.13	Drilled to cut the extension of the south zone beneath the White River.
S-14	0.0	421.0	421.0	Sept.14	Sept.22	Drilled at 60° dip to cut the south zone beneath Hole S-7.

Footage for Sept. 1041.0
(completion of
drilling)

Total footage drilled on property at end of August: 4379.5

Footage for September (completed on 22nd) : 1041.0

Total footage drilled on property to end of contract: 5420.5

Note: The initial 3074.5 feet was drilled with EX equipment, the last part of the contract, 2346.0 feet, was drilled with AX equipment.

A		N
✓	A.D.	✓
✓	J.I.	✓
✓	G.C.A.	✓
✓	G.E.	✓
✓	C.L.C.	✓
	M.H.F.	
	R.D.S.	
✓	BOC	

115F

PROSPECTORS AIRWAYS COMPANY LIMITEDMILES CREEK - ENGER OPTIONYUKON TERRITORYNotes on the Progress of the Diamond Drilling at the Nickel Showing

1. Number of holes drilled: 14 (none over 500' deep or at a flatter angle than 45°, as stipulated by the contract).

Number of bits used : 510 (the impregnated type was not found to be satisfactory)

Footage drilled : 5420.5'

Footage per drill bit: 10.6'

- Number of 8 hr. drill shifts: 304 (approximately, as some shifts were 12 hr., and are also incorporated and balanced out as 8 hr. shifts)

Advance per shift (average): 18'

2. Average core recovery per hole: EX - 83%

AX - 69%

(As the AX holes were drilled adjacent to, and beneath the White River, where the rock appears to be less cohesive, the above percentages are not a good comparison)

3. The rock which contains the mineralization is interbedded pyroclastic and intermediate lava, highly fractured and very brittle. Some pale grey cherty horizons are also present. The best recovery was obtained in the mineralized zones where the sulphide has penetrated and healed the fractures in the rock.

Whitehorse Y.T.
Sept. 30, 1953

R.W. Baker
R.W. Baker