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1976 DRILLING

TTW 107

E.L. 234, TENNANT CREEK, N.T.

Distribution:

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Preussag

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Minerals

MG: 796

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P L A T E

Dwg. No.

Plate 1

DDH TTW 107 - Profile

14167

1. INTRODUCTION

TTW 107 was sited east of TTW 105 to test the down plunge potential of the magnetite body intersected by previous drill holes.

2. RESULTS

The drill hole intersected the magnetite body. Magnetite consists in the interval 210.50 to 228.50 ranged between 5 and 60% while lower grade disseminated magnetite (5 - 10%) persisted irregularly to 241.00 m. Only trace amounts of pyrite were noted and no economic mineralization was intersected.

2.1 Summary Log

0 - 48.00	Roller Bit.
48.00 - 69.30	Orange brown foliated feldspar porphyry ? sheared granite or gneiss.
69.30 - 70.30	Fault zone with poor recovery of feldspar porphyry, and vein quartz rubble.
70.30 - 86.90	Alternating bands of quartzite and softer feldspathic micaceous rock.
86.90 - 94.20	Micaceous quartzite with siltstone bands increasing to end.
94.20 - 123.90	Sandstone - siltstone - slate.
123.90 - 157.20	Porphyroidal sandstone - with bands to 4m of sandstone - siltstone - slate.
157.20 - 210.50	Sandstone - siltstone - slate. Some feldspar porphyroids towards end.
210.50 - 212.00	Magnetite - chlorite - quartz - ? feldspar schist
212.00 - 213.00	"Quartz - feldspar conglomerate" - sheared and partly replaced by quartz - chlorite - magnetite
213.00 - 217.00	Quartz - chlorite - magnetite schist
217.00 - 219.00	Quartz - chlorite - feldspar schist
219.00 - 226.00	Alternating 30 - 50cm bands of quartz - chlorite - magnetite schist and quartz - chlorite - feldspar schist.
226.00 - 228.50	Brecciated quartz - chlorite - magnetite

228.50 - 234.00	Slate and porphyroidal sandstone with disseminated magnetite.
234.00 - 241.00	Quartz - chlorite - feldspar schist and quartz chlorite magnetite schist.
241.00 - 250.00	Quartz - chlorite - feldspar schist, chlorite schist and chlorite phyllite. Minor crystal tuff and chlorite schist with feldspar porphyroids.
250.00 - 286.00	Crystal tuff.

2.2 Significant Assay

The highest copper assay was 1600 ppm from the interval 235 - 236m.

3. CONCLUSIONS

The drilling confirmed that the magnetic body interpreted from magnetic data and intersected by previous drill holes continues at depth. This body where intersected is persistently barren.

APPENDIX

TTW 107

DETAILED LOG & ASSAY RESULTS

TTW 107 - DETAILED LOG

Area: EL 234 - Warrego South

Prospect: WT 1

Collar: Co-ordinates 4632N 4470E
Declination 75°
Azimuth 360 magnetic

Total Depth 286m [0 - 48.00 RB 48.00 - 165.00 NQ
165.00 - TD BQ]

Surveys

<u>Depth</u>	<u>Declination</u>	<u>Azimuth</u>
49.00	69°	Acid Tube
72.00	68°	357
78.50	66°	Acid Tube
101.00	65°	353
131.00	60°	355
165.00	55°	352
205.00	47°	Near magnetite
235.00	41°	Acid Tube
281.00	36°	349

Drill Log:

0 - 48.00	Roller Bit
48.00 - 69.30	Orange brown foliated feldspar porphyry. 2 - 6m euhedral white feldspar make up 20% of rock. Matrix of quartz, feldspar and biotite. Rock has the appearance of a sheared granite or gneiss.
69.30 - 70.30	Very poor recovery of rubbly quartz and fragments of feldspar porphyry as above.
70.30 - 75.10	Broken and weathered brown foliated and layered alternating siliceous bands and softer ?

- feldspathic and more biotite rich band. Patches of chlorite, chloritic clay, biotite schist, chlorite schist and quartz sericite schist.
- 75.10 - 86.90 Pink and grey alternating siliceous sandstone and pink feldspathic rock either sericitic, chloritic or micaceous [biotite]. Intensely fractured in parts with some fractures rehealed by quartz and chlorite.
- 86.90 - 90.30 Grey micaceous quartzite.
- 90.30 - 94.20 Fractured brown foliated quartzite and laminated feldspathic siltstone with patches of quartz rubble.
- 94.20 - 123.90 Grey to dark grey foliated and laminated sandstone, siltstone, slate. Slate cleavage generally parallel to lamination except where laminae disturbed, possibly by slumping. Chloritization near some fractures.
- 123.90 - 127.40 Pinkish brown foliated porphyroidal silicified sandstone. Feldspar porphyroids 1 - 5% make 10% of rock. Foliation defined by chlorite wisps.
- 127.40 - 130.00 Grey green sandstone with some thin siltstone laminae and layers.
- 130.00 - 132.50 Pink grey to dark grey porphyroidal sandstone.
- 132.50 - 136.20 Grey-green grey foliated and laminated sandstone - siltstone - slate.
- 136.20 - 157.20 Pink brown porphyroidal sandstone - colour apparently due to partial jasperization. Core broken and rubbly in parts with some rehealing by mangiferous cements. Intense fracturing sub parallel to core in fractured zones.
- 157.20 - 165.00 Green grey to pink grey laminated sandstone and minor siltstone - slate. Quartz veining towards end.

- 165.00 - 205.45 Dark grey and green grey foliated and often laminated sandstone - siltstone - slate. Some patches broken core caused by fractures sub parallel to core and slaty cleavage.
- 205.45 - 210.50 Green grey foliated sandstone - siltstone - slate. Irregular fractures rehealed by vein quartz and minor jasper to 50cm in length. Chlorite content increasing to end. Feldspar porphyroids in sandstone towards end.
- 210.50 - 212.00 Magnetite - chlorite - quartz - feldspar schist. Magnetite 10 - 50% oxidized with red streak.
- 212.00 - 213.00 Porphyroidal rock partly replaced by vein quartz magnetite and chlorite. Pink rounded feldspar porphyroids to 2cm diameter have been sheared, broken and rock has been invaded by vein quartz with magnetite and chlorite.
- 213.00 - 217.00 Black and dark green quartz chlorite magnetite rock - foliation preserved in most places. Some scattered rounded white feldspar porphyroblasts to 5mm. Magnetite 40 - 60% Quartz 2% Magnetite with red streak.
- 217.00 - 219.00 Foliated quartz, chlorite feldspar schist banded dark green and light grey. Magnetite less than 2%.
- 219.00 - 226.00 Alternating 30 - 50cm zones of quartz chlorite feldspar schist and quartz chlorite feldspar magnetite rock. Magnetite 5 - 30%.
- 226.00 - 228.50 Brecciated and disturbed quartz chlorite [feldspar] magnetite rock 60% oxidized magnetite.
- 228.50 - 229.70 Pale green to dark green foliated siltstone - slate.
- 229.70 - 234.00 Greenish foliated porphyroidal sandstone. White feldspar porphyroids to 5mm. Gradual increase in the number and thickness of magnetite - chlorite bands. Overall 5% of oxidized magnetite.

234.00 - 236.00	Quartz chlorite feldspar schist. Less than 2% magnetite except for 20 cm quartz chlorite magnetite schist with two thin pyrite veins.
236.00 - 238.00	Quartz chlorite magnetite schist, 5 - 10% oxidized magnetite.
238.00 - 240.50	Green and grey foliated chloritic phyllite or slate.
240.50 - 241.00	Quartz chlorite magnetite schist 5 - 10% oxidized magnetite.
241.00 - 243.50	Quartz chlorite feldspar schist.
243.50 - 250.00	Chlorite schist, chloritic phyllite jasperized in parts and with occasional patches of crystal tuff and chlorite schist with feldspar porphyroids. Quartz veins common and 40cm vein quartz at 246.80 followed by 50cm of porphyroidal chloritic schist with up to 5% magnetite.
250.00 - 286.00	Dark grey green crystal tuff. Quartz veins 15cm at 263, 145cm 267.50 to 268.95, 10cm at 276.75 and 20cm chlorite schist with minor specular haematite at 283.10. Crystal tuff consists of 30 - 40% white feldspar ? phenocrysts 2-6mm in a green - grey fine grained matrix. Foliation is defined by chlorite wisps and elongation of feldspar blebs.

END OF HOLE.

TTW 107 - SAMPLING

Sample No.	Interval
A 1	210 - 1
2	211 - 2
3	212 - 3
4	213 - 4
5	214 - 5
6	215 - 6
7	216 - 7
8	217 - 8
9	218 - 9
10	219 - 220
11	220 - 1
12	221 - 2
13	222 - 3
14	223 - 4
15	224 - 5
16	225 - 6
17	226 - 7
18	227 - 8
19	228 - 9
20	229 - 230
21	230 - 1
22	231 - 2
23	232 - 3
24	233 - 4
25	234 - 5
26	235 - 6
27	236 - 7
28	237 - 8
29	238 - 9
30	239 - 240
31	240 - 1

ASSAY RESULTS TTW 107

(results in ppm.)

Interval	Sample No.	Cu	Pb	Zn	Ag	Bi	Au	S.G.
210 - 211	A 1	20	10	30	1.0	x	x	2.81
211 - 212	A 2	25	20	45	1.5	x	x	3.42
212 - 213	A 3	40	15	40	1.0	x	x	2.86
213 - 214	A 4	55	25	50	1.5	x	x	3.39
214 - 215	A 5	70	30	40	2.0	x	x	3.20
215 - 216	A 6	75	20	35	2.0	x	x	3.19
216 - 217	A 7	25	25	35	2.0	x	0.05	3.14
217 - 218	A 8	10	20	25	1.0	x	x	2.96
218 - 219	A 9	10	20	35	1.0	x	x	2.88
219 - 220	A 10	20	20	30	1.5	x	x	3.06
220 - 221	A 11	40	25	35	1.5	x	T	2.96
221 - 222	A 12	10	20	30	1.5	x	T	2.81
222 - 223	A 13	30	25	45	1.5	5	x	3.26
223 - 224	A 14	45	15	20	1.0	x	x	2.79
224 - 225	A 15	90	15	35	1.0	x	x	3.01
225 - 226	A 16	30	25	40	1.5	x	x	2.99
226 - 227	A 17	45	75	45	2.0	40✓	x	3.25
227 - 228	A 18	10	20	45	1.5	x	x	3.37
228 - 229	A 19	15	20	35	1.5	x	0.49	3.14
229 - 230	A 20	5	10	25	1.0	x	x	2.76
230 - 231	A 21	5	10	25	0.5	x	x	2.86
231 - 232	A 22	10	25	40	1.5	x	x	3.03
232 - 233	A 23	35	15	30	1.5	x	x	2.85
233 - 234	A 24	10	20	35	2.0	x	x	2.85
234 - 235	A 25	10	25	40	2.0	x	T	2.91
235 - 236	A 26	1600	20	40	2.0	x	T	2.99
236 - 237	A 27	605	20	30	2.0	x	x	2.86
237 - 238	A 28	150	30	35	1.5	10	0.05	3.00
238 - 239	A 29	10	15	20	1.0	x	x	2.79
239 - 240	A 30	5	30	30	1.5	x	x	2.90
240 - 241	A 31	5	15	35	1.5	x	x	2.84

E.L. 234

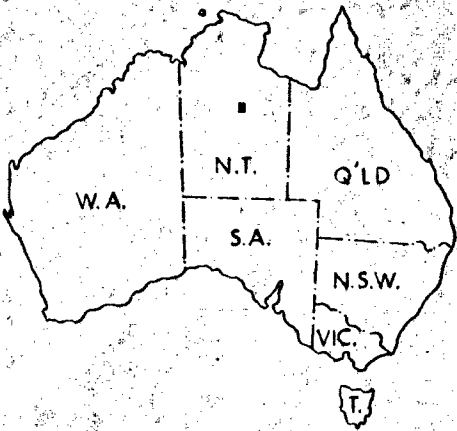
TENNANT CREEK AREA — NORTHERN TERRITORY

DDH TTW 107 PROFILE

COLLAR : 4470 E 4632 N

DECLINATION : 75° - 360° Mag.

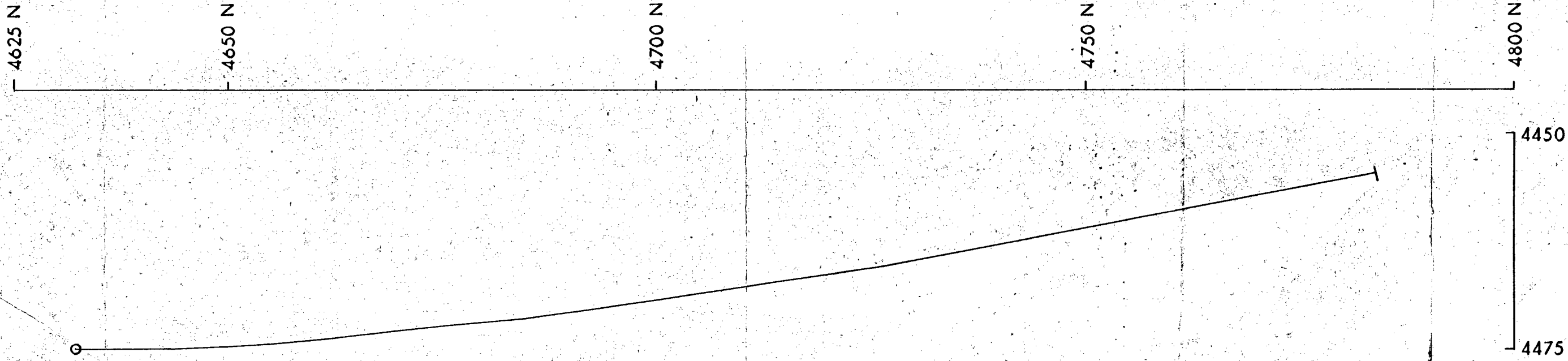
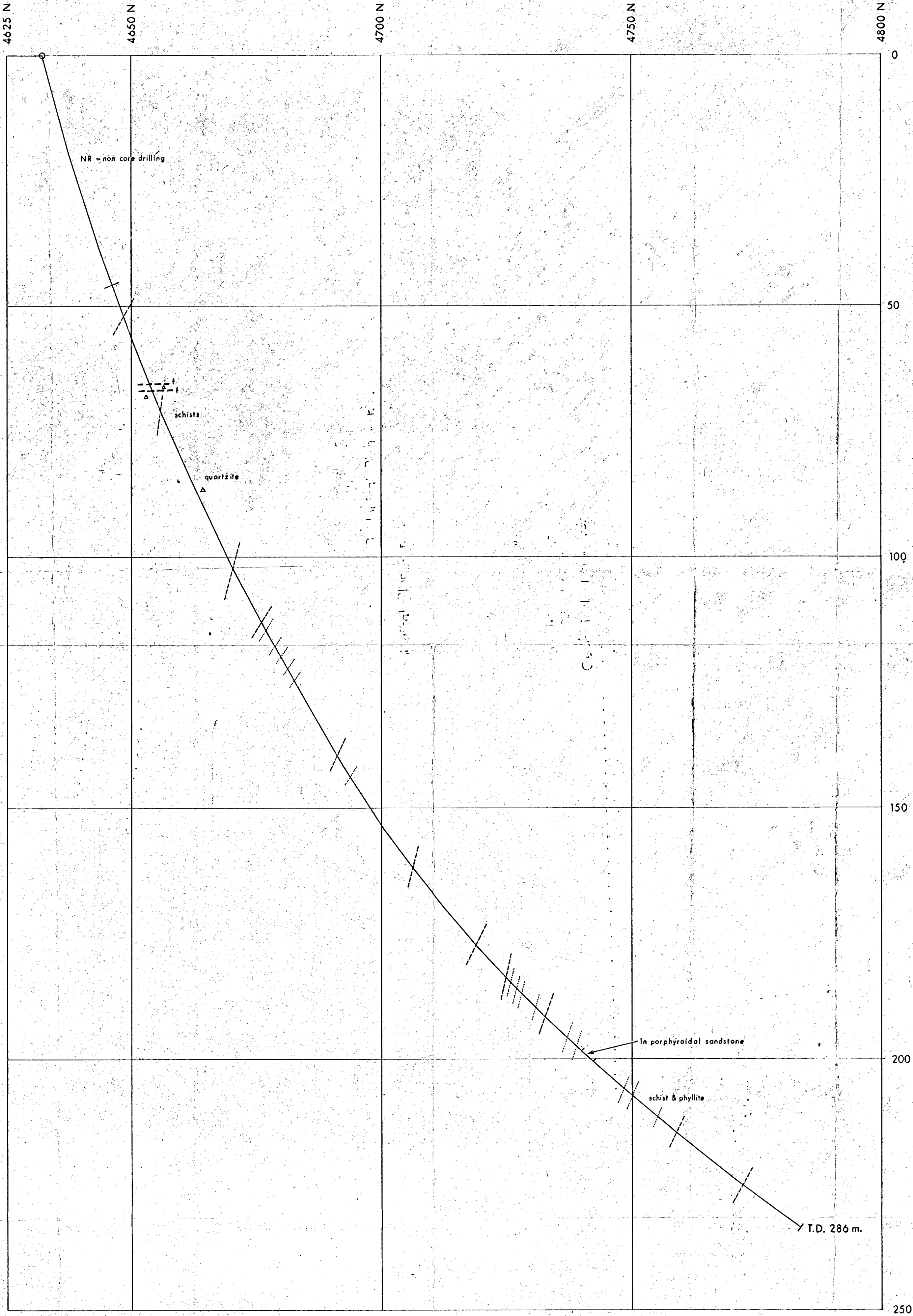
SCALE: 1/500



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Dept: MIN. GEOL. - BRIS	Drafted by: G.W.H.	Checked :	Base Plan :	I

LEGEND

- Collar
- Foliation or cleavage - orientation calculated
- Lithological boundary - orientation inferred
- Quartz vein - orientation unknown
- Minor fault - orientation unknown
- Broken core
- Rehealed breccia
- Foliated feldspar porphyry
- Interbedded siltstones & sandstones
- Sandstone & sericite
- Porphyroclastic sandstone
- "Quartz - feldspar conglomerate"
- Quartz - chlorite - feldspar schist
- Quartz - chlorite - magnetite estimates < 10% magnetite
- 10 - 30%
- 30 - 50% +
- Crystal tuff
- NR No recovery
- PR Poor recovery



PLAN VIEW OF DDH TTW 107