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318001

WESTERN MINING CORPORATION (TAS) PTY. LIMITED

EXPLORATION LICENCE NO. 16/76

AVOCA, TASMANIA

TERMINAL REPORT

001

318002

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318003

1. INTRODUCTION

Exploration Licence 16/76 was granted for an initial six months from 2nd August, 1976 and was extended for a further six months to 2nd August, 1977. The Licence was surrendered on 8th July, 1977. This report read in conjunction with our report for the six months ended 2nd February, 1977, reviews our exploration during the term of the Licence.

Exploration expenditure incurred during the term of the Licence was $50316.

After 2nd February, 1977, the exploration programme carried out consisted of drilling and geophysical logging of bore holes and interpretation of results.

Drilling was carried out in the Kingston-Bonneys Plains-Bona Vista area where 9 bore holes were drilled to a maximum depth of 85 metres.

2. DRILLING

Drilling was carried out between the 3rd of March and 3rd of May 1977 by H.J. Stacpoole, a drilling contractor from Launceston. The rig used was a Gemco 210B rotary drill.

9 Bore holes were drilled totalling 587.3 metres of open hole drilling and 2 metres of coring. (TAR. 80m-82m). Samples were taken at 2 metre intervals and the samples are now stored at the Tasmanian Department of Mines Store, Hobart.

Bore holes T.A.R. 1 to T.A.R. 4 were drilled using a Quick Gel-Quick Trol mud mixture which proved satisfactory but unnecessary as the subsequent holes were drilled satisfactorily without the use of any additives to the water.

Minor hole caving problems were experienced in TAR 3 and TAR 4 due to the presence of dolerite talus above the Triassic sediments. Casing through the talus prevented further caving.

TAR 6 was abandoned at 3.8 metres in dolerite talus due to very slow penetration rates.

The most suitable method of open hole drilling the Triassic sediments appears to be to commence drilling with a blade bit until penetration rate is less than 3m/hr then change to a rock roller bit to complete the hole. This method indicates the general prevalence of mudstones and soft sandstones higher in the sequence and hard sandstones lower in the sequence.

TABLE 1

Summary of Drilling Data

Bore Hole No. (± R.L.)	Co-ordinates Sheet 8414	T.D.	Comments
TAR. 1 (300m)	770N 539E	82m	80-82m cored Coal 37.3-37.4m Coal 40.7-40.8m
TAR. 2 (300m)	750N 500E	84.86m	Coal 8.9-9.0m Coal 10.0-10.4m Coal 11.0-11.4m Coal 14.1-14.5m Coal 21.0-21.1m Carbonaceous Shale 38.0-38.8m Coal 38.8-39.0m, Carbonaceous Shale 39.0-40.0m Coal 41.0-41.1m Carbonaceous Shale 41.1-42.0m Carbonaceous Shale 47.6-49.5m Coal 54.2-54.25m Carbonaceous Shale 54.85-55.00 Carbonaceous Shale 56.90-57.30

Bore Hole No. (± R.L.)	Co-ordinates Sheet 8414	T.D.	Comments
TAR. 3 (260m)	745N 526E	63.5m	Coal 11.6-11.7m Coal 19.7-19.8m Coal 37.4-37.5m Coal 42.0-42.2m Coal 43.8-44.1m
TAR. 4 (250m)	787N 524E	60.0m	no coal intersections
TAR. 5 (210m)	743N 519E	78m	no coal intersections
TAR. 6 (195m)	729N 513E	3.8m	hole abandoned in dolerite talus
TAR. 7 (210m)	731N 510E	60m	no coal intersections
TAR. 8 (260m)	751N 569E	80m	Coal and Carbonaceous Shale 30.8-31.1m Coal and Carbonaceous Shale 34.0-36.0m
TAR. 9 (300m)	796N 505E	78m	no coal intersections

3. GEOLOGY

All bores except TAR. 6 intersected Triassic sediments. Minor Cainozoic sediments were intersected with 7m and 6m of dolerite talus in TAR. 3 and TAR. 4 respectively and 2m of alluvium in TAR. 5.

Most bores contained 10cm-30cm of black loam at the surface.

Depth of visible weathering in the bores varied from 4 metres to 12 metres.

The four Triassic facies intersected probably have more complex lithologies than described because the descriptions are based on chip samples which do not allow detailed breakdown of lithologies.

A. TRIASSIC

The four facies outlined in the field mapping can be observed in the bore holes see plan No. 2401-03.

(a) Coal and Carbonaceous Shale facies

The coal-carbonaceous shale facies can be observed in bore holes TAR. 1, 2, 3 and 8.

Maximum thickness of the facies is 2m in TAR. 2 and TAR. 8, and the facies is commonly associated with the mudstone facies.

Selected samples were taken from TAR. 2 and analysed by Griffith Australia Services, Newcastle, N.S.W. The chip samples were washed to remove extraneous material and then analysed. The analysis indicated that the coal was very poor quality. (Table 2)

TABLE 2

COAL ANALYSIS

Sample		Inherent Moisture	Ash	Volatile Matter	Fixed Carbon	Crucible Swelling Number
TAR. 2	10.0-10.4m	2.5 (2.5)	36.9	19.9	40.7	½
TAR. 2	11.0-11.4m	2.5 (1.4)	29.1	25.6	43.8	½
TAR. 2	14.1-14.5m	2.5 (3.3)	52.1	19.1	26.3	½
TAR. 2	38.8-39.0m	2.5 (1.6)	29.5	32.6	35.4	½
TAR. 2	47.6-48.0m	2.5 (1.5)	71.1	11.9	14.5	-
TAR. 2	48.0-49.0m	2.5 (1.7)	80.3	10.3	6.9	-
TAR. 2	49.0-49.5m	2.5 (1.4)	86.0,	8.2	3.3	-

(b) Mudstone Facies

The mudstone facies occurs in all bore holes except TAR. 4, 7 and 9 and is up to 20m thick.

Colour of the mudstones vary from light to dark grey with the darker mudstones being slightly carbonaceous. Minor dark green mudstones are also present.

In the chip samples the mudstones are commonly sandy suggesting that the mudstones are interbedded with thin sandstone bands however contamination could be responsible for this observation.

(c) Lithic Sandstone and Siltstone facies.

Lithic sandstone and siltstone facies is up to 40m thick and occurs in all bores except TAR. 7 and 9.

The sandstones are generally light grey to grey, moderately hard, fine to medium grained and contain a large proportion of lithic fragments including coal and carbonaceous shale fragments.

The core from TAR. 1, 80-82m shows the presence of thin carbonaceous laminae and fragments in the lithic sandstone.

Generally the sandstones become more quartzose with depth and occasionally have a green colouration in the quartz rich zones.

(d) Quartzose Sandstone facies

The quartzose sandstone facies occurs in all bore holes except TAR. 1, 3 and 8 and appears consistently thicker than the other facies where drilled. TAR. 9 drilled only quartzose sandstones with a thickness of 78m.

The quartzose sandstones are white to light grey, occasionally pale green, fine to medium grained, moderately hard and contain greater than 90% angular quartz grains. Occasionally the sandstones contain a silt and mud matrix.

B. FACIES CORRELATION

Detailed correlation of the facies is not possible between bore holes however a broad correlation is shown on Plan No. 2401-02.

Two distinct units are suggested; an "upper unit" consisting of the coal and carbonaceous shale; lithic sandstone and siltstone; and mudstone facies, and a "lower unit" consisting essentially of the quartzose sandstone facies. If this broad correlation is correct then faulting would have to account for the adjustment of levels. If however lateral facies change had occurred no significant adjustment of levels would be necessary and Plan No. 2401-03 may be accurate.

The correlation on Plan No. 2401-02 is considered more likely to be correct as faulting is common in this area.

4. GEOPHYSICAL LOGGING

All the bore holes were geophysically logged at the end of the drilling programme except TAR. 6 (T.D. 3.8m). The logging unit was hired from Geoscience, Adelaide and was a small "suitcase" type. The logs run were gamma, point resistance and S.P.

TAR. 1 and 8 were blocked and could not be fully logged. Both of these bores were drilled on hill slopes and movement of the slope probably resulted in the holes being blocked. Any further logging of bore holes on slopes in this area should be carried out as soon as possible after the hole has been drilled.

The gamma logs showed very weak responses to changes in lithology and were of no help in correlation of the sediments between the bore holes.

The S.P. and resistivity logs indicated much greater variations in lithologies than the gamma logs both within individual bore holes and between bore holes, with lithologies grading from mudstones through to sandstones. Although the S.P. and resistivity logs appear to reflect the lithologies, correlation between the holes was still not possible as no characteristic units or lithologies could be delineated.

The S.P. logs have an opposite deflection to the normal situation i.e. shale line on the left and deflecting to the right in sandstones. This reversal is attributed to the formation waters being less saline than the

drilling fluid which is not the normal case.

In the absence of characteristic lithologies in the bore holes the geophysical logging was of limited use in correlation of the sediments.

As no thick coal seams were intersected in the drilling it was not possible to indicate whether the geophysical logs run were capable of locating the seams in the area.

The thin coal seams indicated in the lithological logs of TAR. 2 could be indicated by the small geophysical log responses in that part of the log, however these responses are not conclusive.

5. CONCLUSIONS AND RECOMMENDATIONS

In the Kingston-Bonneys Plains-Bona Vista area the dolerite appears to have transgressed the Triassic sequence close to the base of the coal measure sequence. However it is possible that the edges of the dolerite masses are faulted edges and that all bore holes were drilled in the uplifted block where the coal measures had been removed. The coal measures would then be still preserved beneath the dolerite.

A combination of transgression of the dolerite and block faulting appears most likely.

Detailed correlation of the sediments between bore holes is not possible due to the absence of "marker" lithologies and the variability of lithologies. Geophysical logging of the bore holes failed to help correlation.

Further work in the area could incorporate a stratigraphic hole in the Stanhope area to obtain coal samples and gain a better understanding of the section for correlation with the section already drilled. More shallow holes could also be drilled in the area to test the original concept of non-outcropping coal measures preserved beneath the alluvial cover.

APPENDIX I

DETAIL DRILL HOLE LOGS

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 1

010

Drill Type: GEMCO 210B

Co-ordinates: 8414 - 539770

Collar R.L ≑ 300m.

Dip: Azimuth:

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date: 5/3/77

Final Depth: 82m.

Cemented:

Casing removed ~~left in hole~~

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	4				Mudstone, pale brown to greyish brown, soft when wet, (soil, black, soft in top 0.5m).
4	10				Mudstone, dark grey to light grey, soft, carbonaceous, plus siltstone, grey to greyish brown, moderately hard.
10	14				Sandstone, light grey, soft to moderately hard, fine grained, minor carbonaceous shale fragments.
14	16				As above but medium grained sandstone.
16	20				Sandstone, light to medium grey, soft to moderately hard lithic, plus minor carbonaceous mudstone and buff brown siltstone.
20	30				As above but lighter grey.
30	36				Sandstone as above but finer grained with minor hard carbonaceous shale laminae.
36	38				Sandstone as above with minor hard carbonaceous shale, carbonaceous mudstone (soft) and minor coal. (Thin coal band at 37.30m ≑ 10cm thick).
38	44				Mudstone, light grey, soft, sandy, minor carbonaceous grains and laminae, minor coal. (Thin coal band at 40.70m ≑ 10cm thick).

Sheet No. 1

Hole No TAR 1

3180112

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 1

011

Drill Type: GEMCO 210B
Co-ordinates: 8414 – 539770
Project: AVOCA EL. 16/76
Final Depth: 82m
Collar R.L. ≑ 300m
Logged by: S.M. Ashton
Cemented:
Casing removed / left in hole
Dip: 90°
Azimuth:
Dat

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
44	50				Mudstone as above plus Mudstone, greyish green, moderately hard with carbonaceous laminae, plus minor sandstone (muddy) light grey, medium to fine grained, plus minor coal grains and carbonaceous shale laminae.
50	57.5				As above but sandstone predominates.
57.5	58.00				Mudstone and sandstone as above plus siltstone, greyish brown, moderately hard to hard, plus minor coal grains and carbonaceous shale fragments.
58.0	60.0				Sandstone, light grey, soft, medium to coarse grained (Muddy), plus siltstone as above and coal and carbonaceous shale fragments.
60	66				As above but sandstone fine to medium grained.
66	68				Mudstone as above plus minor sandstone, coal and carbonaceous shale as above.
68	70				As above mudstone predominates.
70	72				Sandstone light grey, moderately hard, fine to medium grained plus mudstone as above, plus minor sandstone light brown, moderately hard fine to medium grained, plus coal and carbonaceous shale fragments.
72	74				As above plus sandstone white, fine to medium grained (Muddy).plus coarse quartz grains. Hard drilling, coal grains near 74m, plus hard carbonaceous shale grains.

Sheet No. 2

3180126

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 1

Drill Type: GEMCO 210B	Co-ordinates: 8414 - 539770	Project AVOCA EL. 16/76	Final Depth: 82m
	Collar R.L. ÷ 300m	Logged by: S.M. Ashton	Cemented:
	Dip: 90° Azimuth:	Date	Casing removed / left in hole

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
74	76				As Above,
76	80				Sandstone light grey, moderately hard, fine to medium grained. Siltstone grey to dark grey, moderately hard. Mudstone light grey, soft crumbly with laminae of carbonaceous shale, plus coal grains and carbonaceous shale grains. Started coring at 80m to decide which material is contamination or not.
80	82	1.63m			Sandstone light grey, moderately hard, fine to medium grained, lithic with minor carbonaceous laminae and coal grains.

T.D. 82m — 0 - 80m open hole; 80 - 82m core

Sheet No. 3

Hole No TAR 1

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 2

Drill Type: GEMCO 210B	Co-ordinates: 8414 - 500750	Project AVOCA EL. 16/76	Final Depth: 84.86m
	Collar R.L. ≑ 300m		Cemented:
	Dip: 90° Azimuth:	Logged by: S.M. Ashton	Casing removed / left in hole
		Date 11/3/77	

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	4				Mudstone, pale brown, soft when wet, iron oxide weathering. Top ≑ 0.5m. Soil black. Bottom ≑ 1m mudstone, greyish brown, friable to moderately hard, minor weathering.
4	6				Mudstone, varicoloured greys, browns, pink, green friable to moderately hard, minor iron oxide staining.
6	8				Sandstone, light brown, soft to friable, fine to medium grained (muddy). Base of oxidized zone at 8m.
8	10				Mudstone, light grey soft, minor iron oxide staining. Coal seam 8.90 - 9.00m (≑ 10cm thick)
10	10.4				Coal Seam ≑ 0.4m thick.
10.4	11.0				Mudstone, light grey, soft (sandy).
11	11.4				Coal Seam ≑ 0.4m thick.
11.4	14.1				Mudstone, light grey soft (sandy)
14.1	14.5				Coal Seam ≑ 0.4m thick.
14.5	15.0				Mudstone as above plus coal.
15	16				Mudstone and coal as above plus Mudstone dark grey, moderately hard.

Sheet No. 1

Hole No. TAR 2

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 2

014

Drill Type... GEMCO 210B
Co-ordinates: 8414 - 500750
Project: AVOCA EL. 16/76
Final Depth: 84.86m
Collar R.L.: ≑ 300m
Cemented:
Logged by: S.M. Ashton
Casing removed / left in hole
Dip: 90° Azimuth:
Date:

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
16	18				Sandstone, light grey, friable to moderately hard, fine to medium grained (lithic), plus mudstone pale brown and green, moderately hard plus minor coal.
18	24				Mudstone, light grey, soft to moderately hard (silty) plus minor
(21 -	21.1 Coal Seam)				sandstone, mudstone and coal as above.
24	26				Sandstone, light grey, friable to moderately hard (lithic) plus mudstone light grey as above.
26	30				Mudstone, light grey, very soft plus minor mudstone light brown, moderately hard, plus minor sandstone light grey moderately hard.
30	33				Mudstone, dark grey, very soft, plus minor mudstone, light brown moderately hard near 30m plus minor sandstone light grey soft.
33	35.2				Mudstone, light grey, soft (sandy).
35.2	36				Mudstone, black to dark grey, soft, plus minor carbonaceous shale and coal.
36	38				Mudstone, light grey, soft plus sandstone, light grey, soft plus mudstone black as above.
38	38.5				Carbonaceous shale and siltstones light to dark grey moderately hard.
38.5	38.8				As above plus coal.
38.8	39.0				Coal seam ≑ 0.2m thick
39	40				Carbonaceous shale, and siltstone, light to dark grey, moderately hard.

Sheet No. 2
Hole No TAR 2

3180136

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 2

Drill Type: GEMCO 210B | Co-ordinates: 8414 ÷ 500750 | Project: AVOCA EL. 16/76 | Final Depth: 84.86m

Collar R.L. ÷ 300m | Logged by: S.M. Ashton | Cemented:

Dip: 90° Azimuth: | Date | Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No	5 SPECIMAN FOOTAGE	6 DESCRIPTION
40	41				Siltstone, grey, moderately hard plus minor sandstone grey, fine grained moderately hard.
41.0	41.1				Coal plus carbonaceous shale.
41.1	42				As above plus siltstone dark grey plus minor sandstone, grey, moderately hard.
42	44				Sandstone, grey, moderately hard, fine grained plus minor siltstone as above.
44	46				Sandstone grey moderately hard, fine grained plus sandstone light grey, moderately hard to hard, medium to coarse grained near bottom plus minor coal chips.
46	47.6				Mudstone dark grey, soft plus mudstone and carbonaceous shale.
47.6	48				Carbonaceous shale plus coal.
48	49				Carbonaceous shale plus coal.
49	49.5				Carbonaceous shale plus coal.
49.5	50				As above plus Sandstone light grey, moderately hard.
50	52				Sandstone, light grey to grey, moderately hard, fine grained plus minor white tubular fragments plus minor mudstone light grey, soft.
52	54.2				Sandstone as above plus minor coal.
54.2	54.25				Coal Seam ÷ 0.05m thick.

Sheet No. 3

Hole No TAR 2

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 2

Drill Type: GEMCO 210B	Co-ordinates: 8414 - 500750	Project: AVOCA EL. 16/76	Final Depth: 84.86m
	Collar R.L. ≈ 300m	Logged by: S.M. Ashton	Cemented:
	Dip: 90° Azimuth	Date: 14/3/77	Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
54.25	54.85				Sandstone as above.
54.85	55.00				Carbonaceous shale plus coal.
55.00	56.90				Sandstone as above.
56.90	57.30				Carbonaceous shale and siltstone.
57.30	58.00				Sandstone as above plus minor mudstone, white, soft.
58.0	60.00				Mudstone pale brown grey, friable to moderately hard, plus sandstone of light grey, soft fine grained.
60	62				Mudstone grey to light grey, moderately hard, plus siltstone grey to light grey moderately hard, plus minor sandstone as above.
62	64				Sandstone as above plus sandstone, grey, moderately hard fine to medium grained plus minor coal and carbonaceous shale.
64	66				Sandstone as above plus siltstone yellowish brown moderately hard to friable plus carbonaceous shale and coal.
66	82				Sandstone, light grey moderately hard, fine to medium grained, quartzose, minor lithics.
82	84.56				Sandstone as above plus minor carbonaceous mudstone.
					T.D. 84.86m

Sheet No. 4

Hole No TAR 2

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 3

017

Drill Type: GEMCO 210B

Co-ordinates 8414 - 526745

Collar R.L. ≑ 260m

Dip: 90° Azimuth:

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date 21/3/77

Final Depth: 63.5m

Cemented:

Casing NX 15m ~~removed~~ left in hole

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	7				Dolerite Talus (dolerite rocks and matrix)
7	11.6				Sand, yellowish brown fine-coarse grained, friable-loose. (derived from dolerite).
11.6	18.0				Sandstone (muddy) light grey, moderately hard, fine to medium grained plus minor coal near 11.6m (≑ 10cm thick).
18.0	26.0				Sandstone greenish grey, moderately hard, fine to medium grained, plus minor coal near 19.7m (≑ 10cm thick).
26.0	34.0				Sandstone as above but grey.
34.0	36.0				As above plus mudstone light grey soft.
36.0	37.6				Mudstone light grey, soft, plus minor sandstone as above plus minor Coal near 37.4m (≑ 10cm thick)
37.6	38.2				Sandstone light grey, moderately hard.
38.2	42.0				As above plus minor mudstone light grey soft.
42.0	42.2				Coal Seam ≑ 0.2m thick.
42.2	43.8				Mudstone light grey, soft.
43.8	44.0				Coal Seam.
44.0	44.1				Coal Seam.
44.1	46				Mudstone light grey soft, plus minor Sandstone, light grey as above.

Sheet No. 1

Hole No TAR 3

318018

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 3

018

Drill Type: GEMCO 210B

Co-ordinates: 8414 - 526745

Collar R.L. ≑ 260m

Dip: 90° Azimuth:

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date:

Final Depth: 63.5m

Cemented:

Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
46	56				Sandstone light grey moderately hard fine to medium grained (Muddy) mostly quartz grains.
56	60				Sandstone as above plus minor mudstone moderately hard grey.
60	63.4				Mudstone light grey, to grey soft plus minor sandstone bands as above.
63.4	63.5				Sandstone light grey, hard, fine to medium grained plus minor carbonaceous grains.
					Hole abandoned at 63.5m, rollers off roller, Cone bit left down hole.

Sheet No. 2

Hole No TAR 3

318019

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 4

019

Drill Type: GEMCO 210B

Co-ordinates 8414 – 524787

Collar R.L. ≑ 250m

Dip: 90° Azimuth:

Project AVOCA EL. 16/76

Logged by: S.M. Ashton

Date 1/4/77

Final Depth: 60m

Cemented:

Casing 10.5m ~~removed~~ left in hole

1 FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2			2	Mudstone yellowish brown soft, iron oxide stained. (soil black, top 0.6m)
2	4				As above plus dolerite wash fine to very coarse grained, hard.
4	7.5				Dolerite scree browns dark brown, reds, very hard, some dolerite boulders, plus gravel and fine to very coarse quartz grains, angular
7.5	8.0				Sand, light brownish yellow, very fine to medium grained, angular, micaceous (probably derived from underlying sandstones).
8	10.0				Sandstone light brownish yellow moderately hard to friable, fine to medium grained, iron oxide stained, micaceous, quartzose.
10	12				Sandstone light grey, moderately hard, medium grained minor mica.
12	15				Sandstone light bluish grey, medium to fine grained moderately hard quartzose, mica. (bluish green colour due to possible dolerite).
15	16				Sandstone light grey, white, medium grained, quartzose plus minor mica.
16	51				Sandstone light bluish grey, moderately hard, fine to medium grained quartzose, well sorted, minor mica (plus minor coal 18-20m).

Sheet No. 1

Hole No TAR 4

3180230

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 4

Drill Type: .....

Co-ordinates: 8414 - 524787

Collar R.L. ≑ 250m

Dip: 90° Azimuth: .....

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date: 4/4/77

Final Depth: 60m

Cemented: .....

Casing removed / left in hole

1 m FROM	2 m TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
51	57.5				Mudstone, Siltstone, Sandstone, interbedded grey to dark grey, friable to moderately hard. (water oily), possible Permian?
57.5	60				Sandstone light grey moderately hard, medium grained, quartzose.
					T.D. 60m

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 5

Drill Type: GEMCO 210B
Co-ordinates: 8414-519743
Collar R.L.: ≈ 210m
Dip: 90° Azimuth:
Project: AVOCA EL. 16/76
Logged by: S.M. Ashton
Date: 5/4/77
Final Depth: 78m
Cemented:
Casing: removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2m				Black soil plus Mudstone near base, pale brown, soft, iron oxide staining.
2	4				Gravel (river wash) loose quartz rich.
4	8				Mudstone, light grey, soft Triassic.
8	14				Sandstone, light grey, soft, fine to medium grained, lithic, minor coal.
14	16				Mudstone light, grey soft.
16	17.4				Mudstone as above.
17.4	17.8				Mudstone, grey to dark grey soft.
17.8	24				Sandstone light grey-white, soft minor carbonaceous mudstone, muddy.
24	32				Sandstone grey to dark grey, soft to moderately hard fine to medium grained plus mudstone grey to dark grey soft lithic.
32	43				Mudstone light bluish grey, soft.
43	78				Sandstone light grey to grey, moderately hard fine to medium grained, (muddy) plus minor carbonaceous mudstone, quartzose with lithics.
					T.D. 78m
					(hole abandoned due to broken bit down hole)

Sheet No. 1
Hole No TAR 5

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 6

022

Drill Type: GEMCO 210B

Co-ordinates 8414 - 513729

Collar R.L. ≑ 195m

Dip: 90° Azimuth:

Project AVOCA EL. 16/76

Logged by: S.M. Ashton

Date 17/4/77

Final Depth 3.5m

Cemented:

Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2				Soil black mudstone pale brown plus dolerite scree.
2	3.8				Dolerite scree.
					Hole abandoned at 3.8m due to very slow drilling and hole collapsing.

Sheet No. 1

Hole No TAR 6

3180923

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** Hole No. TAR 7

Drill Type: GEMCO 210B

Co-ordinates: 8414 - 510731

Collar R.L: ≑ 210m

Dip: 090° Azimuth:

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date: 17/4/77

Final Depth: 60m

Cemented:

Casing: removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2				Soil black top 0.2m, Sandstone pale brown, fine to medium grained quartzose.
2	5				Sandstone as above plus gravel and very coarse sand.
5	8.9				Sandstone, whitish grey, very fine to medium grained quartzose, moderately hard.
8.9	12				Sandstone pale green, fine to medium grained, moderately hard, quartzose.
12	35.8				Sandstone whitish grey, moderately hard, fine to medium grained quartzose plus minor lithics from 24m on.
35.8	38				Sandstone, brownish grey, moderately hard, medium to coarse grained quartzose plus lithics i.e. coarse sandstones, green and blue siltstones, green sandstone, orange, red and pink quartz or feldspar.
38	42				As above plus Sandstone whitish grey.
42	46				Sandstone whitish grey, fine to medium grained moderately hard, quartzose, minor lithics.
46	54				Sandstone, brownish grey, moderately hard fine to medium grained, quartzose plus lithics, yellow, reds, greens.
54	60				Sandstone, whitish grey, moderately hard, fine to medium grained quartzose plus minor lithics, yellows, reds, greens.
					T.D. 60m

Sheet No. 1

Hole No. TAR 7

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** 318025 Hole No. TAR 8

024

Drill Type: GEMCO 210B

Co-ordinates: 8414 - 569 751

Collar R.L. ≑ 260m

Dip: 90° Azimuth:

Project: AVOCA 16/76

Logged by: S.M. Ashton

Date 21/4/77

Final Depth: 80m

Cemented:

Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2				Soil black plus Sandstone pale brown soft plus mudstone pale brown moderately hard to crumbly, plus minor white kunkar.
2	4				Sandstone light greenish brown, moderately hard to soft, medium grained lithic plus minor kunkar.
4	10				Sandstone as above but finer grained.
10	13				Sandstone green, medium grained, soft to moderately hard lithic. Base of weathering 13m.
13	22				Sandstone light grey, fine to medium grained, soft to moderately hard lithic plus minor coal grains.
22	30.8				As above but more mud.
30.8	31.10				Carbonaceous shale plus minor coal.
31.10	34				Carbonaceous shale and mudstone, plus mudstone light brown soft.
34	36				Carbonaceous shale and coal TAR 8-1.
36	38				Mudstone grey to light grey, soft (sandy) plus carbonaceous shale and minor coal plus sandstone grey, soft fine to medium grained all interbedded.
38	40				As above but more carbonaceous shale.
40	56				Sandstone grey to light grey, soft to moderately hard, fine to medium grained, lithic (muddy) plus mudstone and carbonaceous shale as above.

Sheet No. 1

Hole No. TAR 8

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** 318026 Hole No. TAR 8 025

Drill Type: GEMCO 210B

Co-ordinates: 8414 - 569 751

Collar R.L. ≑ 260m

Dip: 90° Azimuth:

Project: AVOCA EL. 16/76

Logged by: S.M. Ashton

Date 27/4/77

Final Depth: 80m

Cemented:

Casing removed / left in hole

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
56	76				Sandstone light grey fine to medium grained, soft to moderately hard (lithic) plus minor mudstone light grey soft plus minor carbonaceous shale.
76	80				Sandstone as above but grey, and medium grained.
					T.D. 80m

Sheet No. 2

Hole No. TAR 8

Form 57 WESTERN MINING CORPORATION LIMITED — **DRILL HOLE LOG** 318027 Hole No. TAR 9 026

Drill Type: GEMCO 210B | Co-ordinates: 8414 - 505796 | Project: AVOCA EL. 16/76 | Final Depth: 78m

Collar R.L. ≑ 300m | Cemented:

Logged by: S.M. Ashton | Casing removed / left in hole

Dip: 90° Azimuth: | Date: 29/4/77

1 FROM	2 TO	3 CORE RECOVERY	4 SPECIMAN No.	5 SPECIMAN FOOTAGE	6 DESCRIPTION
0	2m				Soil brown (10cm) plus mudstone brown, soft, plus sand, light brow loose, quartzose.
2	4m				Sandstone light, brown, moderately hard to hard, fine to medium grained quartzose.
4	7m				Sandstones yellowish brown moderately hard to hard, fine to medium grained quartzose. Base of weathering 7m.
7	9m				Sandstone light grey and bluish green, moderately hard to hard, quartzose fine to medium grained.
9	12m				Sandstones as above plus minor bands of mudstone, reddish brown, plus fine laminae of siltstone bluish grey, plus minor lithic grai
12	16				Sandstones as above plus sandstone whitish grey, moderately hard, fine to medium grained quartzose.
16	45				Sandstone whitish grey, moderately hard, fine to medium grained quartzose well sorted, even grained.
45	48				Sandstone as above plus minor coarse lithic grains and mudstone reddish brown.
48	78				Sandstone light greenish grey, fine to medium grained, moderately hardm quartzose plus minor lithic grains (reds, yellows and blacks)
					T.D. 78m

Sheet No. 1

Hole No. TAR 9

APPENDIX II

SAMPLE DATA SHEETS

318029

028

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. TAR 1

Co-ordinates 8414-539770 | Azimuth | Dip 90° | Project AVOLA EL.1676. | Sampled by S.M. ASHTON.

Collar R.L. | Date 5-3-77. | Material

1 Sample No.	2 3 Location	4m Interval	5	6	7	8	9	10	11	12	13
DA29501		0-2									Black Soil + mudst soft greenish brown.
2		2-4									" " " "
3		4-6									mudst, Sltst, dark grey, carbonaceous.
4		6-8									" " "
5		8-10									"
6		10-12									SS. light grey fine grained, soft to mod hd.
7		12-14									" " " "
8		14-16									SS. as above, Int coarser.
9		16-18									as above, plus minor Sltst brown, plus minor Coal & Carb sh.
10		18-20									" "
11		20-22									" "
12		22-24									" "
13		24-26									" "
14		26-28									" "
15		28-30									" "
16		30-32									" "
17		32-34									" "
18		34-36									" "
19		36-38									as above + minor Coal & Carb sh,
20		38-40									mudst, light grey, sandy.

Sheet No 1

Hole No TAR 1.

318030

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. TAR 1

Co-ordinates 8414 - 539770 | Azimuth | Dip 90° | Collar R.L. | Project ADCAEL 16/76. | Sampled by S.M. ASHTON. | Date 6-3-77. | Material

1 Sample No.	2 3 Location	4 Interval m	5	6	7	8	9	10	11	12	13
DH 29521		40-42									Mudst, light grey, soft, sandy.
22		42-44									" " " "
23		44-46									" " " " + S.S. light grey + Carb. Sh.
24		46-48									" " " " "
25		48-50									" " " " "
26		50-52									" " " "
27		52-54									" " " "
28		54-56									" " " "
29		56-58									" " " plus hard Sid. (57.5m
30		58-60									" " " "
31		60-62									" " " "
32		62-64									" " " "
33		64-66									" " " "
34		66-68									" " " "
35		68-70									mudst greenish grey + Carb shale.
36		70-72									" "
37		72-74									SS. light grey + mudst as above.
38		74-76									" "
39		76-78									SS. light - dk grey plus minor Coal.
40		78-80									" " "

Sheet No 2

Hole No TAR. 1

318031

030

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. TAR 1

Co-ordinates 8244-539770 | Azimuth | Dip 90° | Project: ARUNTA E.L. 16/76. | Sampled by S.M. ASHTON.

Collar R.L. | Date 9-3-77. | Material

1 Sample No.	2 Location	3	4 m Interval	5	6	7	8	9	10	11	12	13
DA 29544			80-82									Sandstone light grey. CORE
					END OF HOLE			82m.				
									0-80m			open hole.
									80-82m			Core.

Sheet No 3

Hole No TAR 1

318032

031

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. TAR.2.

Co-ordinates 8444-500750 | Azimuth | Dip 90° | Project: AUGATE L.11/76 | Sampled by S.M. ASHTON.

Collar R.L. | Date 11-3-77. | Material

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	13
DM 29542			0-2									Black soil + mudst. lt brn.
43			2-4									mudst. greyish brn.
44			4-6									mudst variicoloured brns, grys, pinks.
45			6-8									S.S. lt brn.
46			8-10									mudst lt grey.
47			10-12									" "
48			12-14									" "
49			14-16									" " + coal.
50			16-18									S.S. lt gy + mudst pale brn.
51			18-20									mudst lt gy " " " + coal.
52			20-22									" " " " "
53			22-24									mudst. " " + S.S.
54			24-26									S.S. lt gy fine to med grained.
55			26-28									mudst. light grey. + S.S. lt gy.
56			28-30									" " " "
57			30-32									" " "
58			32-34									" " "
59			34-36									mudst. black.
60			36-38									mudst lt gy.
61			38-40									Coal + Carbish + Slst dk gy.

Sheet No. 1

Hole No. TAR.2.

032

318033

Form 58 WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET** Hole No. TAR.2

Co-ordinates 8414-500750 | Azimuth Dip 90° | Project: AVOCA E.L.16/76 | Sampled by S.M. ASHTON.

Collar R.L. | Date 14-3-77. | Material

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	13
												Slst, S.S. as above, coal & carb sh.
AA 29562			40-42									S.S. grey + minor Slst.
63			42-44									
64			44-46									"
65			46-48									mudst, dk gy, soft + carb sh plus coal.
66			48-50									" " "
67			50-52									S.S. lt gry + mudst lt gry
68			52-54									S.S. as above.
69			54-56									Coal & carb sh + S.S. above.
70			56-58									Carb sh + Slst.
71			58-60									mudst pale brown.
72			60-62									mudst grey. + Slst.
73			62-64									S.S. lt gy quartzose
74			64-66									" "
75			66-68									" "
76			68-70									" "
77			70-72									" "
78			72-74									" "
79			74-76									" "
80			76-78									" "
81			78-80									" "

Sheet No 2
Hole No TAR.2

11014

033

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. THR. 2

Co-ordinates 8414- 5070 | Azimuth | Dip 90° | Project: ALBEAE-2. 16/76. | Sampled by S.M. ASHTON.

Collar R.L. | Date 17-3-77. | Material

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	13
DA 29582			80-82									S.S. as above
			82-84.86									" " plus minor Carb Sh.
					END OF HOLE 84.86m.							

Sheet No 3

Hole No THR. 2.

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318035

034

Hole No. TAR 3.

Co-ordinates 8244-526745.

Azimuth ..... Dip 90°

Collar R.L. .....

Project: AVOCA EL 6/76

Sampled by S.M. ASHTON.

Date | Material

1 Sample No.	2 Location	3 Location	4 mN Interval	5	6	7	8	9	10	11	12	13
DA29584			0-2									Dolerite tailings
85			2-4									"
86			4-6									"
87			6-8									Sand yel brn.
88			8-10									" "
89			10-12									S.St. ltgy, + coal + Sand as above.
90			12-14									" "
91			14-16									" "
92			16-18									" "
93			18-20									S.S. Wmstn gy, fn-md. + Coal.
94			20-22									" " "
95			22-24									" "
96			24-26									" "
97			26-28									S.S. grey, muddy.
98			28-30									" "
99			30-32									" "
DA29600			32-34									" "
1			34-36									" + mudst. ltgy. soft
2			36-38									mudst ltgy. " " + S.S. ltgy.
3			38-40									

Sheet No 1

Hole No TAR 3

318026 035

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No TAR-3.

Co-ordinates 8414 - 526745 | Azimuth | Dip 90° | Project AVOCA E.L. 16/76 | Sampled by S.M. ASHTON.

Collar R.L. | Date 25-3-77. | Material

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	13
DA 29604			40-42									as above
5			42-44									mudst lt gy silt + coal.
6			44-46									" " "
7			46-48									S.S. lt gy, med hd, muddy.
8			48-50									" "
9			50-52									" "
10			52-54									" "
11			54-56									" "
12			56-58									" " + mudst lt gy.
13			58-60									" " "
14			60-62									mudst as above
15			62-63.5.									S.S. lt gy, + mudst.

END OF HOLE 63.5m.

(abandoned due to broken bit down hole).

Sheet No 2

Hole No TAR. 3

318037 036

Form 58 WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET** Hole No. TAR-4.

Co-ordinates 8944 - 52487. Azimuth Dip 90° Project: ARDEA E-L 1676 Sampled by S.M. ASHTON.

Collar R.L. Date 1-4-77. Material

1 Sample No.	2 Location	3	4 m Interval	5	6	7	8	9	10	11	12	13
DA29616			0-2									Sil + mudst yel brn.
17			2-4									" " plus dolerite talus.
18			4-6									Dolerite talus (brown)
19			6-8									" "
20			8-10									Sand + S.S. lt brn yel.
21			10-12									S.S. lt grn
22			12-14									S.S. lt whitish grey.
23			14-16									" " "
24			16-18									" " " + S.S. whitish grey.
25			18-20									S.S. lt whitish grey.
26			20-22									" "
27			22-24									" "
28			24-26									" "
29			26-28									" "
30			28-30									" "
31			30-32									" "
32			32-34									" "
33			34-36									" "
34			36-38									" "
35			38-40									" "

Sheet No 1
Hole No. TAR-4

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318038

037

Hole No. TAR 4

Co-ordinates 8244-524787. | Azimuth | Dip 90° | Collar R.L. | Project AVOCA E.L 46/76. | Sampled by S.M. ASHTON. | Date 4-4-77. | Material

1 Sample No.	2 Location	3	4 Interval m	5	6	7	8	9	10	11	12	13
DA 29636			40-42									as above
37			42-44									"
38			44-46									"
39			46-48									"
40			48-50									S.S. Slt. grey - dk grey.
41			50-52									"
42			52-54									"
43			54-56									"
44			56-58									"
45			58-60									S.S. Lt grey
				END OF HOLE				60 m.				

Sheet No 2

Hole No TAR 4

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318039

038

Hole No. TAR.5.

Co-ordinates 8444-51743 | Azimuth | Dip 90° | Project: ANDRADE L. 16/76. | Sampled by S.M. ASHTON.

Collar R.L. | Date | Material

1 Sample No.	2 3 Location	4 m Interval	5	6	7	8	9	10	11	12	13
DA 29646		0-2									Soil black. plus mudst.
47		2-4									Gravel.
48		4-6									mudst. lt grey, soft.
49		6-8									" " "
50		8-10									S.S. lt grey, soft.
51		10-12									" "
52		12-14									" "
53		14-16									" "
54		16-18									" "
55		18-20									mudst lt grey, soft (Sandy)
56		20-22									" "
57		22-24									" "
58		24-26									mudst Sdst, lt grey, soft. + S.S.
59		26-28									" "
60		28-30									" "
61		30-32									" "
62		32-34									S.S. (muddy) light bluish grey,
63		34-36									" "
64		36-38									" "
65		38-40									" "

Sheet No. 1

Hole No. TAR.5.

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318040

039

Hole No. TAR.5.

Co-ordinates 8244-519743 | Azimuth | Dip 90° | Collar R.L. | Project AVOCA E.L. 16/76. | Sampled by S.M. ASHTON.

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	Date	Material
DA 29666			40-42										as above
67			42-44										S.S. ltgy, mdhd. (muddy)
68			44-46										" "
69			46-48										S.S. ltgy " "
70			48-50										" "
71			50-52										" "
72			52-54										" "
73			54-56										" "
74			56-58										" "
75			58-60										" "
76			60-62										" "
77			62-64										" "
78			64-66										" "
79			66-68										" "
80			68-70										" "
81			70-72										" "
82			72-74										" "
83			74-76										" "
84			76-78										" "
				END OF HOLE. 78m									" "

Sheet No 2

Hole No TAR.5.

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318041

040

Hole No. THR.6

Co-ordinates 8414-513729.

Azimuth

Dip 90°

Collar R.L.

Project AVOCA E.L. 16/76.

Sampled by S.M. ASHTON.

Date

Material

1 Sample No.	2 Location	3 Location	4 Interval m	5	6	7	8	9	10	11	12	13
DA 29685			0-2									Soil + mudst + dolerite talus.
86			2-3.8									Dolerite talus. very hard.
					END OF HOLE (hole abandoned due to very hard drilling)				3.8m.			

Sheet No 1

Hole No THR.6

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318042

041

Hole No. TAR 7

Co-ordinates 8214-510731. | Azimuth | Dip 90 | Collar R.L. | Project: AUBLA. E.L 16/76. | Sampled by S.M. ASHTON. | Date 18-4-77. | Material

1 Sample No.	2 Location	3 Location	4 Interval	5	6	7	8	9	10	11	12	13
DA 29687			0-2									S.S. pale brown.
88			2-4									" " plus gravel.
89			4-6									" " plus S.S. whitish grey.
90			6-8									S.S. whitish grey.
91			8-10									" " + S.S. light greenish grey.
92			10-12									" " " " "
93			12-14									S.S. whitish grey. quartzose.
94			14-16									"
95			16-18									"
96			18-20									"
97			20-22									"
98			22-24									"
99			24-26									"
1 29700			26-28									"
1			28-30									"
2			30-32									"
3			32-34									"
4			34-36									"
5			36-38									S.S. brownish grey.
6			38-40									"

Sheet No 1

Hole No TAR 7

1

316043 042

Form 58 WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET** Hole No. TAR 7.

Co-ordinates 8214-510731. Azimuth Dip 90° Project AUSCAREA-16/76 Sampled by S.M. ASHTON.

Collar R.L. Date 19-4-77. Material

1 Sample No.	2 3 Location	4 Interval	5	6	7	8	9	10	11	12	13
AA 29707		40-42									as above.
8		42-44									S.S. whitish grey, quartzose.
9		44-46									" " "
10		46-48									S.S. reddish brn gy. + lithics.
11		48-50									" "
12		50-52									" "
13		52-54									" "
14		54-56									S.St whitish gy.
15		56-58									" "
16		58-60									" "

END OF HOLE 60m

Sheet No 2

Hole No TAR 7.

043

318044

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. TAR 8

Co-ordinates 8414-569-751 | Azimuth | Dip 90° | Collar R.L. | Project ARUCAEL 16/76 | Sampled by S.M. ASHTON | Date | Material

1 Sample No.	2 3 Location	4 Interval	5	6	7	8	9	10	11	12	13
DA 29717		0-2									Soil block. + S.S. pale brown.
18		2-4									S.S. lt greenish brown. lithic + kunker.
19		4-6									" " "
20		6-8									" " "
21		8-10									" " "
22		10-12									S.S. green, lithic.
23		12-14									" " "
24		14-16									S.S. light grey, lithic plus minor coal.
25		16-18									" "
26		18-20									" "
27		20-22									" "
28		22-24									" " plus mudst-lt gy.
29		24-26									" " "
30		26-28									" " "
31		28-30									" " "
32		30-32									Carb sh + mudst. lt brn + minor coal.
33		32-34									" " "
34		34-36									Carb sh + Coal.
35		36-38									mudst grey soft.
36		38-40									"

Sheet No 1

Hole No TAR 8.

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318045 Hole No. TAR 8.

041

Co-ordinates 8414-56975 | Azimuth | Dip 90° | Project ARUCAEL-16/76 | Sampled by S.M. ASHTON.

Collar R.L.

1 Sample No.	2 Location	3	4 Interval	5	6	7	8	9	10	11	12	13 Date / Material
DA29737			40-42									S.S. grey soft fn-md grained. lithic.
38			42-44									〃
39			44-46									〃
40			46-48									〃
41			48-50									〃
42			50-52									〃
43			52-54									〃
44			54-56									〃
45			56-58									S.S. light grey fn-md. 〃
46			58-60									〃
47			60-62									〃
48			62-64									〃
49			64-66									〃
50			66-68									〃
51			68-70									〃
52			70-72									〃
53			72-74									〃
54			74-76									〃
55			76-78									S.S. grey md lith.
56			78-80									〃
				END OF HOLE				80 m				

Sheet No. 2

Hole No. TAR 8

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

318046

045

Hole No. TAR 9.

Co-ordinates 8244-505796 | Azimuth | Dip 90° | Project: TWOCA E.L. 16/76. | Sampled by S.M. ASHTON.

Collar R.L. | Date 29-4-77. | Material

1 Sample No.	2 Location	3 Location	4 Interval	5	6	7	8	9	10	11	12	13
A.29757			0-2									Soil black. phys rmedt brown + S.S. brown.
58			2-4									S.S. lt brn.
59			4-6									S.S yell brn quartzose.
60			6-8									" " "
61			8-10									S.S. lt gry. + rmedt. & slt.
62			10-12									" " "
63			12-14									" " "
64			14-16									" " "
65			16-18									S.S. wh/brn gry, quartzose
66			18-20									" "
67			20-22									" "
68			22-24									" "
69			24-26									" "
70			26-28									" "
71			28-30									" "
72			30-32									" "
73			32-34									" "
74			34-36									" "
75			36-38									" "
76			38-40									" "

Sheet No 1

Hole No TAR 9.

318047 046

Form 58

WESTERN MINING CORPORATION LIMITED — **SAMPLE DATA SHEET**

Hole No. THR.9.

Co-ordinates 8414-505796 | Azimuth | Dip 90° | Project HOCKEY·L·1676 | Sampled by S.M. ASHTON

Collar R.L. | Date 8-4-77. | Material

1 Sample No.	2 3 Location	4 Interval	5 6 7 8	9 10 11 12	13
#29777		40-42			SS whitish gy. quartzose
"		42-44			"
79		44-46			"
80		46-48			"
81		48-50			SS. lt greenish gy quartzose
82		50-52			"
83		52-54			"
84		54-56			"
85		56-58			"
86		58-60			"
87		60-62			"
88		62-64			"
89		64-66			"
90		66-68			"
91		68-70			"
92		70-72			"
93		72-74			"
94		74-76			"
95		76-78			"
			END OF HOLE.	78m	

Sheet No 2

Hole No THR.9

APPENDIX III

GEOPHYSICAL LOGS

LEGEND

SEDIMENTARY DEPOSITS

CAINOZOIC (CAINOZOIC)

- C — UNDIFFERENTIATED — Quaternary-alluvium, swampy loam (Tertiary sediments
- Qt — (QUATERNARY) Dolerite Talus

MESOZOIC (TRIASSIC)

- R — Undifferentiated.
- Rc — Coal & carbonaceous shale facies
- Rm — Mudstone facies
- Rl — Lithic sandstone & siltstone facies
- Rq — Quartzose sandstone facies
- Rqc — . . . (very coarse grain)

PALEOZOIC (PERMIAN)

- P — Undifferentiated.

(SILURIAN)?

- S — Mathinna Beds

IGNEOUS ROCKS

TERTIARY

- Tb. — Basalt

JURASSIC

- Jd. — Dolerite

DEVONIAN

- Dg. — Granite

- Lineations from aerial photos
- Faults
- Adit ("STANHOPE" Mine or prospect name)
- Coal Outcrop
- TAR. Drill Hole

1:100,000 SHEET INDEX

SOUTH ESK	ST PAULS	BEAL S'DAY
8314	8414	8514

Kilometres 0 1 2 3 4 5 6 7 8 9 Kilometres

SCALE 1:50,000

5 cm

318049
77-1206

WESTERN MINING CORPORATION LTD

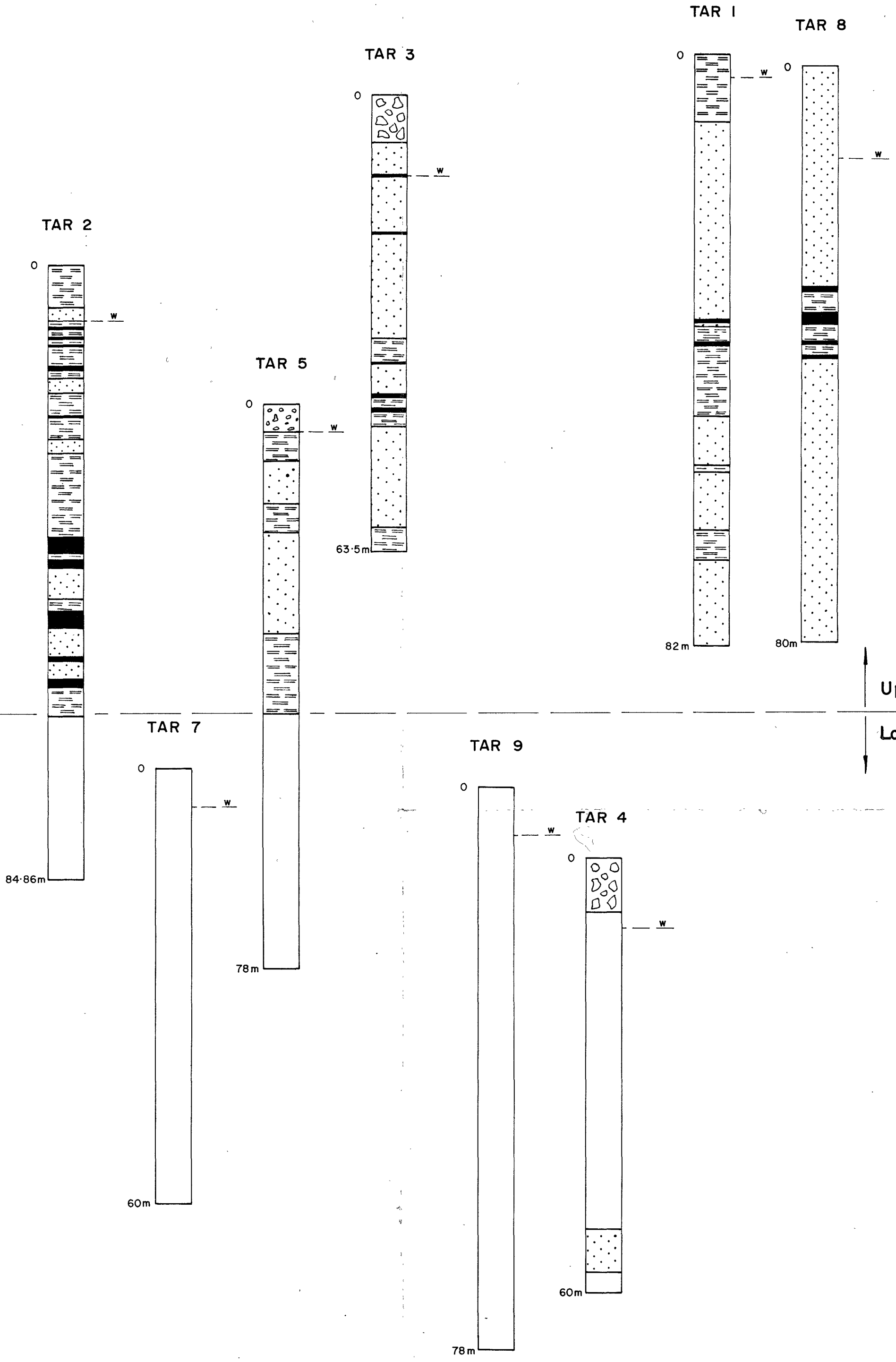
AVOCA (TAS.)

EXPLORATION LICENCE 16/76

GEOLOGY

1578

JANUARY 1977 PLAN NR 2401-01



LEGEND

QUATERNARY

- River gravels.
- Dolerite talus.

TRIASSIC

- Coal and carbonaceous shale facies.
- Mudstone facies.
- Lithic sandstone and siltstone facies.
- Quartzose sandstone facies.
- W — Weathering

318050

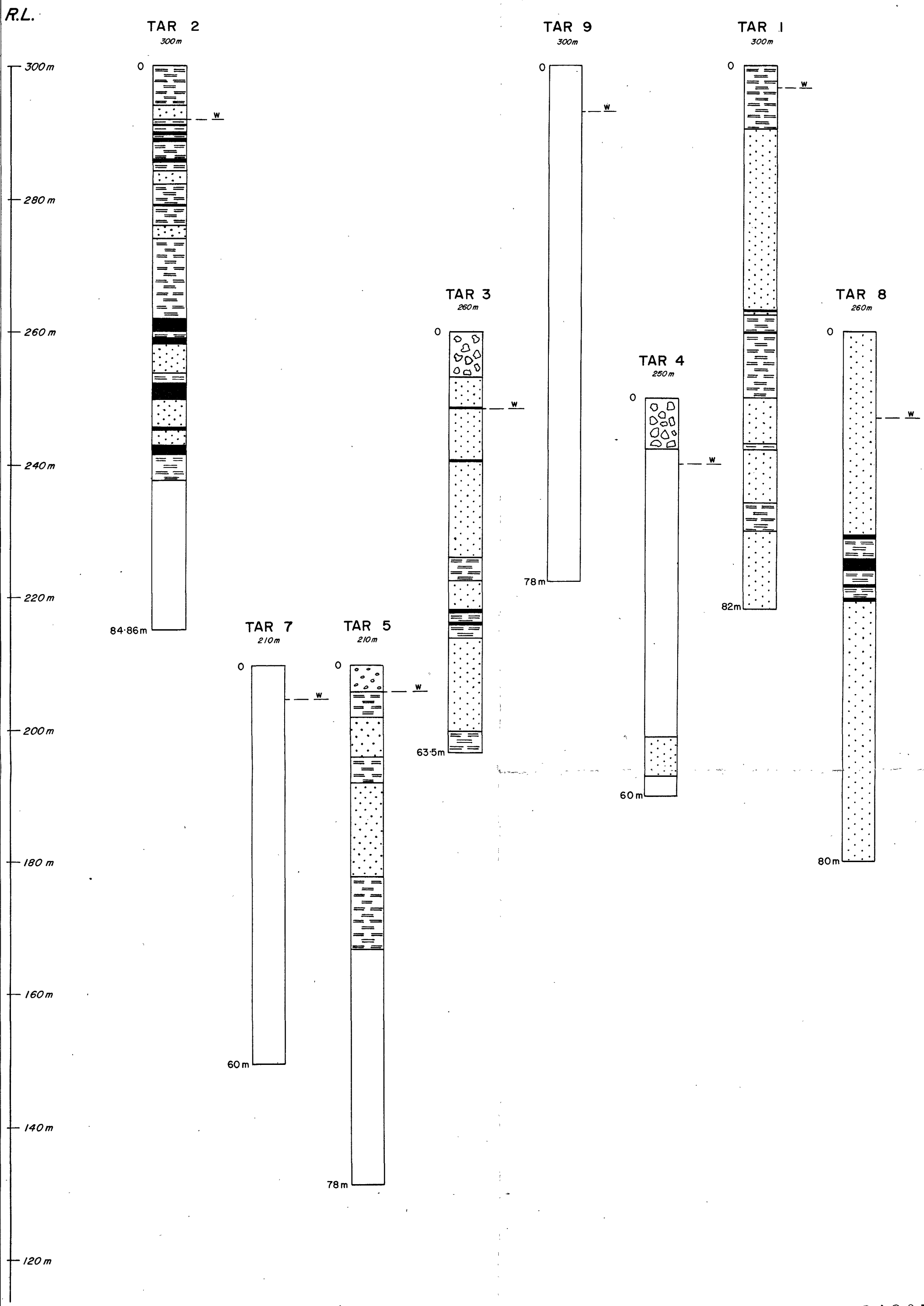
5 cm

79-1206

WESTERN MINING CORPORATION LIMITED
EXPLORATION DIVISION

AVOCA E.L. 16/76
REPRESENTATION OF 1579 LITHOLOGICAL LOGS POSSIBLE CORRELATION

COMPILED : S.M. ASHTON	SCALE : VERT. 1 : 500
DRAWN : E.H. SCHRIER	PLAN No. 2401 - 02
DATE : 30 - 5 - 77	



LEGEND

QUATERNARY

- River gravels.
- Dolerite talus.

TRIASSIC

- Coal and carbonaceous shale facies.
- Mudstone facies.
- Lithic sandstone and siltstone facies.
- Quartzose sandstone facies.
- W — Weathering

318051

5 cm

77-1206

WESTERN MINING CORPORATION LIMITED
EXPLORATION DIVISION

AVOCA E.L. 16/76
REPRESENTATION OF 1580 LITHOLOGICAL LOGS
REDUCED LEVEL (METRES ABOVE SEA LEVEL)

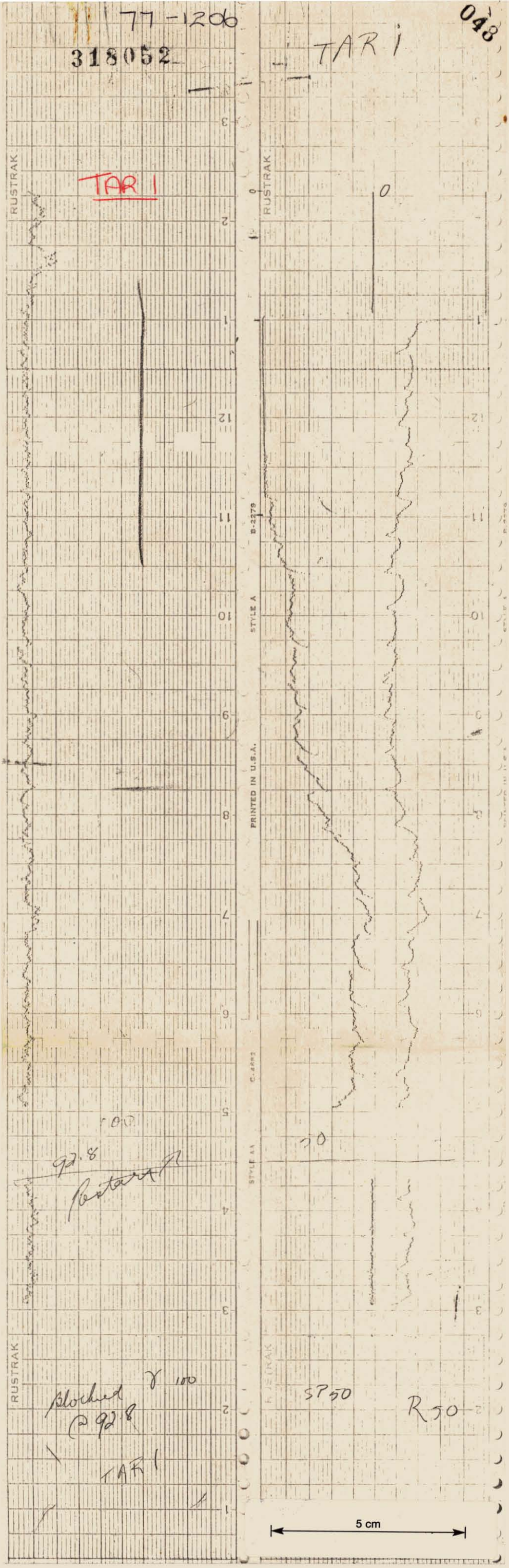
COMPILED : S.M. ASHTON	SCALE : VERT. 1 : 500
DRAWN : E.H. SCHRIER	PLAN No. 2401 - 03
DATE : 30 - 5 - 77	

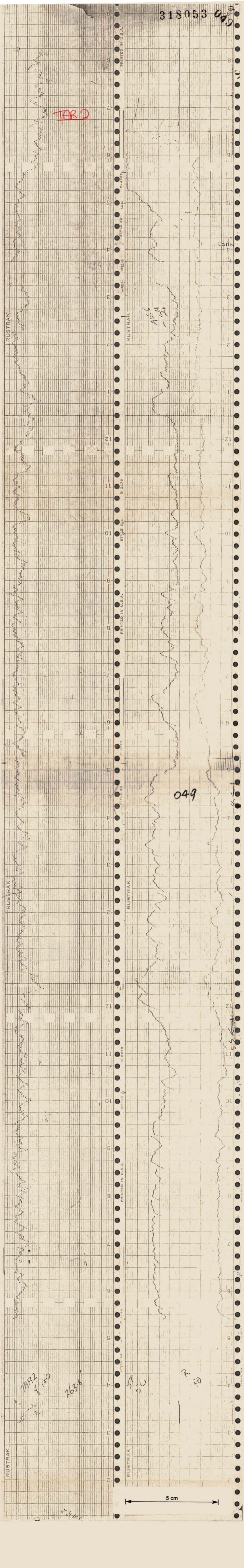
77-1206

318052

048

TAR 1




RUSTRAK
PRINTED IN U.S.A.
TAR 2
049
5 cm

RUSTRAK

TAR 3
6-5-77

RUSTRAK

STYLE AA

C.4582

PRINTED IN U.S.A.

RUSTRAK

STYLE A

B-2279

050

RUSTRAK

STYLE AA

C.4582

RUSTRAK

STYLE A

B-2279

PRINTED IN U.S.A.

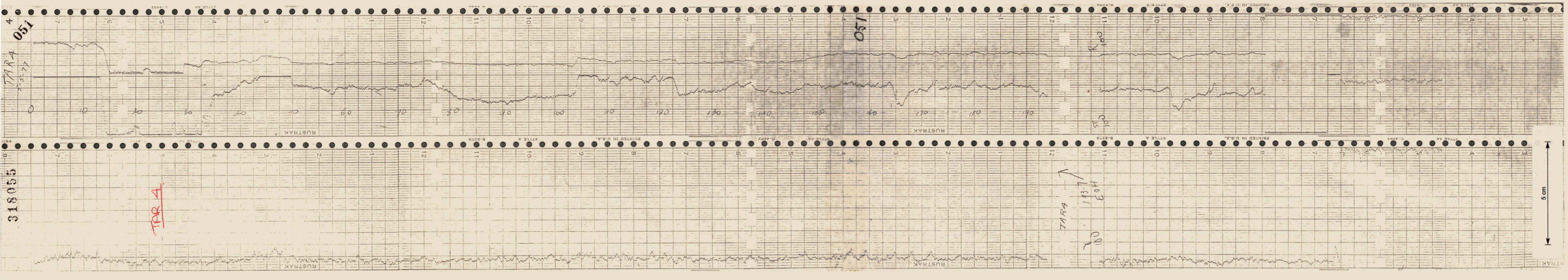
TAR 3

TAR 3
6-5-77

318054

050

5 cm


051
318055
TAR 4
5 cm

318056

052

TARA
5-5-37

TARA
(REPEAT)

052

RUSTRAK

STYLE AA

STYLE A

PRINTED IN U.S.A.

B-2279

100
T.C

SP 50 R 50
1937

5 cm

318057

318058

TAR 7

RUSTRAK

PRINTED IN U.S.A.

STYLE A

RUSTRAK

PRINTED IN U.S.A.

STYLE A

RUSTRAK

Restart 186·8

TAR 1 187·1

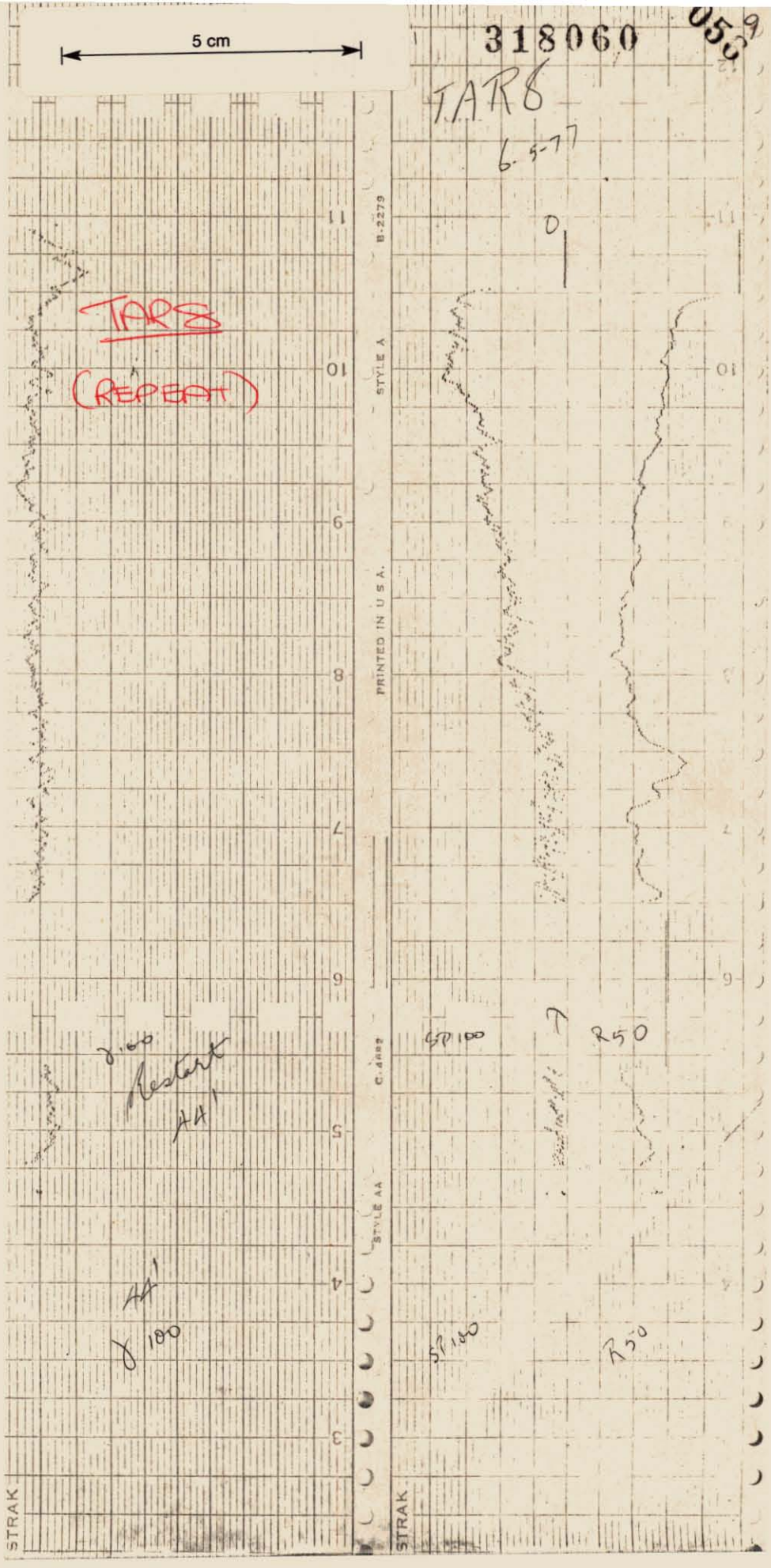
PRINTED IN U.S.A.

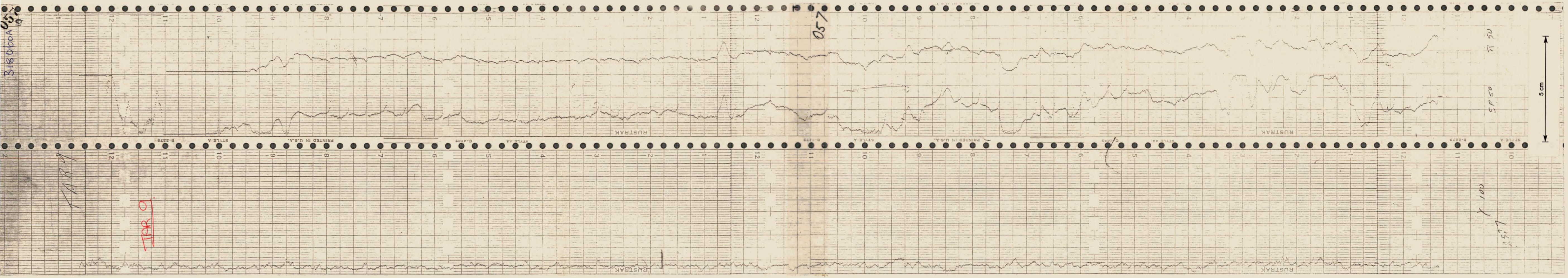
STYLE A

TAR 7

5 cm


5 cm
318059
TAR 8
RUSTRAK
PRINTED IN U.S.A.


5 cm
318060
TAR8
6-5-77
TAR8
(REPEAT)
STYLE A
B-2279
PRINTED IN U.S.A.
STYLE AA
C-4887
STRAK
STRAK
Restart
AA'
AA'
SP100
R50
SP100
R50


5 cm

318061

TAR 9

(REPEAT)