

**WESTERN MINING CORPORATION LIMITED
EXPLORATION DIVISION**

OPEN FILE

**FIRST ANNUAL REPORT
EXPLORATION LICENCE 6309
"CARRAMAN"
21ST JUNE, 1990 - 20TH JUNE, 1991**

CR 91 / 432

Ref:
1:250,000

SE 53-14
Tennant Creek

1:100,000

FLYNN
Tennant Creek

**M.A. WARD
Pasadena, S.A.
July, 1991**

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Figure 2	Soil Sampling - Au ✓
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Figure 4	Soil Sampling - Bi ✓

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Table 1	Regional Stratigraphy ✓
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1. TENURE

E.L. 6309 ("CARRAMAN") was granted for a period of 6 years to Western Mining Corporation Limited and Giants Reef Mining Pty. Ltd. on 21st June, 1990. As such it forms part of the Tennant Creek Joint Venture between the two parties. The E.L. consists of 4 blocks (13.0 km²) and lies entirely within the Warramunga Land Claim Area E (Figure 1).

Under the terms and conditions of the Joint Venture, WMC acts as manager and operator of the E.L.

2. REGIONAL GEOLOGY

E.L. 6309 is underlain by the Lower Proterozoic Warramunga Group (see Table 1), part of the Tennant Creek Inlier of exposed Palaeozoic rocks. Also within the area is Black Eye Member of the Carraman Formation which hosts most orebodies in the field.

The E.L. surrounds several MCC's which contain small ironstone outcrops, from which minor tonnages of gold ore have been won in the past (eg. Carraman, Klondyke). The Edna Beryl mine lies within E.L. 6309 and produced 2,645 tonnes of ore at an average gold grade of 56.9 g/t.

The Warramunga Group, which lies unconformably on Archean age high grade (amphibolite facies) metamorphic basement (Black & McCulloch, 1984), is a thick succession of variably iron-bearing turbiditic sediments and volcanics. This sequence has been metamorphosed to greenschist facies, folded and cleaved between two episodes of granitic intrusion at 1870 ± 20 Ma to 1846 ± 8 Ma and 1650 - 60 Ma (Black, 1984). It is believed that formation of the massive replacement magnetite/haematite bodies and their later mineralisation occurred during and soon after folding.

These sediments are overlain by the laterally equivalent Carpentarian Tomkinson Creek Beds in the north, and the Hatches Creek Group in the south which are in turn succeeded by Cambrian lithologies.

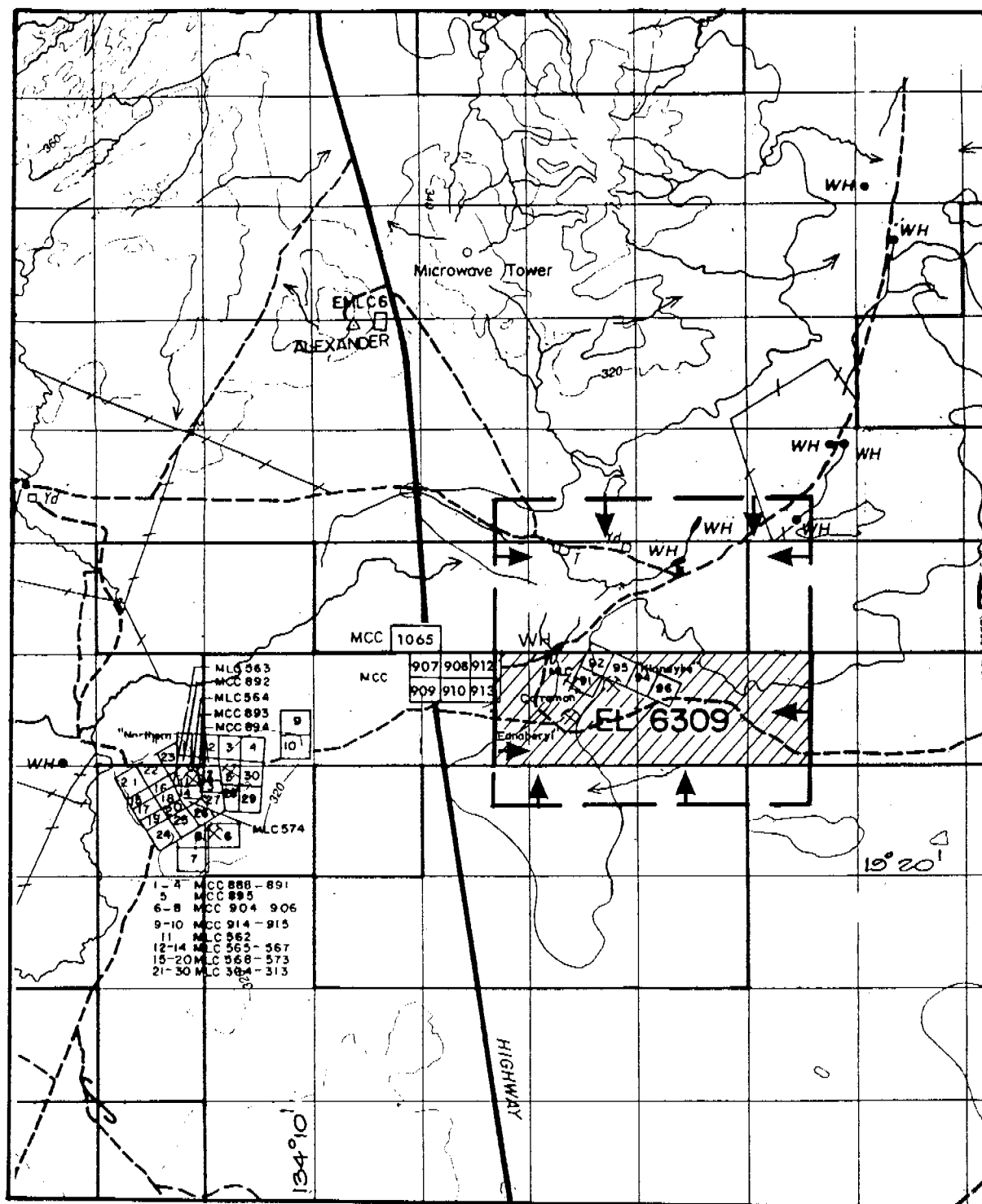
3. WORK COMPLETED

The entire area of E.L. 6309 lies within Area E of the Warramunga Land Claim. W.M.C., being sensitive to the wishes of the local traditional owners have found it necessary to restrict ground work on the E.L. pending discussions with the Central Land Council over a full site clearance of this, and other areas. Unfortunately, at the time of writing WMC had not had a response from the CLC to several long standing requests for a quotation on a site clearance. As a consequence, less ground work was performed than usual for the first year of tenure. The area has, of course, been included in our regional assessment work including new target oriented work in re-processing aeromagnetic data.

A surveyed (AMG) baseline on 7865800N was pegged in May, 1991 across the entire width of the E.L., with star pickets and ID tag every 250m.

Soil samples were collected in the vicinity of the old Edna Beryl mine. Details of the sampling are shown overleaf and analytical results for Au, Cu and Bi are plotted on Figures 2-4 (in pocket). Some obvious Au-Bi anomalism is apparent at the western end of the survey. Although the results are yet to be ground checked, it is felt likely that these results are due to disturbance around the Edna Beryl workings.

E.L. 6309 was included in 1:50,000 scale E.L.-centred reprocessing of regional aeromagnetic data previously acquired by WMC. As the reprocessing and imaging work was done in the last month of the period covered by this report, no conclusions are to hand and costs may not be charged until the next reporting period.



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AREA OF THIS
REPORT, E.L. 6309



BOUNDARY of
WARRAMUNGA
LAND CLAIM AREA E

INDEX TO ADJOINING MAPS

Muckaty 46/4	Brunchilly 46/5	Munkaderry 46/6
Short Range 52/1	Finn 52/2	Baridy 52/3
Kelly 52/4	Tennant Creek 52/5	Gosse River 52/6

WESTERN MINING CORPORATION LIMITED - EXPLORATION DIVISION

Map Ref.	5759 SE53-14
Date	16.7.91
Author	M.W. D.A.B.
Revised	

LOCATION PLAN E.L. 6309

TENNANT CREEK PROJECT AREA N.T.

Scale 1:100 000

Figure No. 1.

Plan No.
7047/246

4. PROPOSED WORK PROGRAM FOR THE SECOND YEAR

Assuming that an Aboriginal Site clearance is performed in the near future and dependent on what is found in that survey, exploration in the second year of tenure would consist of the following, in approximate order -

- (i) Ground inspection of soil anomaly and follow-up if warranted.
- (ii) Ground inspection of any aeromagnetic features of interest, followed by ground magnetics.
- (iii) Detailed gravity survey of any ground magnetic features of interest.
- (iv) Either shallow or deep percussion drilling of targets generated by i- iii above.

It is expected that his programme would attract approximately \$15,000 of expenditure. Note, however that this is dependent on no aboriginal site of significance being found on areas of direct exploration interest.

5. EXPENDITURE IN FIRST YEAR

Expenditure attributable to E.L. 6309 during the reporting period, including a proportion of costs redistributed from a 'General' Project cost-code is as follows:

	\$
Geology	9 330
Geophysics	1 652
Geochemistry	103
Surveying	-
Drafting	667
Analytical	439
Leasing	1 222
Administration	1 256

TOTAL	14 669
	=====

TENNANT CK SOILS

- 8553-14

DIG. TECH
ASS. TECH
MESH SIZE

SAMPLE NUMBER	NORTHING AMG	EASTING AMG	AMG ZONE	NORTHING LOCAL	EASTING LOCAL	AREA CODE	COST CODE
Q0561301	7864625	417846	53	48850	52250	EDNA BERYL 4066	
Q0561302	7864650	417846	53	48875	52250	EDNA BERYL 4066	
Q0561303	7864675	417846	53	48900	52250	EDNA BERYL 4066	
Q0561304	7864700	417846	53	48925	52250	EDNA BERYL 4066	
Q0561305	7864725	417846	53	48950	52250	EDNA BERYL 4066	
Q0561306	7864750	417846	53	48975	52250	EDNA BERYL 4066	
Q0561307	7864750	417896	53	48975	52300	EDNA BERYL 4066	
Q0561308	7864725	417896	53	48950	52300	EDNA BERYL 4066	
Q0561309	7864700	417896	53	48925	52300	EDNA BERYL 4066	
Q0561310	7864675	417896	53	48900	52300	EDNA BERYL 4066	
Q0561311	7864650	417896	53	48875	52300	EDNA BERYL 4066	
Q0561312	7864625	417896	53	48850	52300	EDNA BERYL 4066	
Q0561313	7864600	417946	53	48825	52350	EDNA BERYL 4066	
Q0561314	7864525	417946	53	48850	52350	EDNA BERYL 4066	
Q0561315	7864650	417946	53	48875	52350	EDNA BERYL 4066	
Q0561316	7864675	417946	53	48900	52350	EDNA BERYL 4066	
Q0561317	7864700	417946	53	48925	52350	EDNA BERYL 4066	
Q0561318	7864725	417946	53	48950	52350	EDNA BERYL 4066	
Q0561319	7864750	417946	53	48975	52350	EDNA BERYL 4066	
Q0561320	7864775	417946	53	49000	52350	EDNA BERYL 4066	
Q0561321	7864800	417946	53	49025	52350	EDNA BERYL 4066	
Q0561322	7864800	417996	53	49025	52400	EDNA BERYL 4066	
Q0561323	7864775	417996	53	49000	52400	EDNA BERYL 4066	
Q0561324	7864750	417996	53	48975	52400	EDNA BERYL 4066	
Q0561325	7864725	417996	53	48950	52400	EDNA BERYL 4066	
Q0561326	7864700	417996	53	48925	52400	EDNA BERYL 4066	
Q0561327	7864675	417996	53	48900	52400	EDNA BERYL 4066	
Q0561328	7864650	417996	53	48875	52400	EDNA BERYL 4066	
Q0561329	7864625	417996	53	48850	52400	EDNA BERYL 4066	
Q0561330	7864600	417996	53	48825	52400	EDNA BERYL 4066	
Q0561331	7864575	417996	53	48800	52400	EDNA BERYL 4066	

AU30 AUSL2 -6+2mm	AU30 RPT 1 -6+2mm	PYSTB AAHYD -6+2mm	PYSTB AA -6+2mm
AU PPB	AU PPB	SI PPM	CU PPM
140	120	11.5	15
26		11.7	15
10		3.5	10
420	750	23.6	10
2		4.1	10
420	310	80.0	35
4		12.7	10
2		3.0	10
4		2.6	10
<1		2.8	20
1		3.2	15
1		2.4	15
1		2.0	20
1		4.0	15
1		2.9	10
1		1.4	5
<1		0.9	10
<1		1.3	10
<1		0.9	10
<1		1.8	10
<1		2.9	15
<1		1.5	10
1		1.4	15
1		3.1	15
<1		3.4	15
6	7	90.0	15
<1		1.9	20
<1		1.9	15
1		3.1	15

Number of data records printed = 31



TABLE 1

REGIONAL STRATIGRAPHY

CAMBRIAN

Gum Ridge Formation

Helen Springs Volcanics

CARPENTARIAN

Tomkinson Creek Beds

**LOWER
PROTEROZOIC**

Warramunga Group

Carraman Formation

Black Eye Member

Bernborough Formation

Whippet Sandstone

ARCHEAN

Schist to Gneiss after shale,
quartzite, greywacke BIF,
tuffs, and volcanics

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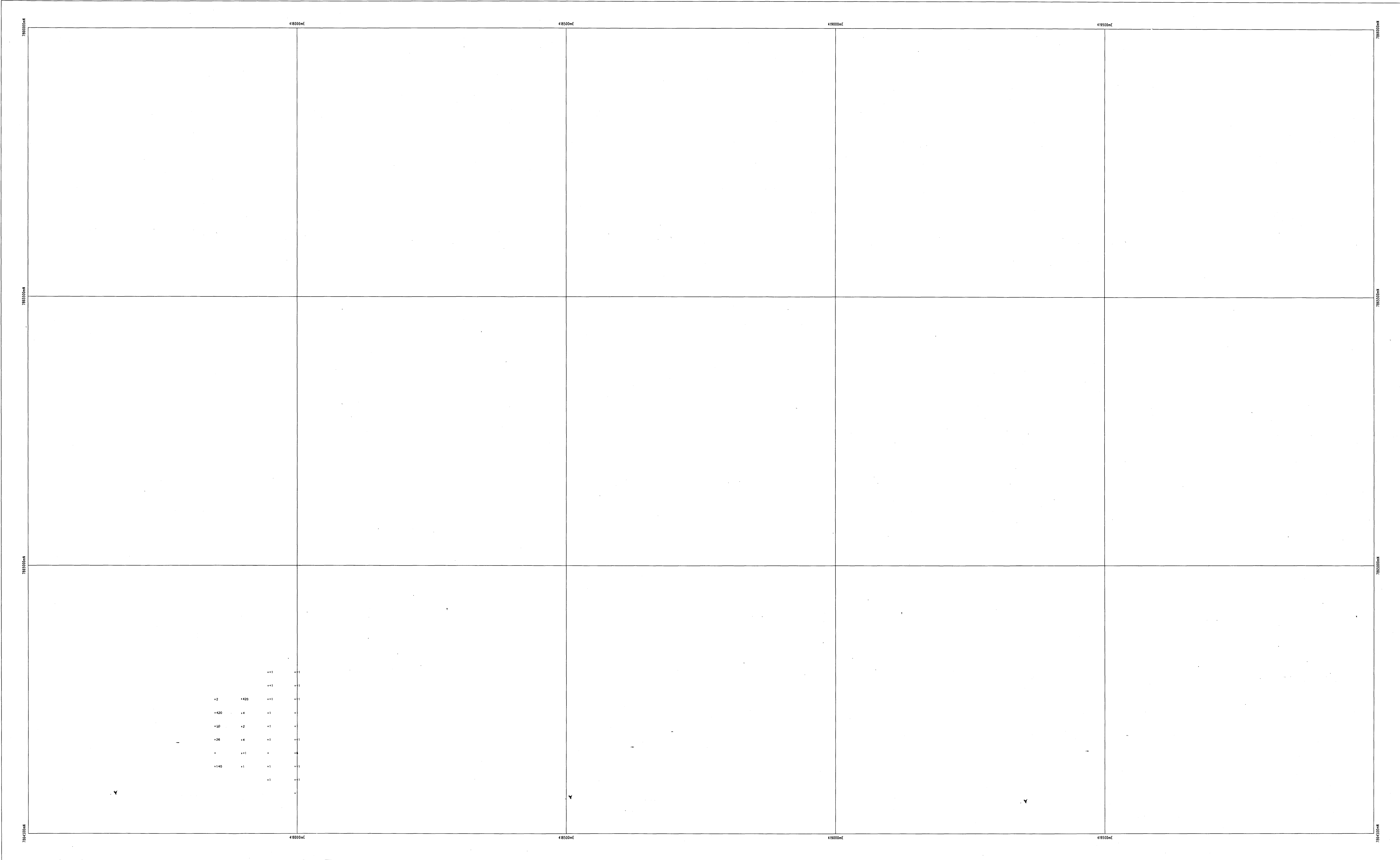
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(After Williams, in prep.)



FULL DESCRIPTOR DETAILS
AU PPB AU30 AUSL2 -6+2mm
SAMPLE NUMBER STRINGS
0056130100561331*1



REVISIONS			
Revised By	Date	Revised By	Date

WESTERN MINING CORPORATION LIMITED EXPLORATION DIVISION			
TENNANT CK SOILS SE53-14 ASSAY PLOT FOR AU PPB AU30 AUSL2 -6+2mm EDNA BERYL			
DATE: 2-JUL-91	AUTHOR: L.CHENOWETH	PLAN NO.	FIG. 2
SCALE: 1: 2500	MAP REF.		

WORKING SHEET ONLY

CU PPM PYSTBAA -6+2mm
SAMPLE NUMBER STRINGS
QD56|30|QD56|33|•|



REVISIONS			
Revised By	Date	Revised By	Date

WESTERN MINING CORPORATION LIMITED
EXPLORATION DIVISION

TENNANT CK SOILS
SE53-14
ASSAY PLOT FOR
CU PPM PYSTBAA -6+2mm
EDNA BERYL

DATE: 2-JUL-91	AUTHOR: L.CHENOWETH	PLAN NO. FIG.3
SCALE: 1 : 2500	MAP REF.	

WORKING SHEET ONLY

WORKING SHEET ONLY

FULL DESCRIPTOR DETAILS
BI PPM PYSTBAAHYD -6+2mm
SAMPLE NUMBER STRINGS
0056130100561331+1



REVISIONS			
Revised By	Date	Revised By	Date

WESTERN MINING CORPORATION LIMITED EXPLORATION DIVISION			
TENNANT CK SOILS SE53-14 ASSAY PLOT FOR BI PPM PYSTBAAHYD -6+2mm EDNA BERYL			
DATE: 2-JUL-91	AUTHOR: LOWENOWETH	PLAN NO.	FIG. 4
SCALE: 1:2500	MAP REF.		

WORKING SHEET ONLY

CR91/452