

PROSPECT 8592

CSR LIMITED

MINERALS EXPLORATION AND DEVELOPMENT GROUP

MOUNT ELLISON, NORTHERN TERRITORY

EXPLORATION LICENCE 4177

PINE CREEK 1:250,000 SHEET SD 52-8

ANNUAL REPORT FOR YEAR ENDED

MARCH 23, 1986

EMR 59/86

OPEN FILE

DARWIN

MARCH, 1986

K.W. HAMILTON

NORTHERN TERRITORY
GEOLOGICAL SURVEY

CR 86 / 173

DISTRIBUTION

	<u>COPY</u>
MEDG LIBRARY, SYDNEY	1
NT DEPARTMENT OF MINES	2
DARWIN OFFICE	3
ADELAIDE OFFICE	4
PEKO-WALLSEND OPERATIONS LTD.	5
DOMINION GOLD OPERATIONS PTY. LIMITED	6

CONTENTS

	<u>PAGE NO.</u>
1. SUMMARY	1
2. INTRODUCTION	3
3. LOCATION AND ACCESS	4
4. TOPOGRAPHY AND CLIMATE	5
5. PREVIOUS EXPLORATION	6
6. REGIONAL GEOLOGY	8
6.1 Proterozoic Stratigraphy	8
6.2 Intrusive Complexes	9
6.3 Deformation and Metamorphism	11
6.4 Cover Rocks	11
7. EXPLORATION CONCEPT	12
8. LOCAL GEOLOGY	14
8.1 Proterozoic Stratigraphy	14
8.2 Intrusive Complexes	15
8.3 Deformation and Metamorphism	18
9. GEOCHEMISTRY	20
9.1 Soil Geochemistry	20
9.2 Rock-chip Geochemistry	23
10. GEOPHYSICS	26
10.1 Airborne Geophysical Survey	26
10.2 Ground Magnetic Surveys	27
11. DARWIN TO ARMADEUS BASIN GAS PIPELINE TRENCH	28
12. WATERTANK PROSPECT	30
13. CONCLUSIONS AND RECOMMENDATIONS	32
14. REFERENCES	33

APPENDICES

- I REGIONAL SOIL SAMPLE RESULTS
- II STATISTICAL PLOTS OF REGIONAL SOIL GEOCHEMICAL RESULTS
- III ANOMALOUS ARSENIC SAMPLES ON REGIONAL SOIL LINES
- IV COMPOSITE SOIL RESULTS
- V ROCK-CHIP SAMPLE RESULTS
- VI PETROGRAPHIC DESCRIPTIONS
- VII GROUND MAGNETIC PROFILES
- VIII SOIL RESULTS - DARWIN TO AMADEUS BASIN GAS PIPELINE TRENCH
- IX SOIL RESULTS - WATERTANK PROSPECT

LIST OF ILLUSTRATIONS

FIGURES

FACING PAGE NO.

- | | | |
|---|--|---|
| 1 | LOCATION MAP, EL 4177, MOUNT ELLISON,
NT | 4 |
| 2 | STRATIGRAPHY OF THE PINE CREEK
GEOSCYNCLINE | 8 |

TABLE

ON PAGE NO.

- | | | |
|---|--|----|
| 1 | STATISTICAL SUMMARY OF ARSENIC
SOIL SAMPLES | 21 |
|---|--|----|

PLANS (in pocket)

SCALE

DRG NO.

- | | | |
|--------|--|----------|
| 8592-1 | EL 4177, MOUNT ELLISON, NT,
GEOLOGY | 1:25,000 |
| 8592-2 | EL 4177, MOUNT ELLISON, NT,
LOCATION OF SOIL AND GROUND MAGNETIC
TRAVERSES | 1:25,000 |
| 8592-3 | EL 4177, MOUNT ELLISON, NT,
ROCK-CHIP SAMPLE LOCATIONS | 1:25,000 |
| 8592-4 | EL 4177, MOUNT ELLISON, NT,
AEROMAGNETIC DATA | 1:25,000 |
| 8592-5 | EL 4177, MOUNT ELLISON, NT,
PIPELINE TRENCH SECTION P1, GEOLOGY
AND GEOCHEMISTRY | 1:250 |

LIST OF ILLUSTRATIONS (continued)

<u>PLANS (in pocket)</u> <u>DRG NO.</u>		<u>SCALE</u>
8592-6	EL 4177, MOUNT ELLISON, NT, PIPELINE TRENCH SECTIONS P3 AND P5, GEOLOGY AND GEOCHEMISTRY	1:250,
8592-8	EL 4177, WATERTANK PROSPECT, GEOLOGY	1:5,000
8592-9	EL 4177, WATERTANK PROSPECT, SOIL SAMPLE LOCATIONS	1:5,000
8592-10	EL 4177, WATERTANK PROSPECT, Cu SOIL RESULTS	1:5,000
8592-11	EL 4177, WATERTANK PROSPECT, Fe SOIL RESULTS	1:5,000
8592-12	EL 4177, WATERTANK PROSPECT, As SOIL RESULTS	1:5,000
8592-13	EL 4177, WATERTANK PROSPECT, Cr SOIL RESULTS	1:5,000

KEYWORDS

BURNSIDE

NORTHERN TERRITORY

SD 52-8

GOLD

ZAMU DOLERITE

GEOPHYSICS

ARSENIC

ROCK-CHIP

SOIL

OLIVE PROSPECT

AIRBORNE MAGNETICS

1. SUMMARY

During 1985, CSR Limited carried out an exploration programme for gold within Exploration Licence 4177 (EL 4177). The programme consisted of geological mapping, airborne and ground geophysical surveys, and soil and rock-chip geochemical sampling.

Five sills of the prospective host rock, the Zamu Dolerite, as well as a major northwest-trending fault, were identified.

Approximately 1,000 soil samples were collected along regional soil lines over areas of Zamu Dolerite. Although a full assessment of these results has not been completed, anomalous arsenic zones have been defined. Anomalous zones were assigned priorities according to their geological association. Composite sampling of the zones defined several intervals containing anomalous gold.

Rock-chip sampling defined two areas of anomalous gold. One area is located north of Ban Ban Homestead and another is located near the Olive prospect.

Geological mapping and rock-chip and soil sampling were also completed along sections of the Darwin-Amadeus Basin gas pipeline trench where it crosses EL 4177. Rock-chip sampling confirmed the presence of anomalous gold north of Ban Ban Homestead. The results of the soil sampling were inconclusive.

An area of anomalous arsenic values along soil lines B34, 35 and 36 was gridded and a closely spaced soil sampling programme was completed. The arsenic anomalies are due to the presence of an ultrabasic flow with a high arsenic background.

Further work is recommended. The high priority arsenic soil anomalies should be checked by a programme of trenching and composite rock-chip sampling. Lower priority anomalies should be checked by a small programme of rock-chip sampling. The two anomalous gold zones will be further investigated by geological mapping, soil sampling, trench and rock-chip sampling. A drilling programme will be completed on the most prospective areas.

2. INTRODUCTION

Title to EL 4177 is held by Peko-Wallsend Operations Limited on behalf of itself and Dominion Gold Operations Pty. Limited under the terms of the Golden Dyke Joint Venture Agreement. CSR Limited is currently earning an interest in the tenement by completing at its own expense a programme of exploration under the terms of the Burnside/Burrundie Joint Venture Agreement.

The exploration programme is directed towards the discovery of disseminated gold mineralisation and is part of a large reconnaissance programme conducted by CSR Limited in the Katherine-Darwin region of the Northern Territory.

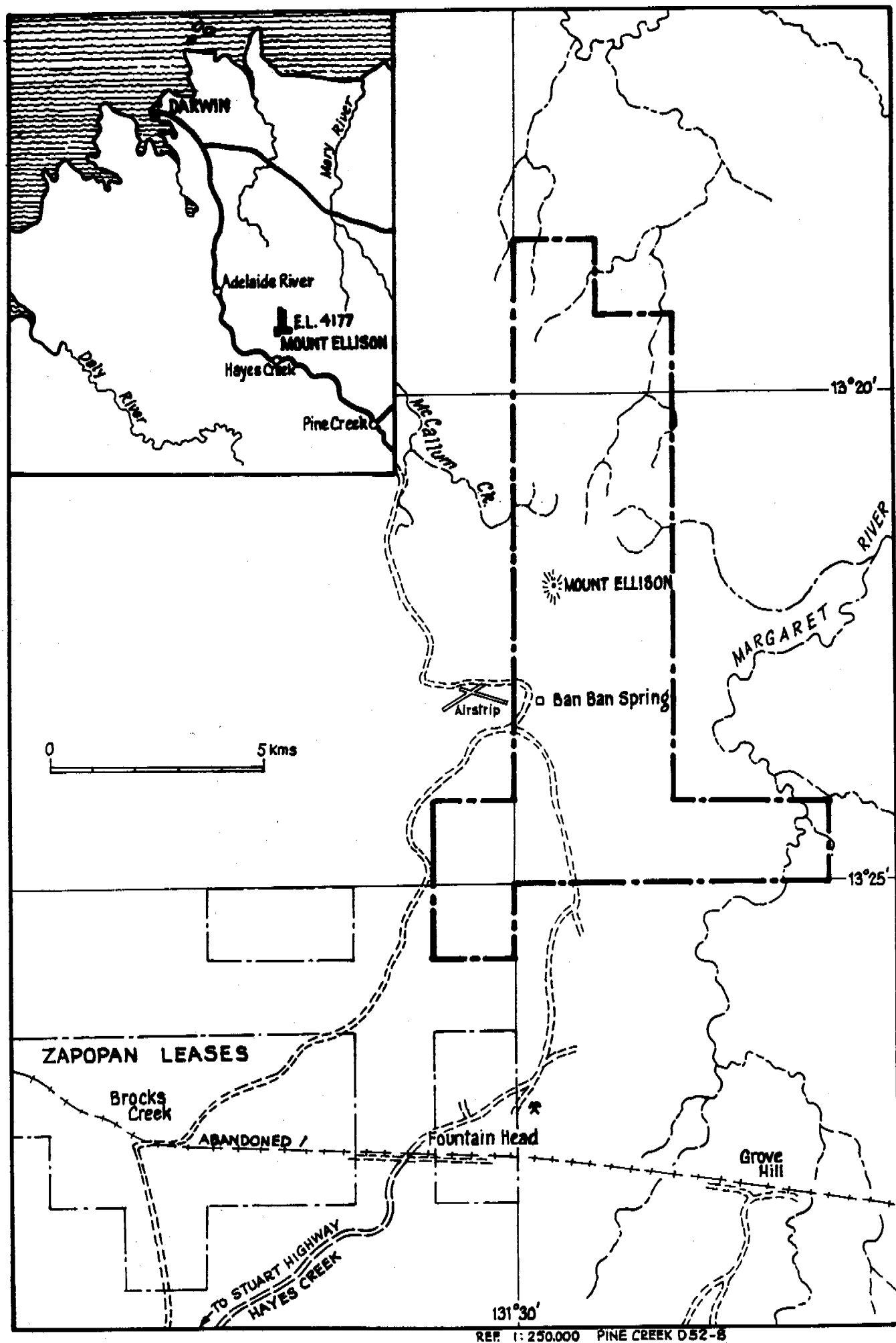


FIG.1 LOCATION MAP E.L. 4177 MOUNT ELLISON N.T.

3. LOCATION AND ACCESS

EL 4177 is located 130 km southeast of Darwin and 60 km northwest of Pine Creek in the Northern Territory. It straddles the junction of the McKinlay River and Batchelor 100,000 topographic sheets. The exact location of the exploration licence is shown in Figure 1. Ban Ban Homestead is located in the southwestern corner of the tenement.

Vehicle access to the area is good. An all-weather road runs from the Stuart Highway to the Ban Ban Homestead. From here, farm tracks provide access to all parts of EL 4177, except for an area of steep ridges near the Mount Ellison Mine. Off-road access is good during the Dry Season, however during the Wet Season, from December to April, off-road access is impossible due to the soft ground conditions.

4. TOPOGRAPHY AND CLIMATE

The topography of EL 4177 is generally flat with low ridges and hills rising to 10 to 15 m above the surrounding flood plains. In the vicinity of the Mount Ellison Mine, steep ridges of carbonaceous pelites of the Koolpin Formation rise up to 100 m above the plains. The highest point in the area is Mount Ellison situated 2 km north of Ban Ban Homestead.

Numerous creeks, almost all of which have well developed flood plains, run through the area.

The vegetation is open savannah with many small trees in open grassland.

The climate is monsoonal with distinct wet and dry seasons. The Dry Season, from April to October, is characterised by lower temperatures (average maximum 28°C), lower humidity (30% relative) and very little rain (average 10 mm). The Wet Season, lasting from November to March, is marked by high rainfall (average 1300 mm), high humidity (average 98%) and high temperature (average maximum 32°C).

5. PREVIOUS EXPLORATION

Gold was discovered in the Burnside area in the late 1880's and many gold mines were subsequently worked. The largest were Cosmopolitan Howley and Zapopan with recorded productions of 33,780 ozs and 26,650 ozs Au respectively (Walpole, 1968).

The Mount Ellison copper mine is located within the boundaries of EL 4177, 2 km north of Ban Ban Homestead. The mine was worked from 1891 to 1911. Recorded production was 3250 tons of copper ore, averaging 20% Cu, and 3 tons of Bi (Walpole, 1968). The lode occurs within a shear zone in carbonaceous, micaceous pelites of the Koolpin Formation.

The area of EL 4177 was mapped during the geological surveys undertaken by the BMR in the northern half of the Northern Territory. Mapping was completed by the BMR as part of the Burnside (1962) and Ban Ban Springs (1961) 1:63,360 geological sheets, the Batchelor-Hayes Creek (1980) and McKinlay River (1981) 100,000 geological sheets, and the Pine Creek (Malone, 1962) 1:250,000 geological sheet. Walpole (1968) reported on the geology and mineralisation of the Burnside area in his study of the Katherine-Darwin region. Recently, a revised stratigraphy for the whole Pine Creek Geosyncline was published by the BMR (Needham et al, 1980).

Many companies have completed exploration programmes in the Burnside area (Campbell, 1956; Gove, 1975; Ikstrums, 1979; Murray, 1955; Patterson, 1955). The commodities sought included gold, uranium, base metals and tin.

Recently, the area covered by EL 4177 was the subject of exploration programmes by CRA Exploration (Wills, 1977 and 1979), AAR Limited (Hamilton and Hassall, 1980, Fraser and Hassall, 1982) and Geopeko (Radford and Rolfe, 1983).

CRA completed a programme of geological mapping, gossan sampling and soil sampling. Only one area, the Olive lead prospect, was considered worthy of any follow-up work. This prospect was tested by drilling, and no significant mineralisation was encountered (Wills, 1979).

AAR Limited conducted an exploration programme for uranium in the Mount Ellison area during 1980 and 1981. The search focussed on the Koolpin Formation and the programme consisted of gridding, radiometric traverses, rock-chip sampling and geological mapping (Fraser and Hassall, 1982). No anomalies worthy of further work were generated and the area was relinquished.

During 1983, Geopeko completed a stream sediment survey over EL 4177 and an assessment of the gold potential of the Mount Ellison mine. No significant Au anomalies were defined during the survey. One As anomaly was outlined for further follow-up.

Ref. 8592

Exploration Licence 4177 "Mount Ellison"
Summary of Expenditure
Year Ended March 31, 1986

<u>General Investigations</u> including drafting geophysics, consultant services, airphoto, Landsat geochemical analyses and Temporary wages	\$20,729
<u>Logistics and Support Services</u> including freight, field camp supplies, vehicle operations, equipment rental, regional office costs and travel	\$11,468
<u>Staff Salaries</u>	\$17,374
<u>Services and Office Overheads</u>	\$9,879
<u>Total</u>	\$59,450

6. REGIONAL GEOLOGY

The Pine Creek Geosyncline consists of an approximate 14 km thickness of Lower Proterozoic sedimentary strata with interbedded volcanics and mafic sills. As EL 4177 is located in the centre of the geosyncline, only a discussion of the regional geology of the central portion of the geosyncline is included in this report. For a full discussion of the regional geology of the whole of the Pine Creek Geosyncline, the reader is referred to Needham et al (1980) and Needham and Stuart-Smith (1984).

6.1 Proterozoic Stratigraphy

The stratigraphy of the Joint Venture area is shown in Figure 2. The oldest formation outcropping in the centre of the geosyncline is the Masson Formation which consists of carbonaceous and dolomitic pelites (Needham and Stuart-Smith, 1984). Needham and Stuart-Smith have proposed that the lower parts of the Masson Formation may be the distal equivalents of the lower-most Beestons Formation and the Kakadu Group, and therefore may disconformably overlie Archean Basement in the centre of the geosyncline.

The Masson Formation is overlain by the Mount Partridge Group. Needham and Stuart-Smith postulate a depositional hiatus between these two formations. However, no evidence for this has been observed. The oldest formation in the Mount Partridge Group is the Mundogie Sandstone. It consists of a sequence of coarse-grained psammites with minor interbedded pelites. These units were deposited in a high-energy environment and probably represent a period of uplift and rapid erosion. The psammites of the Mundogie Sandstone are conformably overlain by the pelitic units of the Wildman Siltstone.

The Mount Partridge Group is unconformably overlain by iron-rich sediments, carbonates and tuffs of the South Alligator Group. The oldest formation in the South Alligator Group is the Koolpin Formation which consists of pyritic, carbonaceous shale, ferruginous sandstone, chert, and minor carbonate and iron formation which were deposited in a shallow marine environment. The Koolpin Formation is unconformably overlain by the Gerowie Tuff which consists of black cherty tuff, grey siliceous pelite, green tuffaceous greywacke and minor ferruginous pelites. It is overlain by, and grades into, the Mount Bonnie Formation, a unit which is transitional between the predominantly volcanic units of the Gerowie Tuff and the greywacke of the overlying Burrell Creek Formation. The base of the Mount Bonnie Formation is marked by a 1 m thick greywacke and the top is defined by the last 1 m thick tuffaceous unit.

The Burrell Creek Formation is the youngest Lower Proterozoic stratigraphic unit in the centre of the Pine Creek Geosyncline. The lithologies present include haematitic siltstone, shale and greywacke. The greywacke content increases towards the east.

6.2 Intrusive Complexes

The Proterozoic stratigraphy has been intruded by a series of doleritic sills known as the Zamu Dolerite and a suite of granites of Carpentarian Age.

6.2.1 Zamu Dolerite

The term, Zamu Dolerite, includes all mafic intrusives which were intruded prior to the Lower Proterozoic metamorphism. They consist predominantly of sills and are a continental tholeiitic suite of rocks (Ferguson and Needham,

1978). Although most are now amphibolite-rich, some outcrops of unaltered dolerite are present in the Zamu Creek area of the South Alligator Valley (Ferguson and Needham, 1978).

Contact metamorphic effects resulting from later Carpentarian granite intrusion are locally apparent. According to Ferguson and Needham (1978), the nett effect of the regional metamorphism has been an enrichment in Fe and Ti, and a depletion in Mg, K and Sr.

Geological mapping by CSR Limited has identified two further stages of alteration in the Zamu Dolerite. The first stage is a widespread carbonate alteration which resulted in the chloritisation of amphibole minerals and the formation of carbonates such as calcite, siderite and ankerite. The carbonate alteration has in turn been overprinted by localised quartz-phyllosilicate alteration. The phyllosilicates present are sericite, muscovite and phlogopite.

6.2.2 Carpentarian Granites

The Lower Proterozoic sequence was intruded by a series of granitoids between 1840 and 1780 ma (Stuart-Smith and Needham, 1985). The intrusion of the granites is related to the 1870-1780 Ma orogeny.

The main intrusive granitoids in the centre of the geosyncline are the Margaret, Burnside, Shoobridge, Fenton, Prices Springs and McKinlay Granites and the Cullen Batholith. The Cullen Batholith consists of 15 separate intrusions (Stuart-Smith and Needham, 1984). The granitoid

types in the centre of the geosyncline range in composition from granite to quartz syenite (Stuart-Smith and Needham, 1984).

6.3 Deformation and Metamorphism

The Pine Creek Geosyncline was subjected to a period of deformation and metamorphism at 1870 ma (Page, 1980). During this period, the tensional regime changed to east-west compression (Stuart-Smith et al, 1980). The units in the centre of the geosyncline were tightly to isoclinally folded with well-developed axial plane cleavages. The deformation increases to the east, especially to the east of the South Alligator fault line.

The units in the centre of the geosyncline were subjected to regional lower greenschist facies metamorphism (Ferguson, 1980). The mafic sills of the Zamu Dolerite were altered to amphibolites. The Carpentarian Granites have produced contact aureoles of varying sizes, resulting in development of andalusite crystals in the pelitic units and amphiboles in the mafic sills of the Zamu Dolerite (Page, 1980).

6.4 Cover Rocks

The Proterozoic units in the Joint Venture area were unconformably overlain by sandstones and siltstones of the Mesozoic Bathurst Island Formation. This Mesozoic cover has now mostly been removed by erosion and only isolated mesas remain.

7. EXPLORATION CONCEPT

The main target sought by CSR Limited was sulphide-associated gold lodes in the Zamu Dolerite. The majority of previous exploration programmes in the Burnside area have concentrated on the iron-rich units of the Koolpin Formation and the quartz reefs in the Koolpin Formation, Gerowie Tuff, Mount Bonnie Formation and Burrell Creek Formation with only limited attention being paid to the gold-bearing potential of the Zamu Dolerite (Nicholson and Eupene, 1984).

The model applied to the Zamu Dolerite by CSR is the one used by Phillips and Groves (1984) to explain the origin of the lode deposits in the Golden Mile Dolerite at Kalgoorlie. A comparison of this model with the geology of the Pine Creek Geosyncline revealed certain similarities which enhance the potential of the Zamu Dolerite as a host for gold mineralisation.

The major similarities are:

- (a) the lithological similarity between the Golden Mile Dolerite and the Zamu Dolerite;
- (b) a similar geological history between the two areas;
- (c) the widespread carbonate alteration patterns with more localised sericitic alteration (and K metasomatism) in the Zamu Dolerite and Golden Mile Dolerite; and
- (d) an association of gold mineralisation with major structural zones such as the Pine Creek Shear Zone and the Howley Anticline.

The gold in gold deposits hosted by greenstones is usually fine and does not show a strong association with quartz veining (Phillips and Groves, 1984), and it was believed that these types of deposits could have been overlooked by previous explorers. CSR's exploration programme was designed to define arsenic haloes associated with gold mineralisation by wide-spaced soil sampling; to locate structural zones within the Zamu Dolerite by magnetics and photo-geological interpretation; and to detect alteration haloes and anomalous gold mineralisation by rock-chip sampling and geological mapping.

In areas which did not contain outcrops of Zamu Dolerite, only limited rock-chip sampling was completed.

8. LOCAL GEOLOGY

EL 4177 contains a sequence of Lower Proterozoic sediments which occupy an embayment between two Carpentarian granitic complexes. It also straddles the extension of the Pine Creek Shear Zone and at least one major NW-striking fault has been identified within the project area. This fault separates the area into two domains, a northern complexly deformed domain and a southern domain in which the intensity of deformation decreases dramatically. Details of the geology are shown in DRG No. 8592-1.

8.1 Lower Proterozoic Stratigraphy

The oldest unit in EL 4177 is the Koolpin Formation, which occurs in the west and centre of the area, and has a minimum apparent thickness of 1 km. The maximum thickness could not be measured because of the deformation present in the northeast of the area. The Koolpin Formation consists of a basal sequence of grey, carbonaceous, pyritic, micaceous pelites with minor haematitic pelites. This sequence is best developed in the area of the Mt. Ellison mine. The basal sequence has been domed by the Burnside Granite and has steep dips away from the Burnside Granite to the north and east. The pelitic units are intruded by numerous quartz-sulphide veins.

This basal sequence grades upwards into a sequence of red, haematitic, micaceous pelites with minor interbedded saccharoidal quartzite and iron formation.

The Koolpin Formation is conformably overlain by the Gerowie Tuff which occurs as a thin north-south band through the centre of EL 4177 and has a maximum apparent thickness of 1 km. Deformation and faulting has resulted in some structural thickening of the unit. It

consists of a sequence of grey-white, siliceous argillites, black tuffaceous cherts and grey quartzites. Weathering of the black chert results in a white oxide coating.

The Gerowie Tuff is overlain by the Mount Bonnie Formation in the southeast corner of the EL. It consists of red, haematitic argillites and red-brown greywacke with minor beds of iron formation and is of indeterminate thickness.

The youngest stratigraphic unit is the Burrell Creek Formation in the northeast corner of the area, which has a faulted contact with the Gerowie Tuff. The relationship with the Mt. Bonnie Formation was not observed within the EL. The Burrell Creek Formation consists of buff, micaceous phyllite, red-brown, micaceous greywacke, black, silicified greywacke and minor, red, haematitic argillite.

8.2 Intrusive Rocks

The Lower Proterozoic stratigraphy has been intruded by a series of Zamu Dolerite sills and the Carpentarian Margaret Granite.

8.2.1 Zamu Dolerite

The Zamu Dolerite consists of five major intrusive sills and many smaller sills. The small sills intrude the upper units of the Koolpin Formation in the northwest of the EL. They were too thin to record on 1:25,000 air photographs and do not have any economic significance.

Four of the five major sills intrude the Koolpin Formation and one sill intrudes the Gerowie

Tuff near the contact with the Koolpin Formation. The largest sill occurs in the vicinity of Ban Ban Homestead and has an apparent thickness of 600 m. The remaining sills are thinner with a maximum apparent thickness of 200 m. Four of the five sills are true dolerite sills and one is an ultrabasic sill. The locations of these units are shown on DRG No. 8592-1.

The dolerite sills outcrop as rounded boulders of dark green, coarse-grained, equigranular dolerite which usually exhibits evidence of uralitic and saussaritic alteration. In places, the dolerites have been hornfelsed and the outcrops consist of green, fine-grained, siliceous quartz-rich material with associated sulphides. The presence of the fresh boulders on the surface gives the impression that the dolerite sills are relatively unaltered. However, examination of sections of the Zamu Dolerite in the Darwin to Amadeus Basin gas pipeline trench has shown that the Dolerite has been extensively weathered, and the fresh dolerite material only comprises a small part of the whole sill (DRG Nos. 8592-5 and 6).

The Zamu Dolerite, as revealed in the trench, is mainly represented by a white to yellow clay material with relict doleritic texture and isolated small boulders of dolerite. This appears to grade into a red, haematitic clay containing many boulders of fresh dolerite. Both of these rock types are overlain by a well-developed orange-red-brown lateritic soil. Because of their more resistant nature, the fresh dolerite boulders are concentrated at the surface during weathering, thereby concealing the true nature of the dolerite underneath.

One zone of sheared, silicified, carbonate-altered dolerite was mapped in trench P1 from 620 to 700 m. The rock consists of fine-grained, micro-crystalline quartz with inclusions of white mica. Traces of pyrite, pyrrhotite and chalcopyrite are present. Petrological examination of samples from this zone confirms that the dolerite has been silicified and overprinted by carbonate alteration (Appendix VI). The zone also contains anomalous Au with a maximum assay value of 0.18 ppm Au.

The ultrabasic sill, located in the northwest corner of EL 4177, has a maximum apparent thickness of 200 m. It has been extremely altered, and in outcrop it consists of a foliated talc, tremolite, carbonate, sericite rock. Much of the carbonate has been leached from the surface outcrops, although relic textures are still present. The sill has a very high background content of Cr, As and Cu. The geology and geochemistry of the ultrabasic sill are discussed in greater detail in Section 12 (Watertank Prospect).

8.2.2 Margaret Granite

The Margaret Granite is located in the northeast corner of EL 4177. It has intruded the Gerowie Tuff, the Mount Bonnie Formation and the Burrell Creek Formation. The granite has been intensely weathered and now forms flat sandy plains with isolated outcrops. In EL 4177, the Margaret Granite consists of a pink, coarse-grained, porphyritic adamellite. It has a contact aureole where hornfelsing of the surrounding sediments has occurred. The extent of this aureole was not determined during geological mapping.

8.3 Deformation and Metamorphism

EL 4177 is located between the Burnside and Margaret Granites (DRG No. 8592-1). A major gold-associated structural zone, the Pine Creek Shear Zone, passes through the EL in a northwest trend and is evidenced by a major fault that is located immediately to the north of the Olive prospect. Although this fault is a major structure, it does not significantly displace the Gerowie Tuff. The strike of this major fault is parallel to the fault which has controlled mineralisation at the Mount Ellison copper mine.

The major northwest trending fault appears to separate two zones of structural deformation. South of this major fault, the units have simply been domed by the intrusive Burnside Granite. They all have a steep dip away from the granite contact. No other major deformation is evident although some north-south block faulting is present to the south of the Olive prospect. As a result of the asymmetrical nature of the Burnside Granite, a broad anticline is present near the Ban Ban Homestead.

North of the major fault, the intensity of deformation increases. The Koolpin Formation and the Zamu Dolerite have been folded into a moderate anticline. The axis of the anticline has a southeast strike and plunges to the southeast. The intensity of faulting also increases north of the major fault.

The majority of units within EL 4177 have a lower greenschist facies grade of metamorphism. However, both the Burnside and Margaret Granites have contact metamorphic aureoles. These two aureoles merge and all of the units in the embayment between them have been hornfelsed. These units have been metamorphosed to

amphibolite metamorphic facies and lie within the biotite isograd of Stuart-Smith and Needham (1984). The pelitic units of the Koolpin Formation have been particularly affected by the contact metamorphism, with the development of biotite and amphibole.

The boundary between the greenschist and amphibolite metamorphic zones was not determined accurately during geological mapping.

9. GEOCHEMISTRY

9.1 Soil Geochemistry

Soil and rock-chip samples were collected from EL 4177. The soil sampling programme was designed to detect broad arsenic haloes around areas of possible gold mineralisation. The rock-chip samples were collected to detect Au and As and to provide petrological information on the alteration styles present.

Approximately 1,300 soil samples were collected. Each sample was sieved on site to -80 mesh and then analysed for Cu, Fe, Cr and As. While As and Cu are the main pathfinder elements used for gold mineralisation in the area, analyses for Cr and Fe were included to:

- assist in the identification of a dolerite sill in areas of poor outcrop; and
- differentiate false As anomalies caused by iron oxide scavenging.

Approximately 1,000 soil samples were collected along wide-spaced soil lines, 100 samples were collected from the bottom of the Darwin to Amadeus Basin gas pipeline trench, and the remainder were collected from the grid established over the Watertank Prospect.

9.1.1 Regional Soil Lines

The lines were spaced 800 m apart and samples were taken at 20 m intervals. All samples were collected from the base of the A horizon. Samples were not collected from areas of alluvial cover. Geological observations were also made

along each soil line. The full analytical results are listed in Appendix I and the sample locations are shown on DRG No. 8592-2.

A full evaluation of the regional soil results has not been completed. Currently, the geochemical profiles for each soil line are being plotted by computer at a scale of 1:5,000. When these computer plots are received, they will be combined with the geological section for each line to enable a detailed interpretation of the geochemical data. A preliminary statistical summary for each element, including basic statistical plots, is included in Appendix II.

A more detailed analysis of the As results has been completed. Statistical analysis demonstrates that 96% of the samples occur within a normal population below a value of 95 ppm As. Samples above this value are obviously anomalous. A statistical analysis was then completed on the lower population and the results are summarised in Table 1. As can be seen, the threshold value for this population is 50 ppm As. Values above 50 ppm As were considered anomalous and warranting further investigation. The full results are listed in Appendix III and sample locations are shown on DRG No. 8592-2.

TABLE 1
STATISTICAL SUMMARY ARSENIC SOIL RESULTS

NUMBER OF SAMPLES	MINIMUM	MAXIMUM	MEAN	STANDARD DEVIATION	THRESHOLD MEAN + 2SD
94	0.5 ppm	95.0 ppm	16.7	15.6	49.9

Preliminary observations on the anomalous arsenic intervals, in decreasing priority, are:

- The anomalies at B17, 700-740 m; B18, 1160-1180 m; B30, 800m, 940-960 m, 1100 m; B31, 180-300 m, 780-1000 m; B33, 1060 m; B35, 1200-1220 m, 1320 m, 1400 m, 1560-1580 m occur within areas mapped as Zamu Dolerite. These zones are considered to be the top priority anomalies.
- The anomalous intervals B17, 980 m, B18, 640 m, 920-980 m; B29, 560-620 m, 680-700 m; B33, 600 m; B36, 1520 m; B37, 780-800 m are located near the Zamu Dolerite contact and are probably related to an increase in sulphide content near the intrusive contact.
- The As anomalies at B34, 900-980 m; B35, 820-860 m; B36, 900-1100 m occur near outcrops of an altered ultrabasic unit within the Koolpin Formation. This unit has a high As background so that the high As values are not considered anomalous (refer to Section 12, Watertank Prospect).
- The As anomalies at B17, 1060-1040 m; B18, 200 m, 360-600 m, 1500-1600 m; B29, 1000 m; B30, 1180-1200 m occur in carbonaceous pelites of the Koolpin Formation which usually contain sulphide-quartz veins. The high As values over these intervals are probably the result of a higher As background and As shedding from the quartz veins. Rock-chip samples collected from the quartz veins did not contain any significant Au values.

- The anomalous intervals at B37, 20-60 m; B38, 840 m, 1320-136 m, 1880 m occur in units of the Gerowie Tuff Formation.

During 1985, some of the higher magnitude As zones were examined by:

- composite rock-chip sampling across the anomalous zones; and
- compositing the soil samples in batches of four and five and assaying the resulting sample for Au.

The results of the rock-chip sampling programme are discussed in detail in Section 9.2. The Au assay results of the composite soil samples were all low with a maximum value of 0.028 ppm Au. The full assay results are listed in Appendix IV.

The low Au values are due to dilution in compositing 4 or 5 samples which cover an interval of 80 to 100 m, e.g. a highly anomalous soil value of 0.1 ppm could be diluted to a value of 0.02 ppm Au.

9.2 Rock-chip Geochemistry

Twelve rock-chip samples were collected during geological mapping. Eleven rock-chip samples and 41 composite rock-chip samples were collected from the soil line traverses in areas of anomalous As values. Seven rock-chip and 2 composite rock-chip samples were collected from the Darwin to Amadeus Basin gas pipeline trench. Selected samples were assayed for Au, As, Cu, Fe and Cr. Some samples were also assayed for Pb, Zn, Co and Ag. Assay results and co-ordinates for the

composite rock-chip samples collected along the soil lines are presented in Appendix V. Sample locations are shown in DRG No. 8592-3 and petrographic descriptions are presented in Appendix VI.

The rock-chip sampling programme successfully defined two areas containing anomalous Au values. The first area, located 1 km north of Ban Ban Homestead, contains an anomalous Au zone defined by composite rock-chip sampling on soil lines B16 and B17 and by rock-chip samples taken from the Darwin to Amadeus Basin gas pipeline trench. The maximum value was 0.94 ppm Au from a rock-chip sample of gossanous material within a zone of bleached dolerite. One 50 m composite sample of fine-grained dolerite along line B17 (650-700 m) assayed 0.56 ppm Au. The corresponding As values were low with a maximum value of 670 ppm As.

The host rock for the Ban Ban anomalous zone is altered, sulphide-rich Zamu Dolerite in the nose of a broad anticline. There are many areas of gossanous haematitic material which, because of the intense weathering, are only seen in the gas pipeline trench. Elsewhere, the gossanous material occurs as isolated rubble on the surface.

The second zone of anomalous Au is centred around the Olive prospect in the eastern half of the EL. The zone was detected by composite rock-chip sampling along soil lines B30 and B31 and by rock-chip samples from the costeans and outcrops near the Olive prospect. The maximum Au value was 0.28 ppm Au from a composite rock-chip sample of fine-grained chert/dolerite material exposed on the dumps of an old costean. A 40 m composite of haematitic quartz within altered dolerite assayed 0.22 ppm Au and 1.19% As. The As values are much higher here than in the Ban Ban anomalous zone.

Because of the lack of outcrop, the geology of this zone is not clearly understood. At least two sills of Zamu Dolerite, intruded into carbonaceous sediments of the Koolpin Formation, appear to be present. All the units have been folded and down-faulted by two north-striking faults. The anomalous zone is adjacent to the major northwest-trending fault that crosscuts EL 4177.

The assay results from rock-chip samples collected from the remainder of the EL were low. The maximum Au value was 0.07 ppm Au.

10. GEOPHYSICS

A low-level airborne magnetic/radiometric survey was flown to help locate areas of dolerite under alluvial cover and to define structurally complex zones within the Zamu Dolerite. To assist in the interpretation of the airborne magnetics, ground magnetic traverses were completed along selected soil lines to cover specific magnetic features.

10.1 Airborne Geophysical Survey

EL 4177 was covered as part of a regional aeromagnetic/radiometric survey over the eastern side of the Burnside Dome. The survey was flown along east-west lines 200 m apart. Terrain clearance was 90 m. North-south tie lines were flown at 3 km intervals. Flight lines were plotted on 1:20,000 colour air photographs. Total count, potassium, uranium and thorium spectrometer readings were recorded simultaneously with the magnetic readings.

The results of the survey were provided on digital tape and then re-processed by CSR Limited to produce a residual magnetic map (DRG No. 8592-4).

Although a detailed interpretation is not presently available, several preliminary observations can be made:

- The survey was not successful in defining individual sills of the Zamu Dolerite due to the frequent association of the Zamu Dolerite with the strongly magnetic Koolpin Formation. Major distribution limits of the dolerite have, however, been indicated by both the magnetic and radiometric data.

- A magnetic trough is present in the centre of the licence. It commences in the area of the Olive prospect and trends NW across the licence and continues beyond its eastern boundary. There is a sudden change in magnetic character across this trough from a complex, highly magnetic zone into a lower, less complex magnetic domain. The sudden change in magnetic character indicates the presence of a major structure coincident with the magnetic trough.

Photointerpretation and ground geological mapping confirm the presence of a major structure in this area.

- The zone of anomalous gold values near the Olive prospect coincides with an intensely magnetic zone. The eastern and western boundaries of this zone coincide with north-striking faults inferred from geological mapping.
- The magnetics of the area north of the Olive prospect indicate the presence of a large fold structure. A large anticline is inferred in this area from geological mapping.

10.2 Ground Magnetic Surveys

To assist in the interpretation of the airborne magnetics, a total of 16 line km of ground magnetics was completed. Readings were taken at 20 m intervals using a Geometrics G-856 proton precession magnetometer. The magnetic profiles of these traverses are included as Appendix VII. The numbering system used is the same as that used for the soil lines and the location of the magnetic traverses is shown on DRG No. 8592-2.

A detailed interpretation of the ground magnetic profiles has not been completed.

11. DARWIN TO AMADEUS BASIN GAS PIPELINE TRENCH

The route of the Darwin to Amadeus Basin gas pipeline trench passes through the southwest corner of EL 4177. During the 1985 field season, the trench was excavated through the EL to a depth of 1.5 to 2.0 m. It was decided to take advantage of this opportunity to obtain some subsurface information in the three areas of Zamu Dolerite exposed by the trenching. In these zones, the trench was mapped at a scale of 1:250; -80# soil samples were collected at 20 m intervals from the bottom of the trench; rock-chip samples were collected from favourable lithologies exposed in the trench and ground magnetic traverses were completed along each zone.

Details of the geology and geochemistry for each zone are shown in DRG Nos. 8592-5 and 6. Ground magnetic profiles are presented in Appendix VI. Soil results are listed in Appendix IX and rock-chip results in Appendix II.

The significant results arising from this work are:

- Rock-chip sampling in trench P1 delineated zones of anomalous As (P1; 860 m) and Au (P1; 250, 300, 450, 680 m). These results confirmed the presence of the anomalous Au zone detected by surface sampling along soil lines B16 and B17.
- A zone of silicified, sheared dolerite with carbonate and sericite alteration was exposed in trench P1, 600 to 700 m. The zone also contained 1-2% sulphides and anomalous Au (maximum 0.18 ppm Au). There was no surface evidence of this zone.
- The unaltered boulders of Zamu Dolerite that predominate on the surface only comprise a small percentage of the dolerite present in the trench. Most of the dolerite in

the trench consists of a white, intensely weathered clay.

- The results of the -80# soil sampling were inconclusive. As the trench was only excavated to a depth varying from 1.5 to 2.0 m, it did not in many cases, penetrate the soil cover. Therefore, since the samples were collected from different levels in the soil profile, any comparison between samples was of limited value.
- An area of high As soil values was detected in P3 over the interval 280 to 420 m. These samples will be composited and assayed for Au.
- Small black-soil depressions contained a considerable quantity of transported alluvium. Surface soil results from these areas are of very limited value.

12. WATERTANK PROSPECT

The Watertank prospect is located in the northwest corner of EL 4177 (see Figure 1). During regional soil sampling, strong As anomalies were located along the intervals B34, 900-980 m; B35, 820-800 m; B36, 900-1100 m. Ground checking of these anomalies confirmed that they were associated with outcrops of a foliated, sericitic talc-carbonate-tremolite rock. This rock was later identified as a very altered ultrabasic which was interpreted to be a separate unit of the Zamu Dolerite. No petrological work has been completed to confirm this interpretation. As this type of lithology is a very favourable host rock for Au mineralisation, it was decided that it warranted more detailed mapping and soil sampling.

A north-south base line was established in the area. East-west cross lines were then emplaced at 200 m intervals (refer DRG No. 8592-8). Soil samples were then taken at 20 m intervals along the cross lines where they crossed the ultrabasic unit. Geological observations were taken at each soil sample location.

The Watertank prospect is located along the eastern flank of a south-plunging anticline. The geology consists of a sequence of haematitic pelite and minor iron formation in the Koolpin Formation which is unconformably overlain in the east by siliceous pelite and chert of the Gerowie Tuff. The Koolpin Formation has been complexly folded while the units of the Gerowie Tuff are only mildly deformed.

The ultrabasic unit has a maximum apparent thickness in outcrop of 150 m although soil geochemical results suggest it may have a maximum thickness of 350 m. As the geological contacts of the ultrabasic unit are not exposed, it was impossible to determine whether the unit is an intrusive sill or a volcanic flow. The stratigraphic position of the

ultrabasic unit varies in the grid area. In the south, it lies within the Koolpin Formation. In the north, it occurs along the contact of the Koolpin Formation and the Gerowie Tuff. To the south, it disappears under alluvial cover and in the north, it terminates abruptly against an inferred sill of Zamu Dolerite. The ultrabasic unit has a strong schistosity which dips steeply to the east. The geology of the Watertank Prospect is shown in DRG No. 8592-8.

The results of the soil geochemistry are shown in DRG Nos. 8592-9 to 8592-13 and listed in Appendix VIII. The results were disappointing. The As soil anomalies were caused by the high As background for the ultrabasic. Significant observations arising from the survey are:

- Arsenic and Cr have a correlation coefficient of 0.635. This high level of correlation indicates that the high As values are a reflection of the primary igneous composition, and that As has not been introduced by metasomatic fluids.
- The higher As and Cr values occur in areas of increased structural complexity. They were probably caused by lateral secretion during deformation and metamorphism.
- The Cu values are erratic and do not correlate with any other element.

13. CONCLUSIONS AND RECOMMENDATIONS

The exploration programme completed by CSR Limited during 1985 has enhanced the potential of EL 4177 for the discovery of gold mineralisation. Rock-chip sampling of surface outcrops and in the Darwin to Amadeus Basin gas pipeline trench have defined two areas containing anomalous gold values.

The regional surface soil sampling generated several intervals containing anomalous arsenic values. Compositing of these intervals has established that some of these zones are also anomalous in gold. Detailed work on the altered ultrabasic sill in the Watertank prospect failed to define any zones which have anomalous arsenic values related to gold mineralisation.

It is recommended that the two anomalous gold areas be evaluated by a programme of geological mapping, soil sampling, trenching and rock-chip sampling. In addition, the anomalous arsenic intervals on the regional soil lines warrant checking by trenching or composite rock-chip sampling in areas of good outcrop, and the anomalous arsenic zones in the Watertank prospect should also be checked by trenching and rock-chip sampling.

Preliminary mapping and sampling has indicated that the major northwest-trending fault identified near the Olive prospect may be a mineralising structure. It is recommended that further mapping and sampling be completed to test this theory.

The most favourable of the targets generated by the above programme could then be tested by a drilling programme during 1986.

14. REFERENCES

- CAMPBELL, F.A. (1956)
"Report on the Gossan Formations of Brocks Creek,
Northern Territory"
NT Department of Mines and Energy
Open File Company Report 56/1
- CRICK, I.H. (1980)
"The Geology of the Batchelor-Hayes Creek Area, Northern
Territory, Australia"
Bureau of Mineral Resources, Australia
1:100,000 Geological Map. Sheet 5171, Part 5170
- DUNN, P.R. and MALONE, E.J. (1961)
"Geology of the Ban Ban Area, Northern Territory"
Bureau of Mineral Resources, Australia
1:63,360 Geological Map. D52-8-62
- FERGUSON, J. and NEEDHAM, R.S. (1978)
"The Zamu Dolerite : A Lower Proterozoic Preorogenic
Continental Tholeiite Suite from the Northern Territory,
Australia"
Journ. Geol. Soc. Aust., 25, pp 309-322
- FRASER, N. and HASSALL, G. (1982)
"Annual Report, Burnside Tenements"
AAR Limited, Company Report (unpubl.)
- GOVE, C.J. (1975)
"Final Report, Woolwonga Area, Pine Creek, Northern
Territory"
NT Department of Mines and Energy
Open File Company Report CR 75/129 (unpubl.)
- HAMILTON, K.W. and HASSALL, G.J. (1980)
"Annual Report, Northern Territory Exploration Licences"
AAR Limited, Company Report (unpubl.)

- IKSTRUMS, J.P. (1979)
"Final Report, Coomalie Creek, EL 1471, Pine Creek
Basin, Northern Territory"
NT Department of Mines and Energy
Open File Company Report 79/83
- MALONE, E.J. (1962)
"Pine Creek, Northern Territory, 1:250,000 Geological
Series"
Bureau of Mineral Resources, Australia
Explanatory Notes D/52-8
- MURRAY, I.J. (1955)
"Report on Uranium Search, Brocks Creek Area, Northern
Territory"
NT Department of Mines and Energy
Open File Company Report 55/1
- NEEDHAM, R.S., CRICK, I.H. and STUART-SMITH, P.G. (1980)
"Regional Geology of the Pine Creek Geosyncline"
in Proceedings of the International Uranium Symposium
International Atomic Energy Agency, Vienna, pp 1-22
- NEEDHAM, R.S. and STUART-SMITH, P.G. (1984)
"The Relationship between Mineralisation and
Depositional Environments, Early Proterozoic
Metasediments of the Pine Creek Geosyncline"
Australasian Institute of Mining and Metallurgy
Darwin Conference, 1984 Papers, pp 201-211
- NICHOLSON, P.M. and EUPENE, G.S. (1984)
"Controls on Gold Mineralisation in the Pine Creek
Geosyncline"
Australasian Institute of Mining and Metallurgy
Darwin Conference, 1984 Papers, pp 377-396
- PAGE, R.W., COMPSTON, W. and NEEDHAM, R.S. (1980)
"Geochemistry and Evaluation of the Late-Archean
Basement and Proterozoic Rocks in the Alligator Rivers
Uranium Field, Northern Territory, Australia"
in Proceedings of the International Uranium Symposium
International Atomic Energy Agency, Vienna, pp 39-68

- PATTERSON, G.W. (1955)
"Brocks Creek, Gossans, Northern Territory"
NT Department of Mines and Energy
Open File Company Report 59/3
- PHILLIPS, G.N. and GROVES, D.I. (1984)
"An Epigenetic Origin for Archean Banded Iron Formation-
Hosted Gold Deposits"
Economic Geology, V79, 1984, pp 162-171
- RADFORD, N.W. and ROLFE, G.L. (1983)
"Annual Report, Exploration Licence 4177"
Geopeko, Company Report (unpubl.)
- STUART-SMITH, P.G., WILLS, K.J., BRICK, I.H. and
NEEDHAM, R.S. (1980)
"Evolution of the Pine Creek Geosyncline"
in Proceedings of the International Uranium Symposium
International Atomic Energy Agency, Vienna, pp 23-38
- STUART-SMITH, P.G. and NEEDHAM, R.S. (1984)
"Hydrothermal Mineral Deposits and their Association
with Granitoids in the Cullen Mineral Field, Northern
Territory"
Australasian Institute of Mining and Metallurgy
Darwin Conference, 1984 Papers, pp 329-338
- STUART-SMITH, P.G. and NEEDHAM, R.S. (1985)
"Pine Creek Geosyncline Field Excursion Guide"
Bureau of Mineral Resources, Australia
Record 1985/26
- WALLACE, D.A., STUART-SMITH, P.G. and NEEDHAM, R.S. (1981)
"The Geology of the McKinlay River Area, Northern
Territory, Australia"
Bureau of Mineral Resources, Australia
1:100,000 Geological Sheet 5271

WALPOLE, B.P., CROHN, P.W., DUNN, P.R. and RANDAL, M.A.
(1968)
"Geology of the Katherine-Darwin Region, Northern
Territory"
Bureau of Mineral Resources, Australia
Bulletin 82

WHITE, D.A. and MALONE, E.J. (1962)
"Geology of the Burnside Area, Northern Territory"
Bureau of Mineral Resources, Australia
1:63,360 Geological Map. Sheet 61, Zone 4

WILLS, K.J. (1977)
"Annual Report, Burnside East, EL 1137, and Burnside
West, EL 1149, Pine Creek Basin, Northern Territory"
NT Department of Mines and Energy
Open File Company Report 78/167 (unpubl.)

WILLS, K.J. (1979)
"Final Reports, Burnside East, EL 1137, and Burnside
West, EL 1149, Pine Creek Basin, Northern Territory"
NT Department of Mines and Energy
Open File Company Report 79/56

KWH/SGL

March 1986

APPENDIX I
REGIONAL SOIL SAMPLE RESULTS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A254775	B15	0.	70.0	4.90	70.0	13.0
A254776	B15	20.	70.0	5.10	95.0	27.0
A254777	B15	40.	65.0	6.10	120.0	7.0
A254778	B15	60.	55.0	6.30	125.0	4.0
A254779	B15	80.	60.0	7.20	135.0	8.0
A254780	B15	100.	80.0	7.40	135.0	10.0
A254781	B15	120.	110.0	12.80	275.0	7.0
A254782	B15	140.	75.0	12.90	285.0	4.0
A254783	B15	160.	125.0	15.90	320.0	3.0
A254784	B15	180.	90.0	15.80	280.0	3.0
A254785	B15	200.	100.0	14.00	225.0	3.0
A254786	B15	220.	110.0	13.00	175.0	3.0
A254787	B15	240.	100.0	12.30	225.0	3.0
A254788	B15	260.	90.0	12.10	220.0	3.0
A254789	B15	280.	95.0	13.90	275.0	4.0
A254790	B15	300.	90.0	13.50	235.0	3.0
A254791	B15	320.	110.0	14.10	230.0	3.0
A254792	B15	340.	75.0	13.40	205.0	3.0
A254793	B15	360.	90.0	14.30	265.0	11.0
A254794	B15	380.	80.0	12.60	220.0	5.0
A254795	B15	400.	110.0	11.40	225.0	13.0
A254796	B15	420.	120.0	11.30	215.0	11.0
A254797	B15	440.	100.0	9.70	175.0	14.0
A254798	B15	460.	105.0	9.50	145.0	3.0
A254799	B15	480.	125.0	10.80	125.0	2.0
A254800	B15	500.	160.0	12.20	150.0	2.0
A254801	B15	520.	200.0	12.60	190.0	3.0
A254802	B15	540.	185.0	12.80	180.0	3.0
A254803	B15	560.	230.0	12.20	195.0	3.0
A254804	B15	580.	250.0	10.70	155.0	3.0
A254805	B15	600.	120.0	11.00	135.0	2.0
A254806	B15	620.	120.0	11.20	135.0	7.0
A254807	B15	640.	90.0	8.50	105.0	4.0
A254808	B15	660.	80.0	5.80	145.0	6.0
A254809	B15	680.	60.0	5.40	175.0	10.0
A254810	B15	700.	60.0	3.20	70.0	11.0
A254811	B15	720.	45.0	1.30	35.0	4.0
A254812	B15	740.	40.0	1.70	25.0	11.0
A254813	B15	760.	40.0	1.20	20.0	15.0
A254814	B15	780.	30.0	0.90	20.0	10.0
A254815	B15	800.	25.0	0.75	15.0	6.0
A254816	B15	820.	40.0	1.00	20.0	20.0
A254817	B15	840.	30.0	0.80	10.0	16.0
A254818	B15	860.	30.0	0.71	10.0	10.0
A254819	B15	880.	30.0	0.53	5.0	9.0
A254820	B15	900.	20.0	0.80	5.0	10.0
A254293	B16	0.	60.0	1.40	80.0	12.0
A254294	B16	20.	30.0	3.20	95.0	15.0
A254295	B16	40.	30.0	3.20	110.0	10.0
A254296	B16	60.	30.0	2.40	100.0	6.0
A254297	B16	80.	30.0	2.60	140.0	10.0
A254298	B16	100.	25.0	2.20	85.0	8.0
A254299	B16	120.	25.0	4.10	100.0	8.0
A254300	B16	140.	25.0	2.30	80.0	3.0

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A254301	B16	160.	20.0	2.00	80.0	3.0
A254302	B16	180.	30.0	2.80	115.0	5.0
A254303	B16	200.	60.0	6.40	145.0	10.0
A254304	B16	220.	60.0	5.50	100.0	4.0
A254305	B16	240.	85.0	5.20	80.0	4.0
A254306	B16	260.	110.0	7.50	100.0	3.0
A254307	B16	280.	167.0	9.80	130.0	4.0
A254308	B16	300.	190.0	10.80	170.0	2.0
A254309	B16	320.	210.0	12.70	185.0	3.0
A254310	B16	340.	160.0	10.00	145.0	2.0
A254311	B16	360.	210.0	11.20	125.0	11.0
A254312	B16	380.	170.0	8.70	90.0	2.0
A254313	B16	400.	160.0	8.40	135.0	6.0
A254314	B16	420.	155.0	7.40	100.0	2.0
A254315	B16	440.	155.0	7.30	85.0	1.0
A254316	B16	460.	145.0	7.10	80.0	1.0
A254317	B16	480.	230.0	10.00	100.0	1.0
A254318	B16	500.	135.0	9.40	100.0	1.0
A254319	B16	520.	135.0	8.30	130.0	0.5
A254320	B16	540.	135.0	8.70	215.0	3.0
A254321	B16	560.	115.0	8.90	255.0	1.0
A254322	B16	580.	190.0	12.10	320.0	2.0
A254323	B16	600.	155.0	10.70	265.0	2.0
A254324	B16	620.	155.0	9.70	210.0	2.0
A254325	B16	640.	215.0	9.80	275.0	1.0
A254326	B16	660.	225.0	15.40	445.0	1.0
A254327	B16	680.	155.0	10.40	320.0	2.0
A254328	B16	700.	145.0	10.00	295.0	1.0
A254329	B16	720.	210.0	13.80	455.0	3.0
A254330	B16	740.	75.0	10.30	260.0	5.0
A254331	B16	760.	80.0	11.10	270.0	6.0
A254332	B16	780.	65.0	10.20	240.0	5.0
A254333	B16	800.	55.0	9.30	245.0	19.0
A254334	B16	820.	50.0	8.20	195.0	23.0
A254335	B16	840.	45.0	6.20	245.0	26.0
A254336	B16	860.	45.0	5.00	240.0	27.0
A254337	B16	880.	30.0	2.90	55.0	14.0
A254338	B16	900.	20.0	2.50	70.0	11.0
A254339	B16	920.	30.0	5.70	190.0	5.0
A254340	B16	940.	35.0	3.80	95.0	5.0
A254341	B16	960.	35.0	3.90	90.0	5.0
A254342	B16	980.	20.0	2.00	55.0	8.0
A254343	B16	1000.	5.0	0.85	10.0	20.0
A255230	B17	0.	40.0	3.00	60.0	20.0
A255231	B17	20.				
A255232	B17	40.				
A255233	B17	60.	50.0	5.00	145.0	36.0
A255234	B17	80.	25.0	2.40	115.0	21.0
A255235	B17	100.	20.0	3.20	75.0	20.0
A255236	B17	120.	5.0	1.90	45.0	8.0
A255237	B17	140.	5.0	2.10	50.0	8.0
A255238	B17	160.	75.0	4.80	60.0	25.0
A255239	B17	180.	45.0	3.90	160.0	40.0
A255240	B17	200.	90.0	6.20	100.0	10.0
A255241	B17	220.	40.0	9.50	95.0	7.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255242	B17	240.	45.0	7.10	85.0	3.0
A255243	B17	260.	50.0	7.70	65.0	2.0
A255244	B17	280.	50.0	8.20	70.0	2.0
A255245	B17	300.	210.0	12.00	135.0	3.0
A255246	B17	320.	170.0	13.60	145.0	3.0
A255247	B17	340.	150.0	13.70	130.0	4.0
A255248	B17	360.	175.0	14.20	140.0	2.0
A255249	B17	380.	25.0	4.60	155.0	44.0
A255250	B17	400.	140.0	13.20	150.0	3.0
A255251	B17	420.	140.0	12.90	140.0	14.0
A255252	B17	440.	150.0	12.90	135.0	6.0
A255253	B17	460.	160.0	11.90	120.0	10.0
A255254	B17	480.	130.0	11.80	125.0	16.0
A255255	B17	500.	85.0	11.20	245.0	3.0
A255256	B17	520.	95.0	13.80	355.0	1.0
A255257	B17	540.	115.0	19.80	390.0	2.0
A255258	B17	560.	140.0	16.00	340.0	2.0
A255259	B17	580.	165.0	17.30	405.0	2.0
A255260	B17	600.	140.0	13.00	330.0	2.0
A255261	B17	620.	90.0	15.30	390.0	3.0
A255262	B17	640.	95.0	13.20	310.0	6.0
A255263	B17	660.	70.0	12.20	245.0	20.0
A255264	B17	680.	60.0	14.90	260.0	20.0
A255265	B17	700.	65.0	16.00	200.0	100.0
A255266	B17	720.	60.0	13.90	205.0	85.0
A255267	B17	740.	55.0	17.90	420.0	60.0
A255268	B17	760.	60.0	13.90	145.0	30.0
A255269	B17	780.	55.0	14.10	125.0	29.0
A255270	B17	800.	55.0	12.40	90.0	9.0
A255271	B17	820.	60.0	14.20	140.0	7.0
A255272	B17	840.	70.0	12.50	110.0	6.0
A255273	B17	860.	90.0	12.20	100.0	7.0
A255274	B17	880.	84.0	11.80	85.0	8.0
A255275	B17	900.	70.0	12.30	85.0	9.0
A255276	B17	920.	50.0	10.10	85.0	6.0
A255277	B17	940.	30.0	8.80	90.0	6.0
A255278	B17	960.	60.0	7.80	85.0	14.0
A255279	B17	980.	25.0	4.50	140.0	180.0
A255280	B17	1000.	20.0	1.30	50.0	37.0
A255281	B17	1020.	15.0	1.00	20.0	30.0
A255282	B17	1040.	15.0	1.10	20.0	47.0
A255283	B17	1060.	30.0	1.50	45.0	51.0
A255284	B17	1080.	30.0	3.70	50.0	110.0
A255285	B17	1100.	145.0	6.30	100.0	110.0
A255286	B17	1120.				
A255287	B17	1140.	60.0	2.30	40.0	51.0
A255288	B17	1160.	35.0	1.10	20.0	21.0
A255289	B17	1180.	40.0	1.40	20.0	10.0
A255290	B17	1200.	50.0	1.40	35.0	4.0
A253811	B18	0.				
A253812	B18	20.				
A253813	B18	40.				
A253814	B18	60.				
A253815	B18	80.				
A253816	B18	100.				
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASAR RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A253817	B18	120.				
A253818	B18	140.				
A253819	B18	160.				
A253820	B18	180.				
A253821	B18	200.				
A253822	B18	220.				
A253823	B18	240.	40.0	1.20	100.0	38.0
A253824	B18	260.	35.0	0.90	75.0	2.0
A253825	B18	280.	40.0	0.90	85.0	55.0
A253826	B18	300.	40.0	2.00	70.0	45.0
A253827	B18	320.	60.0	3.70	90.0	47.0
A253828	B18	340.	50.0	3.90	100.0	25.0
A253829	B18	360.	70.0	9.70	100.0	110.0
A253830	B18	380.	60.0	7.00	115.0	110.0
A253831	B18	400.	55.0	4.80	125.0	220.0
A253832	B18	420.	75.0	7.00	175.0	520.0
A253833	B18	440.	65.0	4.90	145.0	360.0
A253834	B18	460.	50.0	7.10	215.0	380.0
A253835	B18	480.	50.0	4.90	145.0	520.0
A253836	B18	500.	75.0	9.60	390.0	2250.0
A253836	B18	520.	65.0	4.90	125.0	350.0
A253838	B18	540.	55.0	3.90	50.0	500.0
A253839	B18	560.	50.0	5.20	75.0	65.0
A253840	B18	580.	80.0	6.90	80.0	55.0
A253841	B18	600.	65.0	6.10	80.0	65.0
A253842	B18	620.	80.0	7.80	105.0	42.0
A253843	B18	640.	115.0	8.70	115.0	110.0
A253844	B18	660.	210.0	12.60	130.0	7.0
A253845	B18	680.	170.0	10.50	135.0	7.0
A253846	B18	700.	150.0	9.80	100.0	9.0
A253847	B18	720.	200.0	11.30	80.0	7.0
A253848	B18	740.	210.0	11.80	90.0	6.0
A253849	B18	760.	215.0	12.40	85.0	7.0
A253850	B18	780.	170.0	12.10	100.0	8.0
A253851	B18	800.	170.0	11.50	90.0	10.0
A253852	B18	820.	160.0	11.60	90.0	11.0
A253853	B18	840.	180.0	12.10	90.0	11.0
A253854	B18	860.	180.0	11.50	90.0	11.0
A253855	B18	880.	110.0	10.50	100.0	22.0
A253856	B18	900.	85.0	8.90	95.0	20.0
A253857	B18	920.	100.0	7.80	90.0	62.0
A253858	B18	940.	90.0	6.30	145.0	85.0
A253859	B18	960.	90.0	5.00	55.0	57.0
A253860	B18	980.	90.0	7.30	80.0	62.0
A253861	B18	1000.	125.0	8.80	80.0	45.0
A253862	B18	1020.	130.0	8.30	55.0	15.0
A253863	B18	1040.	200.0	9.80	55.0	9.0
A253864	B18	1060.	215.0	10.00	55.0	9.0
A253865	B18	1080.	70.0	11.70	75.0	10.0
A253866	B18	1100.	70.0	10.60	70.0	18.0
A253867	B18	1120.	70.0	10.30	85.0	28.0
A253868	B18	1140.	80.0	10.70	145.0	35.0
A253869	B18	1160.	90.0	10.60	125.0	54.0
A253870	B18	1180.	70.0	11.50	110.0	50.0
A253871	B18	1200.	110.0	9.80	75.0	31.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A253871	B18	1220.	100.0	9.80	85.0	24.0
A253872	B18	1240.	85.0	10.70	90.0	23.0
A253873	B18	1250.	45.0	12.40	120.0	19.0
A253874	B18	1280.	55.0	11.70	120.0	15.0
A253875	B18	1300.	50.0	12.00	135.0	16.0
A253876	B18	1320.	50.0	12.60	150.0	18.0
A253877	B18	1340.	50.0	11.70	140.0	22.0
A253878	B18	1360.	50.0	12.50	165.0	28.0
A253879	B18	1380.	45.0	12.90	185.0	37.0
A253880	B18	1400.	40.0	11.70	160.0	42.0
A253881	B18	1420.	40.0	11.00	145.0	25.0
A253882	B18	1440.	40.0	12.40	170.0	40.0
A253883	B18	1460.	35.0	9.80	125.0	39.0
A253884	B18	1480.	50.0	8.50	105.0	40.0
A253885	B18	1500.	60.0	9.40	125.0	56.0
A253886	B18	1520.	50.0	6.40	85.0	68.0
A253887	B18	1540.	50.0	6.70	140.0	150.0
A253888	B18	1560.	40.0	4.50	145.0	180.0
A253889	B18	1580.	40.0	2.20	55.0	100.0
A253890	B18	1600.	50.0	1.70	50.0	100.0
A257001	B29	0.	20.0	0.67	15.0	11.0
A257002	B29	20.	20.0	0.90	15.0	17.0
A257003	B29	40.	15.0	1.10	20.0	20.0
A257004	B29	60.	20.0	1.40	30.0	31.0
A257005	B29	80.	25.0	1.50	35.0	34.0
A257006	B29	100.	30.0	1.50	45.0	33.0
A257007	B29	120.	25.0	0.90	30.0	11.0
A257008	B29	140.	45.0	1.20	40.0	15.0
A257009	B29	160.	55.0	1.70	50.0	22.0
A257010	B29	180.	80.0	1.90	50.0	40.0
A257011	B29	200.	75.0	1.10	45.0	9.0
A257012	B29	220.	80.0	2.30	65.0	10.0
A257013	B29	240.	55.0	1.40	45.0	6.0
A257014	B29	260.	50.0	0.63	35.0	3.0
A257015	B29	280.	35.0	1.40	55.0	9.0
A257016	B29	300.	50.0	2.20	60.0	10.0
A257017	B29	320.	80.0	3.00	65.0	10.0
A257018	B29	340.	110.0	3.50	65.0	10.0
A257019	B29	360.	95.0	3.40	60.0	11.0
A257020	B29	380.	100.0	3.80	60.0	11.0
A257021	B29	400.	150.0	5.00	90.0	17.0
A257022	B29	420.	235.0	7.20	130.0	20.0
A257023	B29	440.	320.0	6.80	130.0	21.0
A257024	B29	460.	310.0	8.10	195.0	31.0
A257025	B29	480.	65.0	6.10	85.0	26.0
A257026	B29	500.	55.0	6.90	80.0	26.0
A257027	B29	520.	70.0	7.30	80.0	28.0
A257028	B29	540.	50.0	7.00	65.0	25.0
A257029	B29	560.	165.0	10.20	95.0	56.0
A257030	B29	580.	220.0	9.40	90.0	55.0
A257031	B29	600.	300.0	10.90	150.0	380.0
A257032	B29	620.	125.0	7.40	185.0	120.0
A257033	B29	640.	55.0	5.20	130.0	30.0
A257034	B29	660.	45.0	5.90	55.0	21.0
A257035	B29	680.	50.0	4.90	100.0	56.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ANALYSIS RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257036	B29	700.	205.0	7.20	115.0	120.0
A257037	B29	720.	520.0	11.00	90.0	30.0
A257038	B29	740.	780.0	6.90	40.0	20.0
A257039	B29	760.	830.0	9.60	60.0	30.0
A257040	B29	780.	360.0	7.50	105.0	22.0
A257041	B29	800.	175.0	7.10	110.0	29.0
A257042	B29	820.	90.0	5.80	95.0	30.0
A257043	B29	840.	120.0	4.00	100.0	20.0
A257044	B29	860.	145.0	4.30	80.0	15.0
A257045	B29	880.	60.0	2.90	80.0	12.0
A257046	B29	900.	70.0	5.90	105.0	49.0
A257047	B29	920.	55.0	3.60	65.0	35.0
A257048	B29	940.	60.0	3.50	45.0	43.0
A257049	B29	960.	50.0	2.30	45.0	29.0
A257050	B29	980.	55.0	3.10	55.0	43.0
A257051	B29	1000.	50.0	2.80	50.0	55.0
A257053	B30	0.	10.0	1.40	40.0	13.0
A257054	B30	20.	10.0	1.30	30.0	11.0
A257055	B30	40.	10.0	1.40	30.0	10.0
A257056	B30	60.	15.0	1.80	40.0	21.0
A257057	B30	80.	15.0	1.50	40.0	14.0
A257058	B30	100.	20.0	2.00	55.0	17.0
A257059	B30	120.	15.0	1.60	55.0	11.0
A257060	B30	140.	15.0	1.60	55.0	14.0
A257061	B30	160.	20.0	2.20	60.0	21.0
A257062	B30	180.	25.0	2.00	50.0	15.0
A257063	B30	200.	30.0	1.00	25.0	3.0
A257064	B30	220.	30.0	1.10	25.0	4.0
A257065	B30	240.	25.0	0.90	25.0	5.0
A257066	B30	260.	25.0	1.30	25.0	9.0
A257067	B30	280.	30.0	1.60	30.0	9.0
A257068	B30	300.				
A257069	B30	320.				
A257070	B30	340.				
A257071	B30	360.				
A257072	B30	380.	40.0	4.30	55.0	13.0
A257073	B30	400.	20.0	2.90	40.0	8.0
A257074	B30	420.	20.0	1.80	40.0	6.0
A257075	B30	440.	15.0	2.00	35.0	6.0
A257076	B30	460.	15.0	2.30	45.0	9.0
A257077	B30	480.	15.0	2.20	50.0	8.0
A257078	B30	500.	50.0	4.50	60.0	10.0
A257079	B30	520.	45.0	6.10	85.0	13.0
A257080	B30	540.	40.0	5.10	75.0	12.0
A257081	B30	560.	40.0	4.60	70.0	13.0
A257082	B30	580.	30.0	2.60	45.0	9.0
A257083	B30	600.	95.0	4.90	65.0	12.0
A257084	B30	620.	10.0	2.50	35.0	9.0
A257085	B30	640.	20.0	1.90	30.0	8.0
A257086	B30	660.	40.0	2.10	30.0	11.0
A257087	B30	680.	190.0	5.70	65.0	12.0
A257088	B30	700.	400.0	5.80	80.0	12.0
A257089	B30	720.	80.0	4.50	110.0	11.0
A257090	B30	740.	400.0	9.50	110.0	11.0
A257091	B30	760.	205.0	8.80	110.0	11.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257092	B30	780.	135.0	8.20	120.0	20.0
A257093	B30	800.	430.0	8.20	70.0	57.0
A257094	B30	820.	350.0	9.30	65.0	21.0
A257095	B30	840.	540.0	6.90	70.0	18.0
A257096	B30	860.	370.0	5.70	100.0	12.0
A257097	B30	880.	140.0	2.90	65.0	21.0
A257098	B30	900.	75.0	2.40	55.0	7.0
A257099	B30	920.	90.0	3.80	100.0	11.0
A257100	B30	940.	230.0	9.30	135.0	50.0
A257101	B30	960.	125.0	7.40	115.0	73.0
A257102	B30	980.	165.0	6.80	125.0	45.0
A257103	B30	1000.	265.0	11.10	125.0	35.0
A257104	B30	1020.	280.0	10.00	90.0	42.0
A257105	B30	1040.	265.0	9.30	120.0	36.0
A257106	B30	1060.	235.0	10.00	130.0	48.0
A257107	B30	1080.	215.0	11.30	150.0	45.0
A257108	B30	1100.	195.0	10.40	145.0	75.0
A257109	B30	1120.	160.0	11.70	135.0	40.0
A257110	B30	1140.	250.0	9.70	85.0	23.0
A257111	B30	1160.	110.0	6.60	95.0	33.0
A257112	B30	1180.	45.0	3.20	70.0	61.0
A257113	B30	1200.	45.0	2.10	65.0	77.0
A257114	B30	1220.	30.0	0.75	50.0	13.0
A257115	B30	1240.	25.0	1.00	50.0	20.0
A257116	B30	1260.	20.0	0.80	45.0	10.0
A257117	B30	1280.	30.0	1.40	55.0	24.0
A257118	B30	1300.	30.0	1.60	50.0	40.0
A257119	B30	1320.	25.0	1.20	25.0	16.0
A257120	B30	1340.	20.0	1.20	35.0	10.0
A257125	B31	0.	15.0	1.50	35.0	7.0
A257126	B31	20.	15.0	0.80	25.0	2.0
A257127	B31	40.	15.0	1.10	25.0	4.0
A257128	B31	60.	15.0	1.60	25.0	8.0
A257129	B31	80.	20.0	1.60	30.0	9.0
A257130	B31	100.	10.0	1.40	25.0	15.0
A257131	B31	120.	10.0	1.00	25.0	20.0
A257132	B31	140.	10.0	1.50	35.0	28.0
A257133	B31	160.	10.0	1.50	35.0	26.0
A257134	B31	180.	10.0	1.70	40.0	56.0
A257135	B31	200.	25.0	4.40	100.0	140.0
A257136	B31	220.	45.0	9.00	220.0	320.0
A257137	B31	240.	50.0	7.00	220.0	290.0
A257138	B31	260.	40.0	2.50	165.0	105.0
A257139	B31	280.	30.0	2.40	55.0	105.0
A257140	B31	300.	10.0	2.10	70.0	78.0
A257141	B31	320.	60.0	3.40	95.0	32.0
A257142	B31	340.	50.0	4.60	105.0	15.0
A257143	B31	360.	100.0	4.50	125.0	10.0
A257144	B31	380.	60.0	3.20	120.0	9.0
A257145	B31	400.	45.0	4.10	110.0	25.0
A257146	B31	420.	55.0	6.10	135.0	17.0
A257147	B31	440.	85.0	8.10	150.0	22.0
A257148	B31	460.	85.0	8.00	150.0	36.0
A257149	B31	480.	100.0	7.30	150.0	35.0
A257150	B31	500.	130.0	6.90	125.0	34.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257151	B31	520.	90.0	3.90	105.0	21.0
A257152	B31	540.	115.0	4.50	100.0	20.0
A257153	B31	560.	95.0	3.60	70.0	17.0
A257154	B31	580.	100.0	3.40	55.0	12.0
A257155	B31	600.	95.0	4.20	70.0	17.0
A257156	B31	620.	100.0	2.90	55.0	9.0
A257157	B31	640.	70.0	1.50	45.0	20.0
A257158	B31	660.	60.0	1.20	40.0	10.0
A257159	B31	680.	55.0	1.40	30.0	11.0
A257160	B31	700.	70.0	2.30	30.0	11.0
A257161	B31	720.	55.0	2.40	40.0	20.0
A257162	B31	740.	55.0	2.60	45.0	20.0
A257163	B31	760.	70.0	3.30	50.0	24.0
A257164	B31	780.	30.0	5.40	70.0	53.0
A257165	B31	800.	30.0	7.40	65.0	72.0
A257166	B31	820.	35.0	6.40	70.0	100.0
A257167	B31	840.	40.0	7.60	70.0	75.0
A257168	B31	860.	35.0	7.50	50.0	68.0
A257169	B31	880.	35.0	6.90	55.0	39.0
A257170	B31	900.	35.0	7.90	145.0	78.0
A257171	B31	920.	25.0	7.80	80.0	95.0
A257172	B31	940.	25.0	6.00	70.0	63.0
A257173	B31	960.	25.0	3.50	50.0	33.0
A257174	B31	980.	30.0	6.00	65.0	95.0
A257175	B31	1000.	20.0	1.60	45.0	120.0
A256060	B32	0.	15.0	1.60	25.0	11.0
A256061	B32	20.	15.0	1.40	25.0	8.0
A256062	B32	40.	15.0	1.30	35.0	8.0
A256063	B32	60.	30.0	1.50	35.0	10.0
A256064	B32	80.				
A256065	B32	100.				
A256066	B32	120.	70.0	5.00	95.0	23.0
A256067	B32	140.	70.0	5.00	120.0	41.0
A256068	B32	160.	55.0	3.80	60.0	22.0
A256069	B32	180.	35.0	1.80	40.0	16.0
A256070	B32	200.	25.0	1.00	30.0	14.0
A256071	B32	220.	20.0	1.10	30.0	14.0
A256072	B32	240.	30.0	1.40	35.0	17.0
A256073	B32	260.	30.0	2.00	35.0	26.0
A256074	B32	280.	20.0	1.00	35.0	18.0
A256075	B32	300.	15.0	0.80	40.0	21.0
A256076	B32	320.	15.0	1.30	40.0	20.0
A256077	B32	340.	15.0	1.40	35.0	10.0
A256078	B32	360.	15.0	1.90	40.0	8.0
A256079	B32	380.	15.0	2.50	55.0	9.0
A256080	B32	400.	15.0	2.30	60.0	10.0
A256081	B32	420.	20.0	2.70	90.0	16.0
A256082	B32	440.	30.0	3.50	160.0	27.0
A256083	B32	460.	15.0	3.00	150.0	18.0
A257084	B32	480.	20.0	3.50	290.0	20.0
A257085	B32	500.	20.0	4.40	265.0	13.0
A257086	B32	520.	15.0	3.50	220.0	18.0
A257087	B32	540.	20.0	3.90	180.0	24.0
A257088	B32	560.	15.0	3.40	160.0	23.0
A257089	B32	580.	15.0	3.70	160.0	25.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257090	B32	600.	15.0	3.10	130.0	14.0
A256091	B32	620.	15.0	4.20	210.0	37.0
A256092	B32	640.	15.0	4.70	240.0	33.0
A256093	B32	660.	20.0	3.70	165.0	26.0
A256094	B32	680.	40.0	3.60	180.0	39.0
A256095	B32	700.	15.0	1.70	60.0	17.0
A256096	B32	720.	10.0	1.60	90.0	35.0
A256097	B32	740.	10.0	0.90	60.0	13.0
A256098	B32	760.	15.0	1.00	70.0	15.0
A256099	B32	780.	20.0	0.80	95.0	7.0
A256100	B32	800.	35.0	0.90	75.0	4.0
A256101	B32	820.	60.0	4.10	70.0	11.0
A256102	B32	840.	75.0	4.90	80.0	11.0
A256103	B32	860.	70.0	6.00	60.0	13.0
A256104	B32	880.	110.0	8.20	60.0	15.0
A256105	B32	900.	170.0	8.40	45.0	19.0
A256106	B32	920.	140.0	6.10	40.0	19.0
A256107	B32	940.	220.0	5.70	40.0	16.0
A256108	B32	960.	100.0	7.30	60.0	24.0
A256109	B32	980.	200.0	4.50	30.0	16.0
A256110	B32	1000.	60.0	1.50	40.0	18.0
A256111	B32	1020.	20.0	1.30	55.0	16.0
A256112	B32	1040.	20.0	0.90	65.0	14.0
A256113	B32	1060.	15.0	0.68	50.0	22.0
A256114	B32	1080.	20.0	0.59	45.0	13.0
A256115	B32	1100.	20.0	0.61	55.0	15.0
A256120	B33	0.	10.0	0.90	25.0	3.0
A256121	B33	20.	15.0	1.00	15.0	1.0
A256122	B33	40.	15.0	1.10	15.0	2.0
A256123	B33	60.	20.0	1.70	25.0	1.0
A256124	B33	80.	15.0	1.50	25.0	1.0
A256125	B33	100.	15.0	1.80	20.0	2.0
A256126	B33	120.	15.0	1.90	20.0	2.0
A256127	B33	140.	25.0	2.60	25.0	1.0
A256128	B33	160.	65.0	7.00	60.0	5.0
A256129	B33	180.	125.0	8.40	85.0	5.0
A256130	B33	200.	140.0	8.10	100.0	7.0
A256131	B33	220.	40.0	3.60	40.0	3.0
A256132	B33	240.	105.0	4.30	50.0	4.0
A256133	B33	260.	25.0	1.50	25.0	2.0
A256134	B33	280.	35.0	2.90	55.0	7.0
A256135	B33	300.	45.0	3.50	60.0	14.0
A256136	B33	320.	40.0	3.80	55.0	10.0
A256136	B33	340.	55.0	5.20	65.0	19.0
A256137	B33	360.	75.0	6.60	80.0	29.0
A256139	B33	380.	110.0	8.70	65.0	23.0
A256140	B33	400.	140.0	9.10	80.0	18.0
A256141	B33	420.	200.0	9.40	80.0	17.0
A256142	B33	440.	310.0	9.80	85.0	16.0
A256143	B33	460.	560.0	8.90	80.0	29.0
A256144	B33	480.	640.0	6.80	55.0	15.0
A256145	B33	500.	550.0	6.90	60.0	8.0
A256146	B33	520.	530.0	6.10	50.0	12.0
A256147	B33	540.	510.0	7.50	60.0	14.0
A256148	B33	560.	320.0	8.10	105.0	26.0

SAMPLE	LINE	DIST	CR	FE	CU	AS
--------	------	------	----	----	----	----

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A256149	B33	580.	210.0	9.70	85.0	31.0
A256150	B33	600.	220.0	8.70	75.0	56.0
A256151	B33	620.	175.0	6.70	70.0	37.0
A256152	B33	640.	85.0	3.80	50.0	20.0
A256153	B33	660.	90.0	4.10	65.0	22.0
A256154	B33	680.	70.0	3.50	60.0	16.0
A256155	B33	700.	60.0	3.40	60.0	14.0
A256156	B33	720.	60.0	3.00	55.0	15.0
A256157	B33	740.	35.0	2.40	55.0	9.0
A256158	B33	760.	50.0	2.70	55.0	12.0
A256159	B33	780.	50.0	2.60	60.0	10.0
A256160	B33	800.	45.0	2.80	55.0	10.0
A256165	B33	820.	75.0	3.30	55.0	10.0
A256166	B33	840.	115.0	3.50	45.0	7.0
A256163	B33	860.	80.0	3.40	40.0	3.0
A256164	B33	880.	85.0	3.60	50.0	3.0
A256165	B33	900.	80.0	3.40	45.0	2.0
A256166	B33	920.	75.0	3.20	45.0	3.0
A256167	B33	940.	130.0	5.20	70.0	8.0
A256168	B33	960.	350.0	7.30	70.0	8.0
A256169	B33	980.	265.0	7.70	80.0	17.0
A256170	B33	1000.	85.0	5.80	95.0	14.0
A256171	B33	1020.	220.0	6.50	85.0	26.0
A256172	B33	1040.	65.0	5.10	60.0	26.0
A256173	B33	1060.	60.0	5.00	30.0	57.0
A256174	B33	1080.	300.0	6.30	60.0	18.0
A256175	B33	1100.	310.0	6.00	65.0	35.0
A256176	B33	1120.	220.0	7.30	85.0	23.0
A256177	B33	1140.	60.0	4.00	80.0	8.0
A256178	B33	1160.	80.0	5.10	70.0	7.0
A256179	B33	1180.	120.0	4.60	100.0	5.0
A256180	B33	1200.	230.0	9.80	120.0	13.0
A256181	B33	1220.	270.0	9.20	125.0	7.0
A256182	B33	1240.	310.0	8.70	90.0	12.0
A256183	B33	1260.	170.0	6.70	180.0	9.0
A256184	B33	1280.	50.0	4.50	90.0	11.0
A256185	B33	1300.	500.0	8.10	70.0	8.0
A256186	B33	1320.	700.0	6.80	55.0	7.0
A256187	B33	1340.	950.0	7.70	50.0	8.0
A256188	B33	1360.	320.0	7.00	80.0	2.0
A256189	B33	1380.	340.0	8.20	85.0	2.0
A256190	B33	1400.	350.0	8.10	60.0	4.0
A256191	B33	1420.	230.0	8.30	70.0	7.0
A256192	B33	1440.	210.0	7.80	65.0	9.0
A256193	B33	1460.	200.0	8.90	65.0	9.0
A256194	B33	1480.	160.0	8.70	75.0	10.0
A256195	B33	1500.	180.0	6.70	65.0	7.0
A256196	B33	1520.				
A256197	B33	1540.				
A256198	B33	1560.	50.0	1.70	55.0	18.0
A256199	B33	1580.	45.0	1.80	55.0	12.0
A256200	B33	1600.	30.0	1.30	45.0	12.0
A256201	B33	1620.				
A256202	B33	1640.				
A256203	B33	1660.	30.0	1.80	60.0	12.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A256204	B33	1680.	35.0	1.80	65.0	10.0
A256205	B33	1700.	35.0	2.00	70.0	14.0
A256501	B34	0.	10.0	1.90	15.0	22.0
A256502	B34	20.	10.0	1.90	15.0	21.0
A256503	B34	40.	15.0	1.70	20.0	12.0
A256504	B34	60.	10.0	2.10	25.0	18.0
A256505	B34	80.	10.0	2.00	25.0	14.0
A256506	B34	100.	15.0	2.10	30.0	11.0
A256507	B34	120.	15.0	2.80	30.0	15.0
A256508	B34	140.	10.0	2.60	30.0	12.0
A256509	B34	160.	5.0	2.00	15.0	3.0
A256510	B34	180.	10.0	1.90	25.0	9.0
A256511	B34	200.	10.0	1.60	20.0	10.0
A256512	B34	220.	10.0	1.90	25.0	9.0
A256513	B34	240.	5.0	1.30	20.0	10.0
A256514	B34	260.	10.0	0.80	20.0	6.0
A256515	B34	280.	20.0	1.90	30.0	9.0
A256516	B34	300.	5.0	1.10	15.0	6.0
A256517	B34	320.	10.0	1.10	15.0	6.0
A256518	B34	340.	10.0	0.90	20.0	7.0
A256519	B34	360.	5.0	0.90	25.0	7.0
A256520	B34	380.	5.0	2.10	40.0	9.0
A256521	B34	400.	15.0	2.30	40.0	11.0
A256522	B34	420.	45.0	2.80	45.0	9.0
A256523	B34	440.				
A256524	B34	460.				
A256525	B34	480.				
A256526	B34	500.				
A256527	B34	520.	30.0	1.90	40.0	9.0
A256528	B34	540.	40.0	1.50	40.0	8.0
A256529	B34	560.	205.0	4.50	60.0	21.0
A256530	B34	580.	70.0	2.50	55.0	8.0
A256531	B34	600.	50.0	2.90	45.0	8.0
A256532	B34	620.	75.0	3.70	55.0	13.0
A256535	B34	640.	110.0	4.60	65.0	21.0
A256536	B34	660.	145.0	5.80	55.0	15.0
A256537	B34	680.	315.0	6.70	60.0	10.0
A256538	B34	700.	550.0	6.00	80.0	16.0
A256537	B34	720.	460.0	6.70	60.0	21.0
A256538	B34	740.	285.0	6.30	125.0	23.0
A256539	B34	760.	250.0	3.30	50.0	11.0
A256540	B34	780.	70.0	1.90	65.0	8.0
A256541	B34	800.	20.0	1.30	55.0	6.0
A256542	B34	820.	25.0	2.00	95.0	10.0
A256543	B34	840.	55.0	2.10	70.0	10.0
A256544	B34	860.	155.0	2.90	90.0	15.0
A256545	B34	880.	365.0	4.50	60.0	23.0
A256546	B34	900.	1300.0	8.40	80.0	77.0
A256547	B34	920.	1050.0	7.10	80.0	60.0
A256548	B34	940.	1450.0	7.90	105.0	40.0
A256549	B34	960.	1500.0	8.60	105.0	50.0
A256550	B34	980.	1000.0	7.20	125.0	73.0
A256551	B34	1000.	390.0	4.30	110.0	50.0
A256552	B34	1020.	175.0	10.00	120.0	100.0
A256553	B34	1040.	650.0	6.90	85.0	100.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A256554	B34	1060.	400.0	3.70	55.0	12.0
A256555	B34	1080.	240.0	7.20	80.0	6.0
A256556	B34	1100.	240.0	9.10	90.0	8.0
A256557	B34	1120.	40.0	9.40	110.0	9.0
A256558	B34	1140.	55.0	14.10	75.0	8.0
A256559	B34	1160.	55.0	14.00	75.0	7.0
A256560	B34	1180.	35.0	9.10	50.0	6.0
A256561	B34	1200.	30.0	7.10	55.0	9.0
A256562	B34	1220.	30.0	7.60	60.0	12.0
A256563	B34	1240.	35.0	7.00	80.0	18.0
A256564	B34	1260.	30.0	6.80	65.0	14.0
A256565	B34	1280.	35.0	9.50	120.0	12.0
A256566	B34	1300.	45.0	8.60	115.0	13.0
A256567	B34	1320.	65.0	11.70	120.0	11.0
A256568	B34	1340.	70.0	11.80	125.0	11.0
A256569	B34	1360.	85.0	12.20	95.0	16.0
A256570	B34	1380.	85.0	11.90	95.0	15.0
A256571	B34	1400.	85.0	10.40	85.0	16.0
A256572	B34	1420.	115.0	9.90	65.0	20.0
A256573	B34	1440.	85.0	7.50	60.0	23.0
A256574	B34	1460.	85.0	7.20	60.0	22.0
A256575	B34	1480.	70.0	7.70	55.0	12.0
A256576	B34	1500.	70.0	7.40	55.0	10.0
A256577	B34	1520.	55.0	7.20	70.0	12.0
A256578	B34	1540.	55.0	7.00	55.0	11.0
A256579	B34	1560.	75.0	7.70	90.0	9.0
A256579	B34	1580.	75.0	6.70	85.0	10.0
A256580	B34	1600.	40.0	5.20	70.0	10.0
A256581	B34	1620.	30.0	6.10	90.0	11.0
A256581	B34	1640.	45.0	4.70	50.0	7.0
A256582	B34	1660.	35.0	4.30	50.0	9.0
A256585	B34	1680.	30.0	3.70	55.0	10.0
A256586	B34	1700.	30.0	4.40	55.0	11.0
A256587	B34	1720.	40.0	6.20	80.0	11.0
A256588	B34	1740.	35.0	5.70	85.0	1.0
A256589	B34	1760.	25.0	4.30	70.0	10.0
A256590	B34	1780.	25.0	4.30	75.0	10.0
A256591	B34	1800.	45.0	5.90	95.0	10.0
A256592	B34	1820.	50.0	6.10	95.0	10.0
A256593	B34	1840.	170.0	8.00	65.0	11.0
A256594	B34	1860.	145.0	9.60	60.0	11.0
A256595	B34	1880.	155.0	9.40	55.0	10.0
A256596	B34	1900.	135.0	7.80	55.0	9.0
A256597	B34	1920.	130.0	7.20	60.0	9.0
A256598	B34	1940.	65.0	6.10	55.0	10.0
A256599	B34	1960.	65.0	7.30	65.0	12.0
A256600	B34	1980.	65.0	3.50	30.0	6.0
A256601	B34	2000.	55.0	3.80	40.0	8.0
A255339	B35	0.	2.5	1.80	10.0	7.0
A255340	B35	20.	5.0	1.80	10.0	9.0
A255341	B35	40.	5.0	2.00	5.0	8.0
A255342	B35	60.	5.0	2.00	5.0	9.0
A255343	B35	80.	5.0	1.70	5.0	9.0
A255344	B35	100.	15.0	1.60	20.0	9.0
A255345	B35	120.	15.0	1.30	15.0	6.0

SAMPLE	LINE	DIST	CR	FE	CU	AS
--------	------	------	----	----	----	----

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255346	B35	140.	10.0	0.90	25.0	6.0
A255347	B35	160.	10.0	1.00	20.0	8.0
A255348	B35	180.	10.0	1.80	20.0	8.0
A255349	B35	200.	10.0	1.50	25.0	16.0
A255350	B35	220.	10.0	0.90	40.0	35.0
A255351	B35	240.	10.0	1.50	60.0	30.0
A255352	B35	260.	5.0	1.60	70.0	15.0
A255353	B35	280.	10.0	1.30	45.0	20.0
A255354	B35	300.	10.0	1.60	45.0	16.0
A255355	B35	320.	5.0	1.70	35.0	12.0
A255356	B35	340.	10.0	1.90	55.0	19.0
A255357	B35	360.	5.0	1.20	20.0	22.0
A255358	B35	380.	10.0	0.80	20.0	11.0
A255359	B35	400.	10.0	0.90	15.0	7.0
A255360	B35	420.	5.0	0.80	10.0	4.0
A255361	B35	440.	10.0	1.10	15.0	8.0
A255362	B35	460.	10.0	0.65	15.0	5.0
A255363	B35	480.	10.0	1.00	20.0	6.0
A255364	B35	500.	30.0	4.00	60.0	14.0
A255365	B35	520.	55.0	8.10	95.0	30.0
A255366	B35	540.	65.0	8.10	75.0	23.0
A255367	B35	560.	70.0	8.10	60.0	22.0
A255368	B35	580.	55.0	6.00	65.0	19.0
A255369	B35	600.	25.0	3.50	55.0	12.0
A255370	B35	620.	25.0	1.90	35.0	8.0
A255371	B35	640.	20.0	1.20	40.0	7.0
A255372	B35	660.	15.0	1.00	40.0	6.0
A255373	B35	680.	30.0	2.10	70.0	10.0
A255374	B35	700.	45.0	2.20	80.0	11.0
A255375	B35	720.	30.0	1.80	70.0	10.0
A255376	B35	740.	5.0	0.74	35.0	9.0
A255377	B35	760.	15.0	1.00	45.0	15.0
A255378	B35	780.	310.0	3.30	115.0	38.0
A255379	B35	800.	700.0	5.10	95.0	41.0
A255380	B35	820.	1750.0	8.70	105.0	70.0
A255381	B35	840.	1950.0	8.80	85.0	140.0
A255382	B35	860.	2600.0	8.80	80.0	180.0
A255383	B35	880.	1000.0	9.20	75.0	42.0
A253384	B35	900.	1000.0	9.40	110.0	44.0
A255385	B35	920.	850.0	7.70	85.0	35.0
A255386	B35	940.	35.0	1.60	75.0	6.0
A255387	B35	960.	20.0	0.90	90.0	7.0
A255388	B35	980.	15.0	1.40	70.0	10.0
A255389	B35	1000.	15.0	2.20	70.0	17.0
A255390	B35	1020.	20.0	2.40	80.0	21.0
A255391	B35	1040.	3400.0	15.10	80.0	23.0
A255392	B35	1060.	90.0	8.70	165.0	19.0
A255393	B35	1080.	70.0	11.20	265.0	31.0
A255394	B35	1100.	40.0	13.70	95.0	18.0
A255395	B35	1120.	140.0	8.50	60.0	23.0
A255396	B35	1140.	155.0	7.90	45.0	29.0
A255397	B35	1160.	165.0	7.80	70.0	31.0
A255398	B35	1180.	180.0	7.00	25.0	43.0
A255399	B35	1200.	200.0	7.70	60.0	80.0
A255400	B35	1220.	180.0	9.20	120.0	50.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255401	B35	1240.	270.0	9.10	85.0	38.0
A255402	B35	1260.	235.0	8.80	100.0	18.0
A255403	B35	1280.	105.0	8.40	125.0	14.0
A255404	B35	1300.	55.0	9.90	120.0	22.0
A255405	B35	1320.	200.0	8.70	45.0	95.0
A255406	B35	1340.	215.0	8.60	20.0	46.0
A255407	B35	1360.	160.0	9.10	20.0	41.0
A255408	B35	1380.	250.0	7.10	25.0	33.0
A255409	B35	1400.	100.0	9.10	60.0	310.0
A255410	B35	1420.	150.0	10.30	60.0	41.0
A255411	B35	1440.	400.0	9.40	40.0	33.0
A255412	B35	1460.	430.0	10.90	65.0	18.0
A255413	B35	1480.	480.0	8.50	50.0	12.0
A255414	B35	1500.	530.0	8.10	55.0	22.0
A255415	B35	1520.	310.0	8.50	60.0	17.0
A255416	B35	1540.	310.0	8.70	65.0	22.0
A255417	B35	1560.	160.0	8.40	135.0	65.0
A255417	B35	1580.	160.0	9.40	135.0	60.0
A255419	B35	1600.	185.0	9.20	100.0	30.0
A255420	B35	1620.	200.0	10.00	90.0	22.0
A255421	B35	1640.	250.0	9.10	90.0	21.0
A255422	B35	1660.	310.0	8.30	80.0	22.0
A255423	B35	1680.				
A255424	B35	1700.				
A255425	B35	1720.				
A255426	B35	1740.				
A255427	B35	1760.				
A255428	B35	1780.				
A255429	B35	1800.				
A255430	B35	1820.				
A255431	B35	1840.				
A255432	B35	1860.				
A255433	B35	1880.	100.0	3.80	60.0	18.0
A255434	B35	1900.	85.0	3.00	40.0	19.0
A255435	B35	1920.	100.0	3.60	50.0	25.0
A255436	B35	1940.	80.0	3.00	40.0	17.0
A255437	B35	1960.	70.0	3.60	50.0	22.0
A255438	B35	1980.				
A255439	B35	2000.	40.0	2.20	50.0	18.0
A255440	B35	2020.	30.0	2.90	75.0	20.0
A255441	B35	2040.	50.0	5.00	100.0	24.0
A255442	B35	2060.	70.0	6.40	95.0	12.0
A255443	B35	2080.	80.0	6.40	100.0	11.0
A255444	B35	2100.	80.0	9.20	110.0	11.0
A255445	B35	2120.	80.0	5.90	70.0	10.0
A255446	B35	2140.	25.0	3.30	80.0	10.0
A255447	B35	2160.	30.0	4.10	85.0	10.0
A255448	B35	2180.	35.0	3.20	60.0	8.0
A255449	B35	2200.	25.0	3.90	95.0	10.0
A255450	B35	2220.	25.0	5.30	105.0	12.0
A255451	B35	2240.	145.0	7.20	70.0	9.0
A255452	B35	2260.	550.0	8.50	75.0	8.0
A255453	B35	2280.	240.0	6.60	50.0	10.0
A255454	B35	2300.	120.0	7.90	50.0	12.0
A255455	B35	2320.	55.0	7.10	50.0	15.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255456	B35	2340.	60.0	6.70	50.0	14.0
A255457	B35	2360.	55.0	6.20	80.0	15.0
A255458	B35	2380.	45.0	7.10	70.0	16.0
A255459	B35	2400.	40.0	5.80	80.0	14.0
A257180	B36	0.	5.0	1.70	15.0	5.0
A257181	B36	20.	5.0	1.10	10.0	5.0
A257182	B36	40.	5.0	0.80	10.0	3.0
A257183	B36	60.	5.0	0.70	5.0	4.0
A257184	B36	80.	5.0	0.80	10.0	4.0
A257185	B36	100.	5.0	1.00	20.0	7.0
A257186	B36	120.	5.0	1.20	20.0	5.0
A257187	B36	140.	5.0	1.20	10.0	4.0
A257188	B36	160.	10.0	1.70	20.0	6.0
A257189	B36	180.	10.0	2.10	30.0	8.0
A257190	B36	200.	5.0	2.10	25.0	9.0
A257191	B36	220.	5.0	2.20	20.0	10.0
A257192	B36	240.	5.0	2.00	20.0	7.0
A257193	B36	260.	5.0	2.90	35.0	11.0
A257194	B36	280.	2.5	3.90	50.0	13.0
A257195	B36	300.	2.5	3.80	50.0	10.0
A257196	B36	320.	10.0	6.60	75.0	11.0
A257197	B36	340.	15.0	9.90	130.0	15.0
A257198	B36	360.	25.0	11.50	135.0	22.0
A257199	B36	380.	35.0	11.30	90.0	23.0
A257200	B36	400.	35.0	10.60	110.0	29.0
A257201	B36	420.	40.0	9.70	125.0	21.0
A257202	B36	440.	40.0	9.60	170.0	17.0
A257203	B36	460.	35.0	9.40	140.0	10.0
A257204	B36	480.	25.0	10.40	145.0	5.0
A257205	B36	500.	20.0	7.40	85.0	8.0
A257206	B36	520.	2.5	1.30	5.0	3.0
A257207	B36	540.	2.5	1.00	20.0	3.0
A257208	B36	560.	2.5	0.90	30.0	2.0
A257209	B36	580.	5.0	0.30	20.0	2.0
A257210	B36	600.	5.0	1.40	30.0	5.0
A257211	B36	620.	2.5	0.70	10.0	3.0
A257212	B36	640.	20.0	10.50	125.0	8.0
A257213	B36	660.	35.0	11.80	155.0	11.0
A257214	B36	680.	30.0	11.00	155.0	6.0
A257215	B36	700.	15.0	4.30	65.0	11.0
A257216	B36	720.	15.0	3.80	85.0	11.0
A257217	B36	740.	5.0	1.50	85.0	13.0
A257218	B36	760.	5.0	2.70	115.0	12.0
A257219	B36	780.	5.0	1.50	105.0	8.0
A257220	B36	800.	5.0	2.70	90.0	13.0
A257221	B36	820.	5.0	2.50	85.0	9.0
A257222	B36	840.	10.0	1.70	110.0	2.0
A257223	B36	860.	20.0	2.20	120.0	1.0
A257224	B36	880.	30.0	8.70	115.0	9.0
A257225	B36	900.	210.0	9.80	155.0	57.0
A257226	B36	920.	200.0	9.70	140.0	45.0
A257227	B36	940.	300.0	11.30	190.0	100.0
A257228	B36	960.	1150.0	10.90	105.0	330.0
A257229	B36	980.	835.0	10.30	120.0	150.0
A257230	B36	1000.	1400.0	7.60	85.0	260.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257231	B36	1020.	2950.0	11.80	80.0	220.0
A257232	B36	1040.	2350.0	11.60	90.0	180.0
A257233	B36	1060.	1550.0	9.60	140.0	150.0
A257234	B36	1080.	1000.0	13.60	110.0	120.0
A257235	B36	1100.	600.0	10.30	65.0	100.0
A257236	B36	1120.	200.0	10.30	60.0	18.0
A257237	B36	1140.	270.0	7.00	40.0	14.0
A257238	B36	1160.	245.0	8.40	50.0	20.0
A257239	B36	1180.	220.0	7.60	40.0	13.0
A257240	B36	1200.	150.0	7.50	30.0	22.0
A257241	B36	1220.	270.0	7.70	45.0	18.0
A257242	B36	1240.	120.0	6.90	90.0	15.0
A257243	B36	1260.	110.0	8.10	105.0	17.0
A257244	B36	1280.	45.0	4.20	110.0	17.0
A257245	B36	1300.	20.0	2.10	75.0	11.0
A257246	B36	1320.	20.0	1.30	80.0	4.0
A257247	B36	1340.	35.0	3.90	140.0	4.0
A257248	B36	1360.	60.0	8.10	150.0	8.0
A257249	B36	1380.	90.0	7.40	100.0	7.0
A257250	B36	1400.	85.0	7.60	95.0	4.0
A257251	B36	1420.	20.0	2.70	85.0	2.0
A257252	B36	1440.	75.0	5.40	175.0	7.0
A257253	B36	1460.	30.0	5.10	95.0	11.0
A257254	B36	1480.	50.0	7.10	160.0	11.0
A257255	B36	1500.	130.0	9.80	80.0	12.0
A257256	B36	1520.	420.0	10.20	35.0	53.0
A257257	B36	1540.	300.0	10.10	25.0	48.0
A257258	B36	1560.	140.0	8.70	155.0	31.0
A257259	B36	1580.	85.0	9.60	70.0	21.0
A257260	B36	1600.	130.0	11.00	45.0	23.0
A257261	B36	1620.	220.0	12.80	35.0	22.0
A257262	B36	1640.	360.0	11.70	60.0	11.0
A257263	B36	1660.	290.0	11.00	55.0	16.0
A257264	B36	1680.	380.0	11.20	50.0	11.0
A257265	B36	1700.	310.0	11.00	65.0	12.0
A257266	B36	1720.	165.0	9.30	85.0	26.0
A257267	B36	1740.	165.0	10.90	60.0	19.0
A257268	B36	1760.	95.0	11.80	65.0	21.0
A257269	B36	1780.	85.0	9.60	60.0	12.0
A257270	B36	1800.	70.0	10.00	55.0	15.0
A257271	B36	1820.	55.0	8.50	50.0	13.0
A257272	B36	1840.	45.0	6.20	50.0	11.0
A257273	B36	1860.	30.0	3.80	40.0	8.0
A257274	B36	1880.	30.0	3.10	45.0	6.0
A257275	B36	1900.	40.0	4.50	55.0	10.0
A257276	B36	1920.	45.0	3.70	50.0	9.0
A257277	B36	1940.	30.0	3.40	45.0	7.0
A257278	B36	1960.	45.0	4.70	45.0	3.0
A257279	B36	1980.	50.0	4.70	50.0	8.0
A257280	B36	2000.	50.0	4.30	55.0	10.0
A255461	B37	0.	10.0	1.50	75.0	21.0
A255462	B37	20.	5.0	1.30	35.0	10.0
A255463	B37	40.	5.0	9.00	30.0	10.0
A255464	B37	60.	2.5	1.00	35.0	10.0
A255465	B37	80.	2.5	1.50	50.0	10.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255466	B37	100.	5.0	2.40	50.0	19.0
A255467	B37	120.	10.0	3.90	65.0	17.0
A255468	B37	140.	5.0	3.20	55.0	10.0
A255469	B37	160.	2.5	2.40	50.0	7.0
A255470	B37	180.	5.0	1.50	35.0	6.0
A255471	B37	200.	2.5	1.00	30.0	2.0
A255472	B37	220.	2.5	1.00	40.0	3.0
A255473	B37	240.	10.0	1.00	30.0	3.0
A255474	B37	260.	10.0	1.00	30.0	2.0
A255475	B37	280.	10.0	1.20	30.0	2.0
A255476	B37	300.	2.5	1.30	35.0	2.0
A255477	B37	320.	2.5	1.00	30.0	3.0
A255478	B37	340.	2.5	1.00	30.0	3.0
A255479	B37	360.	2.5	1.10	35.0	4.0
A255480	B37	380.	5.0	1.10	45.0	4.0
A255481	B37	400.	2.5	1.70	60.0	9.0
A255482	B37	420.	2.5	2.10	100.0	13.0
A255483	B37	440.	10.0	1.10	45.0	10.0
A255484	B37	460.	20.0	1.20	35.0	5.0
A255485	B37	480.	65.0	4.80	95.0	23.0
A255486	B37	500.	160.0	7.20	70.0	25.0
A255487	B37	520.	65.0	7.70	160.0	33.0
A255488	B37	540.	80.0	7.40	130.0	22.0
A255489	B37	560.	20.0	3.70	165.0	11.0
A255490	B37	580.	10.0	4.10	160.0	8.0
A255491	B37	600.	15.0	5.00	195.0	9.0
A255492	B37	620.	20.0	10.50	300.0	8.0
A255493	B37	640.	30.0	7.50	210.0	7.0
A255494	B37	660.	25.0	8.00	290.0	7.0
A255495	B37	680.	30.0	7.70	225.0	9.0
A255496	B37	700.	30.0	7.00	210.0	22.0
A255497	B37	720.	35.0	8.50	320.0	4.0
A255498	B37	740.	30.0	7.90	320.0	4.0
A255499	B37	760.	25.0	6.30	250.0	20.0
A255500	B37	780.	20.0	6.80	175.0	140.0
A255501	B37	800.	15.0	5.90	175.0	53.0
A255502	B37	820.	10.0	5.80	165.0	47.0
A255503	B37	840.	10.0	4.80	165.0	36.0
A255504	B37	860.	10.0	5.80	205.0	22.0
A255505	B37	880.	15.0	6.60	220.0	12.0
A255506	B37	900.	15.0	5.30	235.0	5.0
A255507	B37	920.	15.0	5.40	140.0	4.0
A255508	B37	940.	20.0	6.90	170.0	5.0
A255509	B37	960.	50.0	9.30	150.0	7.0
A255510	B37	980.	50.0	7.90	130.0	4.0
A255511	B37	1000.	40.0	7.90	155.0	9.0
A255512	B37	1020.	20.0	5.00	175.0	10.0
A255513	B37	1040.	15.0	4.40	140.0	7.0
A255514	B37	1060.	20.0	5.60	110.0	6.0
A255515	B37	1080.	60.0	10.80	110.0	6.0
A255516	B37	1100.	40.0	12.10	140.0	11.0
A255517	B37	1120.	30.0	10.10	180.0	20.0
A255518	B37	1140.	50.0	9.60	100.0	9.0
A255519	B37	1160.	40.0	8.30	80.0	9.0
A255520	B37	1180.	40.0	8.20	100.0	8.0

SAMPLE	LINE	DIST	CR	FE	CU	AS
--------	------	------	----	----	----	----

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A255521	B37	1200.	30.0	8.20	130.0	10.0
A255522	B37	1220.	25.0	6.60	105.0	6.0
A255523	B37	1240.	20.0	6.90	80.0	5.0
A255524	B37	1260.	35.0	5.60	60.0	5.0
A255525	B37	1280.	65.0	6.20	65.0	8.0
A255526	B37	1300.	45.0	6.50	60.0	15.0
A255527	B37	1320.	65.0	7.20	50.0	17.0
A255528	B37	1340.	70.0	5.30	60.0	8.0
A255529	B37	1360.	35.0	5.10	95.0	8.0
A255530	B37	1380.	35.0	2.80	80.0	7.0
A255531	B37	1400.	25.0	4.00	100.0	10.0
A255532	B37	1420.	30.0	3.30	90.0	13.0
A255533	B37	1440.	15.0	2.50	100.0	11.0
A255534	B37	1460.	10.0	2.50	100.0	9.0
A255535	B37	1480.	5.0	1.30	25.0	3.0
A255536	B37	1500.	10.0	3.00	25.0	10.0
A255537	B37	1520.	10.0	1.50	15.0	5.0
A255538	B37	1540.	5.0	0.80	10.0	2.0
A255539	B37	1560.	5.0	0.80	10.0	2.0
A255540	B37	1580.	5.0	1.60	10.0	2.0
A255541	B37	1600.	10.0	1.50	15.0	1.0
A256210	B38	0.	15.0	3.20	110.0	6.0
A256211	B38	20.	10.0	3.70	120.0	8.0
A256212	B38	40.	10.0	5.40	145.0	8.0
A256213	B38	60.	15.0	5.50	115.0	10.0
A256214	B38	80.	25.0	8.00	110.0	10.0
A256215	B38	100.	25.0	10.60	115.0	10.0
A256216	B38	120.	35.0	8.60	95.0	6.0
A256217	B38	140.	50.0	10.40	140.0	4.0
A256218	B38	160.	50.0	10.20	135.0	6.0
A256219	B38	180.	60.0	9.80	140.0	10.0
A256220	B38	200.	10.0	4.90	75.0	7.0
A256221	B38	220.	5.0	2.00	45.0	5.0
A256222	B38	240.	10.0	2.40	100.0	5.0
A256223	B38	260.	5.0	2.30	135.0	3.0
A256224	B38	280.	15.0	3.30	125.0	2.0
A256225	B38	300.	5.0	2.40	125.0	4.0
A256226	B38	320.	10.0	2.10	90.0	2.0
A256227	B38	340.	10.0	1.70	65.0	2.0
A256228	B38	360.	15.0	1.90	50.0	2.0
A256229	B38	380.	10.0	1.40	30.0	1.0
A256230	B38	400.	15.0	2.30	80.0	9.0
A256231	B38	420.	20.0	3.50	120.0	2.0
A256232	B38	440.	15.0	2.90	120.0	1.0
A256233	B38	460.	20.0	3.20	130.0	5.0
A256234	B38	480.	20.0	3.10	130.0	2.0
A256235	B38	500.	15.0	3.00	160.0	5.0
A256236	B38	520.	15.0	2.80	150.0	2.0
A256237	B38	540.	10.0	2.60	130.0	3.0
A256238	B38	560.	10.0	3.30	135.0	4.0
A256239	B38	580.	5.0			
A256239	B38	580.	5.0	1.90	90.0	3.0
A256240	B38	600.	10.0	2.10	95.0	3.0
A256241	B38	620.	5.0	1.70	95.0	3.0
A256242	B38	640.	10.0	2.20	85.0	3.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A256243	B38	660.	35.0	2.30	90.0	6.0
A256244	B38	680.	45.0	5.00	115.0	9.0
A256245	B38	700.	45.0	6.30	100.0	10.0
A256246	B38	720.	50.0	10.40	155.0	23.0
A256247	B38	740.	15.0	5.50	190.0	10.0
A256248	B38	760.	15.0	3.80	100.0	10.0
A256249	B38	780.	15.0	3.30	150.0	13.0
A256250	B38	800.	15.0	5.70	280.0	43.0
A256251	B38	820.	10.0	5.10	335.0	36.0
A256252	B38	840.	10.0	4.50	230.0	74.0
A256253	B38	860.	10.0	1.80	80.0	12.0
A256254	B38	880.	10.0	1.10	45.0	7.0
A256255	B38	900.	5.0	1.10	35.0	7.0
A256256	B38	920.	10.0	1.30	40.0	10.0
A256257	B38	940.	10.0	1.40	50.0	9.0
A256241	B38	960.	25.0	2.20	50.0	11.0
A256259	B38	980.	50.0	2.80	60.0	11.0
A256260	B38	1000.				
A256261	B38	1020.				
A256262	B38	1040.				
A256263	B38	1060.	20.0	1.20	60.0	8.0
A256264	B38	1080.	10.0	1.70	90.0	16.0
A256265	B38	1100.	15.0	2.10	95.0	26.0
A256266	B38	1120.	10.0	1.80	90.0	20.0
A256267	B38	1140.	10.0	2.70	85.0	34.0
A256268	B38	1160.	10.0	3.00	100.0	42.0
A256269	B38	1180.	5.0	2.50	75.0	27.0
A256270	B38	1200.	10.0	3.70	80.0	28.0
A256271	B38	1220.	20.0	5.70	105.0	29.0
A256272	B38	1240.	30.0	8.00	110.0	26.0
A256273	B38	1260.	35.0	10.30	140.0	13.0
A256274	B38	1280.	60.0	12.90	180.0	20.0
A256275	B38	1300.	25.0	13.00	191.0	12.0
A256276	B38	1320.	40.0	12.00	200.0	100.0
A256277	B38	1340.	20.0	11.00	215.0	100.0
A256278	B38	1360.	10.0	7.10	205.0	62.0
A256271	B38	1380.	10.0	4.10	160.0	29.0
A256280	B38	1400.	15.0	4.00	70.0	16.0
A256281	B38	1420.	15.0	2.30	35.0	7.0
A256282	B38	1440.	10.0	1.90	25.0	9.0
A256283	B38	1460.	5.0	1.60	20.0	12.0
A256284	B38	1480.	10.0	1.30	15.0	10.0
A256285	B38	1500.	5.0	1.30	20.0	11.0
A256286	B38	1520.	10.0	0.90	65.0	9.0
A256287	B38	1540.	5.0	1.30	110.0	10.0
A256288	B38	1560.	5.0	1.60	70.0	4.0
A256289	B38	1580.	5.0	1.70	45.0	8.0
A256290	B38	1600.	10.0	1.20	25.0	8.0
A256291	B38	1620.	10.0	0.70	20.0	7.0
A256292	B38	1640.	10.0	0.90	20.0	10.0
A256293	B38	1660.	5.0	1.10	25.0	13.0
A256294	B38	1680.	5.0	3.00	75.0	13.0
A256295	B38	1700.	10.0	2.40	35.0	16.0
A256271	B38	1720.	10.0	1.70	45.0	10.0
A256297	B38	1740.	5.0	1.30	45.0	14.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

ASSAY RESULTS REGIONAL SOIL LINES

SAMPLE	LINE	DIST	CR	FE	CU	AS
A256298	B38	1760.	5.0	1.60	95.0	21.0
A256299	B38	1780.	5.0	1.50	35.0	14.0
A256300	B38	1800.	5.0	0.90	35.0	13.0
A256301	B38	1820.	5.0	1.00	30.0	15.0
A256302	B38	1840.	5.0	1.20	25.0	26.0
A256303	B38	1860.	5.0	1.60	35.0	46.0
A256304	B38	1880.	10.0	1.30	50.0	110.0
A256305	B38	1900.	10.0	1.10	35.0	43.0
A256306	B38	1920.	5.0	0.90	25.0	34.0
A256307	B38	1940.	5.0	0.50	20.0	17.0
A256308	B38	1960.	10.0	0.80	30.0	18.0
A256309	B38	1980.	10.0	0.80	35.0	19.0
A256310	B38	2000.	5.0	2.10	30.0	22.0
A256311	B38	2020.	5.0	1.90	20.0	15.0
A256301	B38	2040.	10.0	2.60	15.0	11.0
A256313	B38	2060.	10.0	2.80	20.0	11.0
A256314	B38	2080.	5.0	2.80	25.0	11.0
A256315	B38	2100.	10.0	3.20	35.0	21.0
A256316	B38	2120.	5.0	3.00	15.0	7.0
A256317	B38	2140.	15.0	3.70	35.0	10.0
A256318	B38	2160.	5.0	1.40	5.0	2.0
A256319	B38	2180.	10.0	1.00	10.0	2.0
A256320	B38	2200.	10.0	2.10	40.0	9.0

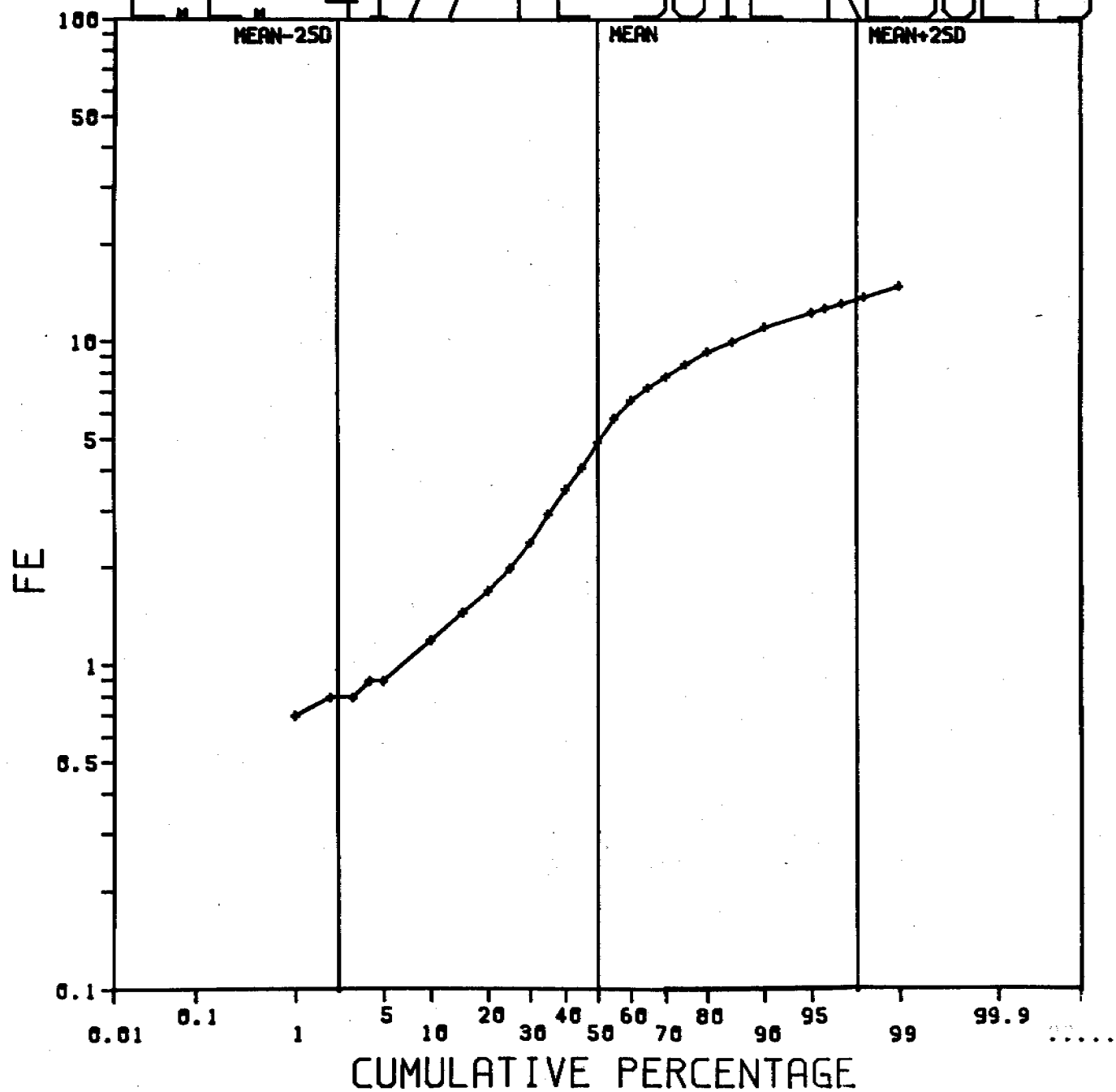
There were 1067 records written.

APPENDIX II

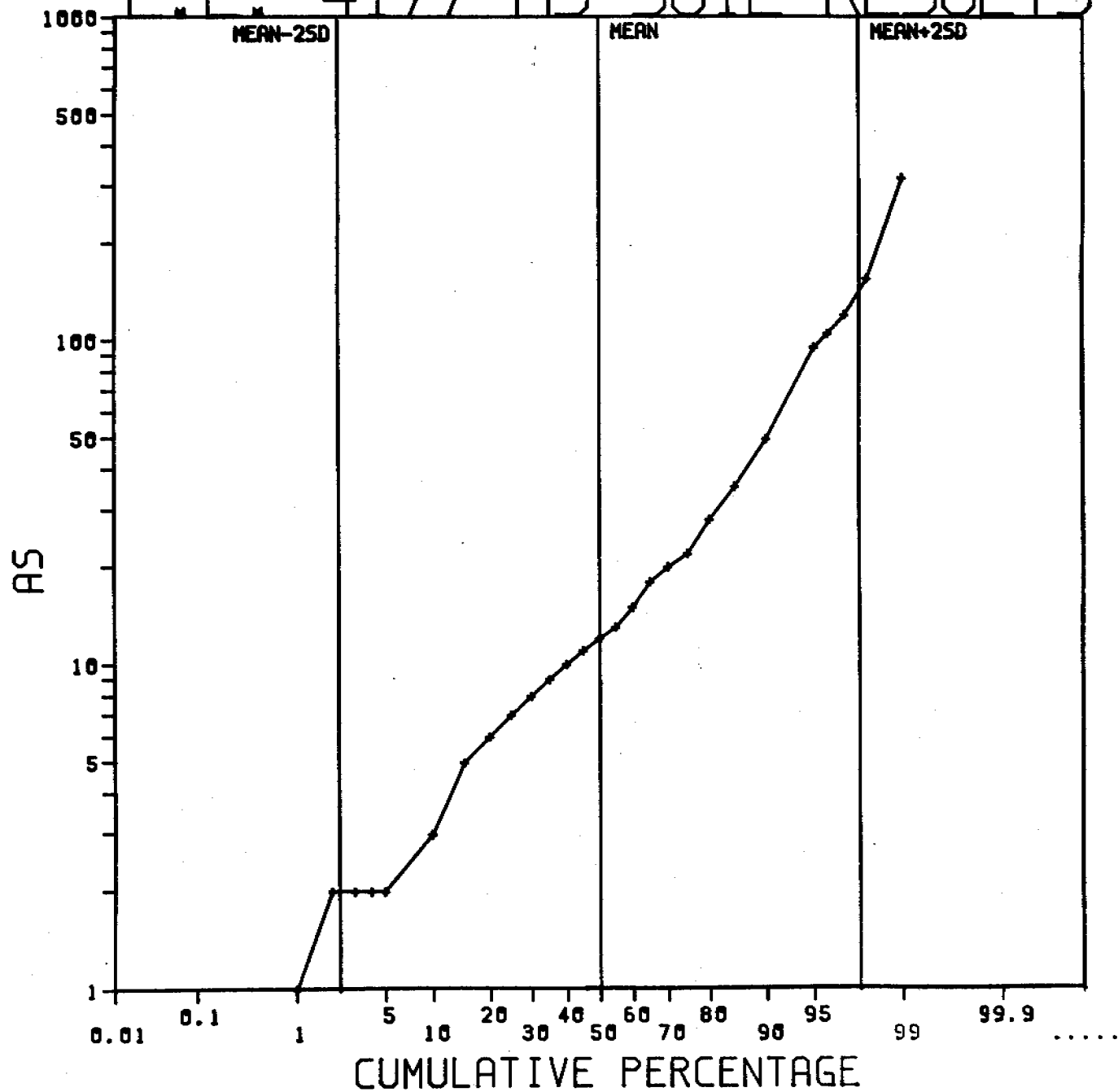
STATISTICAL PLOTS OF REGIONAL SOIL GEOCHEMICAL

RESULTS

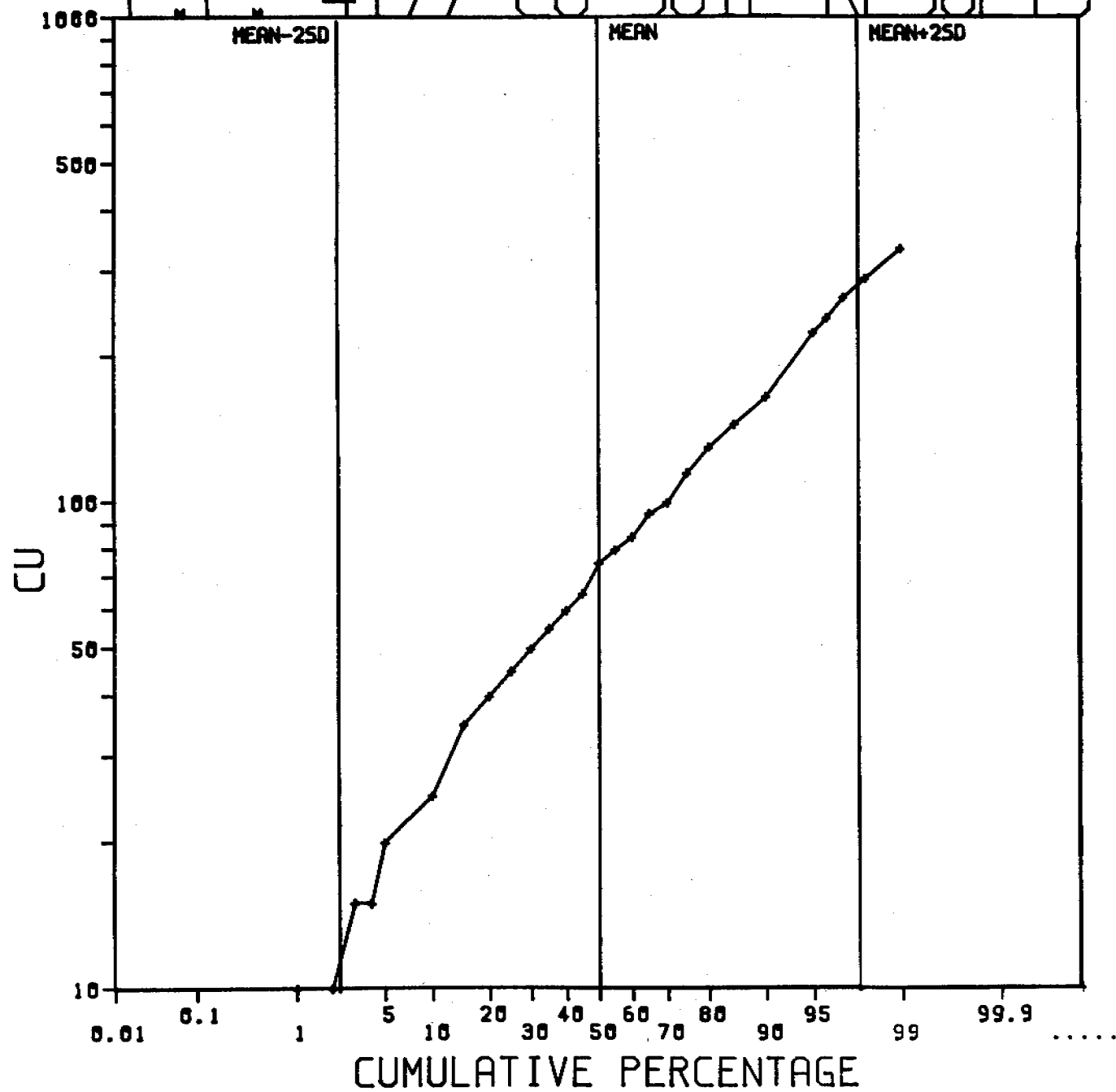
E.L. 4177 FE SOIL RESULTS

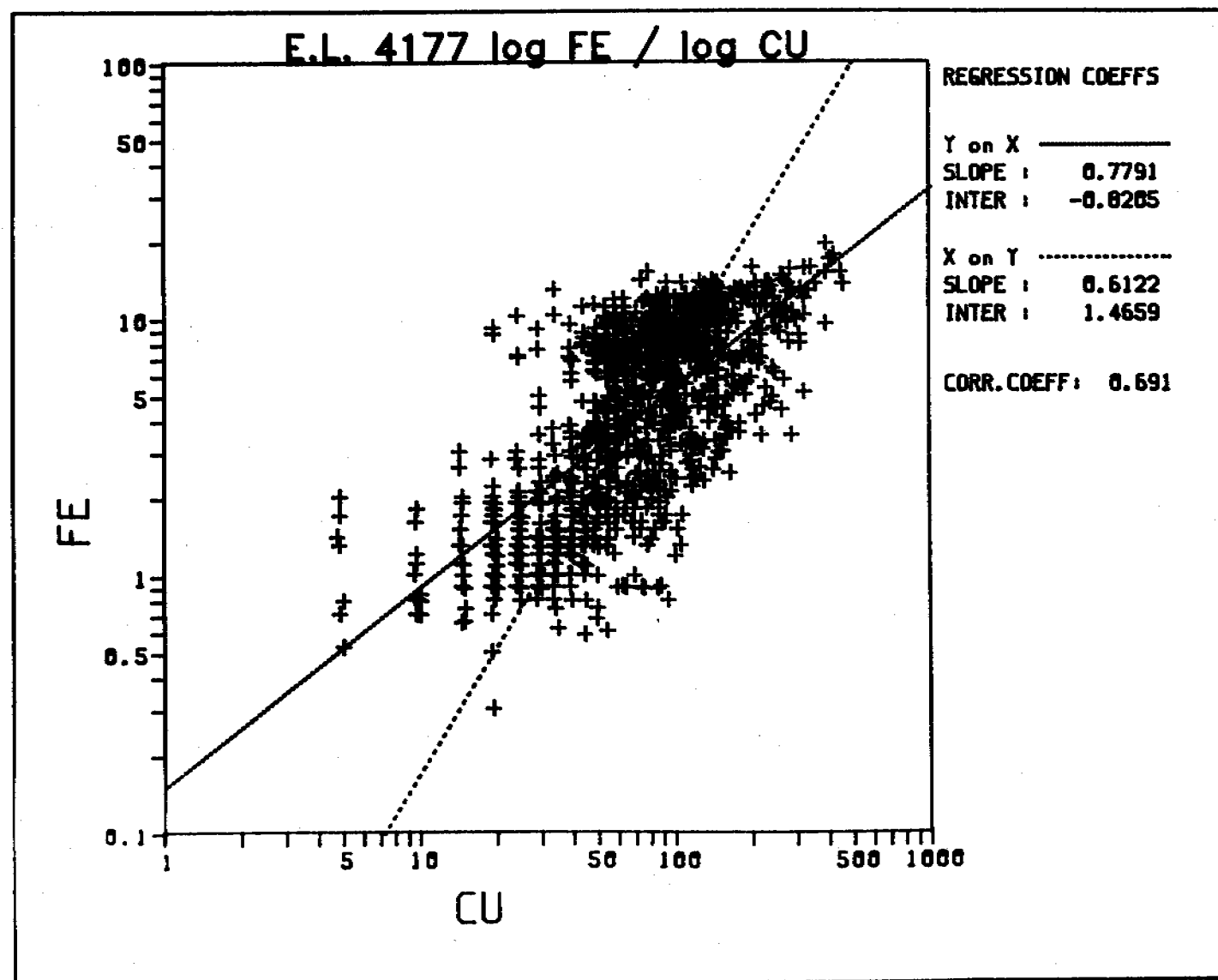


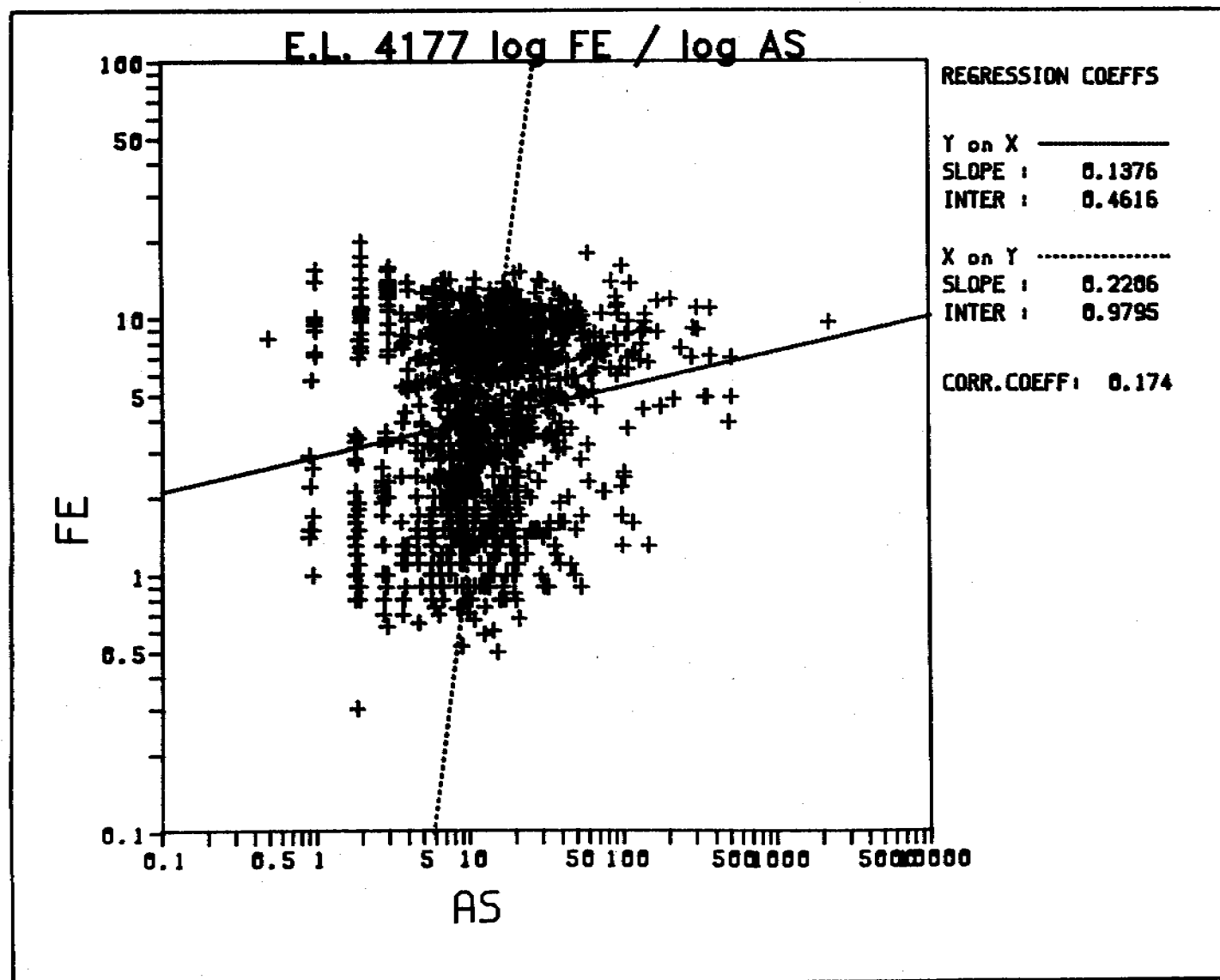
F.I. 4177 AS SOIL RESULTS

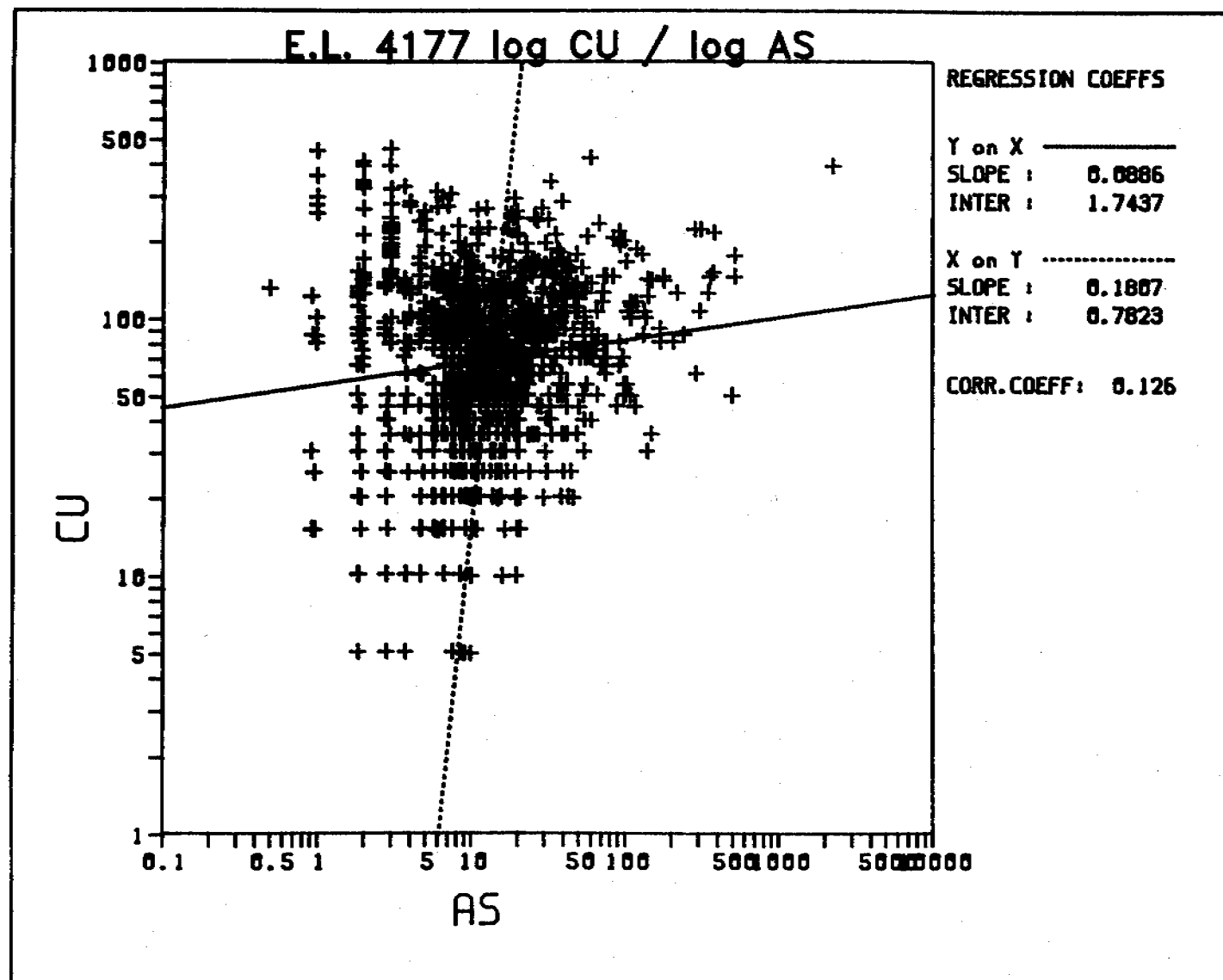


F.I. 4177 CU SOIL RESULTS

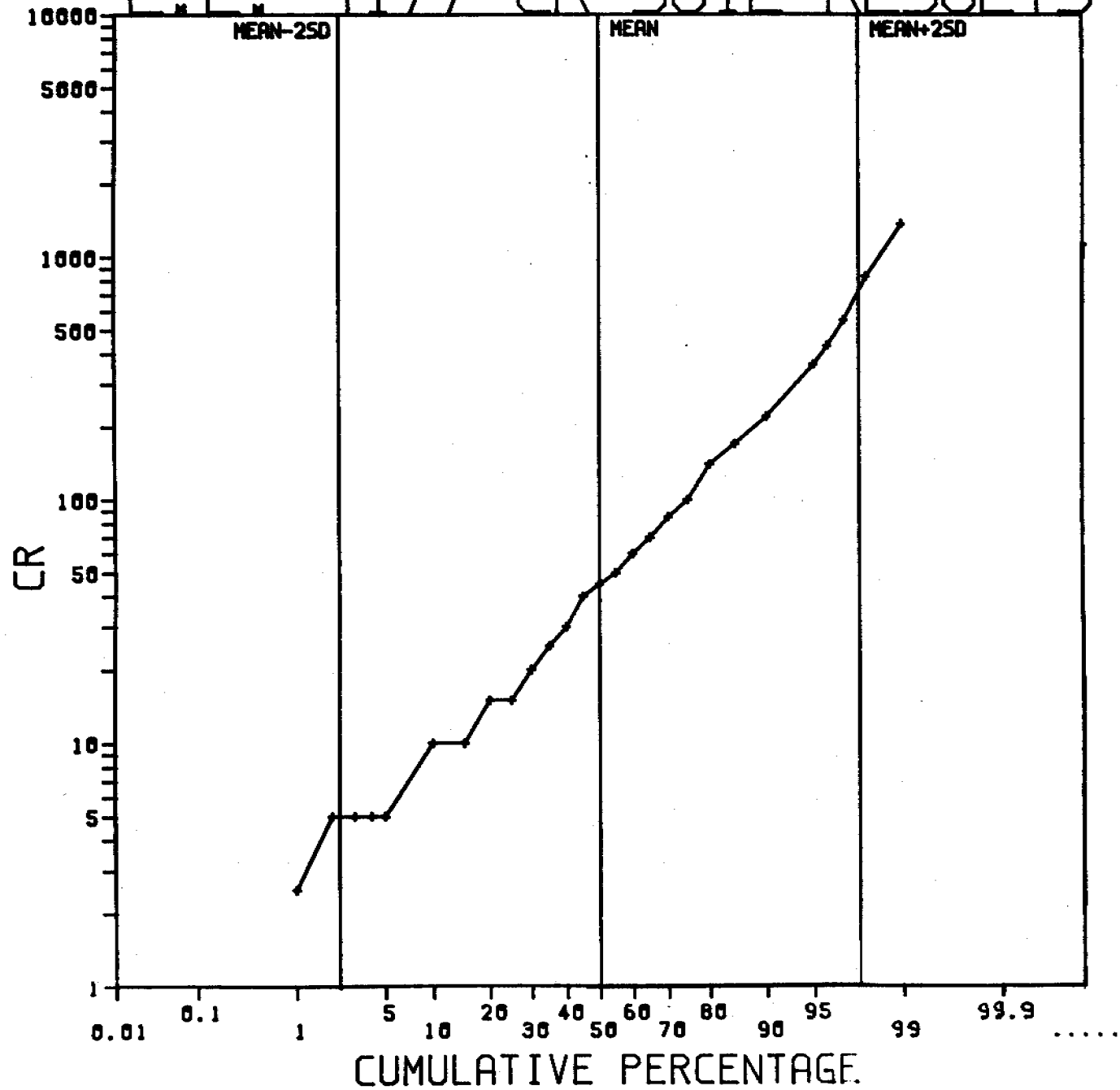








E.L. 4177 CR SOIL RESULTS



APPENDIX III

ANOMALOUS ARSENIC SAMPLES ON REGIONAL SOIL LINES

APPENDIX III
ANOMALOUS ARSENIC SAMPLES

<u>SAMPLE</u>	<u>LINE</u>	<u>DISTANCE</u> (metres)	<u>CR</u> ppm	<u>FE</u> %	<u>CU</u> ppm	<u>AS</u> ppm
A255265	B17	700.	65.0	16.00	200.0	100.0
A255266	B17	720.	60.0	13.90	205.0	85.0
A255267	B17	740.	55.0	17.90	420.0	60.0
A255279	B17	980.	25.0	4.50	140.0	180.0
A255283	B17	1060.	30.0	1.50	45.0	51.0
A255284	B17	1080.	30.0	3.70	50.0	110.0
A255285	B17	1100	145.0	6.30	100.0	110.0
A255287	B17	1140.	60.0	2.30	40.0	61.0
A253825	B18	280.	40.0	0.90	85.0	55.0
A253829	B18	360.	70.0	9.70	100.0	110.0
A253830	B18	380.	60.0	7.00	115.0	110.0
A253831	B18	400.	55.0	4.80	125.0	220.0
A253832	B18	420.	75.0	7.00	175.0	520.0
A253833	B18	440.	65.0	4.90	145.0	360.0
A253834	B18	460.	50.0	7.10	215.0	380.0
A253835	B18	480.	50.0	4.90	145.0	520.0
A253836	B18	500.	75.0	9.60	390.0	2250.0
A253836	B18	520.	65.0	4.90	125.0	350.0
A253838	B18	540.	55.0	3.90	50.0	500.0
A253839	B18	560.	50.0	5.20	75.0	65.0
A253840	B18	580.	80.0	6.90	80.0	55.0
A253841	B18	600.	65.0	6.10	80.0	65.0
A253843	B18	640.	115.0	8.70	115.0	110.0
A253857	B18	920.	100.0	7.80	90.0	62.0
A253858	B18	940.	90.0	6.30	145.0	85.0
A253859	B18	960.	90.0	5.00	55.0	57.0
A253860	B18	980.	90.0	7.30	80.0	62.0
A253869	B18	1160.	90.0	10.60	125.0	54.0
A253870	B18	1180.	70.0	11.50	110.0	50.0
A253886	B18	1500.	60.0	9.40	125.0	56.0
A253887	B18	1520.	50.0	6.40	85.0	68.0
A253888	B18	1540.	50.0	6.70	140.0	150.0
A253889	B18	1560.	40.0	4.50	145.0	180.0
A253890	B18	1580.	40.0	2.20	55.0	100.0
A253891	B18	1600.	50.0	1.70	50.0	100.0

<u>SAMPLE</u>	<u>LINE</u>	<u>DISTANCE</u> (metres)	<u>CR</u> ppm	<u>FE</u> %	<u>CU</u> ppm	<u>AS</u> ppm
A257029	B29	560.	165.0	10.20	95.0	56.0
A257030	B29	580.	220.0	9.40	90.0	55.0
A257031	B29	600.	300.0	10.90	150.0	380.0
A257032	B29	620.	125.0	7.40	185.0	120.0
A257035	B29	680.	50.0	4.90	100.0	56.0
A257036	B29	700.	205.0	7.20	115.0	120.0
A257051	B29	1000.	50.0	2.80	50.0	55.0
A257093	B30	800.	430.0	8.20	70.0	57.0
A257100	B30	940.	230.0	9.30	135.0	50.0
A257101	B30	960.	125.0	7.40	115.0	73.0
A257108	B30	1100.	195.0	10.40	145.0	75.0
A257112	B30	1180.	45.0	3.20	70.0	61.0
A257113	B30	1200.	45.0	2.10	65.0	77.0
A257134	B31	180.	10.0	1.70	40.0	56.0
A257135	B31	200.	25.0	4.40	100.0	140.0
A257136	B31	220.	45.0	9.00	220.0	320.0
A257137	B31	240.	50.0	7.00	220.0	290.0
A257138	B31	260.	40.0	2.50	165.0	105.0
A257139	B31	280.	30.0	2.40	55.0	105.0
A257140	B31	300.	10.0	2.10	70.0	78.0
A257164	B31	780.	30.0	5.40	70.0	53.0
A257165	B31	800.	30.0	7.40	65.0	72.0
A257166	B31	820.	35.0	6.40	70.0	100.0
A257167	B31	840.	40.0	7.60	70.0	75.0
A257168	B31	860.	35.0	7.50	50.0	68.0
A257170	B31	900.	35.0	7.90	145.0	78.0
A257171	B31	920.	25.0	7.80	80.0	95.0
A257172	B31	940.	25.0	6.00	70.0	63.0
A257174	B31	980.	30.0	6.00	65.0	95.0
A257175	B31	1000.	20.0	1.60	45.0	120.0
A256150	B33	600.	220.0	8.70	75.0	56.0
A256173	B33	1060.	60.0	5.00	30.0	57.0
A256546	B34	900.	1300.0	8.40	80.0	77.0
A256547	B34	920.	1050.0	7.10	80.0	80.0
A256548	B34	940.	1450.0	7.90	105.0	140.0
A256549	B34	960.	1500.0	8.60	105.0	110.0
A256550	B34	980.	1000.0	7.20	125.0	76.0

<u>SAMPLES</u>	<u>LINE</u>	<u>DISTANCE</u> (metres)	<u>CR</u> ppm	<u>FE</u> %	<u>CU</u> ppm	<u>AS</u> ppm
A255380	B35	820.	1750.0	8.70	105.0	70.0
A255381	B35	840.	1950.0	8.80	85.0	140.0
A255382	B35	860.	2600.0	8.80	80.0	180.0
A255399	B35	1200.	200.0	7.70	60.0	80.0
A255400	B35	1220.	180.0	9.20	120.0	50.0
A255405	B35	1320.	200.0	8.70	45.0	95.0
A255409	B35	1400.	100.0	9.10	60.0	310.0
A255417	B35	1560.	160.0	8.40	135.0	65.0
A255417	B35	1580.	160.0	9.40	135.0	60.0
A257225	B36	900.	210.0	9.80	155.0	57.0
A257227	B36	940.	300.0	11.30	190.0	100.0
A257228	B36	960.	1150.0	10.90	105.0	330.0
A257229	B36	980.	835.0	10.30	120.0	150.0
A257230	B36	1000.	1400.0	7.60	85.0	260.0
A257231	B36	1020.	2950.0	11.80	80.0	220.0
A257232	B36	1040.	2350.0	11.60	90.0	180.0
A257233	B36	1060.	1550.0	9.60	140.0	150.0
A257234	B36	1080.	1000.0	13.60	110.0	120.0
A257235	B36	1100.	600.0	10.30	65.0	100.0
A257256	B36	1520.	420.0	10.20	35.0	53.0
A255462	B37	20.	5.0	1.30	35.0	160.0
A255463	B37	40.	5.0	9.00	30.0	150.0
A255464	B37	60.	2.5	1.00	35.0	53.0
A255500	B37	780.	20.0	6.80	175.0	140.0
A255501	B37	800.	15.0	5.90	175.0	53.0
A256252	B38	840.	10.0	4.50	230.0	74.0
A256276	B38	1320.	40.0	12.00	200.0	100.0
A256277	B38	1340.	20.0	11.00	215.0	100.0
A256278	B38	1360.	10.0	7.10	205.0	62.0
A256304	B38	1880.	10.0	1.30	50.0	110.0

APPENDIX IV
COMPOSITE SOIL RESULTS

APPENDIX IV
COMPOSITE SOIL RESULTS

Traverse Number	Distance	Composited Samples	Gold Assay ppm
B1	000-040m	A253401 - 405 (5)	0.004
	160-220m	A253414 - 417 (4)	0.002
B4	000-060m	A253491 - 494 (4)	0.003
B7	840-900m	A255043 - 046 (4)	0.001
B8	2140-2220m	A254206 - 210 (5)	0.001
	2240-2320m	A254211 - 215 (5)	x
	2340-2420m	A254216 - 220 (5)	x
B9	1940-2000m	A253650 - 653 (4)	x
	2500-2560m	A253678 - 681 (4)	0.002
B10	820-880m	A254654 - 657 (4)	0.003
	900-960m	A254658 - 661 (4)	0.001
	1600-1680m	A254693 - 697 (5)	0.001
	1940-2000m	A254710 - 713 (4)	x
B11	900-980m	A253735 - 739 (5)	0.004
	1800-1880m	A253780 - 784 (5)	0.002
	1900-1980m	A253785 - 789 (5)	0.002
	2000-2080m	A253790 - 794 (5)	0.002
	2100-2180m	A253795 - 799 (5)	0.027
	2200-2280m	A253800 - 804 (5)	0.002
	2300-2380m	A253805 - 809 (5)	0.013
B17	380-440m	A255249 - 252 (4)	0.005
	700-780m	A255265 - 269 (5)	0.003
	980-1060m	A255279 - 283 (5)	0.003
	1080-1180m	A255284 - 289 (5 - 286 N/S)	0.002
B18	360-440m	A253829 - 833 (5)	0.002
	460-540m	A253834 - 838 (5)	0.004
	560-640m	A253839 - 843 (5)	0.011
	860-940m	A253854 - 858 (5)	0.004

"x" - below detection limit - N/S not sampled.

Traverse Number	Distance	Composited Samples	Gold Assay ppm
--------------------	----------	--------------------	----------------

B18 (cont...)	960-1040m	A253859 - 863 (5)	0.004
	1120-1200m	A253867 - 871 (5)	0.003
	1360-1440m	A253879 - 883 (5)	0.003
	1460-1520m	A253884 - 887 (4)	0.001
	1540-1600m	A253888 - 891 (4)	0.001

B19	060-120m	A254348 - 351 (4)	0.005
-----	----------	-------------------	-------

B20	160-220m	A254830 - 833 (4)	0.002
	240-300m	A254834 - 837 (4)	0.004
	320-380m	A254838 - 841 (4)	0.002

B23	900-980m	A254443 - 447 (5)	0.005
	1000-1060m	A254448 - 451 (4)	0.010
	1080-1160m	A254452 - 456 (5)	0.001
	1180-1260m	A254457 - 461 (5)	0.011

B24	680-740m	A255326 - 329 (4)	0.003
	760-820m	A255330 - 333 (4)	0.018
	840-900m	A255334 - 337 (4)	0.019

B29	020-080m	A257002 - 005 (4)	0.003
	100-180m	A257006 - 010 (5)	0.001
	400-480m	A257021 - 025 (5)	0.004
	540-620m	A257028 - 032 (5)	0.003
	640-700m	A257033 - 036 (4)	0.004
	720-800m	A257037 - 041 (5)	0.003
	820-900m	A257042 - 046 (5)	0.008
	920-1000m	A257047 - 051 (5)	0.007

B30	740-820m	A257090 - 094 (5)	0.006
	940-1020m	A257100 - 104 (5)	0.005
	1040-1120m	A257105 - 109 (5)	0.007
	1140-1200m	A257110 - 113 (4)	0.006

Traverse Number	Distance	Composited Samples	Gold Assay ppm
--------------------	----------	--------------------	----------------

B31	180-260m	A257134 - 138 (5)	0.011
	280-340m	A257139 - 142 (4)	0.006
	440-520m	A257147 - 151 (5)	0.012
	760-840m	A257163 - 167 (5)	0.007
	860-920m	A257168 - 171 (4)	0.007
	940-1000m	A257172 - 175 (4)	0.005

B32	120-180m	A256066 - 069 (4)	0.009
	620-680m	A256091 - 094 (4)	0.006

B33	540-620m	A256147 - 151 (5)	0.007
	1040-1120m	A256172 - 176 (5)	0.007

B34	900-1020m	A256546 - 552 (5-547,548 N/S)	0.004
-----	-----------	-------------------------------	-------

B35	200-280m	A255349 - 353 (5)	0.009
	780-840m	A255378 - 381 (4)	0.008
	860-920m	A255382 - 385 (4)	0.007
	1000-1080m	A255389 - 393 (5)	0.006
	1140-1220m	A255396 - 400 (5)	0.010

B35	1240-1320m	A255401 - 405 (5)	0.009
	1340-1420m	A255406 - 410 (5)	0.009
	1440-1520m	A255411 - 415 (5)	0.013
	1540-1620m	A255416 - 420 (5)	0.012

B36	360-440m	A257198 - A257202 (5)	0.009
	900-980m	A257225 - 229 (5)	0.011
	1000-1080m	A257230 - 234 (5)	0.013
	1200-1280m	A257240 - 244 (5)	0.007
	1500-1580m	A257255 - 259 (5)	0.005
	1600-1680m	A257260 - 264 (5)	0.005
	1700-1780m	A257265 - 269 (5)	0.005

B37	000-080m	A255461 - 465 (5)	0.009
	480-560m	A255485 - 489 (5)	0.004
	780-860m	A255500 - 504 (5)	0.013

B38	780-860m	A256249 - 253 (5)	0.005
	1140-1220m	A256267 - 271 (5)	0.028
	1320-1400m	A256276 - 280 (5)	0.022

APPENDIX V

ROCK-CHIP SAMPLE RESULTS

APPENDIX V

ROCK CHIP SAMPLE RESULTS

[illegible]

APPENDIX V

ROCK CHIP SAMPLE RESULTS

SAMPLE NUMBER	TRAVERSE	DISTANCE	Au	As	Cu	Fe%	Cr	Pb	Zn	Co	Ag
218123			0.07	68	355	30.0	106	17	72	72	1
218124			Not Assayed								
218125			Not Assayed								
218126			Not Assayed								
218182	Trench P1		0.08	4	9	10.1	137				
218183	Trench P1		0.13	20	103	11.8	137				
218184	Trench P1		0.18	<2	218	11.2	125				
218185	Trench P1		0.13	28	62	11.3	164				
218186	Trench P1		0.10	24	25	6.02	119				
218187	Trench P1		0.07	8	88	6.95	100				
218188	Trench P1		0.08	<2	80	9.1	114				
218189	Trench P1		0.10	<2	266	13.8	134				
218190	Trench P1		0.11	<2	100	53.9	62				
218191	Trench P1		0.06	<2	47	14.2	243				
218192	Trench P1		0.11	<2	94	11.9	140				
218193	Trench P1		0.06	<2	273	13	147				
218194	Trench P1		0.05	<2	383	58.3	68				
218195	Trench P1		0.42	128	698	48.2	55				
218196	Trench P1		0.07	4	252	10.9	343				
218197	Trench P1		0.05	28	18	<5	36				
218198	Trench P1		0.94	22	1340	37.5	139				
218199	Trench P1		0.08	42	13	15.0	1680				

APPENDIX V

ROCK CHIP SAMPLE RESULTS

SAMPLE NUMBER	TRAVERSE	DISTANCE	Au	As	Cu	Fe%	Cr	Pb	Zn	Co	Ag
218251			0.04	42	293	23.2	67				
218252			0.07	8	2740	29.8	52				
218253			0.07	320	81	12.4	2420	<5	185	212	<1
218254			0.03	90	64	12.7	365	<5	137	195	<1
218255			0.02	161	48	12.2	2500	<5	47	45	<1
218256			0.07	94	36	10.5	34				
218257			0.13	112	24	7.15	41				
218258			0.09	336	51	21.0	40				
218259			0.28	1930	141	5.5	24				
218260			0.23	158	316	40.0	123				
218261			0.03	110	21	8.45	2160				
218303	B 31	200-240	0.22	1.19%	648	12.8	67				
218304		200-240	0.08	12	155	7.35	54				
218305		200-240	0.02	86	44	1.96	32				
218306		400-500	0.01	34	78	6.25	33				
218307	B 31	400-500	0.02	40	321	20.0	165				
218308	B 33	500	0.01	37	58	4.72	186				
218309		540-500	0.08	20	54	3.38	183				
218310		1090	0.03	12	77	3.62	123				
218311	B 33	1040-1100	0.01	44	24	3.28	42				
218312	B 35	800-840	0.02	250	134	9.58	3140				
218313		840-880	<0.01	350	75	7.30	3080				
218314	B35	880-920	0.01	55	91	6.35	2000				

APPENDIX V
ROCK CHIP SAMPLE RESULTS

SAMPLE NUMBER	TRAVERSE	DISTANCE	Au	As	Cu	Fe%	Cr	Pb	Zn	Co	Ag
218351	Trench P1		0.05	2	127	15.5	127				
218352	Trench P1		0.04	22	610	50.2	271				
218353	Trench P1		0.06	1250	273	16.3	39				
218410	B 29	540	0.01	44	35	12.3	80				
218411	B 29	560	0.01	17	69	7.60	54				
218412	B 29	860	0.02	240	56	5.95	45				
218485	B 29	540-600		18	45	4.7	25				
218486	B 29	700-800		23	35	2.1	50				
218487	B 29	700-720		3	35	1.3	45				
218488	B 29	800-860		51	50	5.2	45				
218489	B 29	920	0.02	35	25	2.9	35				
218491	B 36	320-500	0.01	8	105	3.6	30				
218492	B 36	920-1020	.005	220	95	6.2	590				
218493	B 36	1020-1060		670	80	7.4	850				
218494	B 36	260-480	.005	20	15	1.4	90				
218496	B 18	1200-1400	0.01	5	54	3.95	62				
218497	B 18	700-860	0.1	5	40	6.30	132				
218498	B 18	700	0.02	2	47	5.50	103				
218399	B18	720-640	0.02	3	46	4.08	72				
218500	B 18	730	0.01	2	105	6.22	29				

APPENDIX V
ROCK CHIP SAMPLE RESULTS

SAMPLE NUMBER	TRAVERSE	DISTANCE	Au	As	Cu	Fe%	Cr	Pb	Zn	Co	Ag
218523	B 15	360-380		40	1700	47.9	35				
218524	B 15	500-540		10	335	37.9	80				
218525	B 16	260-400		9	410	38.9	75				
218526	B 16	260-400		6	45	4.5	65				
218527	B 16	600-740	0.04	670	785	40.5	110				
218528	B 17	600-650	0.035	14	570	24.4	60				
218529	B 17	650-700	0.56	6	135	9.3	40				
218531	B 17	700-750		5	40	2.8	45				
218532	B 17	750-800	0.005	10	40	2.5	35				
218533	B 17	380		5	40	3.1	35				
218534	B 17	500	.405	11	480	45.6	35				
218543	B 32	880-900		20	25	2.7	30				
218544	B 32	880-900		22	60	2.6	35				
218545	B 34	900-940		120	90	7.3	850				
218546	B 34	940-980		20	105	7.7	850				
218549	B 30	780	0.02	410	25	3.02	769				

APPENDIX VI
PETROGRAPHIC DESCRIPTIONS

Central Mineralogical Services



39 Beulah Road
Norwood, S.A. 5067
Telephone 42 5659

Mr. K.W. Hamilton
Project Geologist
C.S.R. Limited
Minerals Division
P.O. Box 39318
WINNELLIE / N.T. 5789

15th November, 1985

REPORT CMS 85/10/29

YOUR REFERENCE:	Purchase Order No. 43871
DATE RECEIVED:	24th October, 1985
SAMPLE NOS.:	3 Samples
SUBMITTED BY:	K.W. Hamilton
WORK REQUESTED:	Petrology

H.W. Fander.

H.W. Fander, M. Sc.

Copy to:
Mr. D.A. Brunt
Regional Manager - Central Area
C.S.R. Limited
Minerals Division
P.O. Box 259
GLENSIDE / S.A. 5065

REPORT CMS 85/10/29

Three rock chip samples, received for petrological examination, were thin-sectioned, examined with the respective offcuts, and are described in the attached reports.

Summary

Two samples represent complexly altered "doleritic" facies, with primary detail largely obscured by deformation and alteration effects. Both rocks exhibit evidence of an early phase of microscale "crackle brecciation". This is partly complexed by secondary brecciation (sample 218124). Hornblende hornfels facies contact-metamorphic effects appear, in part at least, to be overprinted on a saussurite-uralite assemblage, are partly complexed by vein and replacive prehnite ($\pm$ pumpellyite) and, in sample 219125, by marked development of late metasomatic scapolite.

These complexly altered microgabbros exhibit accessory sulphide disseminations and mineragraphic examination on the basis of assay data.

Sample 218254 represents a partly weathered and ferruginised hornfelsic metasediment which, dependent on field evidence, could be interpreted as the Koolpin Formation impure chert facies.

D. Cowan, B. Sc.

Petrological Descriptions

218124

(T.S.54806)

This rock may be broadly classified as a hornblende hornfels and represents a contact-altered breccia.

The millimetric- to centimetric-scale clasts (hand specimen) consist of fine- to medium-grained pale green hornblende, microgranular untwinned plagioclase (andesine), and quartz in varying proportions with accessory biotite, sphene, and traces of apatite. These features exhibit fine-scale networks of quartz-healed fractures and, on the basis of vague relict textural features, represent a quartz-mesostasised microgabbro. The feldspar is variably saussurite-stained, and the rock appears to reflect an early phase of uraltite-saussurite alteration, predating the quartz veining and subsequent brecciation.

The matrix consists of aggregates of hornblende with varying proportions of biotite, fine polygonal quartz, microcrystalline plagioclase, and disseminated sphene and locally conspicuous apatite. Detail is obscured by hornfelsic recrystallization effects, but the matrix assemblage is reminiscent of quartz-mica-rich variants of the Zamu Dolerite, and the rock as a whole conceivably represents a (recrystallized) tectonic breccia composite of competent and relatively incompetent (micaceous) variants.

This rock exhibits sporadic late clots of feldspar- and amphibole-replacive prehnite and biotite-replacive chlorite. Fine to ultrafine particles of pyrrhotite are thinly disseminated throughout.

218125

(T.S. 54807)

This may be categorised as a scapolite-hornblende rock.

Major mineralogy comprises coarse anhedral poikilitic scapolite (dipyre) with pervasively interspersed marginally corroded, vaguely uraltitic (i.e. pyroxene-pseudomorphous) pale green hornblende. Fine to microcrystalline sphene is pervasively disseminated throughout. Accessories include sporadic spongy clots of amphibole-interstitial pyrrhotite with rare associated microscopic blebs of chalcopyrite, minor clots and films of prehnite, traces of pumpellyite, and minor traces of apatite.

This rock exhibits a vague relict gabbroic fabric and evidence of an early phase of microfracture network development analogous to that in 218124. Finer detail is obscured by the pervasive development of the texturally late metasomatic scapolite. This phase is vaguely feldspar-pseudomorphous and also corrodes the amphibole, and the partly discontinuous veinlet-controlled prehnite-pumpellyite assemblage.

218254

(T.S. 54808)

This rock may be classified as a weathered hornfels and is of contact-metasedimentary origin.

The rock consists largely of fine (mean 30 μ) granular quartz forming weakly banded aggregates "studded" throughout with partly degraded (vermiculitised) porphyroblastic biotite flakes (mean 75 μ).

The millimetric-scale ferruginised zones (hand specimen) consist of limonitic clay aggregates pseudomorphous after tuft-like aggregates of a sub- to acicular, semi-radiating silicate. Relict textural features are consistent with a (degraded/ferruginised) Fe-amphibole, for example actinolite or ferro-anthophyllite. These features include biotite flakes and were primarily of late contact-metasomatic origin.

This rock is highly siliceous, with sporadic thin relict carbonaceous partings. It may represent the impure chert facies typically represented as boudinaged lenses and concretions within the Koolpin Formation, but is atypical of the major Koolpin carbonaceous dolomitic pelite facies.

D. Cowan, B. Sc.

APPENDIX VII
GROUND MAGNETIC PROFILES

4177 Expire 22/03/89

Date Granted:23/03/83 Expires:22/03/89 Years: 6 Blocks: 34 Covnt Y1:\$8000

SECURITY DETAILS

Amount Lodged	Date Lodged	Date Discharged
---------------	-------------	-----------------

GAZETTE DETAILS

Gazette No	Date of Gazt
34/83	15/04/83
152/85	17/04/85
332/86	02/07/86
347/88	04/05/88
676/88	07/09/88

RECEIPTS

Receipt	Amount	Date Recd	Fees For
682108	220.00	20/12/82	No Account Code entered
912317	170.00	15/03/84	No Account Code entered
963948	170.00	25/02/85	No Account Code entered
101080	390.00	20/02/86	No Account Code entered
151940	160.00	23/02/87	No Account Code entered
159478	160.00	29/02/88	No Account Code entered
158139	50.00	08/06/88	No Account Code entered

No Post Grant Map Details entered

REDUCTION DETAILS

Year	Date Reduced	Blocks Retained
6	23/03/88	2
5	23/03/87	4
3	23/03/85	17
4	23/04/86	13

DEFERRALS

Year	Date Applied	App/Ref	Reduct Now Due
4	20/02/86	A	**/**/**

ANNUAL REPORTS

Year	Date Rec'd	Expenditure
5	19/05/88	\$7150
4	15/05/87	\$61298
3	20/02/86	\$59450
2	25/02/85	\$49836
1	27/03/84	\$19918

ANNUAL REVIEWS

Year	Date Rev'd	New Covenant	Variation App/Ref
6	**/**/**	\$15000	
Comments :			
5	**/**/**	\$15000	
Comments :			
2	**/**/**	\$5000	
Comments :			
3	**/**/**	\$25000	
Comments :			
4	**/**/**	\$25000	
Comments :			

temp.a05330

Fri Feb 24 08:30:53 1995

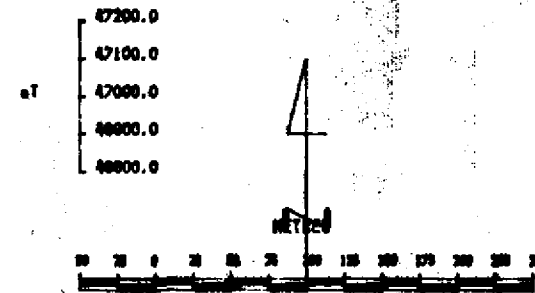
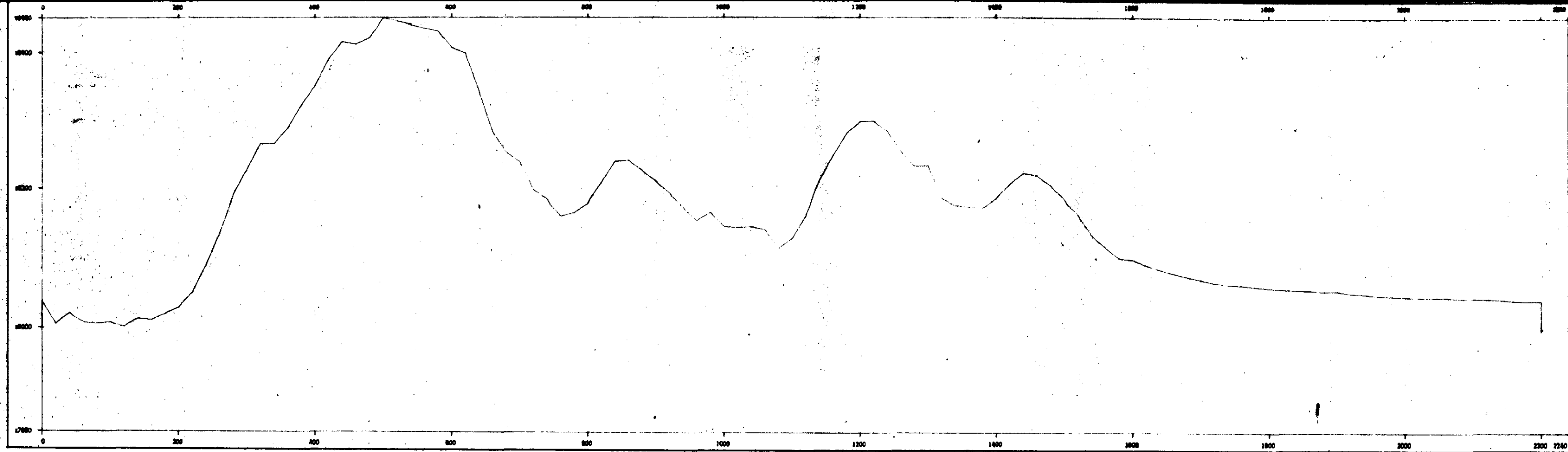
2

DEALINGS

Dealing	Type	Lodged	Approved	Registered	Terminated	Reason
5007	A	09/01/88	17/01/89	17/01/89	22/03/89	
5004	T	09/01/89	17/01/89	31/01/89	22/03/89	
4677	A	23/02/88	16/03/88	16/03/88	22/03/89	
4252	A	03/07/86	29/07/86	30/07/86	22/03/89	
4205	A	30/04/86	30/04/86	30/04/86	22/03/89	
3164	A	30/05/84	13/07/84	13/07/84	22/03/89	

No Past Holders entered

No Substantial Disturbances entered



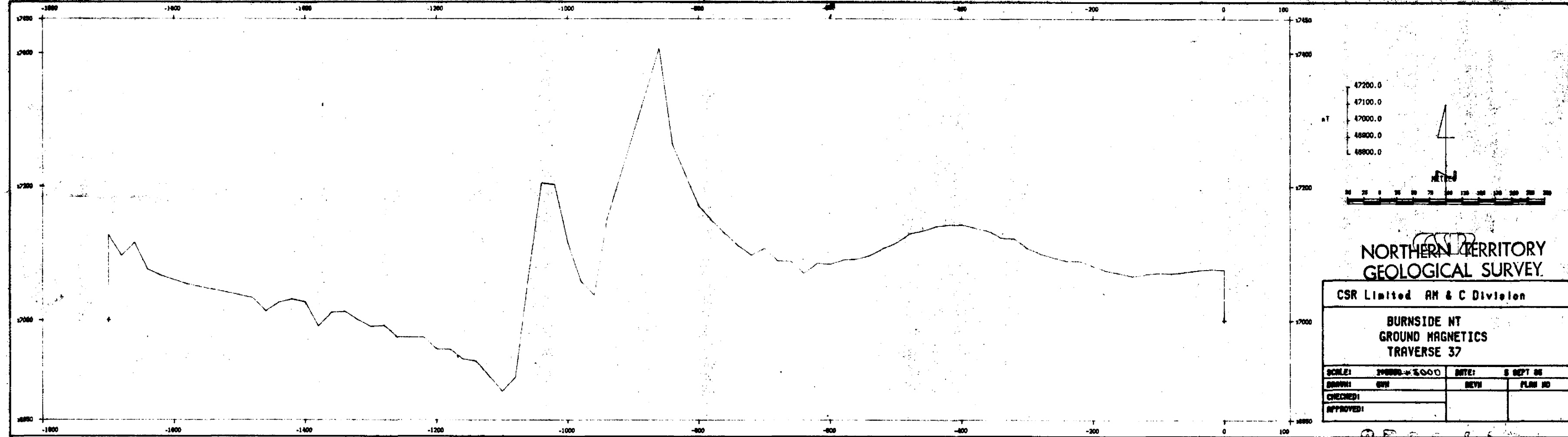
**NORTHERN TERRITORY
GEOLOGICAL SURVEY**

CSR Limited AM & C Division

**BURNSIDE NT
GROUND MAGNETICS
TRAVERSE 38**

SCALE:	1:10000	DATE:	8 SEPT 86
DRAWN:	BNH	SEVN	PLAN 20
CHECKED:			
APPROVED:			

CR 86 / 173

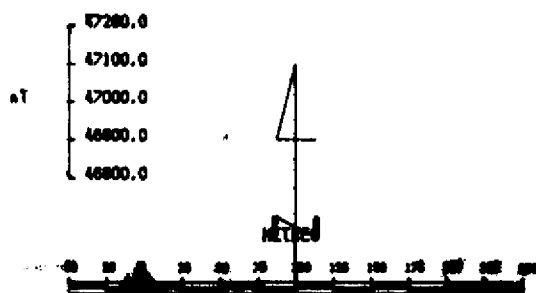
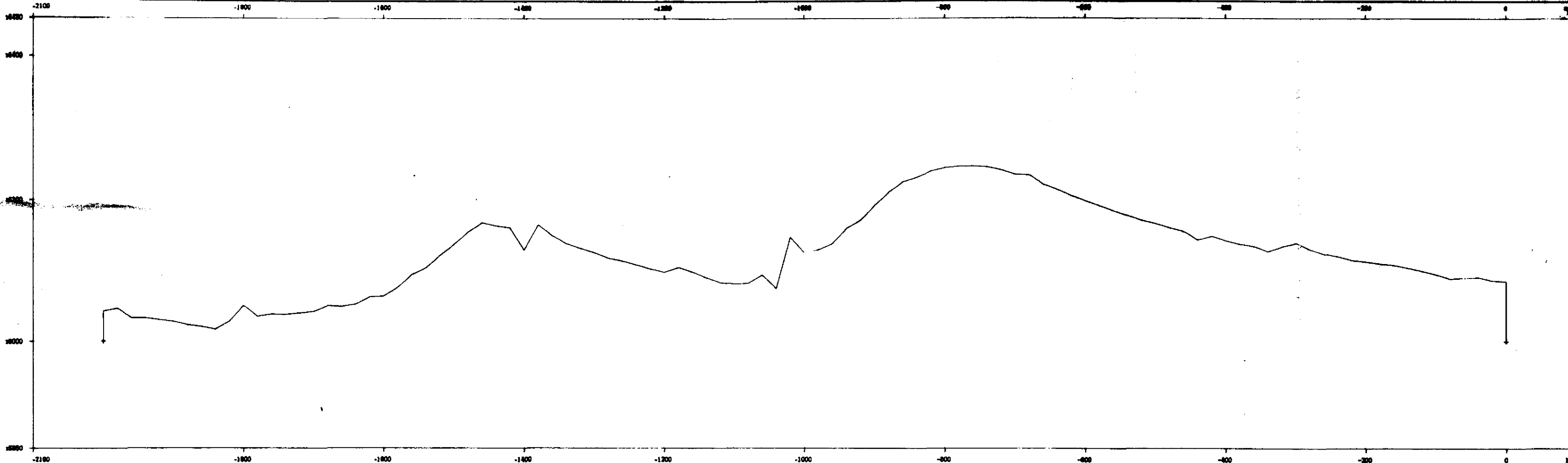


nT
47200.0
47100.0
47000.0
46900.0
46800.0



**NORTHERN TERRITORY
GEOLOGICAL SURVEY**

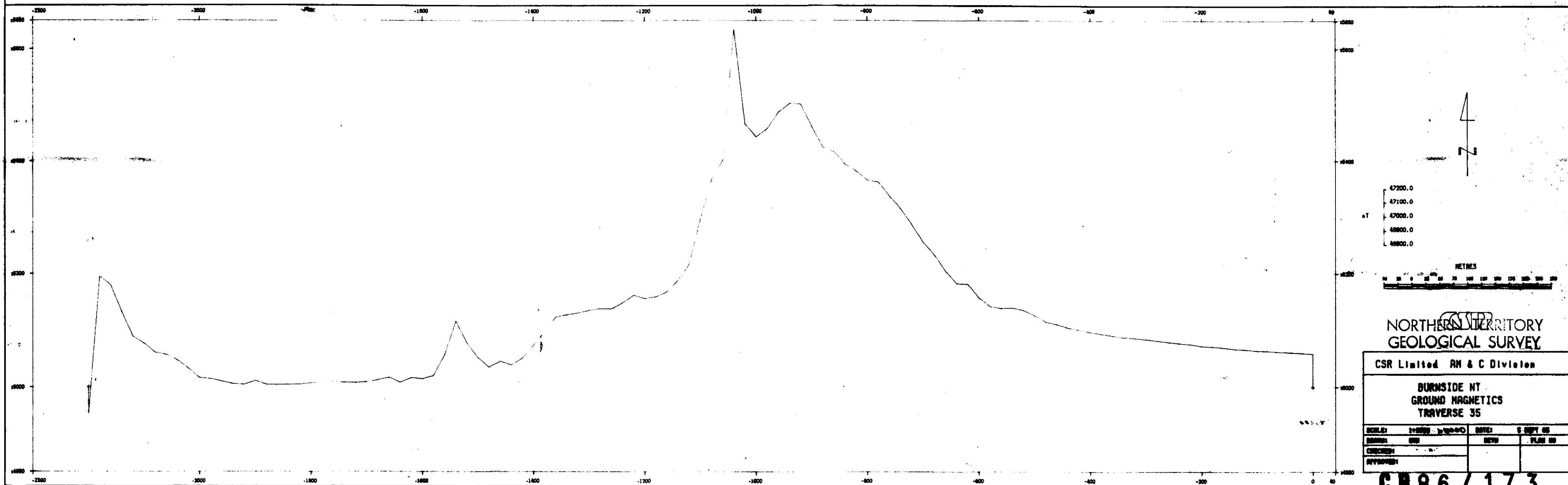
CSR Limited AM & C Division		
BURNSIDE NT GROUND MAGNETICS TRAVERSE 37		
SCALE: 1:5000	DATE: 8 SEPT 86	
DRAWN: GWH	REVISED:	PLAN NO:
CHECKED:		
APPROVED:		




 NORTHERN TERRITORY
 GEOLOGICAL SURVEY

CSR Limited AM & C Division		
BURNSIDE NT GROUND MAGNETICS TRAVERSE 36		
SCALE: 1:2500	DATE: 5 SEPT 88	
DRAWN: GWH	REV: 1	PLAN 00
CHECKED:		
APPROVED:		

CH 36 / 173



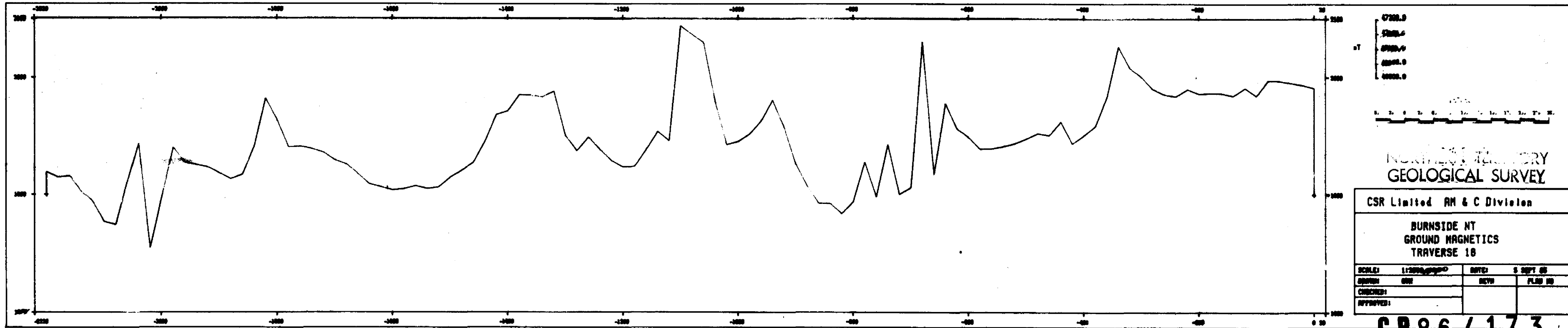
NORTHERN TERRITORY
GEOLOGICAL SURVEY

CSR Limited AM & C Division

BURNSIDE NT
GROUND MAGNETICS
TRAVERSE 35

SCALE: 1:1000	DATE: 5 SEPT 85
DRAWN: GSH	REVISED: PLAN 00
CHECKED:	
APPROVED:	

CN 86 / 173



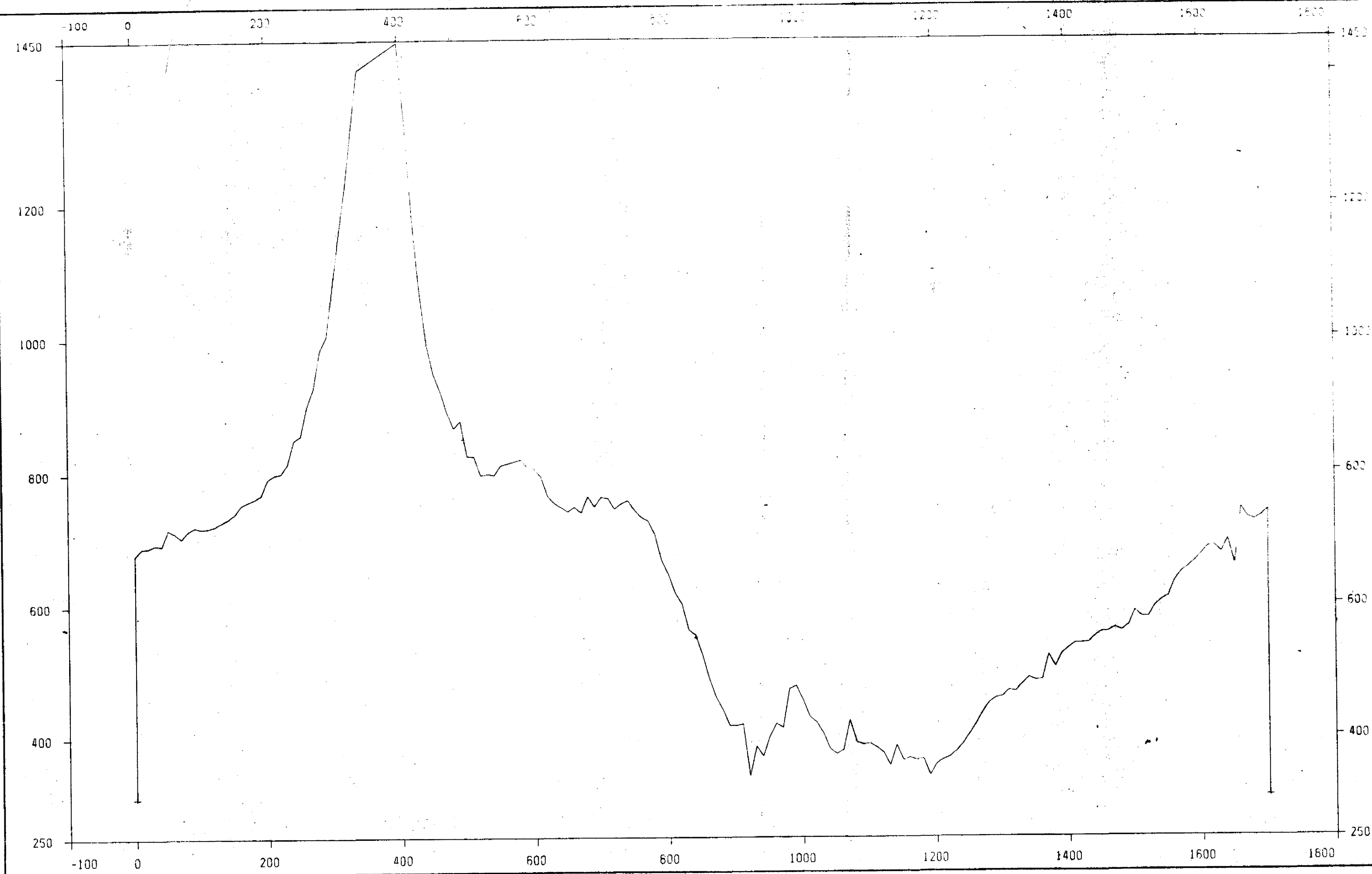
NORTHWEST TERRITORY
GEOLOGICAL SURVEY

CSR Limited AM & C Division

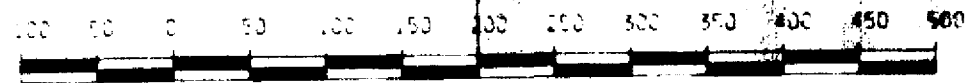
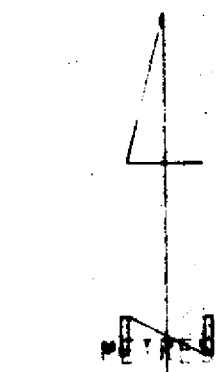
BURNSIDE NT
GROUND MAGNETICS
TRAVERSE 18

SCALE: 1:2000	DATE: 5 SEPT 85
DRAWN: GUN	REV: 1
CHECKED:	FILED: 10
APPROVED:	

CR 86 / 173

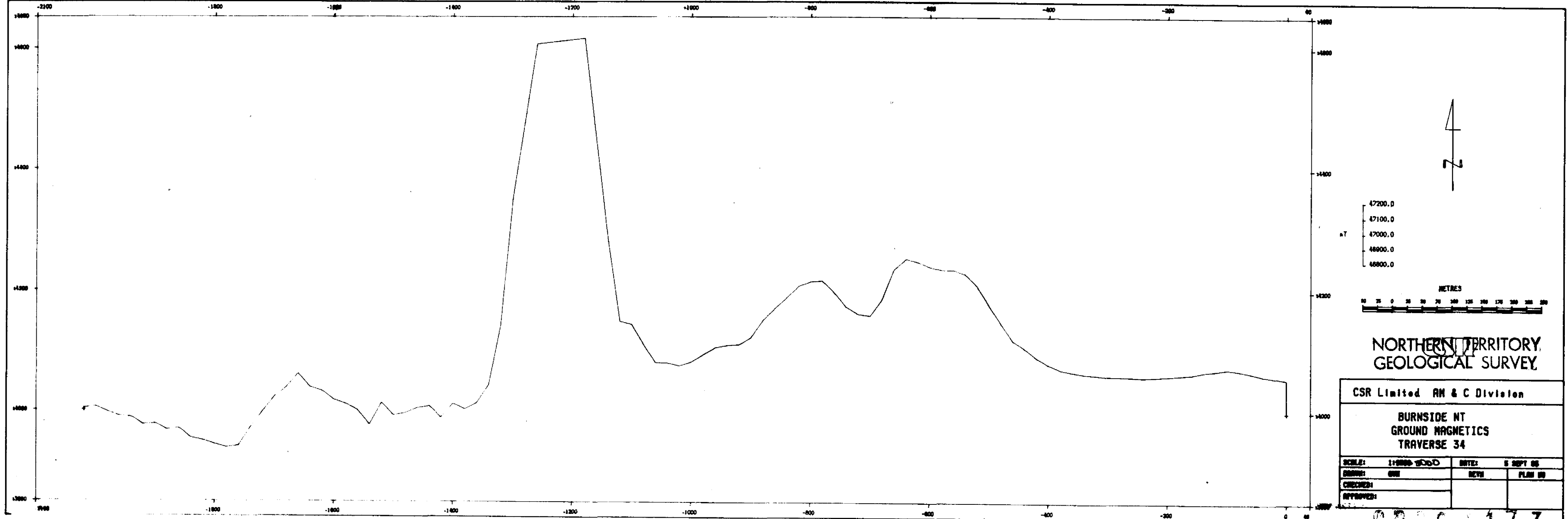


44700.0
44800.0
44900.0
44000.0
44300.0



CSIR

CSR Limited AM & C Division		
BURNSIDE NT TRAVERSE B33 GROUND MAGNETICS		
SCALE: 1:5000	DATE: 24 OCT 85	
DRAWN: GWH	REVN	PLAN NO
CHECKED:		
APPROVED:		
NORTHERN TERRITORY GEOLOGICAL SURVEY		6136/173



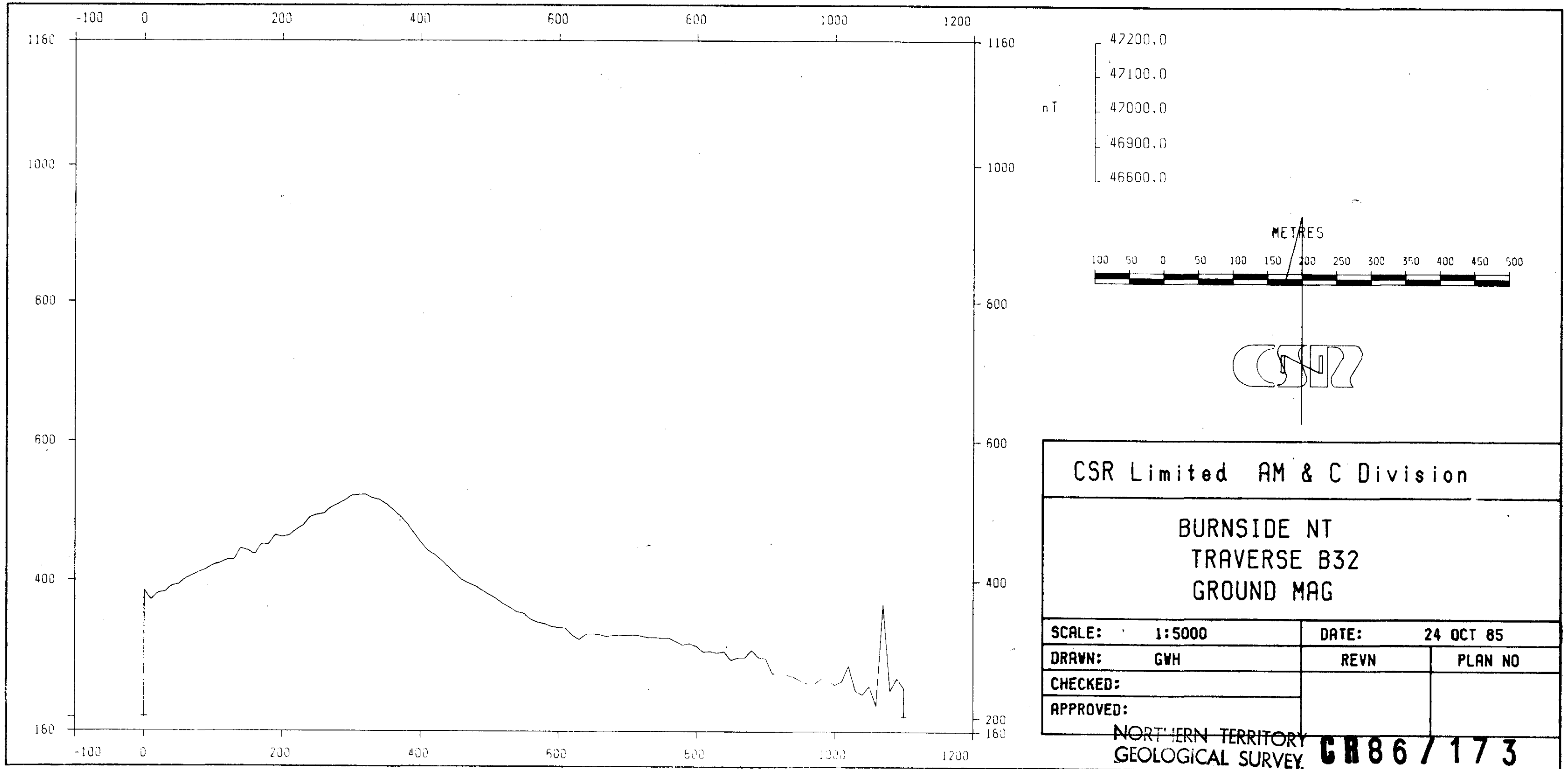
nT
47200.0
47100.0
47000.0
46900.0
46800.0

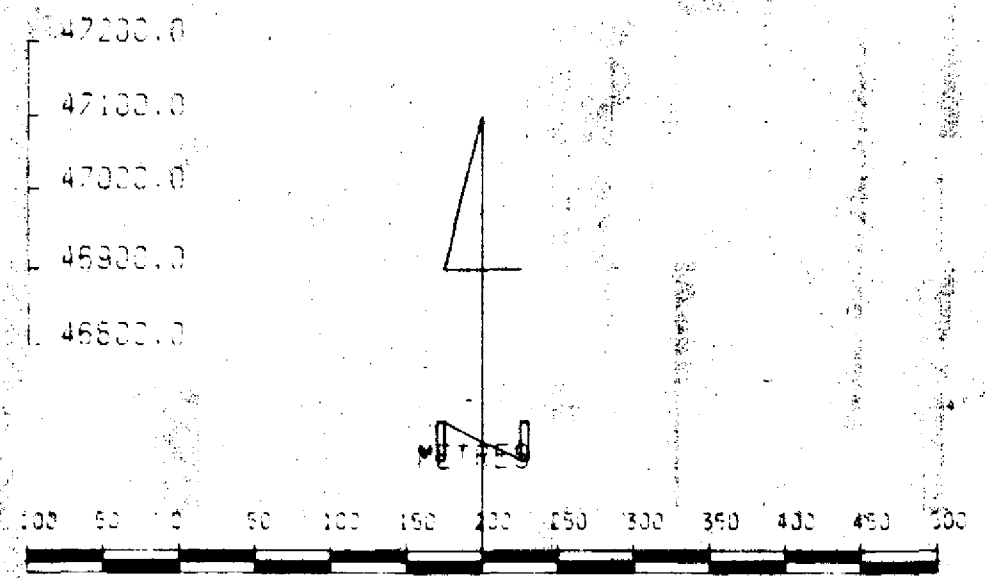
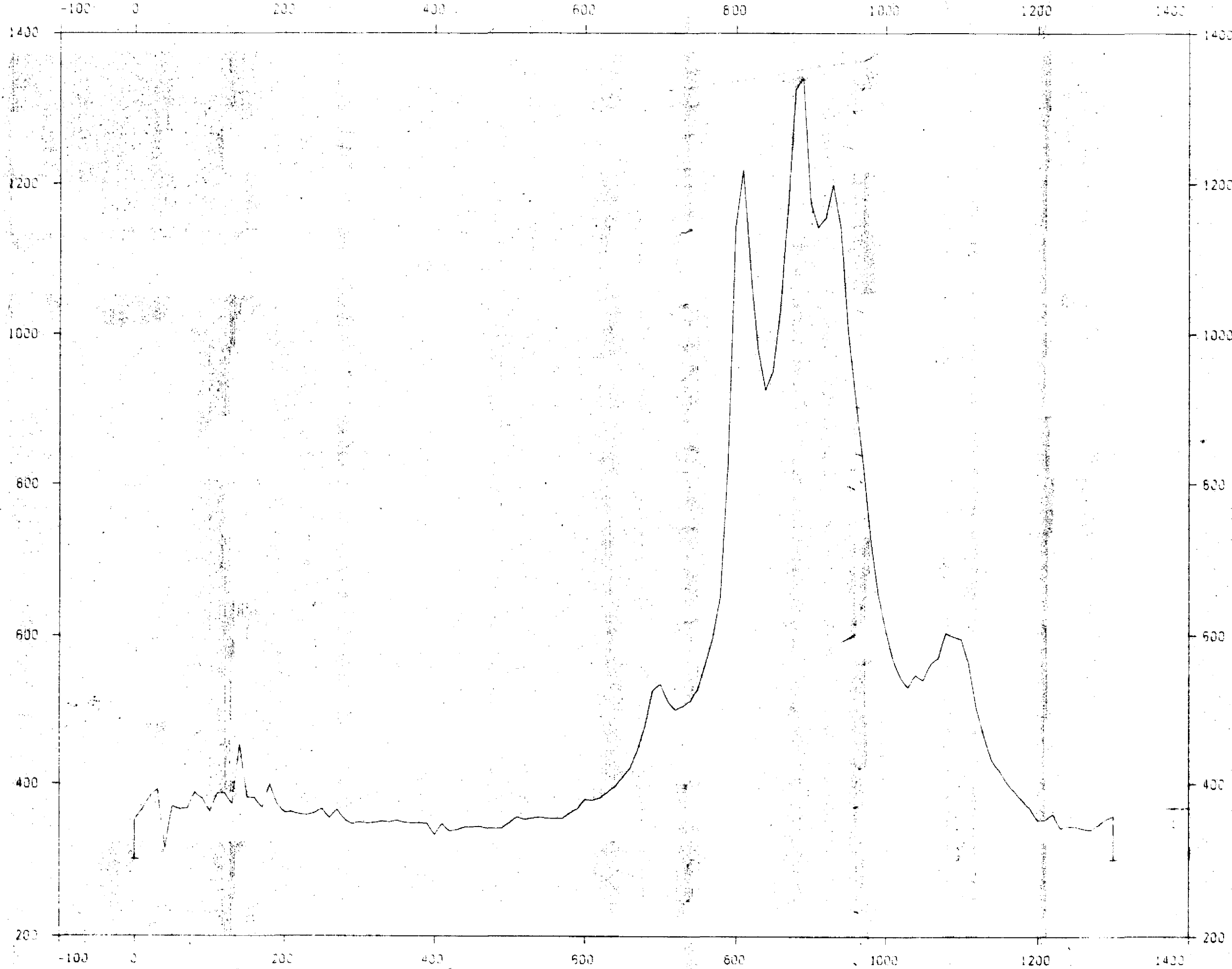
METRES
0 25 50 75 100 125 150 175 200 225 250

NORTHERN TERRITORY
GEOLOGICAL SURVEY

CSR Limited AM & C Division			
BURNSIDE NT GROUND MAGNETICS TRAVERSE 34			
SCALE:	1:5000	DATE:	5 SEPT 85
DRAWN:	GM	REV:	PLAN 00
CHECKED:			
APPROVED:			

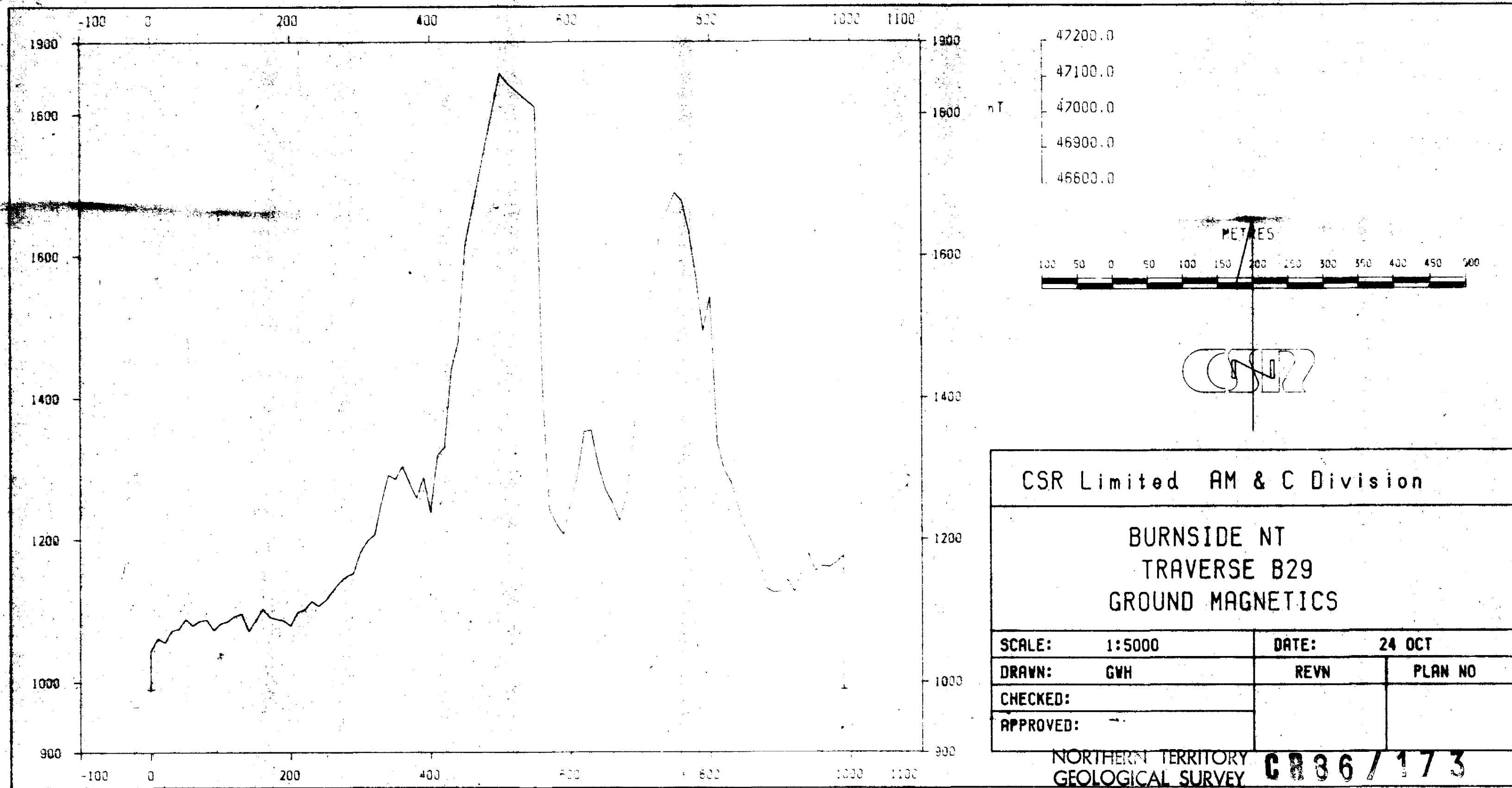
0006 / 173





CSR

CSR Limited AM & C Division		
BURNSIDE NT TRAVERSE B30 GROUND MAGNETICS		
SCALE:	1:5000	DATE: 24 OCT 85
DRAWN:	GWH	REVN
CHECKED:		PLAN NO
APPROVED:		
NORTHERN TERRITORY GEOLOGICAL SURVEY		CR 86 / 173

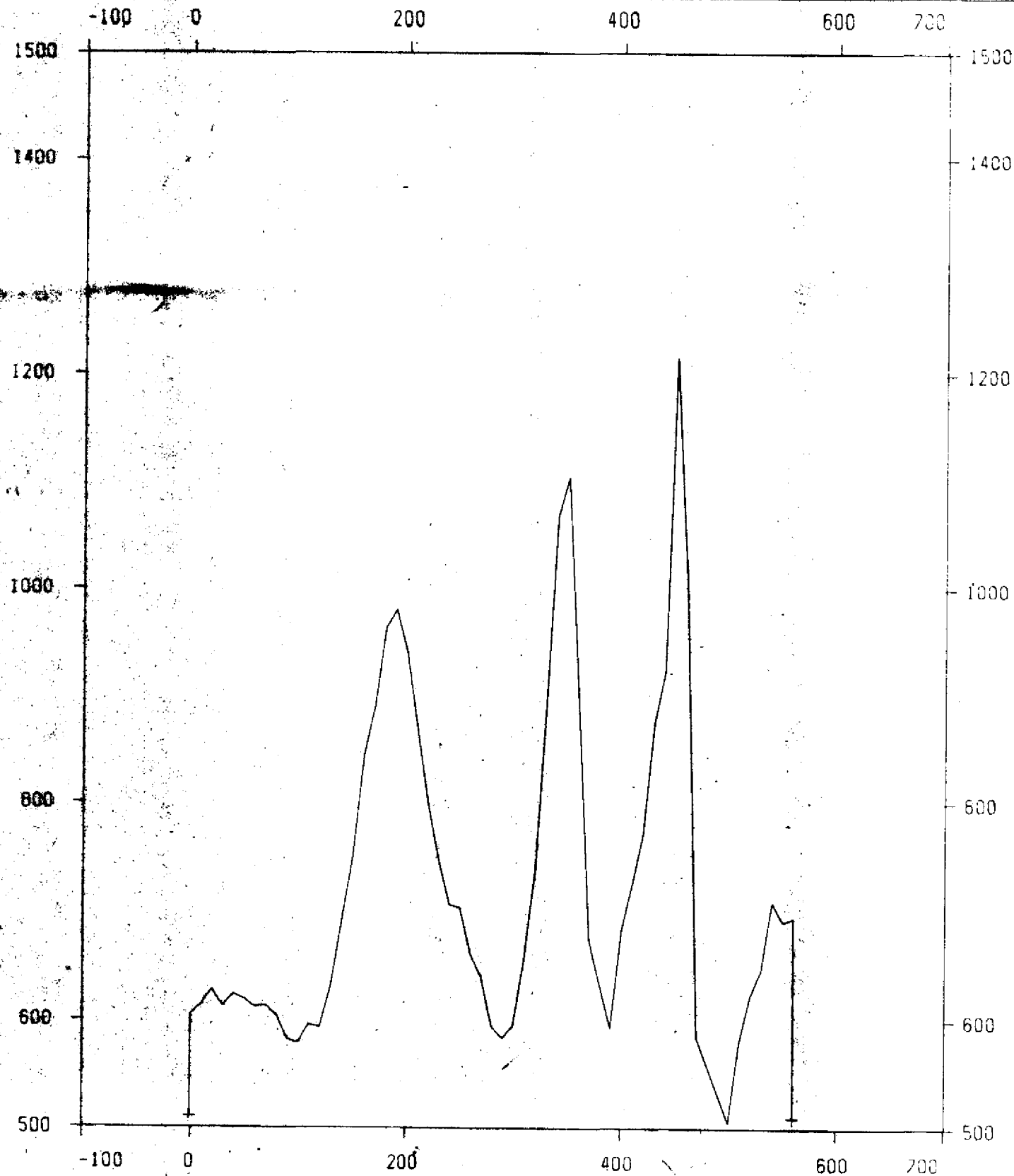


CSR Limited AM & C Division

BURNSIDE NT
TRAVERSE B29
GROUND MAGNETICS

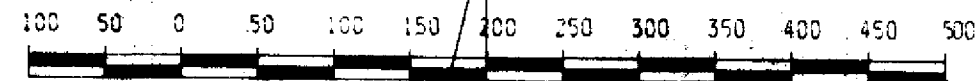
SCALE:	1:5000	DATE:	24 OCT
DRAWN:	GVH	REVN	PLAN NO
CHECKED:			
APPROVED:			

NORTHERN TERRITORY
GEOLOGICAL SURVEY **CR 36 / 173**



47700.0
47600.0
47500.0
47400.0
47300.0

METRES



CSR

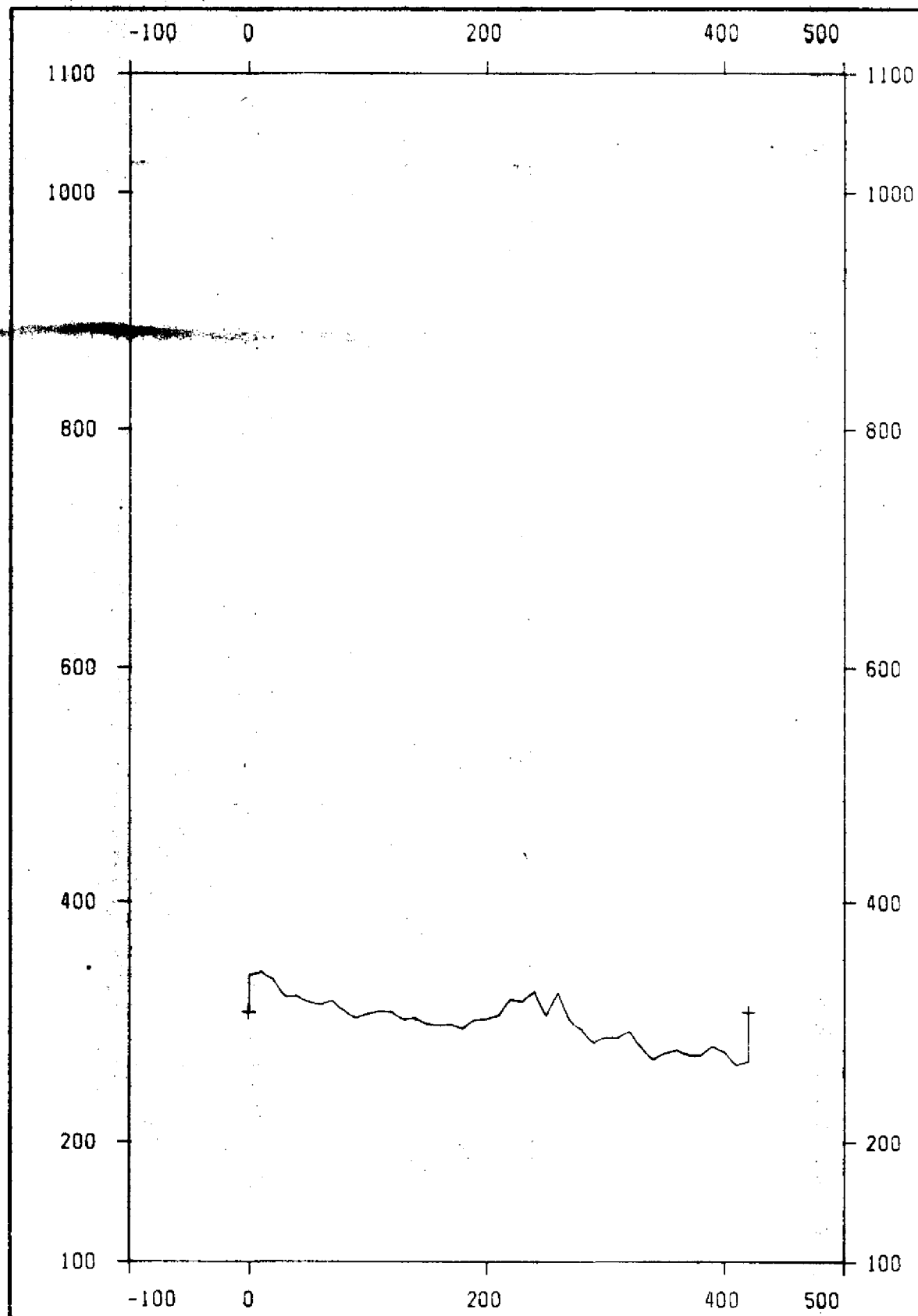
CSR Limited AM & C Division

BURNSIDE NT
TRAVERSE P5
GROUND MAG

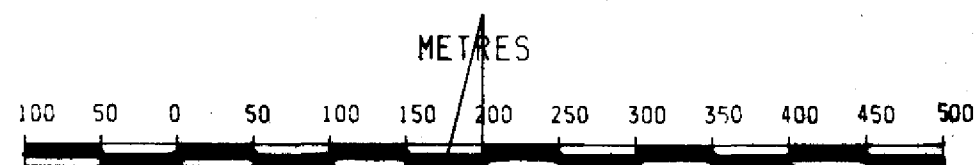
SCALE.	1:5000	DATE.	24 OCT 85
DRAWN.	GWH	REVN	PLAN NO
CHECKED.			
APPROVED.			

NORTHERN TERRITORY
GEOLOGICAL SURVEY,

86 / 173



47700.0
47600.0
47500.0
47400.0
47300.0



CSR

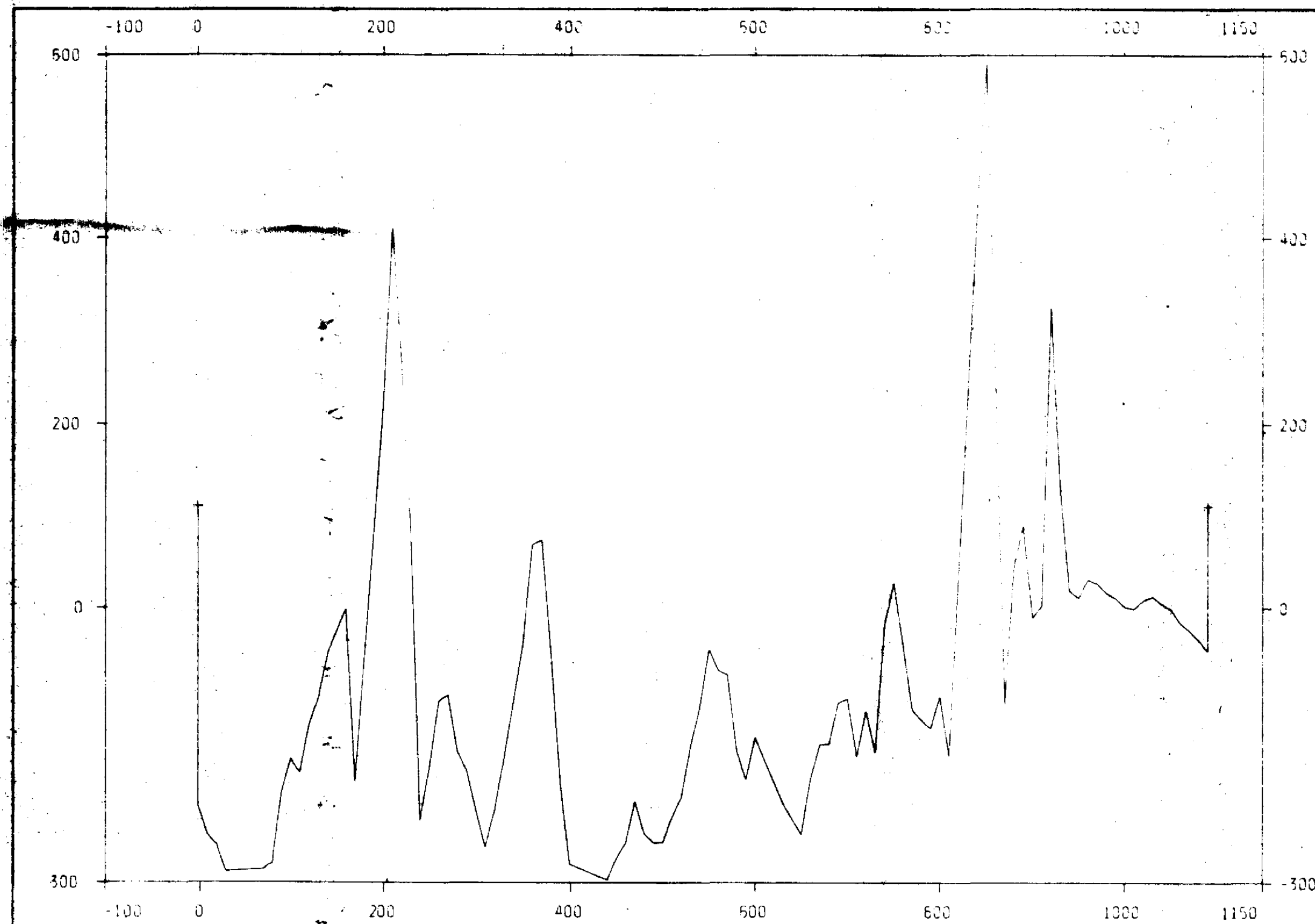
CSR Limited AM & C Division

BURNSIDE NT
TRAVERSE P3
GROUND MAG

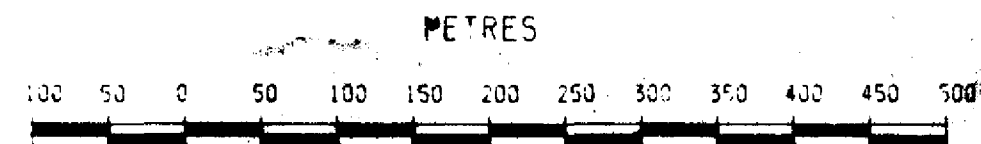
SCALE:	1:5000	DATE:	24 OCT 85
DRAWN:	GWH	REVN	PLAN NO
CHECKED:			
APPROVED:			

NORTHERN TERRITORY
GEOLOGICAL SURVEY

CR 86 / 173



47600.0
47700.0
47800.0
47900.0
48000.0



CSR

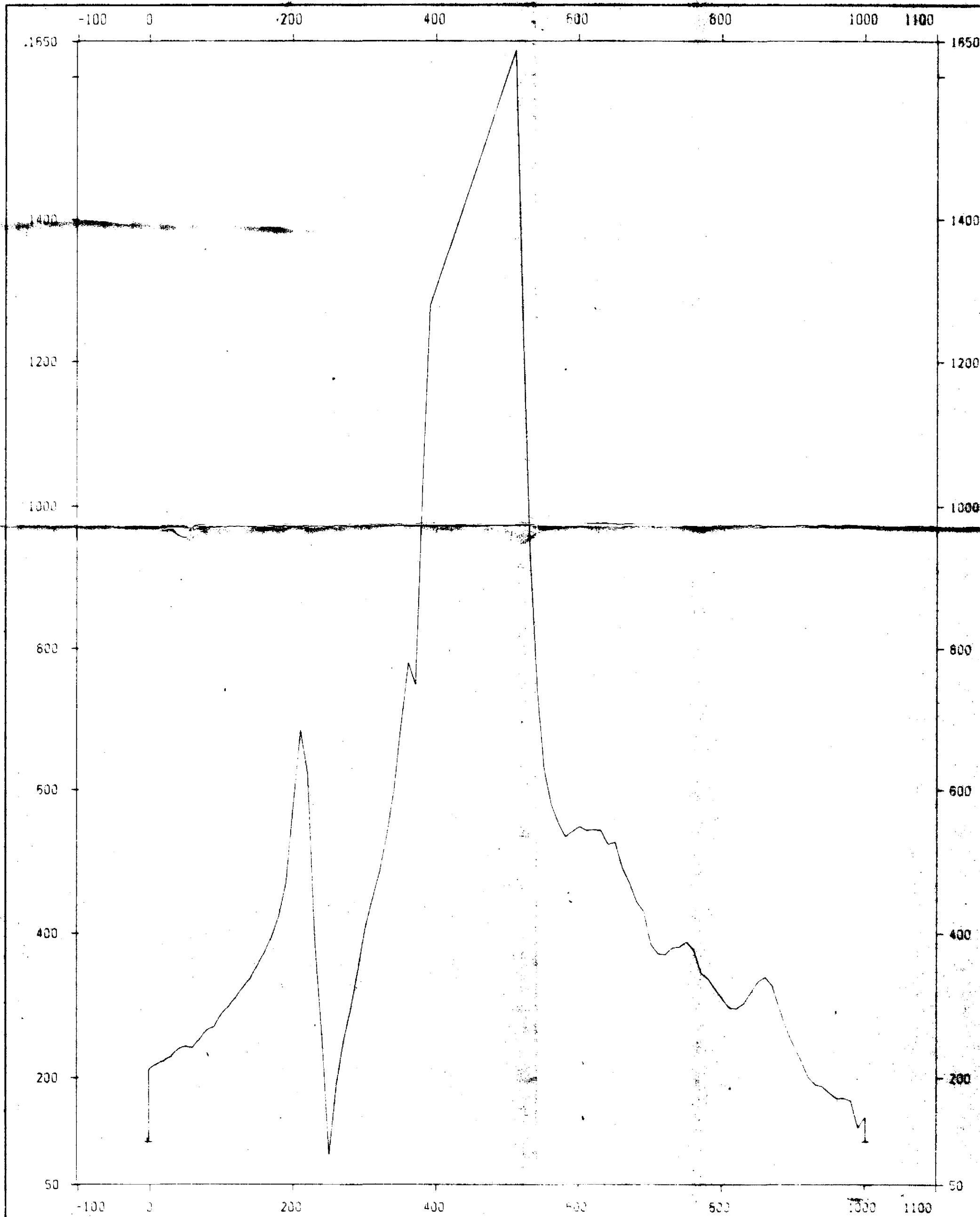
CSR Limited AM & C Division

BURNSIDE NT
TRAVERSE P1
GROUND MAGNETICS

SCALE:	1:5000	DATE:	24 OCT 85
DRAWN:		REVN	PLAN NO
CHECKED:			
APPROVED:			

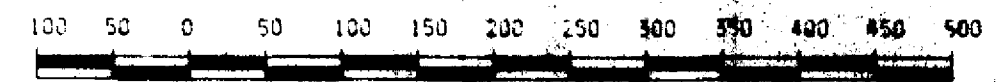
NORTHERN TERRITORY
GEOLOGICAL SURVEY

CR 86 / 173



47400.0
47300.0
47200.0
47100.0
47000.0

METRES



CSIR

CSR Limited AM & C Division		
BURNSIDE NT TRAVERSE B31 GROUND MAGNETICS		
SCALE: 1:5000	DATE: 24 OCT 85	
DRAWN: GWH	REV#	PLAN NO
CHECKED:		
APPROVED:		
NORTHERN TERRITORY GEOLOGICAL SURVEY CR 86 / 173		

APPENDIX VIII

SOIL RESULTS - DARWIN TO AMADEUS BASIN GAS PIPELINE

TRENCH

The current selection is : INITIAL

Page 1

E.L. 4177 DARWIN TO AMADEUS BASIN GAS PIPELINE SOIL RESULTS

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257301	P01A	0.	35.0	9.50	210.0	26.0
A257302	P01A	20.	20.0	8.50	210.0	28.0
A257303	P01A	40.	20.0	9.60	195.0	25.0
A257304	P01A	60.	20.0	9.80	330.0	12.0
A257305	P01A	80.	20.0	12.40	330.0	10.0
A257306	P01A	100.	30.0	12.30	265.0	9.0
A257307	P01A	120.	25.0	14.00	280.0	10.0
A257308	P01A	140.	20.0	13.00	300.0	11.0
A257309	P01A	160.	20.0	13.10	350.0	25.0
A257310	P01A	180.	25.0	13.60	300.0	10.0
A257311	P01A	200.	20.0	9.60	200.0	2.0
A257312	P01A	220.	15.0	5.20	90.0	0.5
A257313	P01A	240.	15.0	3.50	105.0	0.5
A257314	P01B	20.	15.0	3.40	135.0	7.0
A257315	P01B	40.	90.0	10.10	275.0	4.0
A257316	P01B	60.	95.0	11.60	320.0	8.0
A257317	P01B	80.	80.0	11.90	215.0	6.0
A257318	P01B	100.	80.0	9.80	285.0	20.0
A257319	P01B	120.	55.0	12.80	365.0	43.0
A257320	P01B	140.	125.0	16.40	490.0	23.0
A257321	P01B	160.	80.0	14.60	330.0	14.0
A257322	P01B	180.	75.0	6.40	110.0	1.0
A257323	P01B	200.	35.0	4.20	85.0	0.5
A257324	P01B	220.	60.0	10.90	250.0	2.0
A257325	P01B	240.	65.0	12.60	245.0	8.0
A257326	P01B	260.	140.0	11.40	170.0	3.0
A257327	P01B	280.	85.0	14.20	265.0	8.0
A257328	P01B	300.	35.0	9.90	160.0	3.0
A257329	P01B	320.	45.0	10.90	95.0	0.5
A257330	P01B	340.	40.0	4.70	45.0	2.0
A257331	P01B	360.	50.0	7.40	90.0	1.0
A257332	P01B	380.	25.0	11.20	125.0	1.0
A257333	P01B	400.	30.0	8.00	125.0	3.0
A257334	P01B	420.	20.0	6.70	85.0	3.0
A257335	P01B	440.	20.0	6.30	100.0	4.0
A257336	P01B	460.	55.0	12.40	190.0	6.0
A257337	P01B	480.	30.0	11.10	140.0	5.0
A257338	P01B	500.	20.0	8.80	75.0	2.0
A257339	P01B	520.	20.0	8.70	150.0	17.0
A257340	P01B	540.	35.0	8.70	170.0	2.0
A257341	P01B	560.	80.0	10.60	110.0	1.0
A257342	P01B	580.	40.0	16.20	365.0	5.0
A257343	P01B	600.	45.0	11.50	175.0	1.0
A257344	P01B	620.	40.0	6.00	80.0	0.5
A257345	P01B	640.	20.0	4.00	80.0	0.5
A257346	P01B	660.	40.0	4.90	95.0	0.5
A257347	P01B	680.	30.0	4.50	85.0	0.5
A257348	P01B	700.	35.0	8.50	125.0	0.5
A257349	P01B	720.	135.0	13.80	200.0	4.0
A257350	P01B	740.	60.0	12.70	155.0	4.0
A257351	P01B	760.	65.0	8.40	140.0	2.0
A257352	P01B	780.	40.0	12.00	135.0	2.0
A257353	P01B	800.	10.0	10.60	80.0	2.0
A257354	P01B	820.	15.0	10.50	80.0	2.0
A257355	P01B	840.	15.0	11.20	95.0	0.0
SAMPLE	LINE	DIST	CR	FE	CU	AS

The current selection is : INITIAL

Page 2

E.L. 4177 DARWIN TO AMADEUS BASIN GAS PIPELINE SOIL RESULTS

SAMPLE	LINE	DIST	CR	FE	CU	AS
A257356	P01B	860.	15.0	11.90	80.0	3.0
A258040	P03	0.	55.0	6.50	110.0	38.0
A258041	P03	20.	75.0	8.50	90.0	41.0
A258042	P03	40.	80.0	11.60	120.0	43.0
A258043	P03	60.	80.0	7.50	140.0	41.0
A258044	P03	80.	55.0	8.50	105.0	44.0
A258045	P03	100.	50.0	9.60	105.0	28.0
A258046	P03	120.	95.0	9.60	130.0	35.0
A258047	P03	140.	100.0	9.60	130.0	22.0
A258048	P03	160.	65.0	9.70	145.0	24.0
A258049	P03	180.	60.0	9.80	130.0	30.0
A258050	P03	200.	35.0	8.50	85.0	31.0
A258051	P03	220.	55.0	7.90	1050.0	29.0
A258052	P03	240.	55.0	6.30	130.0	24.0
A258053	P03	260.	35.0	6.40	105.0	26.0
A258054	P03	280.	25.0	6.50	70.0	29.0
A258055	P03	300.	35.0	5.10	80.0	18.0
A258056	P03	320.	30.0	3.50	80.0	24.0
A258057	P03	340.	35.0	5.20	110.0	39.0
A258058	P03	360.	30.0	9.30	230.0	63.0
A258059	P03	380.	45.0	10.20	275.0	130.0
A258060	P03	400.	40.0	11.40	210.0	76.0
A258061	P03	420.	50.0	8.90	155.0	57.0
A258065	P05	0.	80.0	6.00	120.0	50.0
A258066	P05	20.	100.0	8.10	140.0	55.0
A258067	P05	40.	135.0	9.50	125.0	50.0
A258068	P05	60.	150.0	9.60	95.0	55.0
A258069	P05	80.	165.0	9.60	80.0	37.0
A258070	P05	100.	160.0	10.00	95.0	40.0
A258071	P05	120.	200.0	9.80	135.0	25.0
A258072	P05	140.	140.0	5.70	100.0	16.0
A258073	P05	160.	150.0	6.00	50.0	22.0
A258074	P05	180.	200.0	10.20	155.0	21.0
A258075	P05	200.	310.0	8.10	265.0	40.0
A258076	P05	220.	140.0	11.00	160.0	19.0
A258077	P05	240.	280.0	11.50	100.0	22.0
A258078	P05	260.	240.0	12.50	165.0	22.0
A258079	P05	280.	160.0	11.50	165.0	690.0
A258080	P05	300.	60.0	12.60	165.0	560.0
A258081	P05	320.	45.0	19.10	115.0	430.0
A258082	P05 *	340.	15.0	3.40	20.0	62.0
A258083	P05	360.	20.0	16.30	145.0	210.0
A258084	P05	380.	20.0	8.60	115.0	1150.0
A258085	P05	400.	2.5	9.10	120.0	150.0
A258086	P05	420.	2.5	6.80	55.0	80.0
A258087	P05	440.	2.5	5.50	40.0	24.0
A258088	P05	460.	15.0	5.80	75.0	10.0
A258089	P05	480.	2.5	2.40	40.0	3.0
A258090	P05	500.	25.0	3.60	35.0	14.0
A258091	P05	520.	70.0	11.20	210.0	70.0
A258092	P05	540.	30.0	5.10	90.0	12.0
A258093	P05	560.	25.0	3.60	70.0	10.0

There were 107 records written.

APPENDIX IX

SOIL RESULTS - WATERTANK PROSPECT

WATERBURY SOIL SAMPLE RESULTS

SAMPLE	CR	FE	CU	AS	EAST	NORTH
A257360	430.0	12.40	55.0	49.0	772166.0	8523119.8
A257361	130.0	7.90	50.0	17.0	772186.0	8523120.1
A257362	95.0	8.50	70.0	13.0	772206.0	8523120.4
A257363	65.0	8.50	75.0	9.0	772226.0	8523120.7
A257364	50.0	7.40	65.0	8.0	772246.0	8523121.1
A257365	110.0	6.80	80.0	20.0	772266.0	8523121.4
A257366	130.0	6.70	65.0	35.0	772286.0	8523121.7
A257367	340.0	9.10	55.0	32.0	772306.0	8523122.0
A257368	640.0	9.20	75.0	32.0	772326.0	8523122.4
A257369	425.0	5.10	80.0	12.0	772346.0	8523122.7
A257370	830.0	8.60	100.0	42.0	772366.0	8523123.0
A257371	220.0	4.80	80.0	40.0	772386.0	8523123.3
A257372	140.0	8.20	100.0	140.0	772406.0	8523123.6
A257373	195.0	6.80	100.0	62.0	772426.0	8523124.0
A257374	225.0	6.40	95.0	47.0	772446.0	8523124.3
A257375	50.0	3.90	65.0	26.0	772466.0	8523124.6
A257376	20.0	2.10	60	18.0	772486.0	8523124.9
A257376	20.0	2.10	60.0	18.0	772486.0	8523124.9
A257377	40.0	4.60	85.0	42.0	772506.0	8523125.3
A257378	65.0	7.20	110.0	110.0	772526.0	8523125.6
A257379	80.0	7.60	65.0	20.0	772546.0	8523125.9
A257380	155.0	7.20	70.0	20.0	772566.0	8523126.3
A257383	40.0	6.90	75.0	9.0	772162.8	8523319.7
A257384	105.0	8.10	75.0	14.0	772182.8	8523320.1
A257385	150.0	7.50	65.0	11.0	772202.8	8523320.4
A257386	155.0	7.40	80.0	9.0	772222.8	8523320.7
A257387	110.0	8.00	90.0	9.0	772242.8	8523321.0
A257388	110.0	9.70	75.0	11.0	772262.8	8523321.4
A257389	1000.0	8.80	110.0	17.0	772282.8	8523321.7
A257390	1950.0	14.10	200.0	40.0	772302.8	8523322.0
A257391	4550.0	13.80	195.0	42.0	772322.8	8523322.3
A257392	4000.0	12.90	190.0	50.0	772342.8	8523322.6
A257393	1700.0	6.80	145.0	62.0	772362.8	8523323.0
A257394	1050.0	9.10	225.0	110.0	772382.7	8523323.3
A257395	1250.0	8.50	120.0	44.0	772402.7	8523323.6
A257396	760.0	10.20	105.0	26.0	772422.7	8523323.9
A257397	1650.0	9.50	105.0	21.0	772442.7	8523324.3
A257398	1850.0	8.60	65.0	30.0	772462.7	8523324.6
A257399	660.0	7.80	40.0	30.0	772482.7	8523324.9
A257400	380.0	6.20	60.0	22.0	772502.7	8523325.3
A257401	610.0	8.80	50.0	43.0	772522.7	8523325.6
A257402	220.0	8.70	85.0	95.0	772542.7	8523325.9
A257403	380.0	8.20	55.0	13.0	772562.7	8523326.2
A257415	1650.0	6.80	105.0	72.0	772159.5	8523519.7
A257414	140.0	9.60	120.0	7.0	772179.5	8523520.0
A257413	270.0	10.80	160.0	10.0	772199.5	8523520.3
A257412	300.0	9.60	120.0	10.0	772219.5	8523520.7
A257411	430.0	16.80	325.0	18.0	772239.5	8523521.0
A257410	200.0	6.80	110.0	9.0	772259.5	8523521.3
A257409	500.0	5.10	80.0	33.0	772279.5	8523521.6
A257408	430.0	4.00	85.0	24.0	772299.5	8523522.0
A257407	590.0	6.20	100.0	43.0	772319.5	8523522.3
A257406	1250.0	7.70	120.0	100.0	772339.5	8523522.6
A257405	1800.0	8.10	100.0	110.0	772359.5	8523522.9
A257416	1350.0	8.70	80.0	74.0	772379.5	8523523.3
A257417	900.0	9.10	80.0	51.0	772399.5	8523523.6
SAMPLE	CR	FE	CU	AS	EAST	NORTH

WATERTANK SOIL SAMPLE RESULTS

SAMPLE	CR	FE	CU	AS	EAST	NORTH
A257508	650.0	8.20	110.0	32.0	772289.7	8524121.9
A257509	380.0	4.50	75.0	19.0	772309.7	8524122.2
A257510	180.0	3.00	65.0	12.0	772329.7	8524122.5
A257511	110.0	1.70	50.0	7.0	772349.7	8524122.9
A257512	100.0	1.80	50.0	7.0	772369.7	8524123.2
A257513	115.0	3.80	75.0	9.0	772389.7	8524123.5
A257514	95.0	2.30	60.0	7.0	772409.7	8524123.8
A257515	100.0	2.10	35.0	6.0	772429.7	8524124.2
A257516	50.0	1.70	35.0	5.0	772449.7	8524124.5
A257517	20.0	0.90	35.0	3.0	772469.7	8524124.8
A257518	10.0	1.30	30.0	5.0	772489.7	8524125.1
A257519	15.0	1.60	25.0	5.0	772509.7	8524125.5
A257520	15.0	1.60	25.0	6.0	772529.7	8524125.8
A257521	15.0	2.00	35.0	3.0	772549.7	8524126.1
A257523	15.0	9.60	190.0	42.0	771843.3	8524514.7
A257524	40.0	11.70	185.0	44.0	771863.3	8524515.0
A257525	55.0	9.20	105.0	55.0	771883.3	8524515.3
A257526	110.0	10.40	110.0	79.0	771903.3	8524515.7
A257527	75.0	9.70	95.0	47.0	771923.3	8524516.0
A257528	100.0	8.90	70.0	53.0	771943.3	8524516.3
A257529	180.0	7.70	95.0	120.0	771963.3	8524516.6
A257530	100.0	7.30	120.0	51.0	771983.3	8524517.0
A257620	100.0	8.90	80.0	26.0	772146.5	8524319.6
A257621	70.0	7.50	180.0	25.0	772166.5	8524319.9
A257622	1050.0	14.90	60.0	17.0	772186.5	8524320.2
A257623	3300.0	13.70	100.0	63.0	772206.5	8524320.6
A257624	35.0	1.20	65.0	2.0	772226.5	8524320.9
A257625	30.0	2.10	50.0	25.0	772246.5	8524321.2
A257626	20.0	1.00	55.0	7.0	772266.5	8524321.5
A257627	50.0	1.20	65.0	7.0	772286.5	8524321.9
A257628	30.0	1.40	90.0	3.0	772306.5	8524322.2
A257629	315.0	3.60	60.0	10.0	772326.5	8524322.5
A257630	1100.0	6.00	55.0	23.0	772346.5	8524322.8
A257631	285.0	3.30	75.0	11.0	772366.5	8524323.2
A257632	45.0	2.10	70.0	9.0	772386.5	8524323.5
A257633	35.0	2.00	35.0	3.0	772406.5	8524323.8
A257634	25.0	1.80	35.0	6.0	772426.5	8524324.1
A257635	20.0	1.70	20.0	5.0	772446.5	8524324.5
A257636	30.0	2.40	35.0	6.0	772466.5	8524324.8
A257637	60.0	9.50	115.0	14.0	772486.5	8524325.1
A257638	60.0	10.70	130.0	52.0	772506.5	8524325.4
A257639	75.0	9.60	110.0	38.0	772526.4	8524325.8
A257640	70.0	12.10	165.0	49.0	772546.4	8524326.1
A257531	80.0	7.10	135.0	38.0	772003.3	8524517.3
A257532	170.0	9.50	125.0	10.0	772023.3	8524517.6
A257533	830.0	12.80	95.0	24.0	772043.3	8524517.9
A257534	900.0	12.00	110.0	57.0	772063.3	8524518.3
A257535	1200.0	9.30	140.0	46.0	772083.3	8524518.6
A257536	1700.0	11.40	100.0	50.0	772103.3	8524518.9
A257537	160.0	5.30	95.0	15.0	772123.3	8524519.2
A257538	1100.0	8.20	85.0	110.0	772143.3	8524519.6
A257539	1200.0	8.40	80.0	100.0	772163.3	8524519.9
A257540	1350.0	11.00	95.0	130.0	772183.3	8524520.2
A257541	900.0	9.30	60.0	44.0	772203.2	8524520.5
A257542	1100.0	8.60	125.0	85.0	772223.2	8524520.9
A257543	1000.0	8.90	80.0	67.0	772243.2	8524521.2
SAMPLE	CR	FE	CU	AS	EAST	NORTH

The current selection is : INITIAL

Page 4

WATERBANK SOIL SAMPLE RESULTS

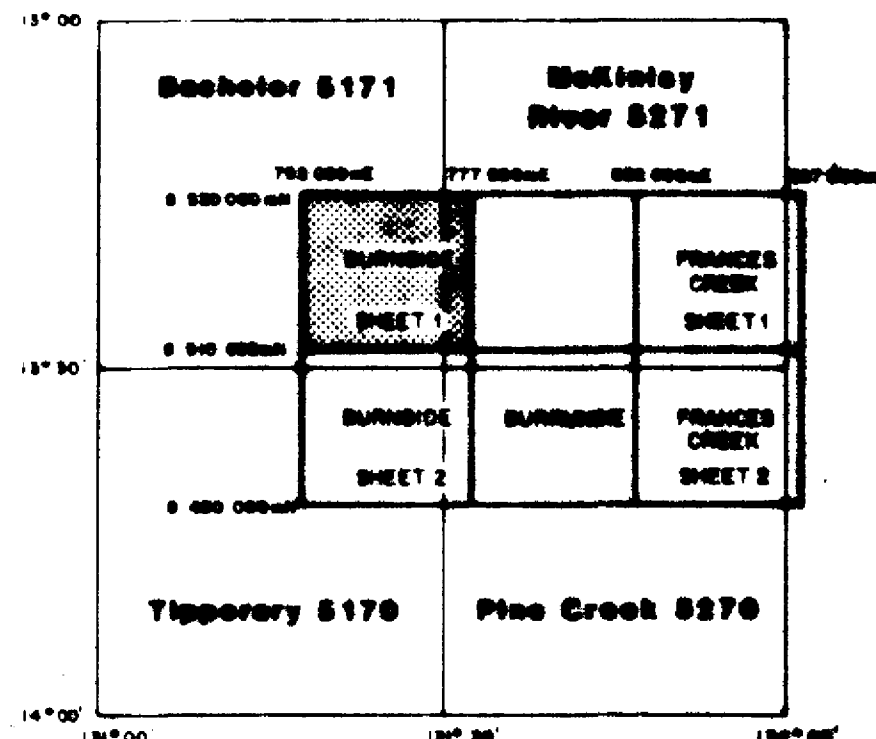
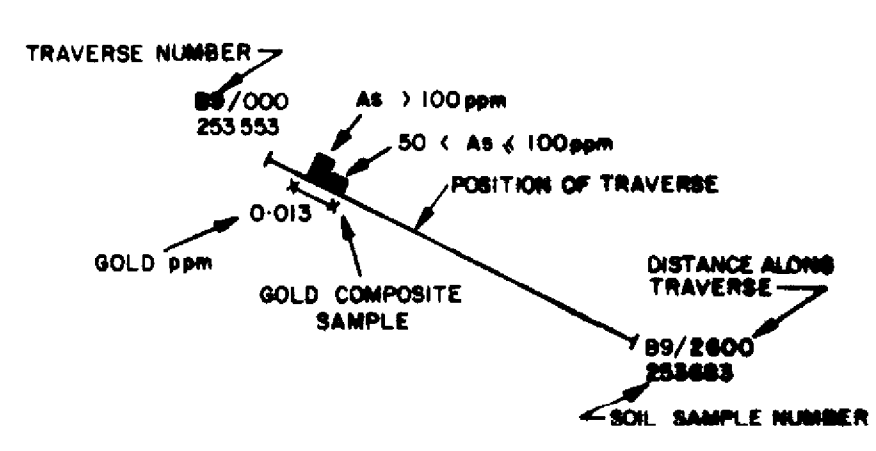
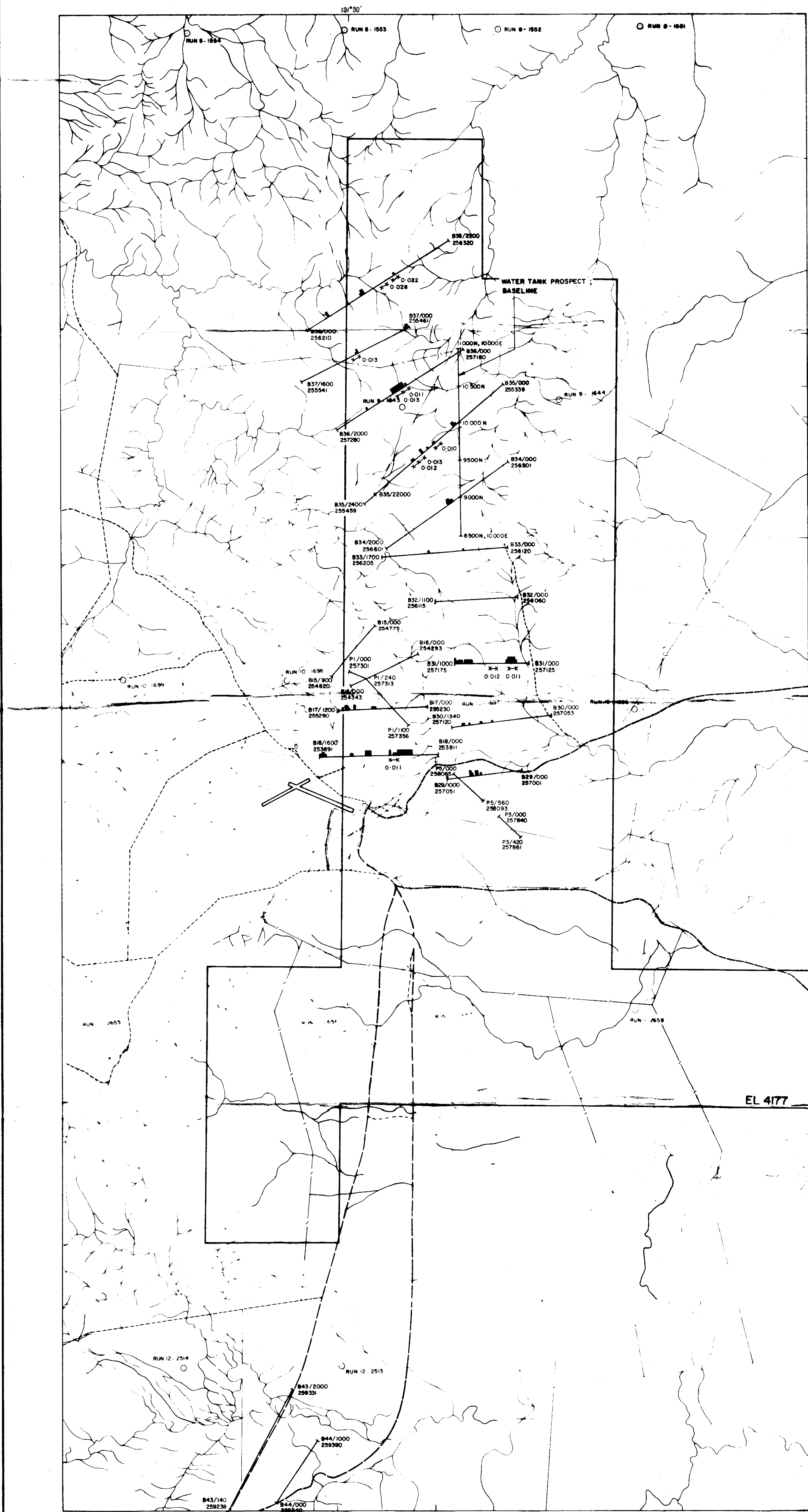
SAMPLE	CR	FE	CU	AS	EAST	NORTH
A257544	1100.0	5.90	45.0	130.0	772263.2	8524521.5
A257545	2600.0	9.60	70.0	150.0	772283.2	8524521.8
A257546	2650.0	11.70	60.0	160.0	772303.2	8524522.2
A257547	1750.0	8.90	110.0	70.0	772323.2	8524522.5
A257548	500.0	5.90	115.0	69.0	772343.2	8524522.8
A257549	420.0	3.70	96.0	53.0	772363.2	8524523.1
A257550	90.0	1.80	100.0	25.0	772383.2	8524523.5
A257551	55.0	1.50	90.0	20.0	772403.2	8524523.8
A257552	35.0	1.60	55.0	10.0	772423.2	8524524.1
A257553	30.0	1.00	35.0	11.0	772443.2	8524524.4
A257651	155.0	7.40	70.0	7.0	771540.1	8524709.8
A257652	50.0	10.60	65.0	10.0	771560.1	8524710.1
A257653	100.0	11.50	85.0	35.0	771580.1	8524710.4
A257654	200.0	7.80	35.0	31.0	771600.1	8524710.8
A257655	155.0	7.30	30.0	26.0	771620.1	8524711.1
A257656	120.0	10.50	80.0	62.0	771640.1	8524711.4
A257657	340.0	8.50	120.0	77.0	771660.1	8524711.7
A257658	310.0	9.60	215.0	70.0	771680.1	8524712.1
A257659	240.0	13.20	350.0	90.0	771700.1	8524712.4
A257660	265.0	9.20	170.0	69.0	771720.1	8524712.7
A257661	250.0	10.50	160.0	71.0	771740.1	8524713.0
A257662	220.0	8.70	130.0	67.0	771760.1	8524713.4
A257663	205.0	8.00	95.0	65.0	771780.1	8524713.7
A257664	120.0	6.70	135.0	59.0	771800.0	8524714.0
A257665	145.0	9.50	165.0	50.0	771820.0	8524714.3
A257666	245.0	10.20	90.0	18.0	771840.0	8524714.6
A257667	640.0	10.80	95.0	28.0	771860.0	8524715.0
A257668	1700.0	11.60	140.0	100.0	771880.0	8524715.3
A257669	2850.0	11.90	65.0	57.0	771900.0	8524715.6
A257670	2500.0	13.70	85.0	130.0	771920.0	8524716.0
A257671	1150.0	16.70	95.0	110.0	771940.0	8524716.3
A257672	420.0	5.80	80.0	32.0	771960.0	8524716.6
A257673	55.0	3.30	215.0	17.0	771980.0	8524716.9
A257674	35.0	5.40	410.0	46.0	772000.0	8524717.3
A257675	40.0	5.10	260.0	42.0	772020.0	8524717.6
A257676	30.0	4.10	185.0	28.0	772040.0	8524717.9
A257680	35.0	1.90	85.0	7.0	771336.9	8524906.5
A257681	160.0	3.90	80.0	20.0	771356.9	8524906.8
A257682	700.0	7.70	60.0	10.0	771376.8	8524907.1
A257683	480.0	7.40	45.0	6.0	771396.8	8524907.5
A257684	450.0	5.80	40.0	4.0	771416.8	8524907.8
A257685	550.0	5.80	35.0	7.0	771436.8	8524908.1
A257686	570.0	6.50	40.0	8.0	771456.8	8524908.4
A257687	470.0	6.50	35.0	11.0	771476.8	8524908.8
A257688	1550.0	8.80	40.0	10.0	771496.8	8524909.1
A257689	2000.0	9.80	75.0	95.0	771516.8	8524909.4
A257690	1750.0	7.50	70.0	100.0	771536.8	8524909.8
A257691	2500.0	9.90	95.0	160.0	771556.8	8524910.1
A257692	2350.0	8.50	80.0	220.0	771576.8	8524910.4
A257693	1950.0	7.20	55.0	200.0	771596.8	8524910.7
A257694	2050.0	7.60	60.0	260.0	771616.8	8524911.1
A257695	1650.0	8.60	50.0	190.0	771636.8	8524911.4
A257696	850.0	9.80	40.0	64.0	771656.8	8524911.7
A257697	1350.0	8.50	145.0	120.0	771676.8	8524912.0
A257698	2200.0	8.80	130.0	150.0	771696.8	8524912.4
A257699	1350.0	6.60	80.0	160.0	771716.8	8524912.7
SAMPLE	CR	FE	CU	AS	EAST	NORTH

WATERTANK SOIL SAMPLE RESULTS

SAMPLE	CR	FE	CU	AS	EAST	NORTH
A257700	1200.0	10.60	95.0	110.0	771736.8	8524913.0
A257701	850.0	8.50	70.0	40.0	771756.8	8524913.3
A257702	1050.0	9.30	70.0	69.0	771776.8	8524913.6
A257703	1500.0	8.20	80.0	85.0	771796.8	8524914.0
A257704	1300.0	9.10	90.0	67.0	771816.8	8524914.3
A257705	900.0	7.40	80.0	38.0	771836.8	8524914.6
A257707	10.0	1.10	115.0	2.0	771233.6	8525104.8
A257708	10.0	0.80	40.0	0.5	771253.6	8525105.2
A257709	15.0	0.90	50.0	0.5	771273.6	8525105.5
A257710	10.0	0.90	70.0	1.0	771293.6	8525105.8
A257711	15.0	1.20	45.1	1.0	771313.6	8525106.1
A257712	15.0	1.10	45.0	4.0	771333.6	8525106.5
A257713	15.0	1.20	50.0	6.0	771353.6	8525106.8
A257714	20.0	1.10	40.0	5.0	771373.6	8525107.1
A257715	25.0	1.60	60.0	6.0	771393.6	8525107.4
A257716	160.0	2.60	110.0	7.0	771413.6	8525107.8
A257717	950.0	5.80	55.0	19.0	771433.6	8525108.1
A257718	520.0	5.10	30.0	12.0	771453.6	8525108.4
A257719	340.0	5.20	60.0	19.0	771473.6	8525108.7
A257720	540.0	6.80	30.0	14.0	771493.6	8525109.1
A257721	400.0	6.30	35.0	18.0	771513.6	8525109.4
A257722	570.0	7.90	65.0	42.0	771533.6	8525109.7
A257723	30.0	2.00	70.0	5.0	771553.6	8525110.1
A257724	20.0	0.60	55.0	0.5	771573.6	8525110.4
A257725	15.0	0.90	55.0	0.5	771593.6	8525110.7
A257726	20.0	1.10	95.0	0.5	771613.6	8525111.0
A257727	15.0	0.90	115.0	1.0	771633.6	8525111.4
A257601	55.0	5.10	95.0	11.0	771230.4	8525304.8
A257602	45.0	4.00	90.0	8.0	771250.4	8525305.1
A257603	20.0	1.60	55.0	6.0	771270.4	8525305.5
A257604	15.0	1.20	35.0	7.0	771290.4	8525305.8
A257605	15.0	1.00	45.0	7.0	771310.3	8525306.1
A257606	15.0	1.00	100.0	5.0	771330.3	8525306.4
A257607	55.0	4.00	130.0	10.0	771350.3	8525306.8
A257608	170.0	6.80	100.0	19.0	771370.3	8525307.1
A257609	220.0	7.70	75.0	22.0	771390.3	8525307.4
A257610	180.0	7.10	70.0	20.0	771410.3	8525307.7
A257611	180.0	5.50	60.0	16.0	771430.3	8525308.1
A257612	140.0	3.60	60.0	14.0	771450.3	8525308.4
A257613	160.0	6.20	80.0	36.0	771470.3	8525308.7
A257614	165.0	5.50	65.0	32.0	771490.3	8525309.0
A257615	30.0	1.00	60.0	6.0	771510.3	8525309.4
A257616	20.0	2.30	90.0	13.0	771530.3	8525309.7

There were

266 records written.



CSA LIMITED-MEDCO

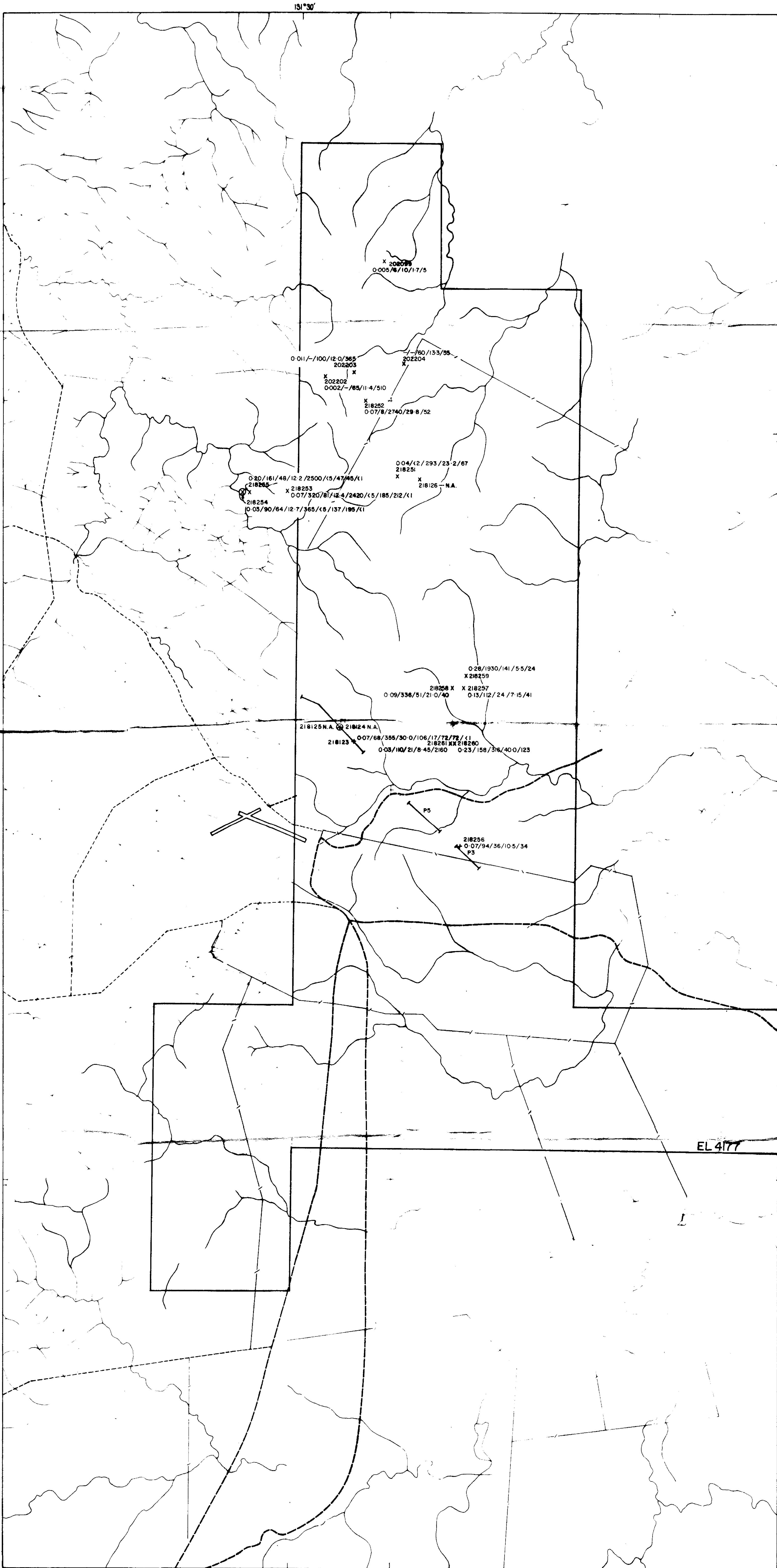
EL. 4177 MT. ELLISON N.T.

LOCATION OF SOIL AND GROUND MAGNETIC TRAVERSES

SCALE 1:25 000
 DRAWN K. HAMILTON / C.S.D.S.
 DATE FEB. 1986
 REVISED

DWG No. **8592-2**

PROJECT NO. **85/173**



LEGEND

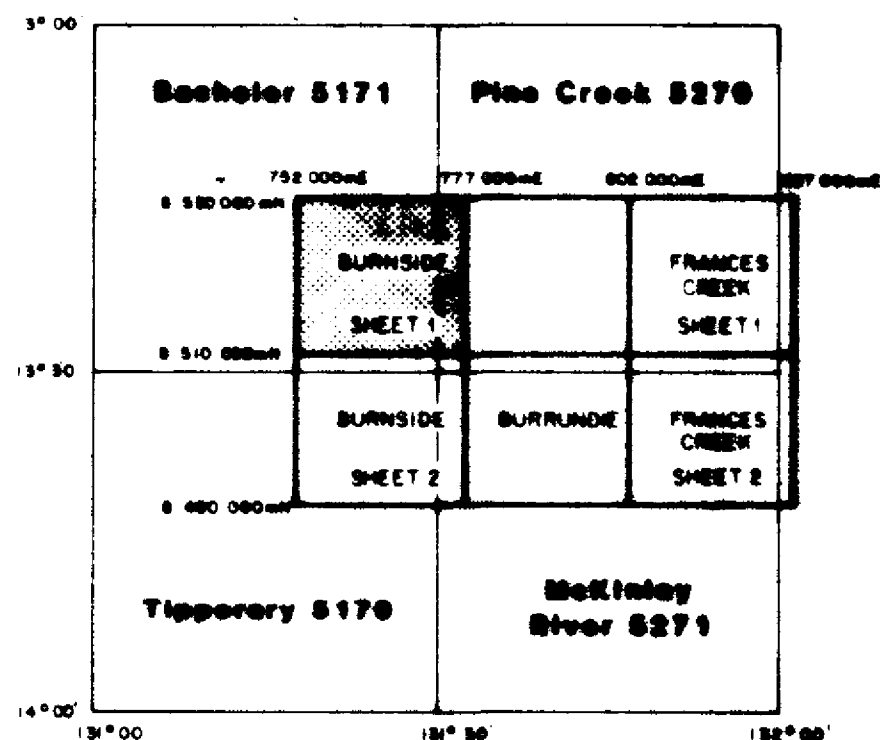
X 218278 ROCK CHIP SAMPLE LOCATION

RESULTS Au ppm / As ppm / Cu ppm / Fe % / Cr ppm / Pb ppm / Zn ppm / Co ppm / Ag ppm

N.A. Not assayed

P5 TRENCH; For assay details see appropriate trench section (DRG Nos. 8582-5, 8582-6)

⊗ PETROLOGICAL SAMPLE



CBA LIMITED-MEBO

EL. 4177 MT. ELLISON N.T.

ROCK CHIP SAMPLE LOCATIONS

SCALE 1:25 000

DRAWN K. HAMILTON / C.S.D.S.

DATE FEB 1986

REVISED

DRG No 8582-3

NORTHERN TERRITORY GEOLOGICAL SURVEY

CR 86/173

[illegible]

SOIL

- S1 Red - red brown soil
- S2 Mottled, red-orange - yellow soil
- S3 Creamy yellow - light green (bleached ?) soil

NOTE Soil classification based on colour only
No origin or horizon implied

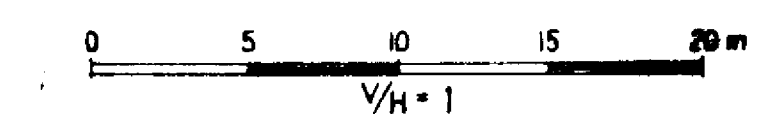
Psk	Siltstone (Koolpin Formation)
Psk ₁	Grey micaceous
Psk ₂	Grey carbonaceous
Pdz	Zarnu Dolomite outcrop
Pdz ₁	Fine grained, minor sulphides
Pdz ₂	Altered, fine grained, highly silicified with abundant sulphides
Pdz ₃	Medium to fine grained
Pdz ₄	Coarse granular

 Outcrop outline and change in soil
 Quartz veins

As, Cu, Fe, Cr
ppm ppm % ppm ● -80° soil sample location

Au, As, Cu, Fe, Cr ppm ppm ppm % ppm x Rock chip sample location and number

NOTE: FOR LOCATION REFER DRG. NO. 8592-9

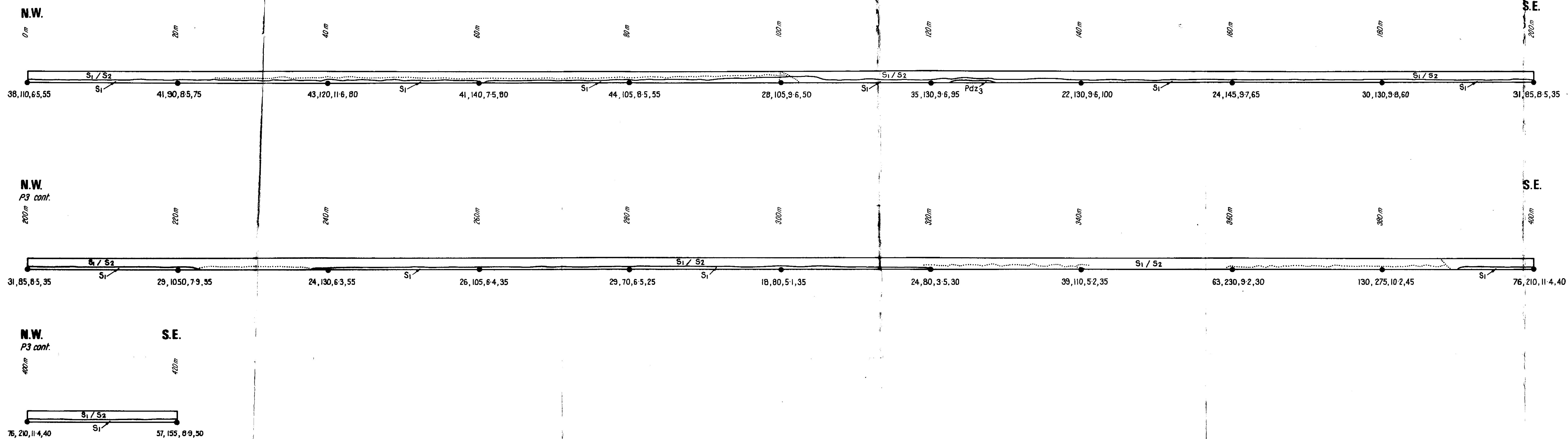
**CBA LIMITED-MEDC**

E.L. 4177, MT. ELLISON N.T.

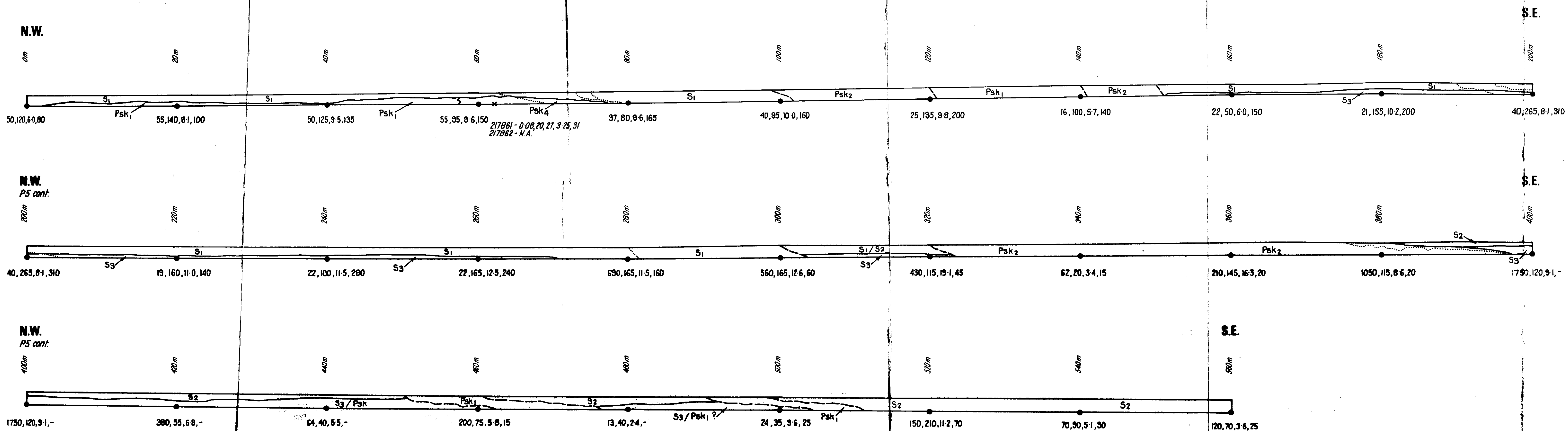
PIPELINE TRENCH SECTION P1
GEOLOGY & GEOCHEMISTRY

DATE	1980	NO. 1	DATE REC.	
BY	J. B. B. / Y. J. B.		8602-6	
FOR	Area 10			
NORTHWEST TERRITORY				
GEOLOGICAL SURVEY				
			EN 86/173	

TRENCH SECTION P3



TRENCH SECTION P5



REFERENCE

- SOIL**
- S1 Red - red brown soil
 - S2 Mottled, red - orange - yellow soil
 - S3 Creamy yellow - light green (bleached?) soil
- NOTE: Soil classification based on colour only
No origin or horizon implied

- Psk** Silstone (Koolpin Formation)
- Psk1 Grey micaceous
 - Psk2 Grey carbonaceous
- Pdz** Zamu Dolerite outcrop
- Pdz1 Fine grained, minor sulphides
 - Pdz2 Altered, fine grained, highly silicified with abundant sulphides
 - Pdz3 Medium to fine grained
 - Pdz4 Coarse granular

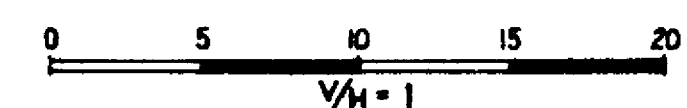
- Outcrop outline and change in soil
..... Quartz veins

- As Cu Fe Cr
ppm ppm % ppm

- Au As Cu Fe Cr
ppm ppm ppm % ppm

- -80° soil sample location
x Rock chip sample location and number

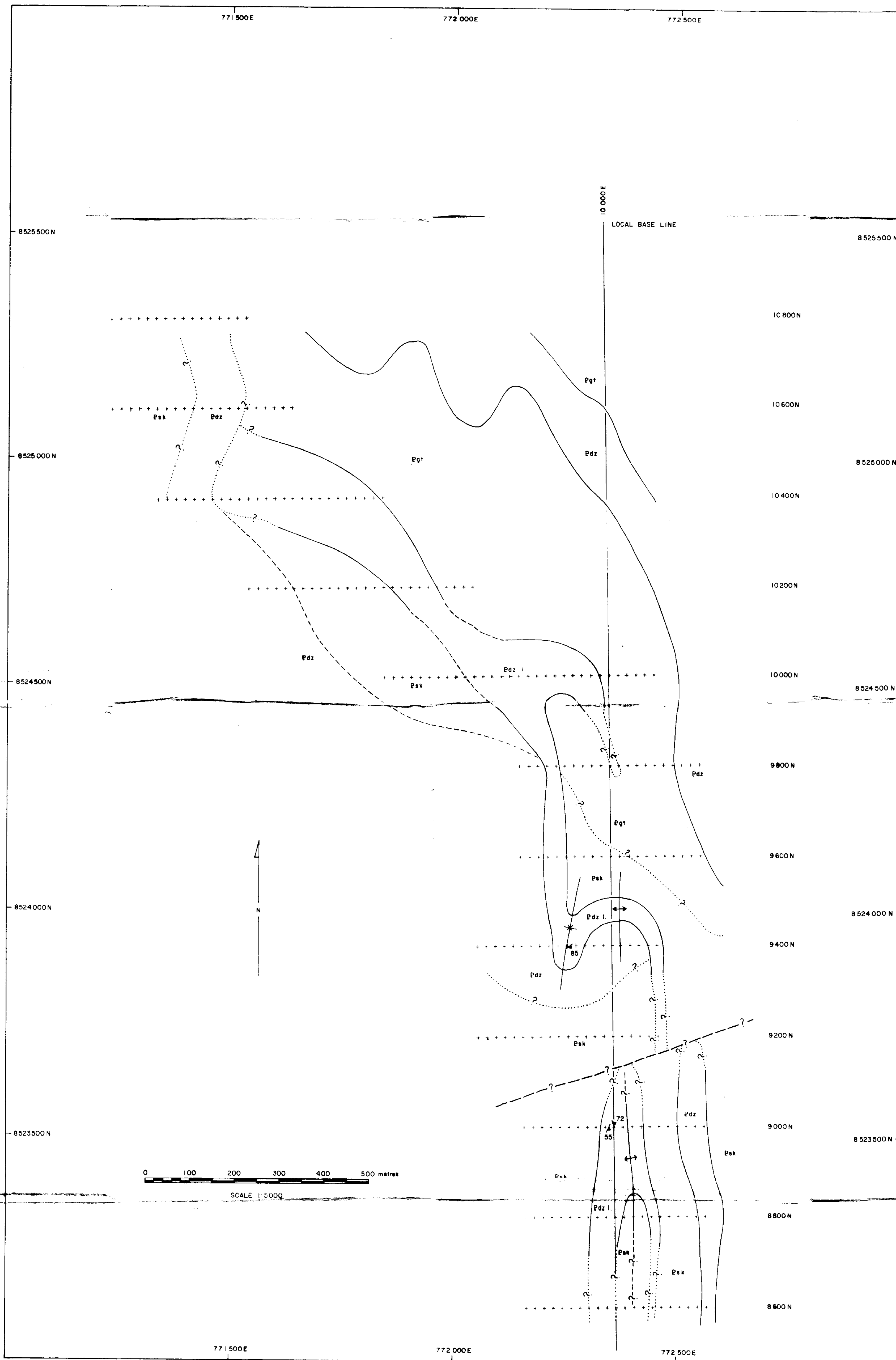
NOTE FOR LOCATION REFER DRG No. B582-3



CSA LIMITED-MEDG

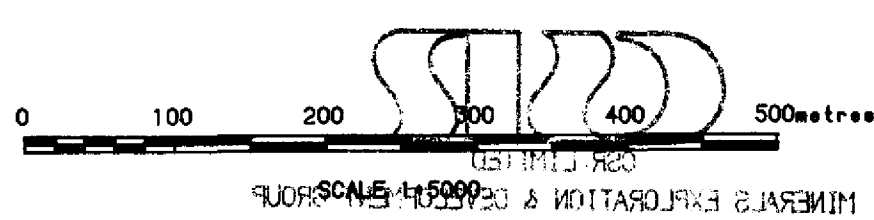
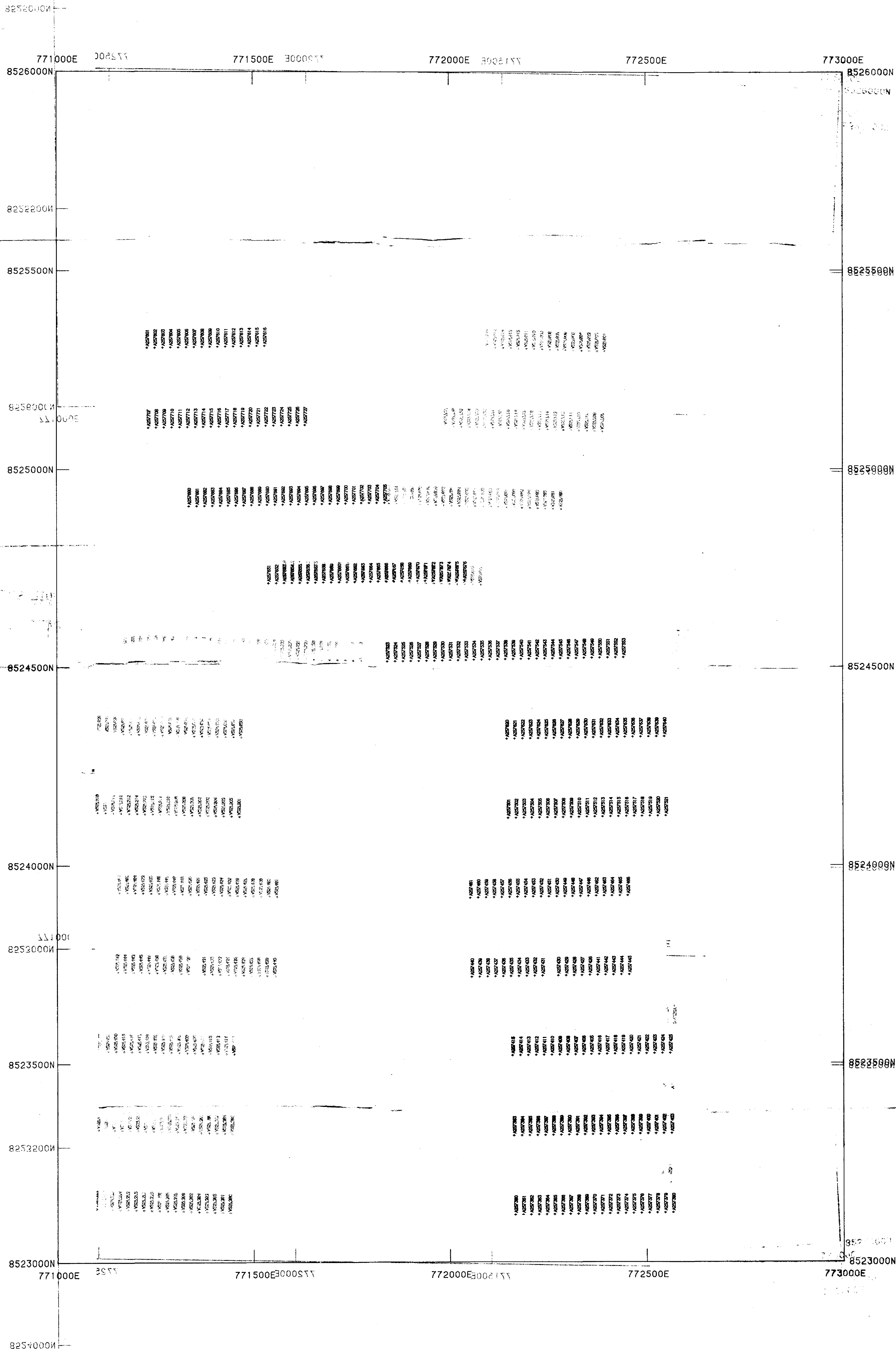
EL. 4177, MT. ELLISON N.T.

**PIPELINE TRENCH SECTIONS P3 & P5
GEOLOGY & GEOCHEMISTRY**

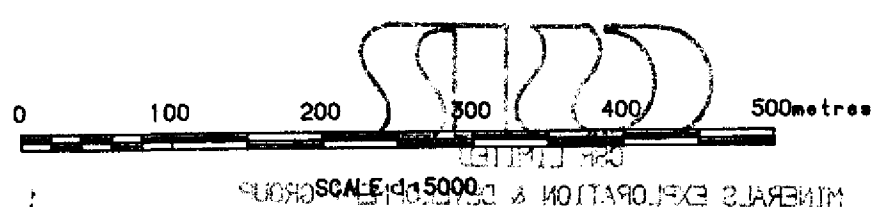
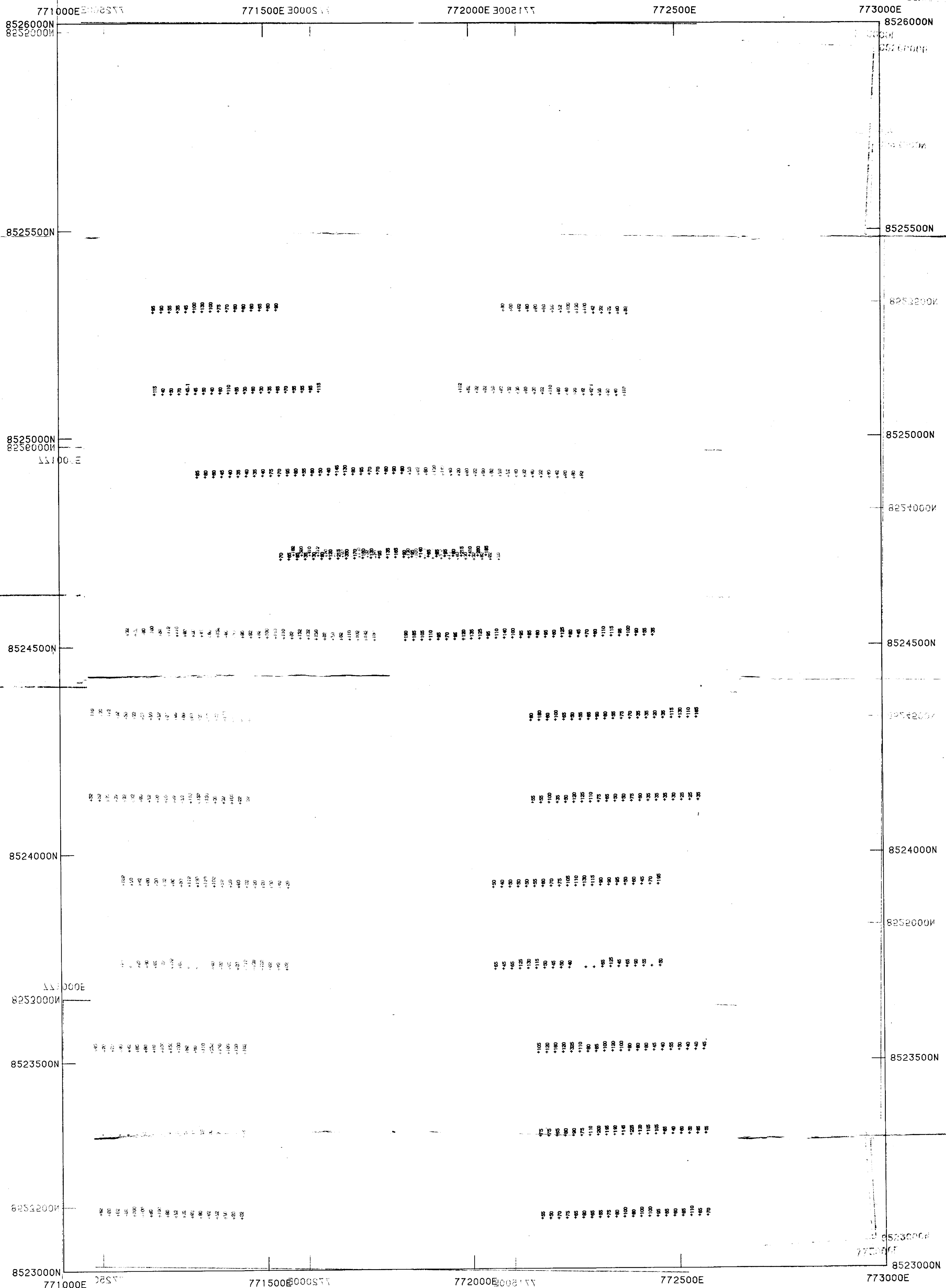


- LEGEND
- ZAMU
DOLERITE **PdZ** Green-green black coarse
grained massive dolerite
- PdZ I.** Tremolite, sericite, carbonate
schist
- GEROWIE
TUFF **Pgt** Blue-black chert, grey
siliceous siltstone
- KOOLPIN
FORMATION **Psk** Haematitic siltstones, banded
iron formation black chert
- GEOLOGICAL BOUNDARIES
- Position accurate
- - - Position approximate
- ...?... Inferred, concealed
- STRUCTURE
- ? Fault, inferred and concealed
- ↑ Anticline, position accurate
- ★ Syncline position accurate
- Metamorphic foliation, measured
- MISCELLANEOUS
- + Soil sample location
- 10 000 N Local grid

CSA LIMITED-MEDG	
EL 4177	
WATERTANK PROSPECT GEOLOGY	
SCALE 1:5000	DRG No.
DRAWN C.S.D.S.	8592-8
DATE 28.4.86	
NORTH TERRITORY GEOLOGICAL SURVEY	



CSR LIMITED - MEDG	
EL 4177	
WATERTANK PROSPECT	
SOIL SAMPLE LOCATIONS	
SCALE : 1" = 5000'	DRG No. 8592-9
AUTHOR :	
DATE : 14-MAY-88	
REVISED :	



CSR LIMITED - MEDG	
EL 4177	
WATERTANK PROSPECT	
Cu SOIL RESULTS	
SCALE • 1:5000	DRG No. • 8592-10
AUTHOR •	
DATE • 14-MAY-96	
REVISED •	

8526000N

771000E

8526000N

8526000N

8525500N

8525000N

8525000N

8524500N

8524000N

8523500N

8523000N

8523000N

8523000N

3002500E

771500E

3002500E

772000E

3002500E

772500E

773000E

8526000N

8526000N

8525500N

8525000N

8525000N

8524500N

8524500N

8524000N

8524000N

8523500N

8523500N

8523000N

8523000N

8523000N

8523000N

8523000N

8523000N

8523000N

8523000N

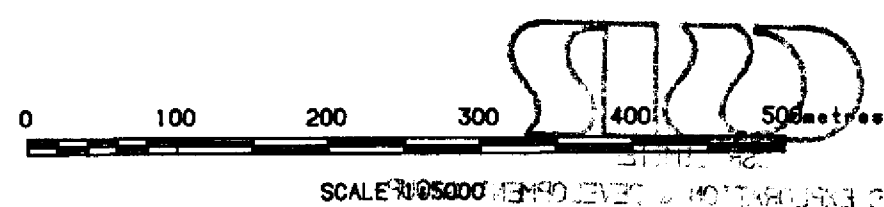
8523000N

8523000N

8523000N

8523000N

8523000N

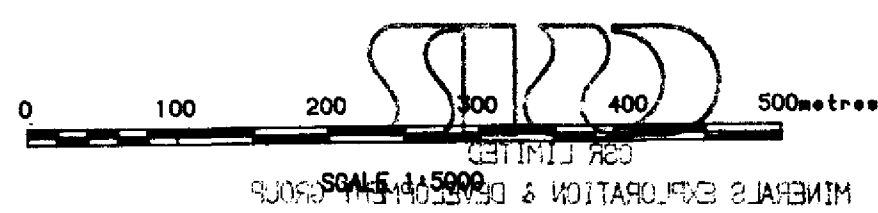
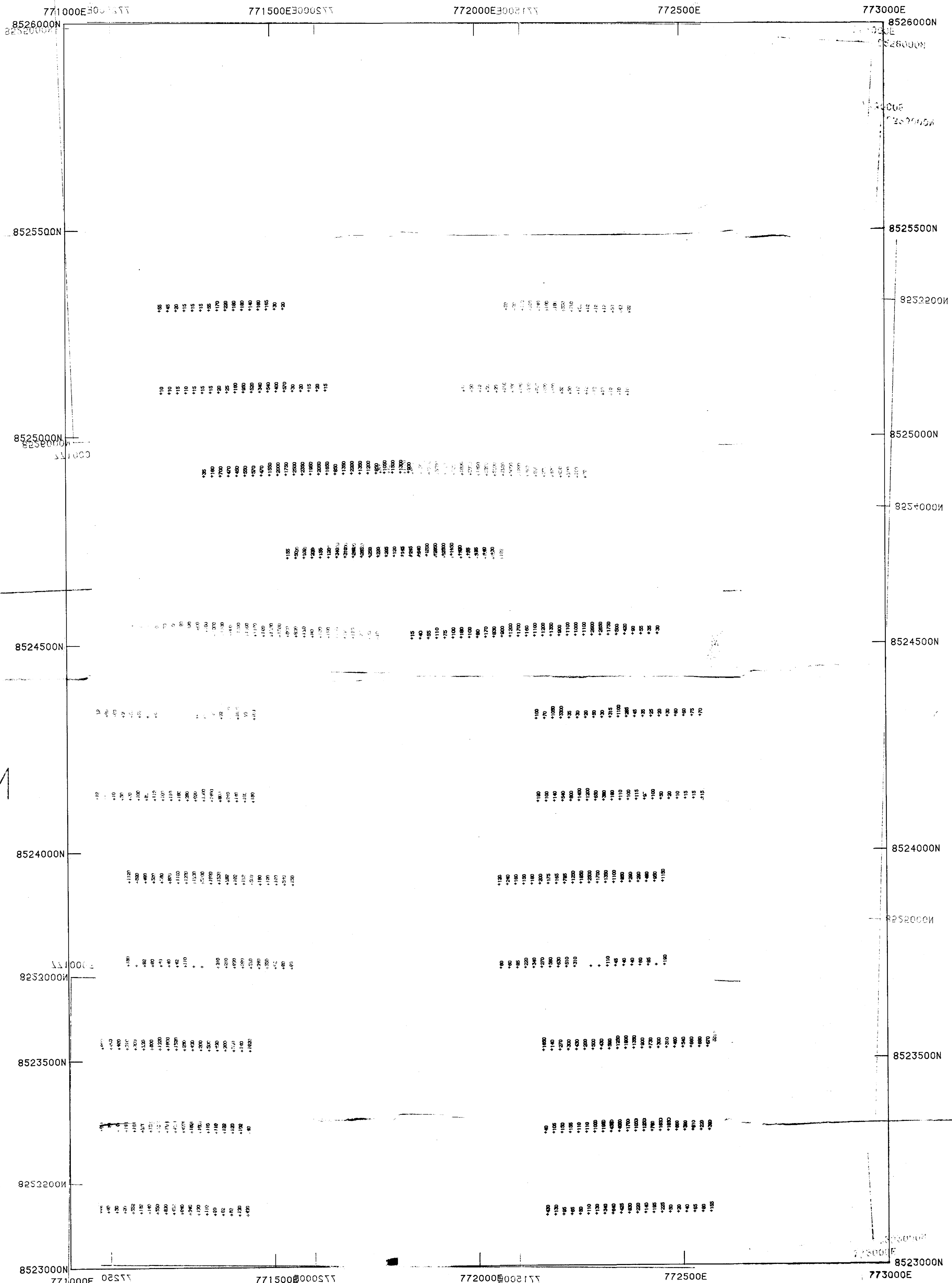


SCALE 1:5000



MINERALS EXPLORATION & DEVELOPMENT GROUP

CSR LIMITED - MEDG	
EL 4177	
WATERTANK PROSPECT	
A. SOIL RESULTS	
SCALE : 1:5000	DRG No. 8592-12
AUTHOR :	
DATE : 14-MAY-86	
REVISED :	



CSR LIMITED - MEDG	
EL 4177	
WATERTANK PROSPECT	
CR SOIL RESULTS	
SCALE: 1:5000	DRG No. 8592-13
AUTHOR:	
DATE: 14-MAY-88	
REVISED:	