(Pgs. 37-38)

CONTENTS ENVELOPE 3534

TENEMENT: E.L. No. 486

REPORT:

TENEMENT HOLDER: Stockdale Prospecting Ltd.

REPORT:	Quarterly Report - 6th September, 1979	(Pgs. 3-9)
PLANS:	Carrieton West E.L. & S.E.L. Outlines	
	Reconnaissance Positives	(Pg. 9)
	1979 Stream Sampling	3534-1
	Moockra Anomalous Drainage	3534-2
	Moockra (NO477) Anomaly & Mill Grid	3534-3
REPORT:	Quarterly Report - 6th December 1979	(Pgs. 10-14)
REPORT:	" - 6th March, 1980	(Pgs. 15-19)
REPORT:	" - 6th June, 1980	(Pgs. 20-29)
PLANS:	Isomagnetic Contour Map	3534-4
	Magnetic Anomaly 1/1	(Pg. 26)
	" 2/4	(Pg. 27)
REPORT:	Quarterly Report - 6th September, 1980	(Pgs. 30-33)
REPORT:	" - 6th December, 1980	(Pgs. 34-36)

- 6th March, 1981

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 CARRIETON WEST FIRST QUARTERLY REPORT TO 6TH SEPTEMBER, 1979

CONTENTS

		Page
1.	Introduction	1
2.	Prospecting History Prior to June, 1979	1
3.	Current Sampling	2
4. •	Summary of Prospecting Progress	2
5.	Results	2
6.	Future Programme	3
7.	Staff	3
8.	Expenditure	3
	MADC	

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST FIRST QUARTERLY REPORT TO SEPTEMBER 6, 1979.

1. INTRODUCTION

Exploration Licence Number 486, over 139 square kilometres in the Carrieton Westarea (Map 1) was granted on June 7, 1979 to Stockdale Prospecting Limited.

This report covers exploration work undertaken in the licence area for the three month period ended September 6, 1979, together with a brief resume of Stockdale's prospecting in the area, prior to the granting of the Exploration Licence.

2. PROSPECTING HISTORY PRIOR TO JUNE 1979

Regional prospecting by Stockdale in March 1968 of the general Orroroo Sheet area was at such a sparse density that no samples were collected within the confines of EL 486. However, kimberlitic indicator minerals were located in stream samples to the east, centred on Eurelia.

Consequently, later in that same year, a densening of the sample grid in the vicinity of Eurelia took place; five such samples fell within EL 486, although all were negative. The Eurelia area had however been confirmed as having kimberlite potential.

On the basis of this information, in 1970 and 1971, a further programme of detailed stream sediment sampling was initiated, covering an area of some 2000 square kilometres around Eurelia. Thirty-three such samples were collected in the Carrieton West area, but all proved negative.

Prior to the granting of EL 393 therefore, the area of EL 486 gave no indication of its kimberlite potential, even though a sampling density of greater that 1:4 sq km had been achieved. However, sampling of EL 393 revealed three areas of interest which made it imperative that further ground be secured to the west and north.

North of Carrieton, in Pekina Creek, positive samples B6373 and D7785 (see Map 1) initially were thought to originate from the Eurelia area itself, having undergone considerable transportation along Pekina Creek. Recent information suggests sources are to be found north of Carrieton.

In the western foothills of EL393 previously positive sample D8392 (see Map 1) was confirmed and the anomalous area traced westwards to such an extent that the western boundary of the Eurelia kimberlite province was postulated to transgress over the western margin of EL 393 onto ground now also held as EL 486.

Utah, during their extensive drilling programme of the 1970's intersected kimberlite in one hole, CDO10, suggesting that kimberlite could be uncovered west of the 1380 30'E meridian.

3. CURRENT SAMPLING

Sampling of EL 486 and EL 393 has proceeded apace so that field work has been carried on within EL 486 since the granting of the EL itself.

3.1 Fill-in stream sampling (See Map 2)

Stream sampling at a density of 1:2 sq km was completed over the entire EL area, entailing the collection of 66 samples. Five of these were found to contain kimberlitic garnet, situated in a belt stretching eastwards from Moockra.

3.2 Detailed stream sampling (See Map 2, 3)

East of Moockra, a further 42 stream samples were collected in various stages, to delineate anomalous areas. High garnet counts were encountered in places, and one sample N5524 yielded kimberlitic ilmenite, slightly removed from the garnet rich area.

3.3 Mill Grid

High garnet counts near GR 2594 4053 in generally featureless country, prompted the setting up of a 100 m interval loam grid covering some 1.4 km in the surrounding area. 155 loam samples were collected during this exercise and although some 24 sites proved positive, grain counts were low and disappointing.

$3.4 \quad SI54-1/K9$

Attention was focussed away from Mill Grid to the SE, where sample N7395 contained many garnets. Utilising open magnetometer traverses and noting vegetational anomalies, a kimberlite dyke labelled SI54-1/K9 was rapidly uncovered. No doubt the dyke system associated with K9 continues intermittently to the NW, as far as Coonatto Creek.

4. SUMMARY OF PROSPECTING PROGRESS

Stream Sampling	Fill-in Sampling Area Sampled Close-interval, follow-up work Area sampled	66 139 sq km 42 10 sq km
Loam Sampling	100 m interval	155
Magnetometer Stations		300

5. RESULTS

All results are to hand and have been discussed in the preceding sections; they are also shown diagrammatically on the attached maps.

6. FUTURE PROGRAMME

In conjunction with a low-level airborne magnetometer survey over EL 393, the greater majority of EL 486 is being included in this exercise. No fieldwork is anticipated prior to the completion of this survey, hopefully some time in the second quarter. Once all data is to hand, the main area of interest to the east of Moockra, and several outlying anomalies will be assessed accordingly.

Meanwhile, bulk sampling of SI54-1/K9 will commence, with representative samples from adjacent drainage channels also to be considered.

7. STAFF

The staff employed during the period were as follows:-

Classification	Average Number Employed
Geologist	1
Prospecting Hand	5
Cook	1
Mechanic	1

Assistance was given by the Exploration Manager and Regional Geologist and this project was supported by the facilities of our office and laboratories in Melbourne and Johannesburg.

8. EXPENDITURE

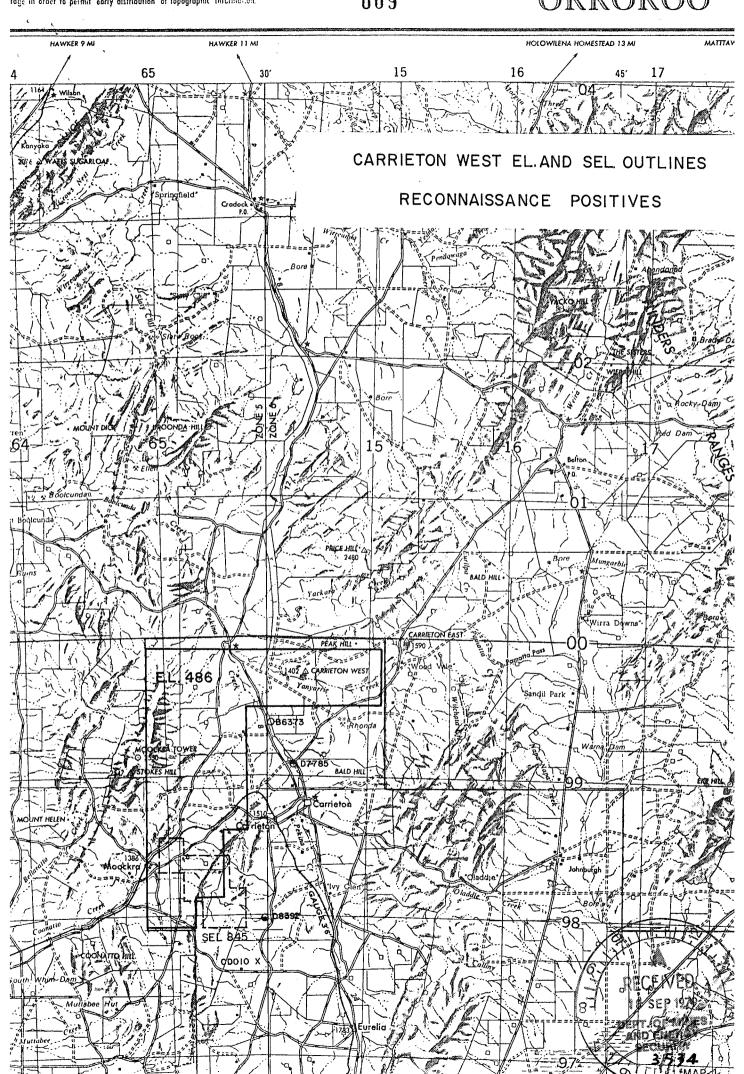
The expenditure for the period was as follows:-

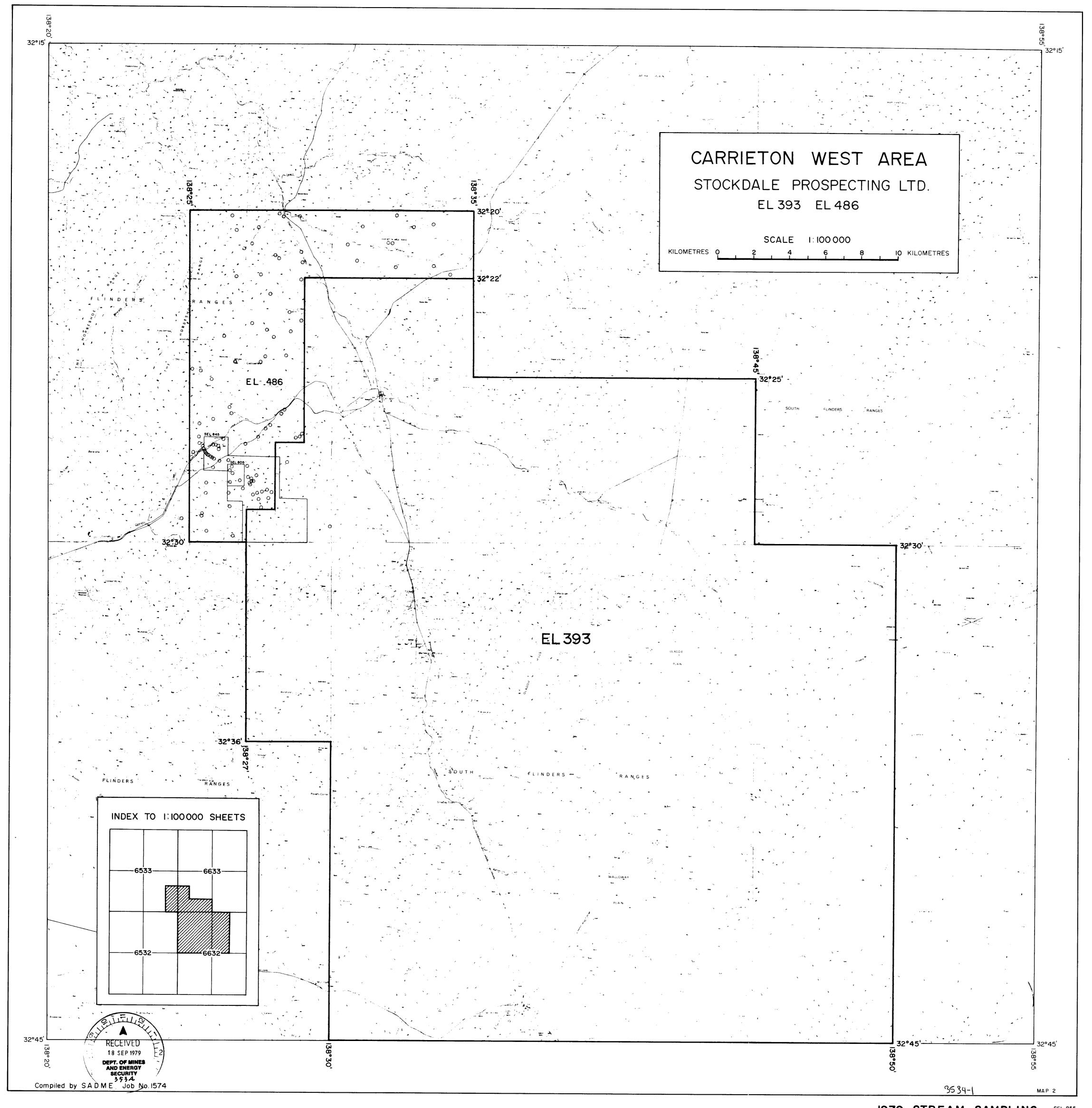
	\$
Management and office overheads	6778
Sample examination	7239
Field staff - technical	6257
other	12095
Transport - road	3416
other	8308
Other field costs	7730
Equipment amortisation	9989
Total	\$ 61812

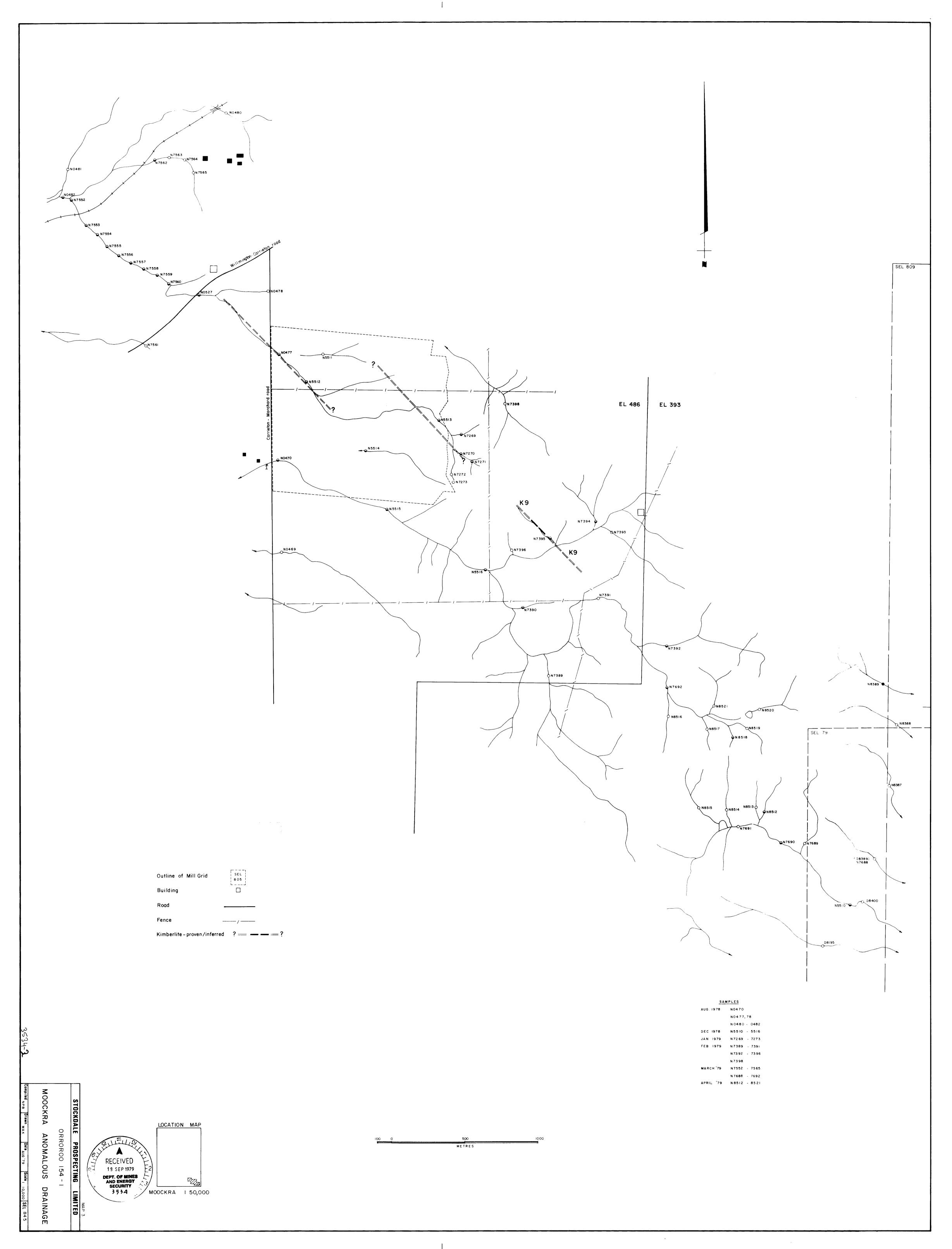
Melbourne September 12, 1979. K.J. STRACKE,
Exploration Manager.

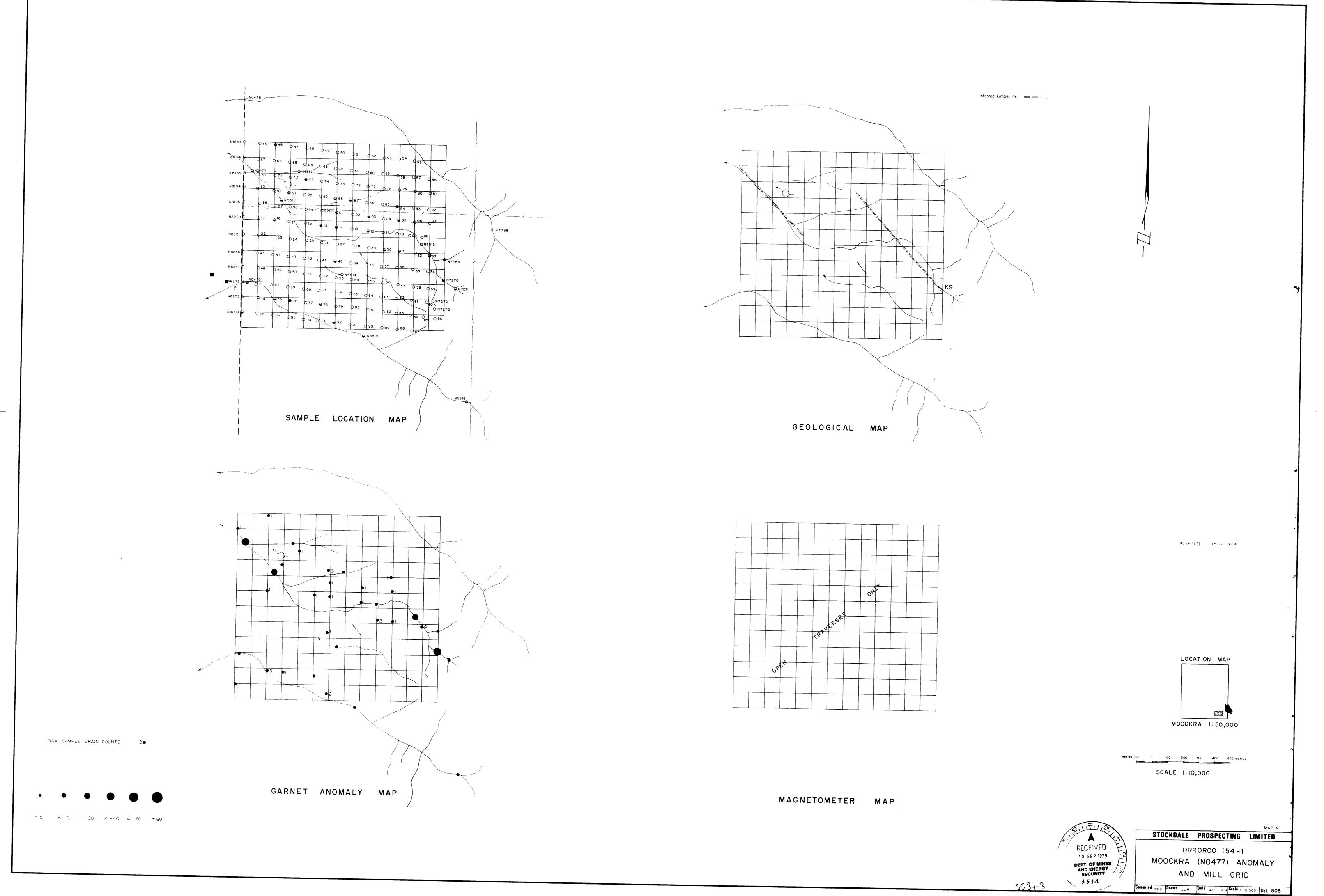
MAPS

Map 1		1:250,000	Carrieton West EL SEL outlines Reconnaissance Positives
Map 2	SEL 855	1:100,000	1979 Stream Sampling
Map 3	SEL 845	1: 10,000	Moockra Anomalous Drainage
Map 4	SEL 805	1: 10,000	Moockra (NO477) Anomaly and Mill Grid









STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 CARRIETON WEST

SECOND QUARTERLY REPORT TO 6TH DECEMBER, 1979

CONTENTS

		Page
1.	INTRODUCTION	1
2, .	FIELDWORK WITHIN REPORT PERIOD	1
3.	RESULTS	1
4.	BULK SAMPLING	1
5.	SUMMARY OF PROSPECTING DATA	1
6.	FUTURE PROGRAMME	1
7.	STAFF	2
8.	EXPENDITURE	2
	M A P S	3

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 CARRIETON WEST

SECOND QUARTERLY REPORT TO 6TH DECEMBER, 1979

1. INTRODUCTION

This report covers exploration work undertaken in the licence area for the three month period ended 6th December, 1979.

Black and white photographs at 1:20,000 from the aerial survey completed during the previous period were forwarded to Geoterrex for mosaic preparation. Colour photographs from the same survey were obtained over part of the EL area.

No data has yet been received from the low-level airborne magnetometer survey over the greater part of EL 486. Delays in the processing of the flight data has rendered such information unavailable to us in 1979. We are hoping however that early in 1980 all data will be forwarded to us by the contractors Geoterrex Pty. Ltd. of Canada.

As no fieldwork had been planned prior to the completion of the survey, none was undertaken during the quarter.

2. FIELDWORK WITHIN REPORT PERIOD

No samples were collected during the report period.

3. RESULTS

All results had been received and reported on in the last quarter. Consequently no new results are to hand.

4. BULK SAMPLING

Bulk sampling of SI54-1/K9 commenced; 30 cu.m were collected as shown on Map 2, and subsequently treated.

5. SUMMARY OF PROSPECTING DATA

Stream samples 0

Loam samples 0

Bulk samples Collected 1 (30 cu.m)

Treated 1 (30 cu.m)

FUTURE PROGRAMME

No fieldwork is anticipated prior to the completion of the aerial magnetometer survey. Once such data is to hand however the main area of interest to the east of Mookra, and several outlying anomalies will be assessed accordingly.

7. STAFF

The staff employed during the period were as follows:-

Classification	Average Number Employed
Plant Supervisor	1
Plant Assistant	

Assistance was given by the Exploration Manager and Regional Geologist and this project was supported by the facilities of our office and laboratories in Melbourne and Johannesburg.

8. EXPENDITURE

Our expenditure allocations are determined in terms of the cost of samples collected. As no samples were collected during the current period, no expenditure can be allocated to our normal expenditure categories.

Expenditure on other items during the period was as follows:-

Bulk sampling unit	\$ 7,100
Aerial photography	836
Aerial magnetometer survey	2,144
Total this quarter	10,080
Previous expenditure	61,812
Total expenditure to date	\$ 71,892

Melbourne December 1979. K.J. STRACKE, Exploration Manager.

JJ:ss

M A P S

Map 1	SEL 855	1:100,000	1979 Stream Sampling
Map 2	SEL 845	1: 10,000	Mookra Anomalous Drainage

STOCKDALE PROSPECTING LIMITED EXPLORATION LICENCE NUMBER 486 CARRIETON WEST THIRD QUARTERLY REPORT TO MARCH 6, 1980

CONTENTS

		Page
1.	INTRODUCTION	1.
2.	MAGNETOMETER SURVEY	1
3.	FIELDWORK WITHIN REPORT PERIOD	1
4.	RESULTS	1
5.	SUMMARY OF PROSPECTING DATA	1
6.	FUTURE PROGRAMME	1
7.	STAFF	2
8.	EXPENDITURE	2
	MAPS	3

STOCKDALE PROSPECTING LIMITED EXPLORATION LICENCE NUMBER 486: CARRIETON WEST THIRD QUARTERLY REPORT TO MARCH 6, 1980.

1. INTRODUCTION

This report covers exploration work undertaken in the licence area for the three month period ended March 6, 1980.

2. MAGNETOMETER SURVEY

The data from the low level airborne magnetometer survey over EL 386 and a portion of EL 393 became available during the period and interpretation disclosed two anomalies in EL 486 considered worthy of further work by both sampling and ground magnetometer work.

3. FIELD WORK DURING THE REPORT PERIOD

No stream or loam samples were taken during this period.

Three bulk samples totalling 90 cu. m were collected from the positive drainages below SI54-1/K9 to test for diamond dispersal from the dyke and two inferred kimberlites.

4. RESULTS

Results of examination of the bulk sample collected during the previous quarter are still awaited. The material of the three bulk samples collected during the quarter will be treated early in the next quarter.

5. SUMMARY OF PROSPECTING DATA

Stream samples:

0

Loam samples:

0

Bulk samples, Collected: 3 (90 cu. m)

Treated:

6. FUTURE PROGRAMME

Ground magnetometer surveys and sampling of the two aerial magnetometer anomalies will be undertaken. A follow-up exercise will be mounted to ascertain if the positives located within EL 393 adjacent to EL 486, are from a source rock within the Carrieton West area.

7. STAFF

The staff employed on the Exploration Licence during the report period were as follows:

Classification	Average No. Employed
Plant Supervisor	1.
Plant Assistants	2
Staff Geologist	1

A consultant geophysicist from our South African office interpreted the aeromagnetic survey results while field operations were controlled by a staff geologist.

Assistance and guidance were given by the Exploration Manager and Regional Geologist and the project was supported by the facilities of our office and laboratories in Melbourne and Johannesburg.

8. EXPENDITURE

Expenditure for the period was as follows:

	\$
Management/Office services	537
Field Staff - Technical	996
- Other	615
General Field Expenses	648
Transport - Ground	244
Equipment amortisation	352
Specialist services: Geophysical work	1,370
Bulk sampling	1,860
TOTAL FOR THIS PERIOD	6,623
Total for Previous Period	71,892
Total expenditure to date	78,515

Melbourne, 25/3/80

K.J. STRACKE, Exploration Manager.

PRJ:ss

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Map 1 SEL 855 1:100,000 1979 Stream Sampling

Map 1 SEL 845 1: 10,000 Mookra Anomalous Drainage

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 CARRIETON WEST

FOURTH QUARTERLY REPORT TO JUNE 6, 1980

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CONTENTS

		Page
1.	INTRODUCTION	1
2.	MAGNETOMETER SURVEY	1
3.	RESULTS RECEIVED	1
4.	SUMMARY OF PROSPECTING DATA	2
5.	FUTURE PROGRAMME	2
6.	STAFF	2
7.	EXPENDITURE	3
	MAPS	4

- 022

STOCKDALE PROSPECTING LIMITED EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST FOURTH QUARTERLY REPORT TO JUNE 6, 1980

1. INTRODUCTION

This report covers the exploration work undertaken in the licence area during the three month period ended June 6, 1980. Exploration conducted during this period was limited and only consisted of two close interval ground magnetometer grids. The associated detailed stream sampling will be pursued during the next quarter.

2. MAGNETOMETER SURVEY

As mentioned in the last quarterly report, the interpretation of data from the aeromagnetic survey indicated that two anomalies are considered worthy of further investigation by both sampling and ground magnetometer surveys.

Designated 1/1 and 2/4 (Map 2), these magnetic anomalies have been interpreted by our consultant from Anglo American Corporation in Johannesburg. Although regarded at this time as not being indicative of kimberlite pipes, it was recommended that they be, nevertheless, drilled. This suggestion is being evaluated by us and our associate company Australian Anglo American Limited, in conjunction with their base-metal search.

3. <u>RESULTS</u> <u>RECEIVED</u>

The results of the bulk sample collected during the December quarter were as follows:

L9941 Dyke K9: 1 diamond of 0.0065cts.

Dyke K9 is on the same trend as K1, K2, and K3, and the diamond result is consistent with results from that particular swarm.

The three bulk samples collected from the positive drainages of SI54-1/K9 have yet to be examined in our Melbourne laboratory.

4. SUMMARY OF PROSPECTING DATE

Stream Samples 0
Loam Samples 0

Magnetometer Stations 155 Area 0.46km²

Bulk Samples: Collected

Heavy Medium Treatment 3 (90 cubic metres)

5. FUTURE PROGRAMME

Close interval sampling of the two magnetic anomalies 1/1 and 2/4 will be undertaken, and upon the results of this heavy mineral survey a drilling programme will be proposed.

A follow-up exercise will also be conducted to ascertain if the low grain-count sample sites located within EL393, adjacent to EL486, are from a source within the Carrieton West area.

To determine if there is a dispersion of microdiamonds from the Eurelia Kimberlite Field (EL393), a bulk sample (100 cubic metres) from a selected gravel bed in Pekina Creek, near the Yanyarrie Creek junction, will be contemplated.

6. STAFF

The staff employed on the Exploration Licence during the report period were as follows:

Classification	<u>Average Number Employed</u>
Plant Supervisor	1
Plant Assistants	2
Field Geologist	1
Prospecting Hands, Cook	3
Consultant Geophysicist	2 days

Assistance was given by the Exploration Manager and Regional Geologist, while the project was supported by the facilities of our office and laboratory in Melbourne. Specialist laboratory services were provided by our laboratory in Johannesburg.

7. EXPENDITURE

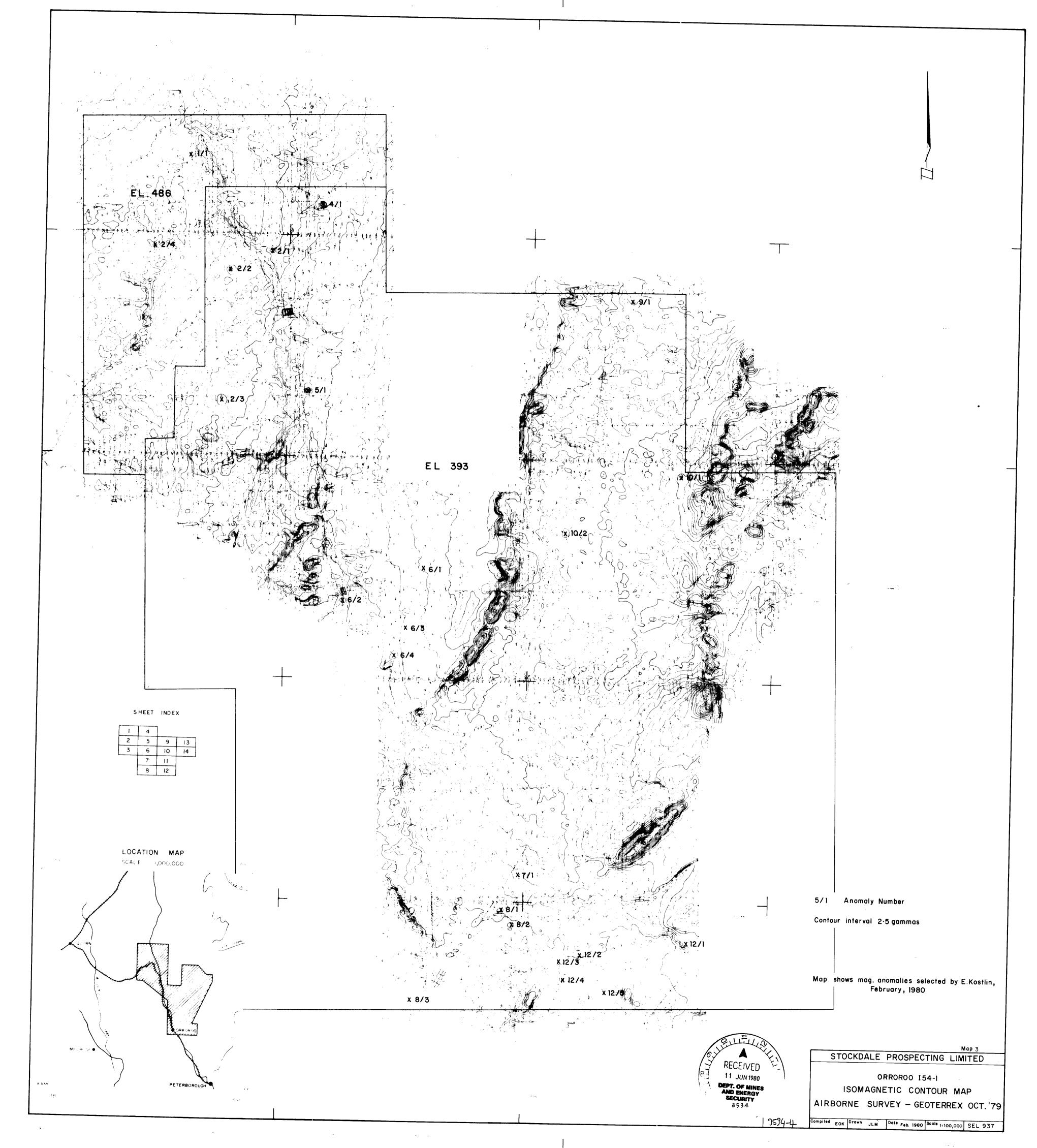
Expenditure during the period was as follows:

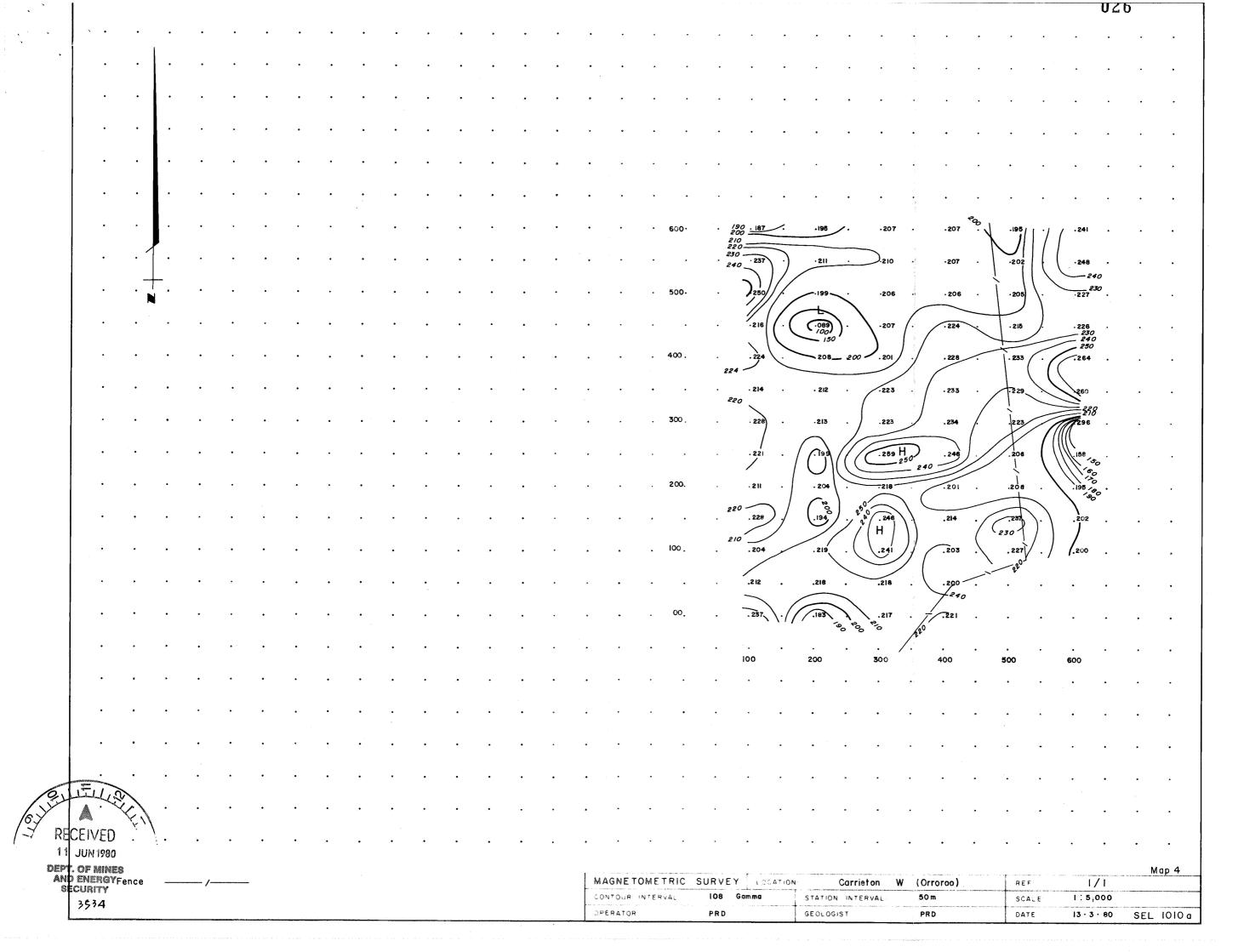
Warrange /Office complete	\$ 126
Management/Office services	•
Field Staff - Technical	234
- Other	144
General Field Expenses	152
Transport - Ground	57
Equipment	82
Specialist services: Geophysical work	700
Bulk sampling	6,300
Total for the period	\$ 7,795
Total for Previous Period	\$78,515
Total expenditure to date	\$86,310

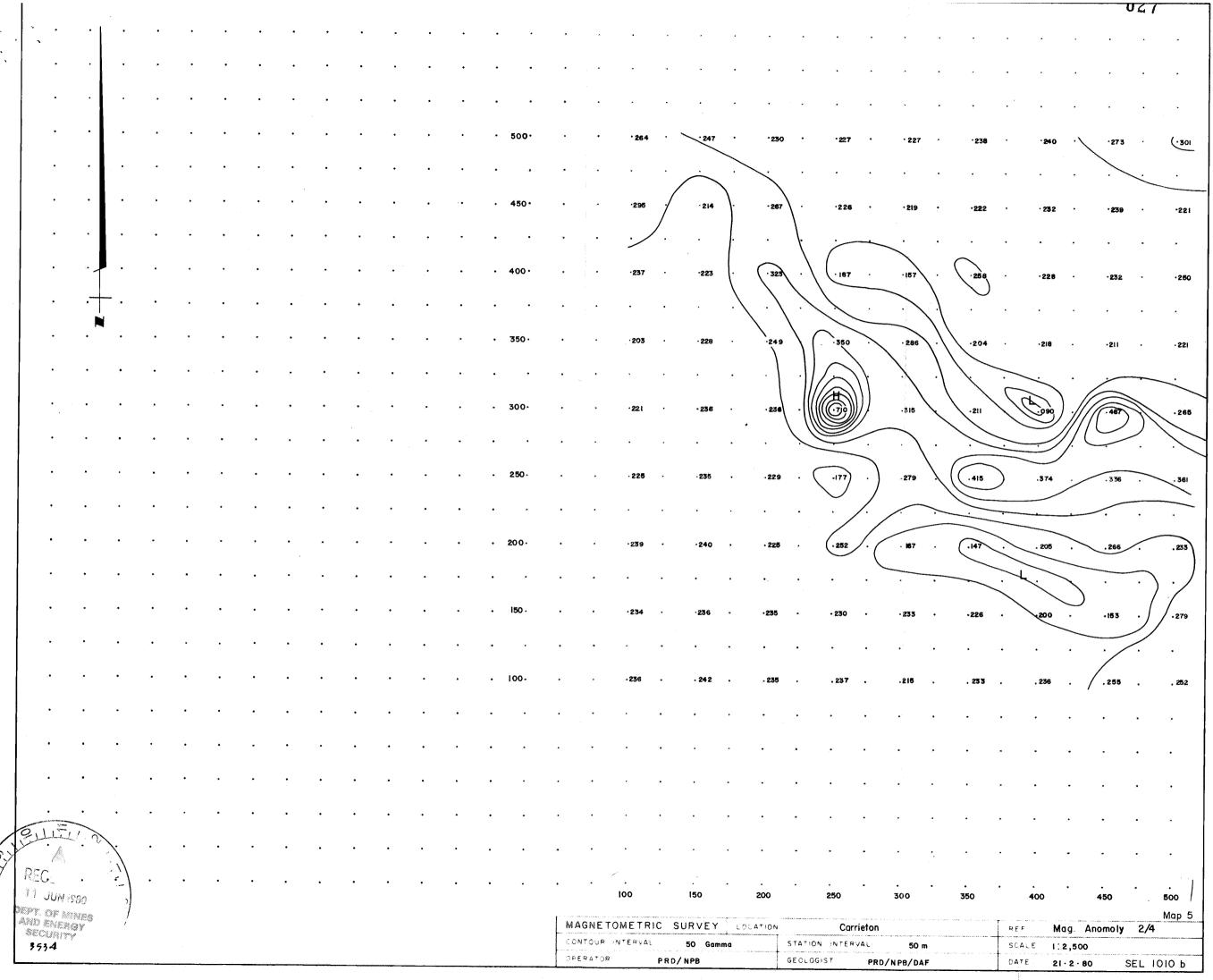
Melbourne 6/6/1980 NPB.bg

<u>M</u> <u>A</u> <u>P</u> <u>S</u>

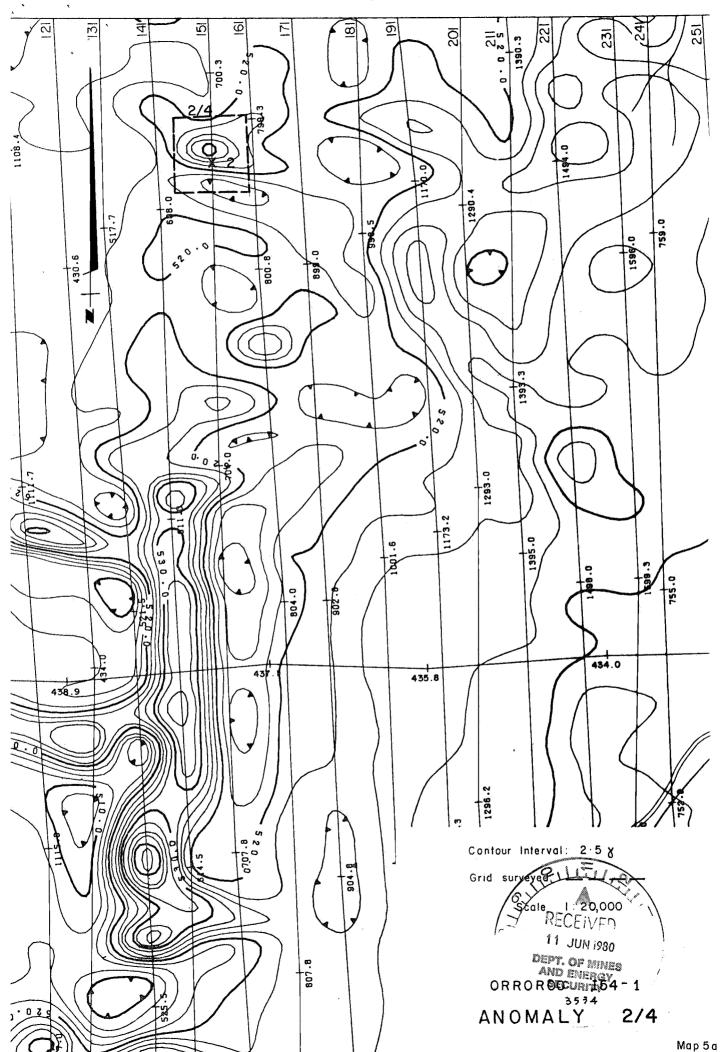
MAP	1	SEL	855	1:1	00,000	1979 STREAM SAMPLING
MAP	2	SEL	845	1:	10,000	MOOCKRA ANOMALOUS DRAINAGE
MAP	3	SEL	937	1:1	00,000	ISOMAGNETIC CONTOUR MAP
MAP	4	SEL	1010a	1:	5,000	MAGNETIC ANOMALY 1/1
MAP	5	SEL	1010ь	1:	5,000	MAGNETIC ANOMALY 2/4

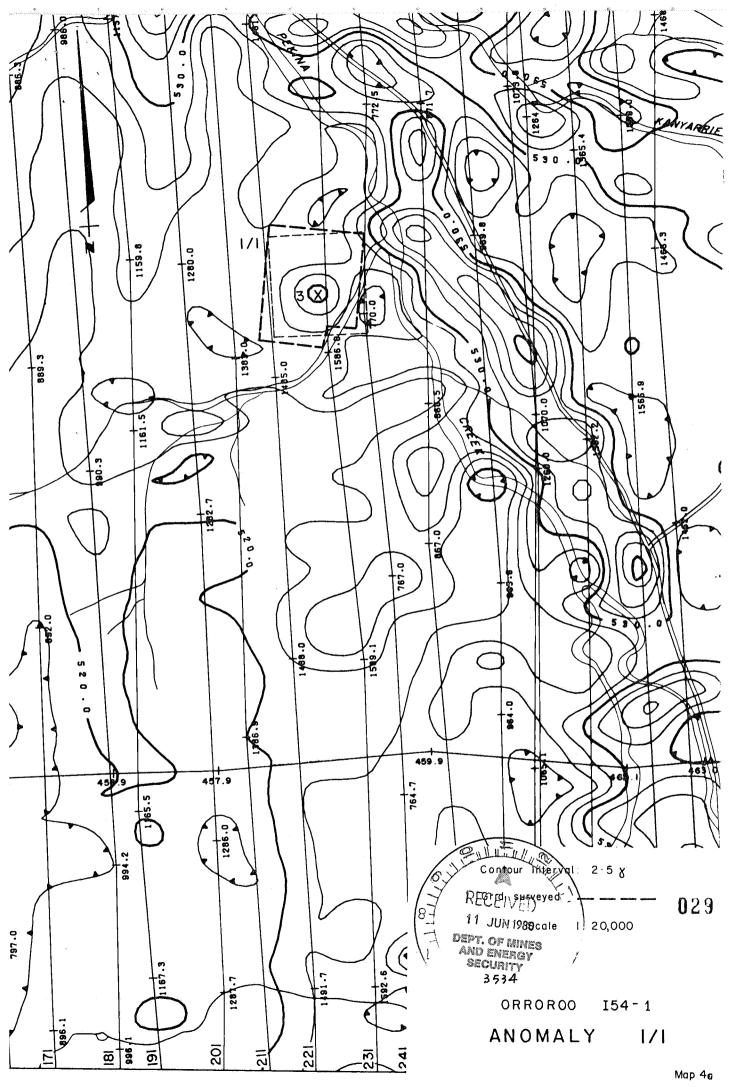






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STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST

FIFTH QUARTERLY REPORT TO SEPTEMBER 6, 1980



CONTENTS

,		Page
1.	INTRODUCTION	1
2.	PROSPECTING PROGRESS	1
3.	RESULTS RECEIVED	1
4.	FUTURE PROGRAMME	1
5.	STAFF	2
6.	EXPENDITURE	2

STOCKDALE PROSPECTING LIMITED EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST FIFTH QUARTERLY REPORT TO SEPTEMBER 6, 1980

1. <u>INTRODUCTION</u>

This report covers the tenure of Exploration Licence Number 486 for the three month period ending 6th September following renewal of area for a further 12 months.

2. PROSPECTING PROGRESS

Due to Stockdale Prospecting Limited's commitments elsewhere in South Australia work in EL 486 during the report period was limited to further assessment of the ground magnetometer grids over aeromagnetic anomalies 1/1 and 2/4. It is now considered that, as deposits of economic value are unlikely to be detected by drilling, no further work will be done on these anomalies

3. RESULTS RECEIVED

No diamonds were found in the three bulk samples treated during the last quarter

4. FUTURE PROGRAMME

A follow-up exercise will be conducted to ascertain if the low grain counts detected at sample sites within EL 652 (formerly 393) emanate from source rocks within EL 486.

The decision to collect a further bulk sample in Pekina Creek to determine the dispersal of micro diamonds from the Eurelia Kimberlite Field will depend upon results of bulk samples from Pekina Creek in EL 652.

Developments within EL 652, where drilling is planned, could well change the proposed programme to a much more intensive exercise if favourable results were gained.

5. STAFF

The following staff were employed in work appertaining to the exploration licence during the quarter:-

Consultant Geophysicist 2 man days Regional Geologist (EAST) 1 man day

Assistance was given by the Exploration Manager, while the project was supported by the facilities of the Stockdale Prospecting Limited's office and laboratory in Melbourne.

6. EXPENDITURE

Expenditure during the period was as follows:-

Management/Office services	\$31
Field Staff - Technical	58
- Other	36
General Field Expenses	38
Transport - Ground	14
Equipment amortisation	20
Specialist service - Geophysical work	707
TOTAL FOR THE PERIOD	\$904
Total previously reported \$86	5,310
TOTAL EXPENDITURE TO DATE \$87	7,214

Melbourne September, 1980

<u>K.J. STRACKE</u> Exploration Manager

PRJ:bs

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST

SIXTH QUARTERLY REPORT TO DECEMBER 6, 1980

CONTENTS

		Page
1.	INTRODUCTION	1
2.	PROSPECTING PROGRESS	1
3.	RESULTS RECEIVED	1
4.	FUTURE PROGRAMME	1
5.	EXPENDITURE	1

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST

SIXTH QUARTERLY REPORT TO DECEMBER 6, 1980

1. INTRODUCTION

This report covers the tenure of Exploration Licence Number 486 for the three month period ending 6th December, 1980.

2. PROSPECTING PROGRESS

No work was conducted within the licence area during the report period.

3. RESULTS RECEIVED

All expected results were available during the last quarter and therefore none were received for the present report period.

4. FUTURE PROGRAMME

A follow-up exercise will be conducted to ascertain if the low grain counts detected at sample sites within EL 652 (formerly 393) emanate from source rocks within EL 386.

The decision to collect a further bulk sample in Pekina Creek to determine the dispersal of micro diamonds from the Eurelia Kimberlite Field will depend upon results of bulk samples from Pekina Creek in EL 652.

Further petrological work on the kimberlite dyke designated K9 is anticipated.

5. EXPENDITURE

Since no ground work was conducted, expenditure to date remains at \$87,214.

K.J. STRACKE

Exploration Manager

Melbourne

Nov. 1980

PRJ:kss

STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST

SEVENTH QUARTERLY REPORT TO 6TH MARCH 1981



STOCKDALE PROSPECTING LIMITED

EXPLORATION LICENCE NUMBER 486 - CARRIETON WEST

SEVENTH QUARTERLY REPORT TO 6TH MARCH, 1981

1. INTRODUCTION

This report covers the tenure of Exploration Licence Number 486 for the three month period ending 6 March, 1981.

2. PROSPECTING PROGRESS

No work was conducted within the licence area during the report period.

3. RESULTS RECEIVED

All expected results were available during the last quarter and therefore none were received for the present report period.

FUTURE PROGRAMME

A follow-up exercise will be conducted to ascertain if the low grain counts detected at sample sites within EL 652 (formerly 393) emanate from source rocks within EL 486.

The apparent dispersal of diamonds from the Eurelia kimberlite field, within Stockdale Prospecting Limited's adjoining Exploration Licence No. 652, is limited and therefore the proposed bulk sample in Pekina Creek is not warranted.

Further petrological work on the kimberlite dyke designated K9 is anticipated.

It is proposed that 95% of the licence area will be relinquished and the area containing the source rock designated K9 retained for petrological studies.

EXPENDITURE 5.

Total expenditure to date is \$87,214.

K.J. STRACKE

Exploration Manager

P.R. JONES Whyalla

13 March, 1981

PRJ/kss

Distribution: SADME, PRJ, IC.