NEGRI RIVER CORPORATION LIMITED

EXPLORATION LICENCES 2092 AND 2093

EXPLORATION REPORT

FOR THE YEAR ENDED 9 SEPTEMBER, 1984

NR-57

A. J. LOHAN
SEPTEMBER 1984

ABSTRACT

Exploration of E.L.'s 2092 and 2093 was carried out by Negri River Corporation Limited in the period September 1983 to September 1984. The adjacent E.L.'s 3457, 3458 and 3459 were subject to the same exploration programme.

A bulk sampling and testing programme for diamonds was implemented in September 1983 and concluded during April 1984. No kimberlitic grains or diamonds were identified.

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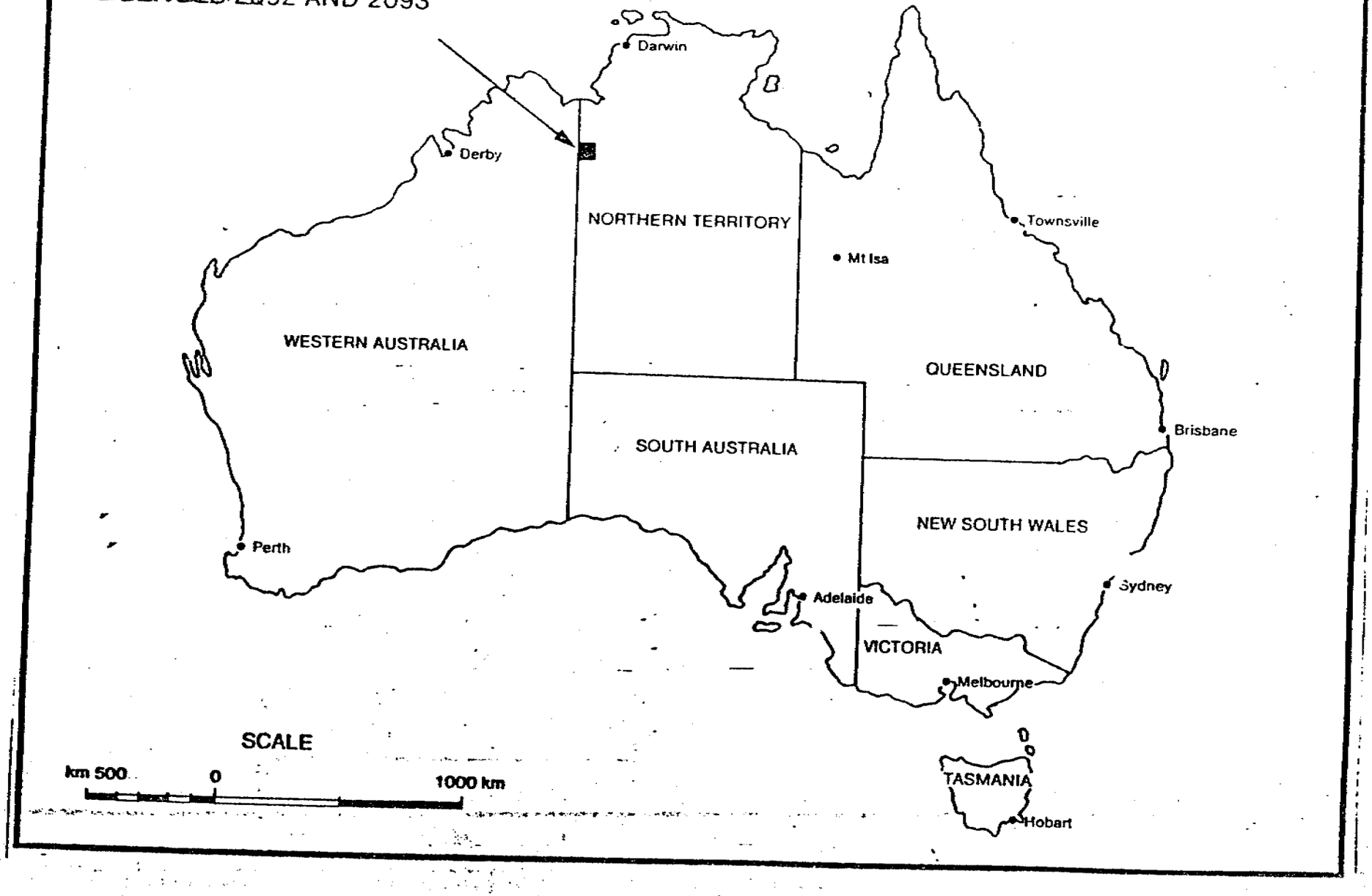
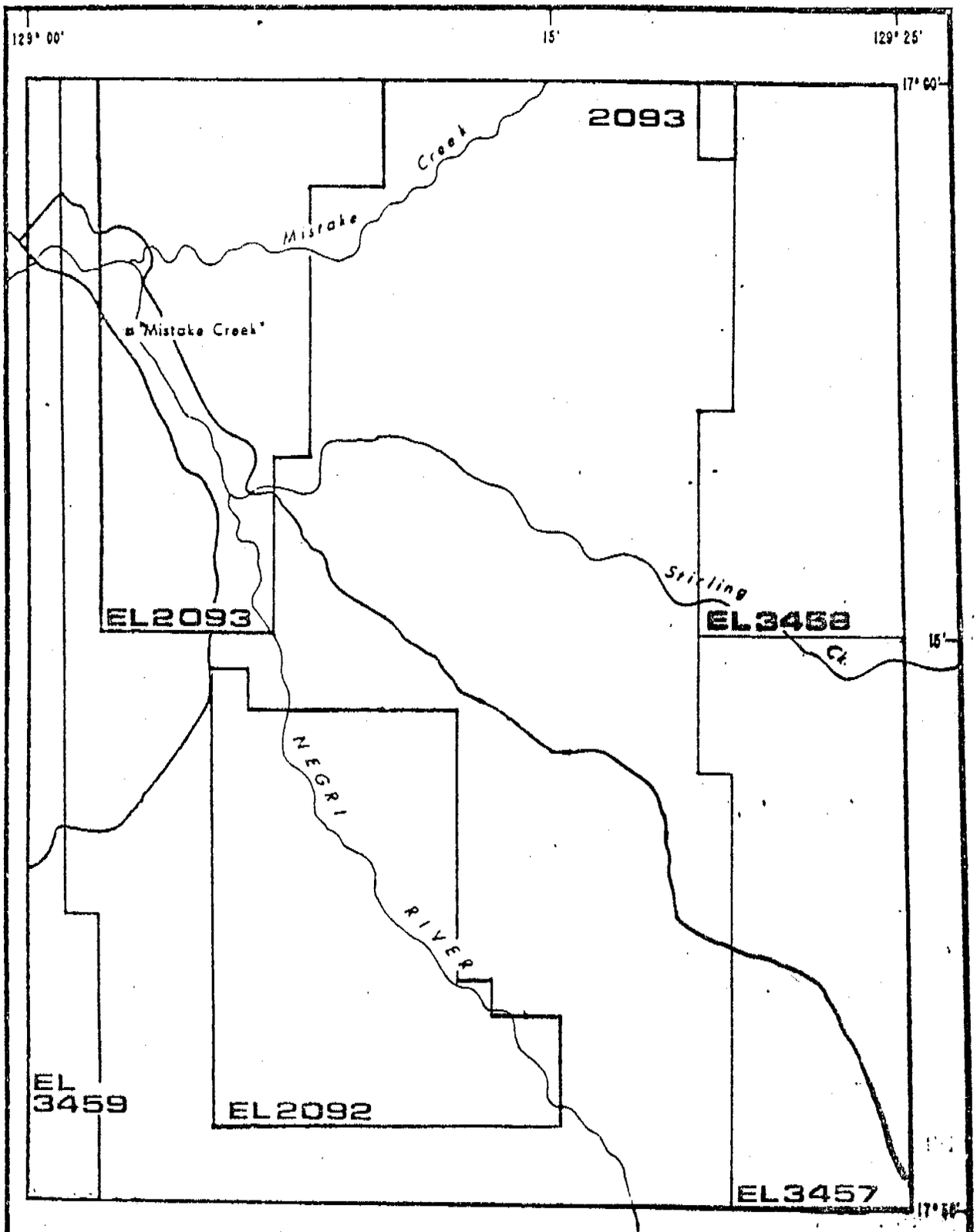
1. INTRODUCTION

The original Exploration Licences 2092 and 2093 comprised 2452 square kilometres of the Northern Territory of Australia (Figure One). Periodic reductions have determined a present area of 291 square kilometres for E.L.'s 2092 and 2093 (Figure Two).

This report deals with exploration activities in E.L.'s 2092 and 2093. The adjacent E.L.'s 3457, 3458 and 3459 (held by Negri River Corporation Limited) were subject to the same exploration programme. Hence the results of exploration are not detailed for each licence area separately but licence boundaries may be imposed on drainage - sample maps. Report NR-56 contains details of exploration in E.L.'s 3457, 3458 and 3459.

LOCATION OF EXPLORATION
LICENCES 2092 AND 2093





EL 2092 & 2093
EL's 3457, 3458 & 3459
NORTHERN TERRITORY.

LOCATION MAP

SCALE

0 4 8 12 16 20 24 30 KM

Fig. 2

2. 1983 PROGRAMME

A bulk sampling and testing programme of river gravel for diamonds was implemented in September 1983. The programme was conducted on a contract basis by Kratos Uranium N.L., for Negri. On-site operations were carried out by Stellar Mining in concert with Negri River Corporation Limited.

Basal river gravels at each site (refer to map in rear pocket) were retrieved by front-end loader thence to a rear-dump truck for transport to a heavy-media separation plant. Environmental alteration was minimised by rehabilitation of each sample site and access track.

Gravel samples from the heavy-media plant were passed over a vibrating table and grease trap. Material trapped by the grease was sent to Diamond Laboratory Services for analysis.

Table One summarises the sampling programme. Sampling commenced in October 1983 and was completed the following December. Treatment of the concentrates was completed in Sydney.

TABLE ONE

SUMMARY OF BULK TESTING PROGRAM

Sample No. / Tonnage (t)	Negri 1:100 000 Grid Reference	Road Distance to H.M.S.[1] (km)	Treatment H.M.S. / Table[2]	Sample Site	Sample Composition	Concentrate Mass (kg) / Compositio
ST-1/30	095 203	12	complete	Point bar gravel deposit	gravel and cobbles	20/pebbly gravel
ST-2/20	098 179	9	complete	gravel and cobble gutter	gravel and clayey gravel	4/pebbly gravel
ST-3/35	021 113	3	complete	gravel trap in bedrock	ironstone gravel and cobbles	360/pebbly gravel
ST-4/30	082 031	17	complete	gravel trap on and adjacent to bedrock	ironstone gravel, cobbles, some boulders	500/pebbly ironstone gravel
ST-5/50	115 953	35	complete	boulder and cobble point bar	ironstone gravel and clayey gravel, cobbles and boulders	2500/pebbly ironstone gravel
ST-6/30	154 833	54	not sampled	gravel trap in bedrock outcrops	-	-
ST-7/20	035 132	6	Not sampled	Gravel gutter	-	-
PT	-	-	Not sampled	old river terrace	-	-

1. HMS: Heavy Media Separation plant

2. Table: Grease table used to secure diamonds during final sample processing.

3. 1983 PROGRAMME RESULTS

Results of the samples sent for analysis came to hand during April 1984.

No Kimberlitic grains or diamonds were identified although a single grain was retained by Diamond Laboratory Services for further analysis. The results of analysis are included as Appendix I.

4. SUMMARY AND CONCLUSIONS

Since September 1983, a bulk sampling and testing programme for diamonds was commenced and completed. Analysis of the samples was finalised during April 1984.

Further work is dependent on evaluation and interpretation of exploration since the inception of E.L.'s 2092 and 2093.

APPENDIX I

Diamond Laboratory Services Pty. Ltd.

HEAVY MINERAL DIVISION.
Australian Representative for:
DIAMOND GRADING LABORATORIES

3rd Floor
89 York Street
Sydney, N.S.W. 2000
Telephone (02) 290 1022

HEAVY MINERAL CONCENTRATE ANALYSIS.

EXAMINATION FOR KIMBERLITIC MINERAL INDICATOR GRAINS.

CONSIGNMENT (Lab. Ref. No.):	AA 15480
CLIENT:	DR. B. MARSHALL
SAMPLE NUMBER (Clients Ref.):	ST 1, ST 2, ST 5, ST 5A.
TOTAL NUMBER OF SAMPLES:	FOUR.
DATE SAMPLES RECEIVED:	1.12.83.
DATE SAMPLES COMPLETED:	5.12.83.

The above consignment has been sorted and checked and the results are tabulated on the accompanying sheets.

Key to symbols used in the reports:

□	Etched
l.abr.	Lightly abraded
abr.	Abraded
R.O.S.	Remnant of original surface.
R.O.K.	Remnant of kelyphitic surface.
◇	Diamond
N.K.	Non-kimberlitic
▲	Angular

12.12.83

Laboratory Supervisor. Date.

NR 53

NR-53

METHOD OF EXAMINATION.

The four samples numbered ST 1, 2, 5, 5A were recieved for inspection at the Sydney premises of Diamond Laboratory Services Ltd. The samples had been concentrated prior to the arrival at the laboratory, however the grains had a grease residue on them and required additional cleaning to make them ready for viual observation.

Each sample was weighed and recorded after final preparation and the inspection of the concentrate was carried out by qualified sorters for traces of kimberlitic indicator minerals.

Any grains considered to have morphological characteristics consistent with kimberlitic indicator minerals were isolated and further confirmatory analysis recommended.

Other grains recognised by our sorters are listed in "other grains" column and may include the following:

Moissanite, haematite, fluorite, pyroxene, olivine, zircon, tourmaline, kyanite, corundum, rutile, magnetite, cassiterite, mica, pyrites, gold, etc.

RESULTS.

No grains considered to be kimberlitic were found in these samples.

Diamond Laboratory Services Pty. Ltd.

HEAVY MINERALS DIVISION

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CONSIGNMENT AA 15480 SAMPLE No's. ST. 1; ST. 2; ST. 5; ST. 5A DATE 5.12.83

Sample No.	Mesh Size	Garnet	Ilmenite	Chrome Diopside	Spinel	Other Grains	Remarks
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	4 N.K.	—	—	—	1 Pyrite.	
ST. 1	+60	—	—	—	—	—	
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	—	
ST. 2.	+60	—	—	—	—	—	
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	—	
ST 5.	+60	—	—	—	—	—	
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	—	
ST 5A	+60	—	—	—	—	—	
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						

SAMPLES RECEIVED IN LAB 1.12.83 SAMPLES SEPARATED 1.12.83

SAMPLES UNPACKED AND CHECKED 1.12.83 SLIDES CHECKED 5.12.83

Diamond Laboratory Services Pty. Ltd.

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HEAVY MINERAL CONCENTRATE ANALYSIS

EXAMINATION FOR KIMBERLITIC MINERAL INDICATOR GRAINS

CONSIGNMENT (Lab.Ref.No.):	AA15485
CLIENT:	DR. B. MARSHALL
SAMPLE NUMBER (Clients Ref.):	ST3, ST4A
TOTAL NUMBER OF SAMPLES:	TWO
DATE SAMPLES RECEIVED:	12.12.83
DATE SAMPLES COMPLETED:	13.12.83

The above consignment has been sorted and checked and the results tabulated on the accompanying sheets.

Key to symbols used in the report:

⧉	Etched
l.abr.	Lightly abraded
abr.	Abraded
R.O.S.	Remnant of original surface
R.O.K.	Remnant of kelyphitic surface
◇	Diamond
N.K.	Non-kimberlitic
△	Angular

NR - 54

NR 54

22.12.83

Laboratory Supervisor Date

METHOD OF EXAMINATION

The two samples numbered ST 3 and ST 4A were received for inspection at the Sydney premises of Diamond Laboratory Services Pty. Ltd. The samples had been concentrated prior to their arrival at the laboratory, however, the grains had a grease residue to them and required additional cleaning to make them ready for visual observation.

Each sample was weighed and recorded after final preparation and the inspection of the concentrate was carried out by qualified sorters for traces of kimberlitic indicator minerals.

Any grains considered to have morphological characteristics consistent with kimberlitic indicator minerals were isolated and further confirmatory analysis recommended.

Other grains recognised by our sorters are listed in 'other grains' column and may include the following:

Moissanite, haematite, fluorite, pyroxene, olivine, zircon, tourmaline, kyanite, corundum, rutile, magnetite, cassiterite, mica, gold etc.

22.12.83

RESULTS

No grains considered to be kimberlitic were found in these samples.

22.12.83

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CONSIGNMENT AA...1548. SAMPLE No's. ST. 3:...ST. 4A..... DATE 13.12.83.....

Sample No.	Mesh Size	Garnet	Ilmenite	Chrome Diopside	Spinel	Other Grains	Remarks
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	1 PYROXENE 2 HAEMATITE.	
ST 3	+60	5 N.K.	—	—	—	—	
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	1 HAEMATITE.	
ST 4A.	+60	—	—	—	—	—	
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						

SAMPLES RECEIVED IN LAB .....12.12.83..... SAMPLES SEPARATED ....12.12.83.....

SAMPLES UNPACKED AND CHECKED ...12.12.83..... SLIDES CHECKED .....13.12.83.....

Diamond Laboratory Services Pty. Ltd.

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HEAVY MINERAL CONCENTRATE ANALYSIS

EXAMINATION FOR KIMBERLITIC MINERAL INDICATOR GRAINS

CONSIGNMENT (Lab.Ref.No.):	AA15629
CLIENT:	DR. B. MARSHALL/A. LOGAN
SAMPLE NUMBER (CLient's Ref.):	ST4, ST5, ST4 & 5 (Spillage)
TOTAL NUMBER OF SAMPLES:	THREE
DATE SAMPLES RECEIVED:	13.3.84
DATE SAMPLES COMPLETED:	20.3.84

The above consignment has been sorted and checked and the results tabulated on the accompanying sheets.

Key to symbols used in the report:

□	Etched
l.abr.	Lightly abraded
abr.	Abraded
R.O.S.	Remnant of original surface
R.O.K.	Remnant of kelyphitic surface
◇	Diamond
N.K.	Non-kimberlitic
△	Angular

NR SS

.....
Laboratory Supervisor

2.4.84
.....
Date

METHOD OF EXAMINATION

Two samples, numbered ST4 and ST5 and a sample marked ST4 & 5 (spillage) were received for inspection at the Sydney premises of Diamond Laboratory Services Pty. Ltd. The samples had been concentrated prior to their arrival at the laboratory on a grease belt and therefore, had a grease residue on them.

In addition, removal of the grease residue had been attempted using petrol, resulting in an extremely unwieldy, smelly, messy mass of grains which, in addition to being difficult to clean, was extremely hazardous due to the heavy petrol fumes.

This resulted in a much lengthier time for each sample in the preparation stage as normal cleaning and drying techniques had to be discarded in order to get rid of the petrol and grease from the grains to make them ready for visual inspection.

Each sample was weighed and recorded after final preparation and the inspection of the concentrate was carried out by qualified sorters for traces of kimberlitic indicator minerals.

Any grains considered to have morphological characteristics consistent with kimberlitic indicator minerals were isolated and further confirmatory analysis recommended.

Other grains recognised by our sorters are listed in 'other grains' column and may include the following:

Moissanite, haematite, fluorite, pyroxene, olivine, zircon, tourmaline, kyanite, corumdum, rutile, magnetite, cassiterite, mica, gold etc.

RESULTS

Sample ST4 & 5 (Spillage)

No grains whose characteristics indicate possible kimberlitic origin were observed.
A number of metallic grains were observed. Chemical analysis of these grains showed Zn and Cu content suggesting that they were shavings that came from a metallic piece of equipment.

Sample ST4

No grains considered to be of kimberlitic origin were observed.

Sample ST5

Two non-kimberlitic garnets, eight zircons and grains of haematite and pyroxene were observed. None of these was considered to be of kimberlitic origin.

One black grain was observed and isolated whose characteristics indicate possible kimberlitic origin. It has been sent for further analysis by electron microprobe.

2.4.84

Diamond Laboratory Services Pty. Ltd.

HEAVY MINERALS DIVISION

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Sydney, N.S.W. 2000
Telephone (02) 290 1022

CONSIGNMENT .BH.15629.... SAMPLE No's. ST.4.5.(SPLIT).ST.4..ST.5... DATE .20.3.84....

Sample No.	Mesh Size	Garnet	Ilmenite	Chrome Diopside	Spinel	Other Grains	Remarks
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	34 YELLOWISH
	+44	1 N.K.	—	—	—	4 HAEMATITE	METALLIC GRAINS
ST 4+5 (SPLIT)	+60	—	—	—	—	—	OBSERVED IN SAMPLE.
	+16	—	—	—	—	—	
	+25	—	—	—	—	—	
	+44	—	—	—	—	—	
ST 4	+60	—	—	—	—	—	
	+16	—	—	—	—	—	
	+25	1 N.K.	? 1	—	—	1 ZIRCON	1 YELLOWISH METALLIC
	+44	1 N.K.	—	—	—	2 HAEMATITE: 7 ZIRCONS: 4 PYROXENE	GRAIN OBSERVED IN
ST 5	+60	—	—	—	—	—	SAMPLE.
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						
	+16						
	+25						
	+44						
	+60						

SAMPLES RECEIVED IN LAB .....5.3.84..... SAMPLES SEPARATED .....16.3.84.....

SAMPLES UNPACKED AND CHECKED ...13.3.84..... SLIDES CHECKED .....20.3.84.....

APPENDIX

II

LIST OF REPORTS

NR-0 Report on the testing for kimberlitic indicator minerals of portion of exploration licences 2092 and 2093, Northern Territory of Australia.
(Colchester and Marshall, February 1981)

NR-A Report on the interpretation of air photo and landsat imagery, exploration licences 2092 and 2093, N.T. of Australia.
(Marshall, February, 1981)

NR-B Mineralogical investigation of alluvial sand samples, portion of exploration licences 2092 and 2093, Northern Territory of Australia.
(Franklin, May, 1981)

NR-1 Report on stream-sediment geochemical analyses from portion of exploration licences 2092 and 2093, Northern Territory of Australia.
(Marshall, June, 1981)

NR-2 Assessment of the report on mineralogical investigation of alluvial sand samples, E.L.'s 2092 and 2093, N.T. of Australia. (Marshall, June, 1981)

NR-3 Progress Report: Exploration Licences 2092 and 2093.
(Marshall, September, 1981)

NR-4A Heavy mineral concentrate analysis examination for kimberlitic indicator grains.
(Afrique, July, 1981 - Diamond Laboratory Services)

NR-4B Mineralogical investigation of alluvial sand samples.
(Franklin, July, 1981 - Diamond Laboratory Services)

NR-5 Report on sampling and laboratory activities, Exploration Licences 2092 and 2093, 1981 Exploration Program.
(Marshall, September, 1981)

NR-6 Evaluation of reports on the tributary sampling program E.L.'s 2092 and 2093, 1981 Exploration Program.
(Marshall, November, 1981)

NR-7 Evaluation of the main channel samples, E.L's 2092, 2093, 1981 Exploration Program.
(Marshall, May, 1982)

NR-8 Heavy mineral concentrate analysis examination for kimberlitic mineral indicator grains.
(Afrique, September, 1981 - Diamond Laboratory Services)

NR-9 Heavy mineral concentrate analysis examination for kimberlitic mineral indicator grains - consignment AA11905.
(Afrique, September, 1981 - Diamond Laboratory Services)

NR-10 Microprobe analysis of garnet grains - samples 182, 203 and 263.
(Sechos, September, 1981 - Diamond Laboratory Services)

NR-11 Progress report on exploration activities.
(Marshall, November, 1981)

NR-12 Progress report on exploration of E.L's 2092 and 2093, Northern Territory.
(Orridge, October, 1981)

NR-13 Heavy minerals concentrate analysis, Samples B1 - B7, Coarse and Medium fractions.
(Afrique, November,, 1981, D.L.S)

NR-14 Microprobe analysis of grains from samples B2, B3, B4.
(Sechos, December, 1981 - D.L.S.)

NR-15 Heavy mineral concentrate analysis, samples B1 and B2 Fine fraction.
(Sechos, December, 1981 - D.L.S.)

NR-16 Heavy mineral concentrate analysis, samples B3 and B7 Fine fraction.
(Sechos, January, 1981 - D.L.S.)

NR-17 Microprobe analysis of grains from samples B3 to B7 Fine fraction.
(Sechos, February, 1981 - D.L.S.)

NR-18 Heavy mineral concentrate analysis, Samples 350 to 360 inclusive.
(Sechos, February, 1981 - D.L.S.)

NR-19 Progress report on exploration activities.
(Marshall, February, 1982)

NR-20 Microprobe analysis of grains form samples 350 to 360.
(Sechos, March, 1982 - D.L.S.)

NR-21 Final report on exploration of E.L.'s 2092, 2093 Northern Territory.
(Orridge, January, 1982)

NR-22 Exploration proposals - 1982 for E.L.'s 2092, 2093 Northern Territory.
(Marshall, February, 1982)

NR-23 Exploration licences 2092 and 2093, N.T.: Review of exploration data to January, 1982.
(Hickling, May, 1982)

NR-24 Report on the location of kimberlite pipes using digital processing of Landsat data, Negri River District.
(Longman & Associates, June, 1982)

NR-25 Final Report: Negri River Exploration Zone, Northern Territory of Australia.
(Way, January, 1983 - SWA Group)

NR-26 E.L.'s 2092, 2093, 3457, 3458, 3459 - Exploration details, 1982 field program.
(Marshall, November, 1982)

NR-27 E.L.'s 2092 and 2093. Exploration report for the year ended 9th September, 1982. Vols. 1 and 2.
(Marshall, September, 1982)

NR-28 Heavy mineral concentrate analysis and microprobe report. Samples 363 to 390.
(Sechos, October, 1982 - D.L.S.)

NR-29 Heavy mineral concentrate analysis and microprobe report. Samples 391 to 415.
(Sechos, November, 1982 - D.L.S.)

NR-30 Heavy mineral concentrate analysis and microprobe report. Samples 416 to 446.
(Sechos, November, 1982 - D.L.S.)

NR-31 Heavy mineral concentrate analysis and microprobe report. Samples 448 to 482 and ML1 to ML4.
(Sechos, December, 1982 - D.L.S.)

NR-32 Heavy mineral concentrate analysis and microprobe report. Bulk sample B11.
(Sechos, December, 1982 - D.L.S.)

NR-33 Heavy mineral concentrate analysis. Bulk sample B5.
(Sechos, December, 1982 - D.L.S.)

NR-34 E.L.'s 3457, 3458, 3459. Exploration report for the ending 11th January, 1983.
(Marshall, January, 1983)

NR-35 E.L. Applications 1A, 1B, 2A, 2B.
(Marshall, February, 1983)

NR-36 Heavy mineral concentrate analysis. Bulk sample B6.
(Sechos, January, 1983 - D.L.S.)

NR-37 Heavy mineral concentrate analysis and microprobe report. Bulk sample B2.
(Sechos, February, 1983 - D.L.S.)

NR-38 Heavy mineral concentrate analysis. Bulk samples B8, B9, B13.
(Sechos, March, 1983 - D.L.S.)

NR-39 Heavy mineral concentrate analysis. Bulk sample B10a.
(Sechos, March, 1983 - D.L.S.)

NR-40 Heavy mineral concentrate analysis. Bulk sample B12.
(Sechos, March, 1983 - D.L.S.)

NR-41 Progress report on exploration work, Mistake Creek district E.L.'s 2092, 2093, 3457, 3458, 3459.
(Marshall, March, 1983)

NR-42 Heavy mineral concentrate analysis. Bulk samples B3 and B4.
(Sechos, April, 1983 - D.L.S.).

NR-43 Electron microprobe results for grains from bulk samples B3, B8 and B13.
(Sechos, April, 1983 - D.L.S.)

NR-44 Exploration activities and sacred sites. E.L.'s 2092, 2093, 3457, 3458, 3459.
(Marshall, April, 1983)

NR-45 Exploration proposals for E.L.'s 3457, 3458, 3459.
(Marshall, May, 1983)

NR-46 Report on diamond exploration programme of Negri River Corporation Limited.
(Hickling, June, 1983)

NR-47 Mineral sample from an unknown locality.
(Williams, June, 1983)

NR-48 Progress report on exploration work, Mistake Creek district.
(Marshall, June, 1983)

NR-49 Report on the examination of three sand samples for specific mineralogical identification.
(Franklin, August, 1983)

NR-50 Examination for kimberlite mineral indicators.
(Sechos, October, 1983 - D.L.S.)

NR-51 E.L.'s 2092 and 2093. Exploration Report for the year ended 9th September, 1983
(Lohan, September, 1983)

NR-52 Report on bulk sample diamond testing program for E.L.'s 2092 and 2093.

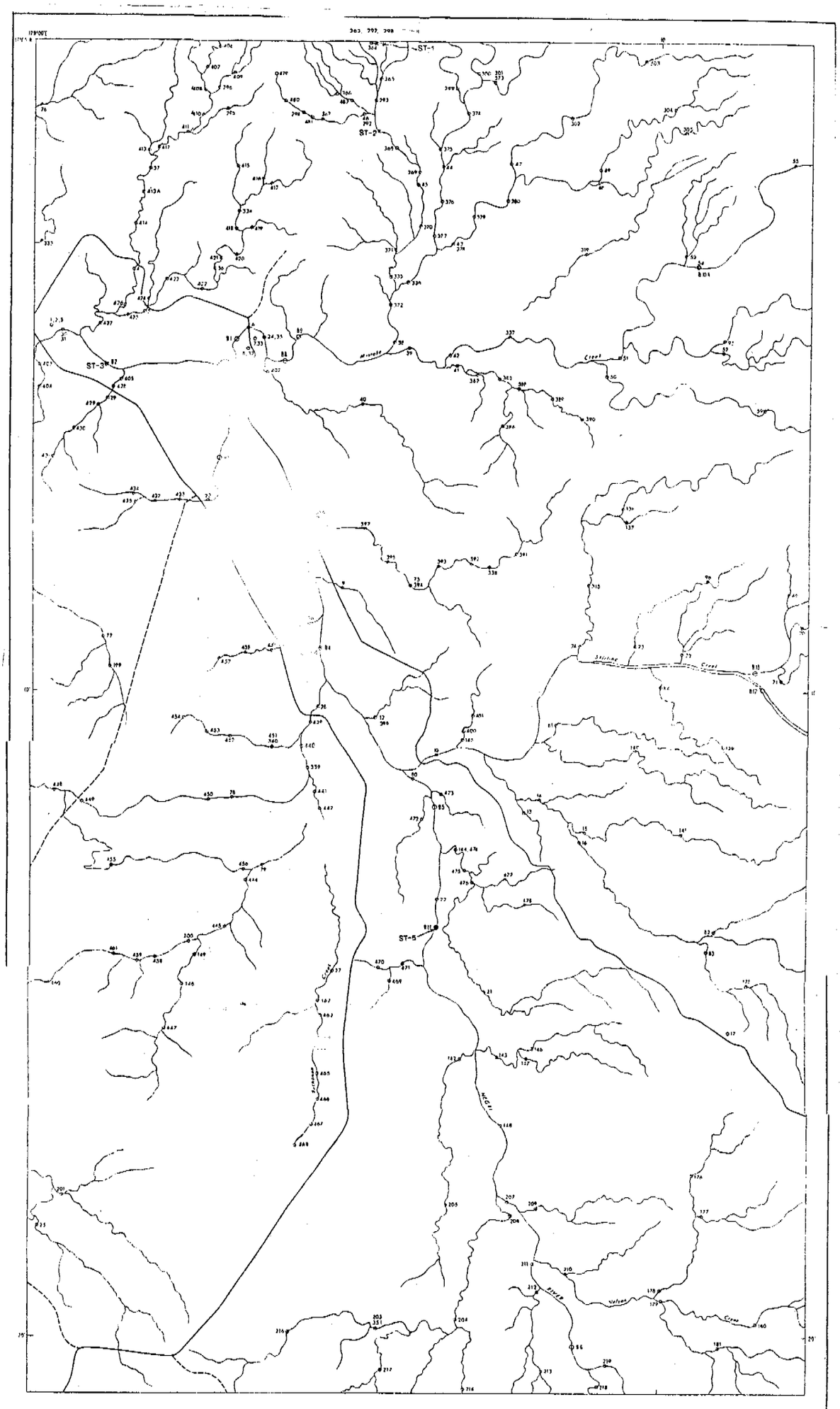
NR-53 Heavy mineral concentrate analysis. Bulk test samples ST-1, ST-2, ST-5, ST-5A.
(Sechos, December, 1983 - D.L.S.)

NR-54 Heavy mineral concentrate analysis. Bulk test samples ST-3, ST-4A
(Sechos, December, 1983 - D.L.S.)

NR-55 Heavy mineral concentrate analysis. Bulk test samples ST-4, ST-5, ST-4 and 5 (Spillage).
(Sechos, April, 1984 - D.L.S.)

NR-56 E.L.'s 3457, 3458, 3459. Exploration Report for the year ending January 11th, 1984 (Lohan, April, 1984).

NR-57 The present report



NEGRI RIVER CORPORATION LIMITED

EXPLORATION LICENCES - MISTAKE CREEK DISTRICT

SAMPLE LOCATIONS

MAP 1