

14-6

ANNUAL REPORT

EXPLORATION LICENCES 5064 AND 5092

for

WESTERN GULF OIL AND MINING LTD

by J.W. SHIELDS

S.J. BELLETTE

GEONORTH DARWIN

APRIL 1988

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The annual report for Exploration Licences 5064 and 5092 is in two parts, the first part being the presentation of results from a sampling survey carried out on these areas, the second being the results and interpretation resulting from reassaying previously drilled diamond drill holes on Exploration Licence 5092.

These reports were both completed in October 1987, although the field work and sampling of the diamond drill core had been carried out over a considerable time frame.

## EXPENDITURE

### EXPLORATION LICENCE 5092

SAMPLING	1,487.00
ASSAYING	1,230.00
GEOLOGY	682.06
CORE SPLITTING	3,720.00
ASSAYING CORE	5,264.50
INCIDENTALS	735.22
VEHICLES	3,200.00
ACCOMODATION	638.00
 TOTAL	 \$16,956.78

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EXPLORATION LICENCE 5064

SAMPLING	3,240.58
ASSAYING	2,730.10
VEHICLES	3,580.28
ACCOMODATION	2,550.00
INCIDENTALS	1,283.80
CONTRACT GEOLOGY	3,963.96
 TOTAL	 \$17,348.72

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REPORT ON A RECONNAISSANCE  
SAMPLING SURVEY - LEWIS PROSPECTS  
EXPLORATION LICENCES 5064, 5092

REPORT NUMBER 2

for

DESTINY PROSPECTING PTY LTD

by J.W.Shields

GEONORTH

OCTOBER 1987

**RECONNAISSANCE SAMPLING**  
**EXPLORATION LICENCES 5064 & 5092**  
**OCTOBER 1987**

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RECONNAISSANCE SAMPLING  
EXPLORATION LICENCES 5064 & 5092

OCTOBER 1987

INTRODUCTION

A reconnaissance sampling programme was carried out on Exploration Licences 5064 and 5092 at the request of Destiny Prospecting Pty Ltd.

Samples were collected and described by an experienced prospector and then fire assayed for gold, and arsenic assayed for by A.A.S. at the Australian Assay Laboratories in Pine Creek.

This report sets out the results of this work and an opinion on the overall prospectivity of the tenements for gold.

Core from previous diamond drilling has been split and assayed and the results will be the subject of another report.

LOCATION AND ACCESS

Map one shows the areas sampled in relation to the Mount Wells Battery (top left hand corner).

The area is about 150 kilometres southeast of Darwin and 70 kilometres north northeast from Pine Creek.

Access is readily obtained from the Stuart Highway which runs from Darwin in a southerly direction through Pine Creek. Mount Wells Battery can be reached from the highway by the most direct route, leaving the highway about 10 kilometres southeast of Emerald Springs and travelling in a northerly direction along a well formed dirt road to Mount Wells Battery.

RECONNAISSANCE SAMPLING  
EXPLORATION LICENCES 5064 & 5092  
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From Mt Wells Battery, a dirt track leads easterly to a crossing of the McKinlay River. The track continues easterly, and about half a kilometre further on, a faint turnoff track leads south across the McKinlay River floodplains to the old drill sites.

Exploration Licence 5064 is roughly bisected by Watts Creek which flows northeasterly. Access to this Exploration Licence is by "bushwacking" in a four wheel drive vehicle along this creek.

GENERAL GEOLOGY AND REGIONAL  
PROSPECTIVITY FOR GOLD

These areas occur in the central part of the Pine Creek Geosyncline, which consists mainly of Proterozoic rocks with an Archaean basement.

This Geosyncline is being subject to ever increasing exploration, activities, mostly for gold.

In 1979, a table (table 6) was published in Excursion guide for the International Uranium Symposium on the Pine Creek Geosyncline, Australia, in which the total recorded production and resources of gold (for the Geosyncline) are shown as 647,943 ounces.

Since then, reserves have been increasing dramatically with Pine Creek having about 750 000 ounces and being successfully in production for more than 1 year. Cosmo Howley mine recently opened with an announced reserve of 250 000 ounces of gold. Western Mining Corporation have recently announced the imminent opening of the Goodall mine with an expected output of 50 000 ounces of gold per year.

RECONNAISSANCE SAMPLING  
EXPLORATION LICENCES 5064 & 5092  
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I expect this trend to continue with some increase in discovery rate, as many projects are under way.

However, there are many areas with high potential for major gold mineralisation which are not being prospected yet but certainly warrant it as exploration costs are minor compared with the value of gold which could be found.

DETAILED GEOLOGY

The rocks, structures and proximity to granite in the areas under consideration are the same or similar to those at the Pine Creek mine.

The rocks belong to the Burrell Creek Formation which consists of greywackes interbedded with siltstones. The greywackes, especially a sequence of say 30 metres, seems to be a favourable host in a number of gold prospects and mines.

Structurally, anticline hinges or axes are the controlling factor for the gold mineralisation.

Proximity to granite is rather a nebulous factor, as granite may be present not far beneath the surface. So that an area may appear to be a long way from granite on a geological map, but may in fact be close, as granite may be beneath the area but not crop out at the surface.

In the case of the areas under consideration, all the above factors which appear to be necessary to have a gold deposit are present, and in fact gold is present as will be demonstrated shortly.



**RECONNAISSANCE SAMPLING**  
**EXPLORATION LICENCES 5064 & 5092**  
**OCTOBER 1987**

**SAMPLING METHODS**

As this survey was intended as a first look at the areas to determine the viability and direction of further work, a coverage of the area with about 100 samples was considered adequate, although a negative result wouldn't have been considered as definitive, as the gold orebodies we are looking for may well outcrop over a small area but, in fact, be large orebodies.

A prospector with a long successful history of prospecting in the "Top End" took the samples and briefly described them. He plotted the approximate position of each sample on a geological 1:100 000 map which was enlarged to allow enough space for recording sample numbers. Of course, he took particular notice of quartz or gossan and these received preference for sampling over other rock types.

The sample descriptions are presented at the back of this report.

The prospector delivered these samples to the assay laboratory in Pine Creek with a request to assay for gold and arsenic.

A prefix of MLW was given to each sample for anonymity and to prevent confusion with other samples.

**SAMPLING RESULTS AND DISCUSSION**

These are presented on the accompanying Maps numbered 3, 4 & 5 together with the sample numbers so that the relevant sample description may be consulted.

RECONNAISSANCE SAMPLING  
EXPLORATION LICENCES 5064 & 5092

OCTOBER 1987

Gold values of less than 0.01 g/t are not shown. Similarly with values of arsenic less than 100 g/t.

Exploration Licence 5092 has a near north trending zone with quartz veins along it. These veins are quite anomalous in my opinion and make the prospect worthy of more serious exploration.

Exploration Licence 5064 has even higher anomalous results and sample 88 described as "Greywacke with Scorodite?" assaying nearly 1 gram/tonne gold and 4.35% arsenic could well be a pointer to an orebody. The prospector, Mr Ronan, said that the sample came from a small outcrop with very little outcrop around. The presence of a nearby outcrop from which sample 87 was taken, which assayed 0.03 g/tonne Au and 1100 g/tonne As is described as a "gossan with quartz veins".

The area from which these two samples come should, in my opinion, be given the highest priority for further exploration.

Another area to the northwest is definitely worth a more concentrated look.

CONCLUSIONS

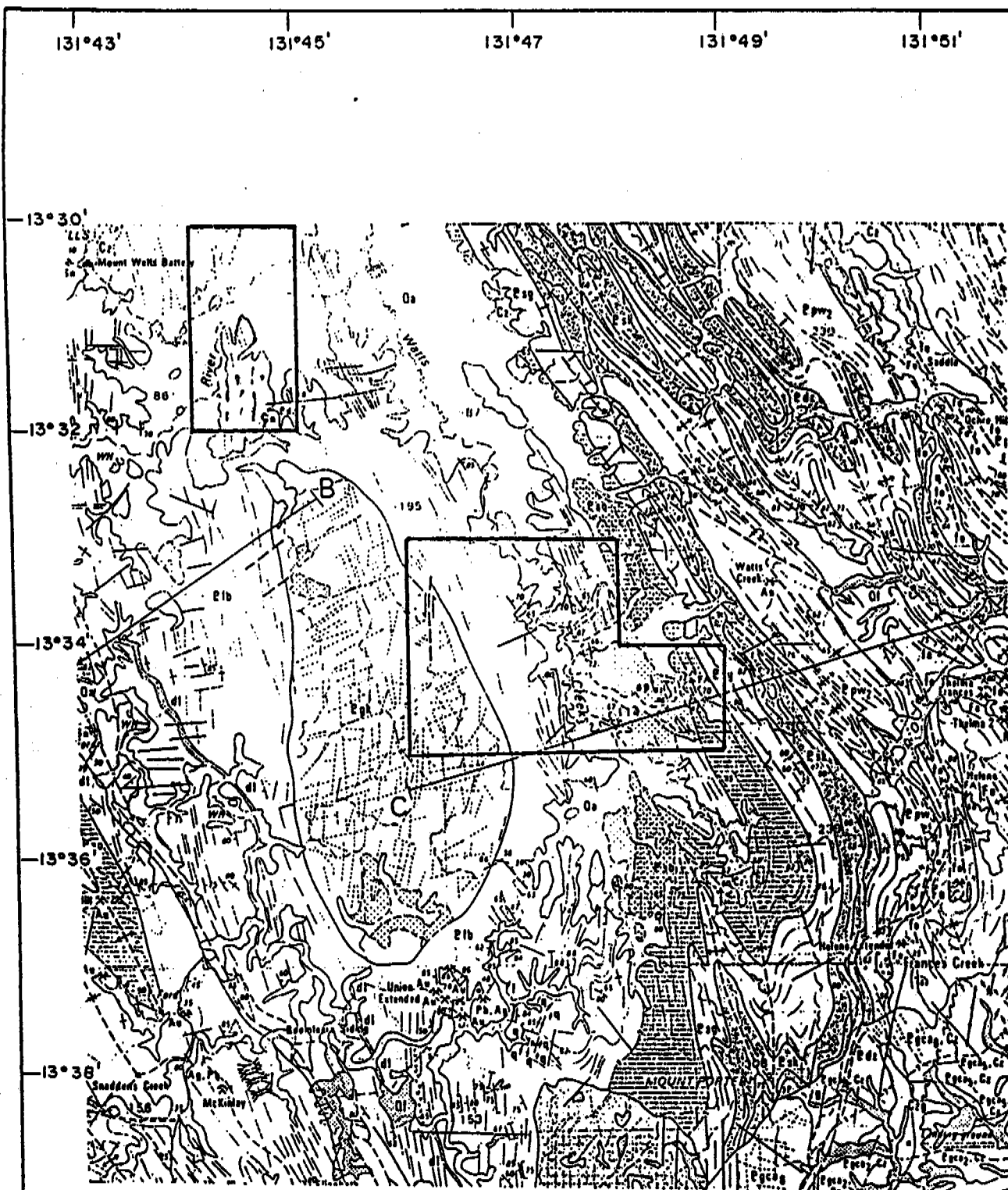
The areas contain anomalous gold and arsenic results.

Two samples in the southwestern part of Exploration Licence 5064, one of greywacke with scorodite(?) and the other of gossan have a possibility of leading to an orebody, as they have excellent assay results.

**RECONNAISSANCE SAMPLING**  
**EXPLORATION LICENCES 5064 & 5092**  
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The quartz veins trending in a near vertical position through Exploration Licence 5092 show strong anomalous gold and arsenic values. This zone will be discussed further in a report giving results of assaying core from previous drilling.

Further work, initially consisting of detailed mapping in conjunction with further sampling is recommended with perhaps costeaning in the southwestern portion of Exploration Licence 5064.

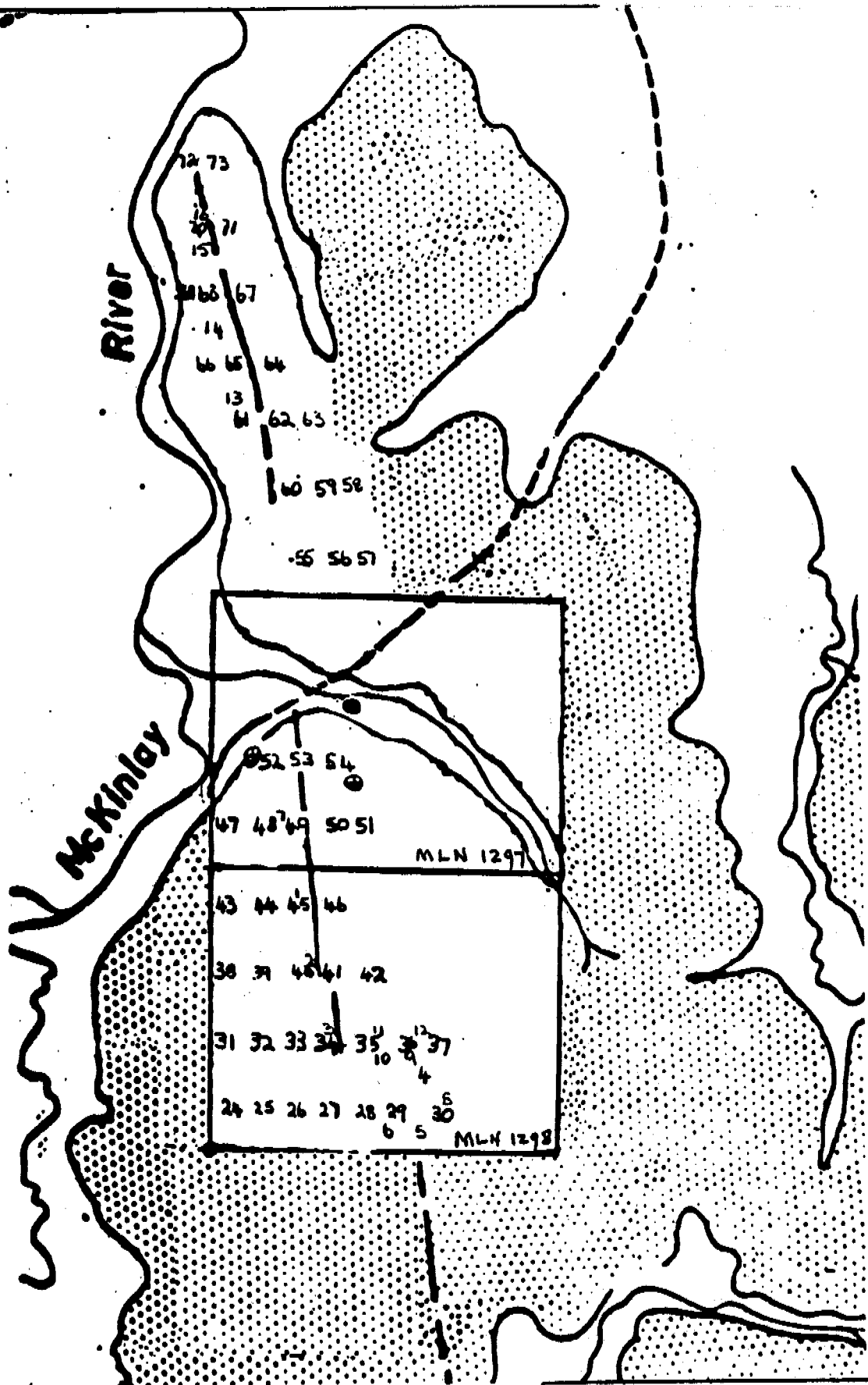


DESTINY PROSPECTING PTY. LIMITED  
EXPLORATION LICENCES 5064, 5092

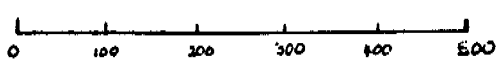
GEOLOGICAL MAP 1

GEOLOGIST: J. SHIELDS DATE: OCT 87

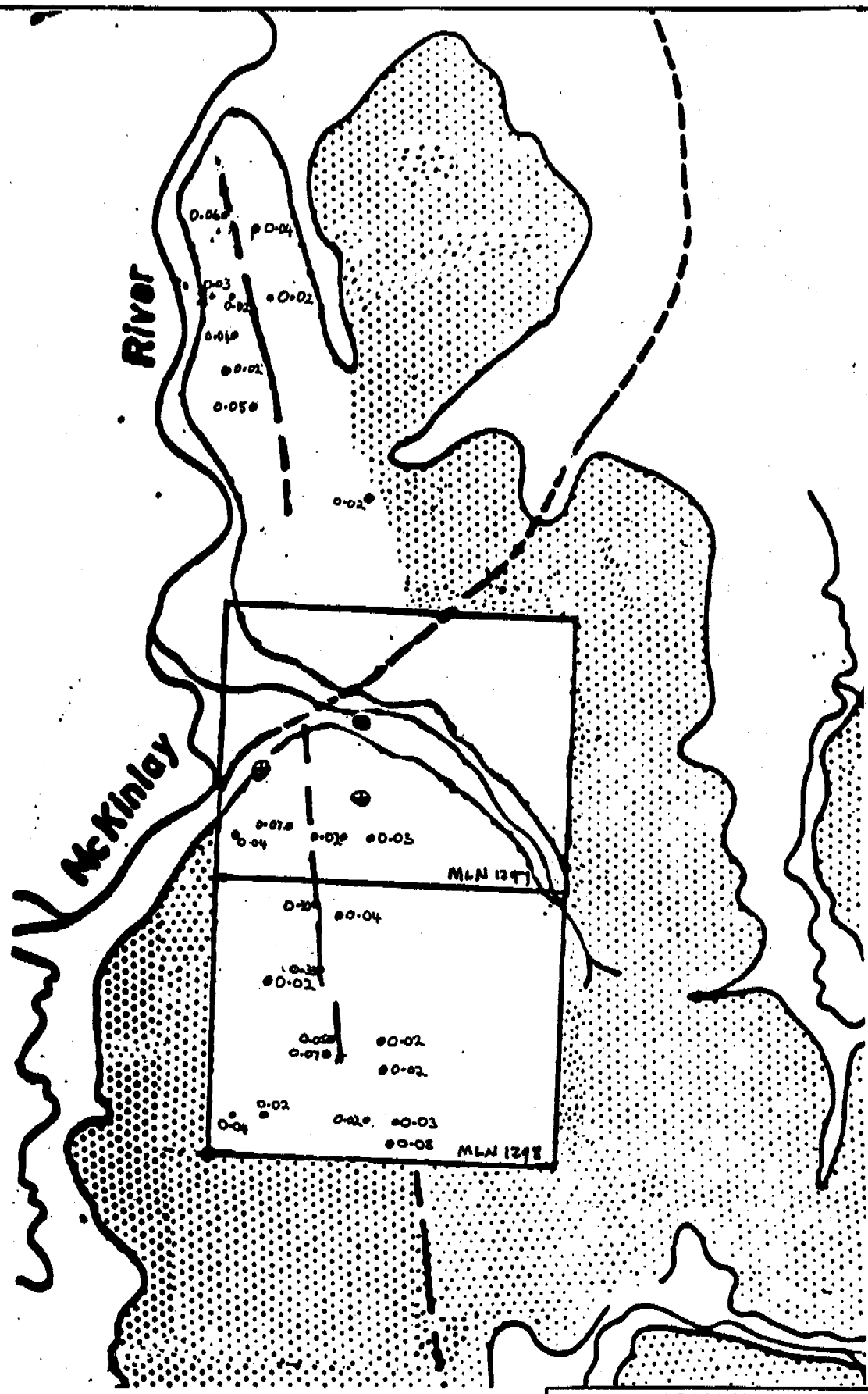
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SCALE



DESTINY PROSPECTING PTY LIMITED
SAMPLE LOCATIONS EXPLORATION LICENCE 5092
GEOLOGIST: J. SHIELDS DATE: OCT 87
MAP 2



SCALE

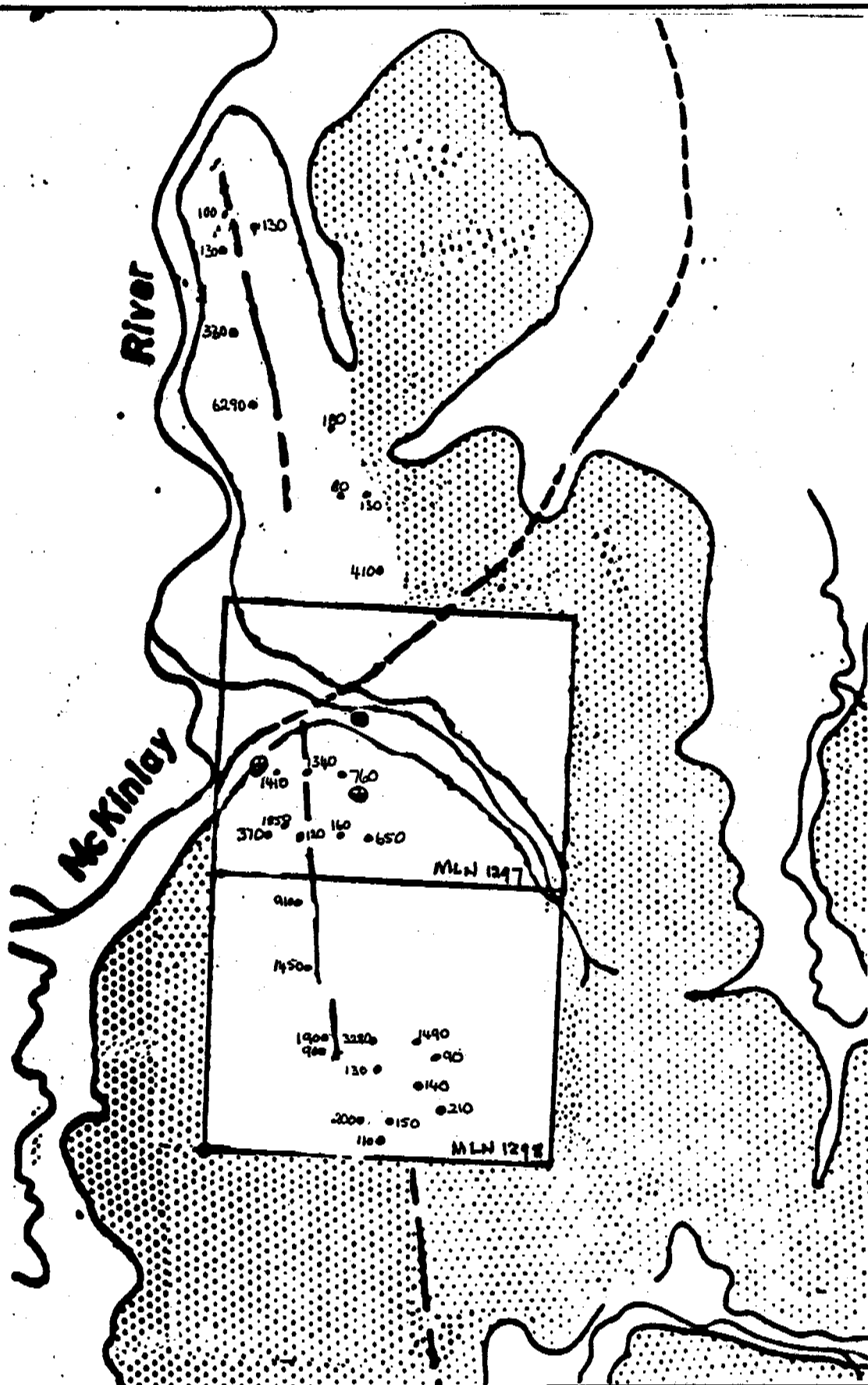


DESTINY PROSPECTING PTY. LIMITED

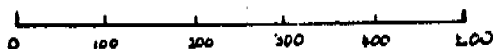
GOLD ASSAYS EL 5092

GEOLOGIST: J. SHIELDS DATE: OCT 87

MAP 3



SCALE



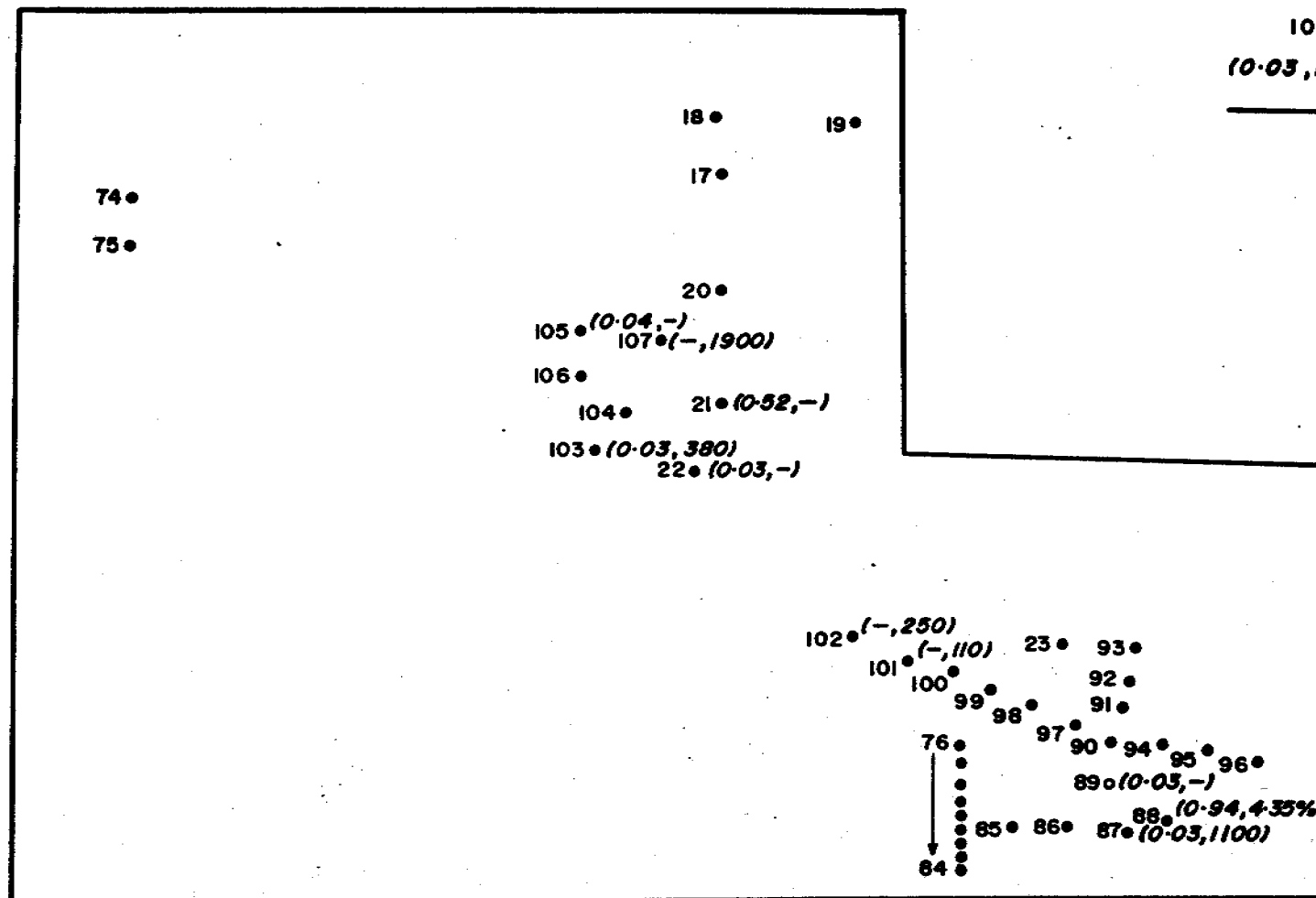
DESTINY PROSPECTING PTY. LIMITED

ARSENIC ASSAYS EL 5092

GEOLOGIST: J. SHIELDS DATE: OCT 87

MAP 4

105 • sample location and number  
 (0.03, 1100) (gold values g/t, arsenic values g/t)  
 ——— lease boundary



DESTINY PROSPECTING PTY. LIMITED  
 EXPLORATION LICENCE 5064  
 RECONNAISSANCE SAMPLING RESULTS  
 GEOLOGIST: J. SHIELDS  
 SEPTEMBER 1987



BRIEF DESCRIPTION OF SAMPLES

MLW 1	3m wide Quartz with Boxworks.
2	Quartz with Boxworks.
3	Quartz.
4	Greywacke.
5	Greywacke with Quartz Veins.
6	Greywacke with Quartz Veins.
7	Quartz.
8	Siltstone with Quartz Veins
9	Siltstone with Quartz Veins.
10	Greywacke with Quartz Veins.
11	Greywacke.
12	Greywacke.
13	Greywacke with Quartz.
14	Quartz with Boxworks 1m wide.
15	Quartz with Boxworks 2m wide.
16	Quartz Scree.
17-20	Quartz.
21	Quartz, Gossan with Quartz Veins.
22-23	Quartz.
24-60	Siltstone, Greywacke, Quartz with Boxworks.
61	Siltstone.
62-66	Siltstone, Quartz, Greywacke with Quartz Veins.
67-69	Siltstone, Greywacke, Quartz with Boxworks.
70-74	Siltstone, Greywacke, Quartz.
75	Quartz.
76-86	Quartz, Siltstone with Quartz Veins.
87	Gossan with Quartz Veins.
88	Greywacke with Scorodite(?).
89-90	Large Quartz Vein.
91	Narrow Quartz Vein.

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- 92-93 Quartz.
  - 94 Quartz, Siltstone with Quartz Veins.
  - 95 Quartz, Siltstone.
  - 96-98 Quartz, Siltstone with Quartz Veins.
  - 99-100 Quartz, Siltstone.
  - 101-102 Quartz, Siltstone with Quartz Veins.
  - 103 Quartz with Boxworks.
  - 104 Quartz, Gossan (yellowish).
  - 105 Quartz.
  - 106 Fine Grained Greywacke.
  - 107 Greywacke, Ferruginous Boxworks.

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EXPLORATION LICENCE 5064  
MOUNT WELLS AREA  
DIAMOND DRILL CORE ASSAYING  
AND STRUCTURAL INTERPRETATION

for

DESTINY PROSPECTING PTY LTD

by J.W. Shields

S.J. Bellette

GEONORTH

October 1987

**EXPLORATION LICENCE 5064**  
**STRUCTURAL INTERPRETATION**  
**J.W. SHIELDS S.J. BELLETTE**

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EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

INTRODUCTION

In 1972, the Northern Territory Geological Survey carried out an assessment of some gossanous quartz veins in an area about 3.2 kms southeast of Mount Wells Battery. This work showed that the veins carried the following:

<u>METAL</u>	<u>RANGE OF VALUES IN g/t</u>	
COPPER	324	- 1120
LEAD	90	- 5660
ZINC	19	- 198
COBALT	<10	- 25
NICKEL	<10	- 30
MOLYBDENUM	<20	
CADMIUM	<2	- 4
TIN	<50	- 13,700
SILVER	<2	- 28
GOLD	0.21	- 2.94

The vein system is described as more than 0.5 kms in length with a width ranging from 0.6 to 3 metres.

Only small intervals of core were assayed for gold.

The purpose of this report is to set out the results of assaying all the core from these holes for gold and arsenic and to give an opinion on the prospectivity of the area based on these results and on structural information gleaned from examination of the core, and aerial photographs.

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

SUMMARY

Three hundred and twenty nine samples, each representing about 1 metre length of diamond drill core were obtained from the 3 holes which were put down.

The highest gold assay obtained is 0.31 g/t and the highest arsenic value 7800 g/t.

A statistical analysis of the arsenic assay results shows a strong result. There are two distinct populations of arsenic. The logical explanation is that one population represents the normal unmineralised rock, and the other population represents the mineralised rock.

Bedding is not discernible in most of the core. However, what is present suggests that an anticline is present and that the vein represents a saddle reef.

An air photograph study gives an anticline to the west of the Mineral Claims, but within Exploration Licence 5092.

Suggestions for further exploration are made.

EXPLORATION LICENCE DESCRIPTION

The collars of the holes are situated just to the east of the McKinlay River about 3.2 kilometres southeast of the Mount Wells Battery.

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

The Exploration Licence is made up of two blocks. A steep sided north - south running ridge is situated to the south and the gold bearing vein is situated on this. The ridge continues into the north but tapers off to flood plain level before reaching a small creek which runs westwards into the McKinlay River.

DIAMOND DRILLING

Diamond drill hole No. 1 was drilled in November 1973. At the surface it had a bearing of 267 degrees magnetic and an inclination of 55 degrees. Tropari Surveys at 45 metres and 90 metres depth gave bearings of 112 degrees magnetic and 082 degrees magnetic with dips of 52 degrees and 48 degrees.

The bearings could not possibly be correct for this hole but could be appropriate for DDH 2.

Diamond drill hole No.2 was drilled in December 1973. At the surface it had a bearing of 087 degrees magnetic and an inclination of 45 degrees. The log says that no surveys were carried out.

Hole 1 reached a depth of 100 metres whilst hole 2 was terminated at 160 metres.

There are apparently no records or logs relating to diamond drill hole No 3. However, the collar for it exists on the ground and the following data was read: Direction: 245 degrees magnetic dip 65 degrees.

The collars of all these holes are shown on Map 2.

EXPLORATION LICENCE 5064STRUCTURAL INTERPRETATIONJ.W. SHIELDS S.J. BELLETTECORE SPLITTING AND ASSAYING

The diamond drill core from the three drill holes is stored at the Core Library, Farrell Crescent, Winnellie, Darwin.

The core was split using a diamond saw and each sample of about 1 metre placed in a plastic sample bag. Altogether 329 samples were taken. Each sample number, beginning at 1 was given the prefix WID.

Following are the details of the samples:

<u>DDH 1(m)</u>	<u>INTERVAL(m)</u>	<u>RECOVERY(m)</u>	<u>PREFIX</u>
6.0 - 7.0	1	1	WID 1
7.0 - 8.0	1	1	WID 2
8.0 - 9.0	1	1	WID 3
9.0 - 10.0	1	1	WID 4
10.0 - 11.0	1	1	WID 5
11.0 - 12.0	1	1	WID 6
12.0 - 13.0	1	1	WID 7
13.0 - 14.0	1	1	WID 8
14.0 - 15.0	1	1	WID 9
15.0 - 16.0	1	1	WID 10
16.0 - 17.0	1	1	WID 11
17.0 - 18.5	1.5	1	WID 12
18.5 - 21.55	3.05	0.5	WID 13
21.55 - 22.55	1	0.6	WID 14
22.55 - 23.5	1.05	0.45	WID 15
23.50 - 24	0.5	0.1	WID 16
24.00 - 25.2	1.2	0.35	WID 17



EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
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25.2	- 25.75	0.55	0.5	WID 18
25.75	- 26.5	0.75	0.5	WID 19
26.5	- 27.45	0.95	0.3	WID 20
27.45	- 28.45	1	1	WID 21
28.45	- 29.7	1.25	1	WID 22
29.7	- 30.9	1.2	1	WID 23
30.9	- 32.15	1.25	1	WID 24
32.15	- 34.0	1.85	1.5	WID 25
34.0	- 40.15	6.15	1	WID 26
40.15	- 38.6	1.55	1.5	WID 27
38.6	- 34.3	4.3	1	WID 28
34.3	- 35.35	1.05	1	WID 29
35.35	- 36.2	0.85	1	WID 30
36.2	- 36.9	0.7	1	WID 31
36.9	- 38.0	1.1	1	WID 32
38.0	- 40.9	2.9	1	WID 33
40.9	- 41.85	0.9	1	WID 34
41.85	- 42.55	0.7	1	WID 35
42.55	- 43.5	0.95	1.5	WID 36
43.5	- 44.25	0.75	1.2	WID 37
44.25	- 44.9	0.65	1.4	WID 38
44.9	- 45.9	1	1	WID 39
45.9	- 47.1	1.2	1	WID 40
47.1	- 47.75	0.65	1	WID 41
47.75	- 48.15	0.4	1.4	WID 42
48.15	- 49.3	1.15	1.2	WID 43
49.3	- 50.4	1.1	1	WID 44
50.4	- 51.2	0.8	1	WID 45
51.2	- 51.8	0.6	1	WID 46
51.8	- 52.45	0.65	1	WID 47
52.45	- 53.45	1	1.1	WID 48

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

53.45	- 54.45	1	1	WID 49
54.45	- 55.45	1	1.1	WID 50
55.45	- 56.45	1	1	WID 51
56.45	- 61.9	5.45	1	WID 52
61.9	- 62.9	1	1.3	WID 53
62.9	- 63.9	1	1.2	WID 54
63.9	- 64.9	1	1.3	WID 55
64.9	- 65.9	1	1.2	WID 56
65.9	- 66.7	0.8	1.2	WID 57
66.7	- 67.45	0.75	1.5	WID 58
67.45	- 68.3	0.85	1	WID 59
68.3	- 69.3	1	1	WID 60
69.3	- 70.6	1.3	1	WID 61
70.6	- 71.6	1	1	WID 62
71.6	- 72.6	1	1	WID 63
72.6	- 73.65	1.05	1	WID 64
73.65	- 74.65	1	1.2	WID 65
74.65	- 75.65	1	1.1	WID 66
75.65	- 76.7	1.05	1.2	WID 67
76.7	- 77.7	1	1.2	WID 68
77.7	- 78.5	0.8	1.2	WID 69
78.5	- 79.2	0.7	1.2	WID 70
79.2	- 81.2	1	1	WID 71
81.2	- 82.0	0.8	1	WID 72
82.0	- 83.0	1	1	WID 73
83.0	- 84.1	1.1	1	WID 74
84.1	- 85.0	0.9	1	WID 75
85.0	- 85.9	0.9	1.3	WID 76
85.9	- 87.25	1.35	1.3	WID 77
87.25	- 88.0	0.75	1.2	WID 78
88.0	- 89.0	1	1.4	WID 79

EXPLORATION LICENCE 5064  
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89.0	- 90.35	1.35	1	WID 80
90.35	- 91.0	0.65	1	WID 81
91.0	- 92.0	1	1	WID 82
92.0	- 93.2	1.2	1.2	WID 83
93.2	- 94.3	1.1	1	WID 84
94.3	- 95.3	1	1	WID 85
95.3	- 96.1	0.8	1	WID 86
96.1	- 97.0	0.9	1	WID 87
97.0	- 98.0	1	1	WID 88
98.0	- 99.0	1	0.8	WID 89
99.0	- 100.0	1	0.7	WID 90

<u>DDH 2(m)</u>		<u>INTERVAL(m)</u>	<u>RECOVERY(m)</u>	<u>PREFIX</u>
9.6	- 10.6	1	1.0	WID 91
10.6	- 12.0	1.4	1.0	WID 92
12.0	- 13.5	1.5	1.5	WID 93
13.5	- 14.25	0.75	1.5	WID 94
14.25	- 18.9	4.65	1.6	WID 95
18.9	- 19.0	0.1	1.2	WID 96
19.0	- 18.5	0.5	1.7	WID 97
18.5	- 22.9	4.4	1.6	WID 98
22.9	- 23.5	0.6	1.7	WID 99
23.5	- 24.5	1	1	WID 100
24.5	- 26.5	2	1.3	WID 101
26.5	- 27.3	0.8	1.5	WID 102
27.3	- 28.45	1.15	1.3	WID 103
28.45	- 29.45	1	1.2	WID 104
29.45	- 30.25	0.8	1.2	WID 105
30.25	- 31.2	0.95	1	WID 106

EXPLORATION LICENCE 5064

STRUCTURAL INTERPRETATION

J.W. SHIELDS S.J. BELLETTE

31.2	- 32.21	1.01	1	WID 107
32.21	- 33.2	0.99	1	WID 108
33.2	- 34.1	0.9	1	WID 109
34.1	- 35.04	0.94	1	WID 110
35.04	- 36.0	0.96	1	WID 111
36.0	- 36.73	0.73	1.5	WID 112
36.73	- 37.9	1.17	1.1	WID 113
37.9	- 39.0	1.1	1.1	WID 114
39.0	- 40.36	1.36	1.4	WID 115
40.36	- 41.36	1	1.6	WID 116
41.36	- 42.1	0.74	1.3	WID 117
42.1	- 43.2	1.1	1	WID 118
43.2	- 44.1	0.9	1	WID 119
44.1	- 45.0	0.9	1	WID 120
45.0	- 46.2	1.2	1	WID 121
46.2	- 47.25	1.05	1.2	WID 122
47.25	- 48.2	0.95	1	WID 123
48.2	- 49.2	1	1	WID 124
49.2	- 50.52	1.32	1	WID 125
50.52	- 51.75	1.23	1	WID 126
51.75	- 52.6	0.85	1	WID 127
52.6	- 53.57	0.97	1	WID 128
53.57	- 54.3	0.73	1	WID 129
54.3	- 55.28	0.88	1	WID 130
55.28	- 56.4	1.12	1	WID 131
56.4	- 57.74	1.34	1.7	WID 132
57.74	- 58.7	0.96	1	WID 133
58.7	- 59.7	1	1	WID 134
59.7	- 60.7	1	1	WID 135
60.7	- 61.7	1	1	WID 136
61.7	- 62.69	0.99	1	WID 137

EXPLORATION LICENCE 5064STRUCTURAL INTERPRETATIONJ.W. SHIELDS S.J. BELLETTE

62.69	- 64.25	1.56	1.5	WID 138
64.25	- 65.2	0.95	1	WID 139
65.2	- 66.2	1	1.1	WID 140
66.2	- 67.2	1	1.2	WID 141
67.2	- 68.04	0.84	1.2	WID 142
68.04	- 69.2	1.16	1.2	WID 143
69.2	- 70.45	1.25	1.4	WID 144
70.45	- 71.4	0.95	1	WID 145
71.4	- 72.4	1	1	WID 146
72.4	- 73.5	1.1	1	WID 147
73.5	- 74.5	1	1.1	WID 148
74.5	- 75.5	1	1	WID 149
75.5	- 76.49	0.99	1.3	WID 150
76.49	- 77.6	1.11	1	WID 151
77.6	- 78.6	1	1	WID 152
78.6	- 79.66	1.06	1	WID 153
79.66	- 80.79	1.13	1	WID 154
80.79	- 82.4	1.61	1	WID 155
82.4	- 84.2	1.8	2	WID 156
84.2	- 86.2	2	2	WID 157
86.2	- 87.2	1	1.5	WID 158
87.2	- 88.85	1.65	1.5	WID 159
88.85	- 89.5	0.65	1	WID 160
89.5	- 91.4	1.9	1	WID 161
91.4	- 92.8	1.4	1	WID 162
92.8	- 93.8	1	1	WID 163
93.8	- 94.5	0.7	1	WID 164
94.5	- 95.3	0.8	1	WID 165
95.3	- 96.3	1	1.3	WID 166
96.3	- 97.3	1	1.2	WID 167
97.3	- 98.3	1	1.2	WID 168

EXPLORATION LICENCE 5064STRUCTURAL INTERPRETATIONJ.W. SHIELDS S.J. BELLETTE

98.3	- 99.27	0.97	1.1	WID 169
99.27	-100.3	1.03	1.1	WID 170
100.3	-101.5	1.2	1.1	WID 171
101.5	-102.4	0.9	1	WID 172
102.4	-103.5	1.1	1.1	WID 173
103.5	-104.7	1.2	1.2	WID 174
104.7	-105.37	0.67	1	WID 175
105.37	-106.5	1.13	1	WID 176
106.5	-107.7	1.2	1.1	WID 177
107.7	-108.6	0.9	1	WID 178
108.6	-109.6	1	1	WID 179
109.6	-110.6	1	1	WID 180
110.6	-111.6	1	1	WID 181
111.6	-112.9	1.3	1	WID 182
112.9	-113.7	0.8	1	WID 183
113.7	-114.6	0.9	1	WID 184
114.6	-115.6	1	1	WID 185
115.6	-116.6	1	1	WID 186
116.6	-117.7	1.1	1	WID 187
117.7	-119.0	1.3	1	WID 188
119.0	-120.1	1.1	1	WID 189
120.1	-120.9	0.8	1	WID 190
120.9	-121.9	1	1	WID 191
121.9	-122.9	1	1	WID 192
122.9	-123.8	0.9	1	WID 193
123.8	-124.5	0.7	1	WID 194
124.5	-125.2	0.7	1	WID 195
125.2	-127.0	1.8	1	WID 196
127.0	-128.0	1	1	WID 197
128.0	-129.0	1	1	WID 198
129.0	-130.0	1	1	WID 199

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

130.0	-131.0	1.	1	WID 200
131.0	-132.82	1.82	1	WID 201
132.82	-134.0	1.18	1	WID 202
134.0	-135.67	1.67	1	WID 203
135.67	-136.7	1.03	1	WID 204
136.7	-137.7	1	1	WID 205
137.7	-138.7	1	1	WID 206
138.7	-139.92	1.22	1	WID 207
139.92	139.5	0.42	1	WID 208
139.5	-140.5	1	1	WID 209
140.5	-141.5	1	1	WID 210
141.5	-142.5	1	1	WID 211
142.5	-143.5	1	1	WID 212
143.5	-144.5	1	1	WID 213
144.5	-145.2	0.7	1.3	WID 214
145.2	-146.2	1	1	WID 215
146.2	-147.4	1.2	1	WID 216
147.4	-149.0	1.6	1	WID 217
149.0	-150.0	1	1.1	WID 218
150.0	-153.0	2	1.2	WID 219
153.0	-154.2	1.2	1.2	WID 220
154.2	-155.0	0.8	1.1	WID 221
155.0	-155.5	0.5	1.1	WID 222
155.5	-156.0	0.5	1.1	WID 223
156.0	-156.5	0.5	1.1	WID 224
156.5	-157.04	0.54	1.1	WID 225
157.04	-157.8	0.76	1.5	WID 226
157.8	-159.0	1.2	1.5	WID 227
159.0	-160.03	1.03	1.3	WID 228

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

<u>DDH 3(m)</u>		<u>INTERVAL(m)</u>	<u>RECOVERY(m)</u>	<u>PREFIX</u>
3	- 4	1	1.2	WID 229
4	- 5	1	1.2	WID 230
5	- 6	1	1.2	WID 231
6	- 7	1	1.2	WID 232
7	- 7.9	0.9	1.1	WID 233
7.9	- 8.5	0.6	1.2	WID 234
8.5	- 9.4	0.9	1.2	WID 235
9.4	- 10.5	1.1	1.1	WID 236
0.5	- 11.5	1	1.2	WID 237
11.5	- 12.5	1	1.1	WID 238
12.5	- 13.5	1	1.2	WID 239
13.5	- 15.0	1.5	1.2	WID 240
15.0	- 16.0	1	1.2	WID 241
16.0	- 17.0	1	1.2	WID 242
17.0	- 18.8	1.8	2.4	WID 243
18.8	- 19.7	0.9	1.2	WID 244
19.7	- 20.6	1	1.2	WID 245
20.6	- 22.0	1.4	1.1	WID 246
22.0	- 22.85	0.85	1.1	WID 247
22.85	- 23.8	0.95	1.1	WID 248
23.8	- 24.5	0.7	1	WID 249
24.5	- 25.3	0.8	1	WID 250
25.3	- 26.1	0.8	1	WID 251
26.1	- 27.5	1.4	1.1	WID 252
27.5	- 29.5	2	1.2	WID 253
29.5	- 30.5	1	1.2	WID 254
30.5	- 32.0	1.5	1.1	WID 255
32.0	- 33.0	1	1.2	WID 256



EXPLORATION LICENCE 5064STRUCTURAL INTERPRETATIONJ.W. SHIELDS S.J. BELLETTE

33.0	- 34.0	1	1.2	WID 257
34.0	- 35.2	1.2	1	WID 258
35.2	- 36.1	0.9	1	WID 259
36.1	- 37.1	1	1	WID 260
37.1	- 38.1	1	1.1	WID 261
38.1	- 39.1	1	1.1	WID 262
39.1	- 40.1	1	1.1	WID 263
40.1	- 41.2	1.1	1.1	WID 264
41.2	- 42.2	1	1	WID 265
42.2	- 43.2	1	1	WID 266
43.2	- 44.2	1	1.2	WID 267
44.2	- 45.2	1	1.2	WID 268
45.2	- 46.35	1.15	1	WID 269
46.35	- 47.4	1.05	1	WID 270
47.4	- 48.5	1.1	1	WID 271
48.5	- 49.1	0.6	1	WID 272
49.1	- 49.9	0.8	1	WID 273
49.9	- 50.9	1	1.1	WID 274
50.9	- 51.85	0.95	1.1	WID 275
51.85	- 52.9	1.05	1	WID 276
52.9	- 53.9	1	1.2	WID 277
53.9	- 54.9	1	1	WID 278
54.9	- 55.7	0.8	1	WID 279
55.7	- 56.7	1	1.1	WID 280
56.7	- 57.0	0.3	1	WID 281
57.0	- 58.7	1.7	1.1	WID 282
58.7	- 59.55	0.85	1	WID 283
59.55	- 60.55	1	1	WID 284
60.55	- 61.3	0.75	1	WID 285
61.3	- 62.0	0.7	1	WID 286
62.0	- 62.9	0.9	1.3	WID 287

EXPLORATION LICENCE 5084STRUCTURAL INTERPRETATIONJ.W. SHIELDS S.J. BELLETTE

62.9	- 63.9	1	1	WID 288
63.9	- 65.3	1.4	1	WID 289
65.3	- 66.3	1	1.1	WID 290
66.3	- 67.5	1.2	1.1	WID 291
67.5	- 68.7	1.2	1.1	WID 292
68.7	- 70.0	1.3	1	WID 293
70.0	- 70.35	0.35	1.5	WID 294
70.35	- 71.3	0.95	1.2	WID 295
71.3	- 72.3	1	1.1	WID 296
72.3	- 73.3	1	1.1	WID 297
73.3	- 73.65	0.35	1	WID 298
73.65	- 74.8	1.15	1.1	WID 299
74.8	- 75.4	0.6	1.1	WID 300
75.4	- 76.5	1.1	1	WID 301
76.5	- 77.3	0.8	1	WID 302
77.3	- 78.1	0.8	1	WID 303
78.1	- 79.0	0.9	1	WID 304
79.0	- 79.98	0.98	1	WID 305
79.98	- 80.6	0.62	1.1	WID 306
80.6	- 81.35	0.75	1.1	WID 307
81.35	- 82.2	0.85	1.1	WID 308
82.2	- 83.1	0.9	1.1	WID 309
83.1	- 84.0	0.9	1.1	WID 310
84.0	- 84.6	0.6	1.1	WID 311
84.6	- 86.0	1.4	1.1	WID 312
86.0	- 87.1	1.1	1.2	WID 313
87.1	- 88.1	1	1.2	WID 314
88.1	- 89.05	0.95	1.2	WID 315
89.05	- 89.7	0.65	1.1	WID 316
89.7	- 90.4	0.7	1	WID 317
90.4	- 91.2	0.8	1	WID 318

**EXPLORATION LICENCE 5064**  
**STRUCTURAL INTERPRETATION**  
**J.W. SHIELDS S.J. BELLETTE**

91.2	- 92.2	1	1	WID 319
92.2	- 93.3	1.1	1	WID 320
93.3	- 94.7	1.4	1	WID 321
94.7	- 95.4	0.7	1	WID 322
95.4	- 96.2	0.8	1	WID 323
96.2	- 97.2	1	1.5	WID 324
97.2	- 98.2	1	1.5	WID 325
98.2	- 99.2	1	1.4	WID 326
99.2	-100.2	1	1.4	WID 327
100.2	-101.2	1	1.4	WID 328
101.2	-102.95	1.75	1.2	WID 329

**ASSAY RESULTS**

Appendix 1 gives a summary of the gold results obtained.

The arsenic results have been plotted on a lognormal probability graph (Appendix 2). This distinctly shows that two populations are present - the normal population would constitute about 60-70 percent of the samples, with the mineralised population being 30-40 percent.

The assay certificates at the end of this report show the gold and arsenic values for each sample.

**STRUCTURAL INFORMATION**

A close study of the core did not yield a great deal of information.

**EXPLORATION LICENCE 5064****STRUCTURAL INTERPRETATION****J.W. SHIELDS S.J. BELLETTE**

However, with the aid of high level photographs, a reliable interpretation of the structure of the area has been possible. This ties in with the information from the drill holes.

The drill hole information shows that the bedding in the holes has a consistent steep dip to the east. A facing, from a graded bedding occurrence, shows that the beds are not overturned.

The aerial photograph shows that a very tight anticline runs about north-south through the western part of Exploration Licence 5092.

**STRUCTURAL INTERPRETATION**

It is apparent from the structural study that the mineralised zone where drilled, is further away from the anticline axis than further to the south.

The surface gold values also increase southwards as the zone gets closer to the anticline axis.

The gold prospects with the best potential in the Pine Creek Geosyncline are found in coarse grained sedimentary rocks in the crests of anticlines.

**PROSPECTIVITY OF CLAIM AREAS**

EXPLORATION LICENCE 5064  
STRUCTURAL INTERPRETATION  
J.W. SHIELDS S.J. BELLETTE

It would appear that the Licence area contains a quartz vein or saddle reef with values up to 2.94 g/t Au and with width 0.5 to 3 metres.

The country rock, consisting of shale and fine grained greywackes shows arsenic mineralisation with quite minor gold mineralisation, in the three diamond drill holes.

However, these were drilled where the vein is farthest away from the anticline axis. Therefore, it could be surmised that gold values could increase towards the anticline axis.

The prospectivity should increase towards the anticline axis, and the axis itself is within the Exploration Licence.

CONCLUSIONS AND RECOMMENDED  
FUTURE EXPLORATION

The diamond drill hole assaying and interpretation of structure in the core has resulted in a new interpretation of where gold mineralisation might be found in the area.

To further test this possibility, it is recommended that an outcrop search and identification programme be completed in the first instance. This should be confined to the area where the anticline axis is expected to be.

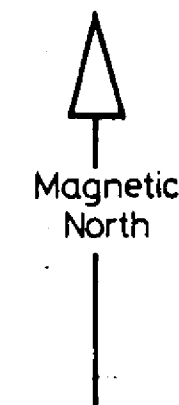
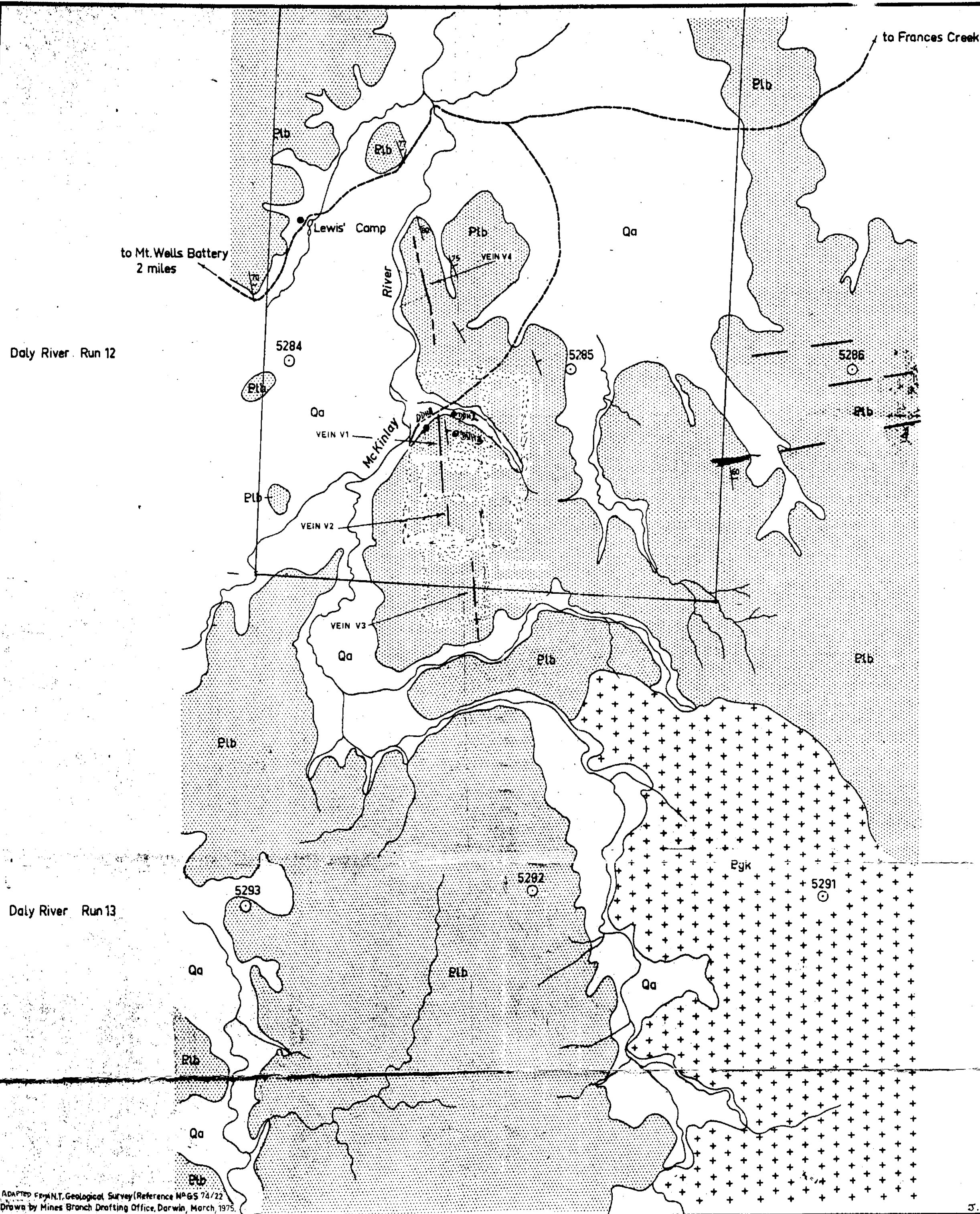
Low level photography should be purchased to carry out this efficiently.

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This should be followed by a shallow vertical diamond drilling programme to identify any coarse grained sedimentary rocks and to test for gold and arsenic.

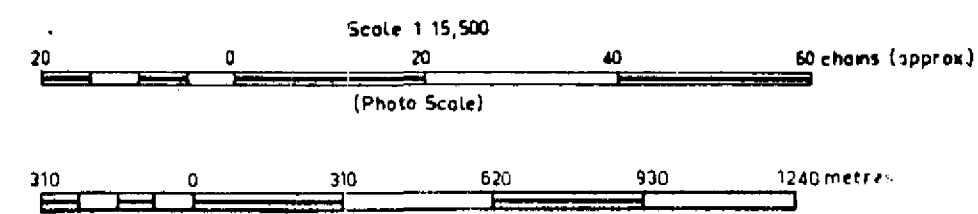
The direction of further exploration would depend on the results of the above work.





DESTINY PROSPECTING PTY LTD.

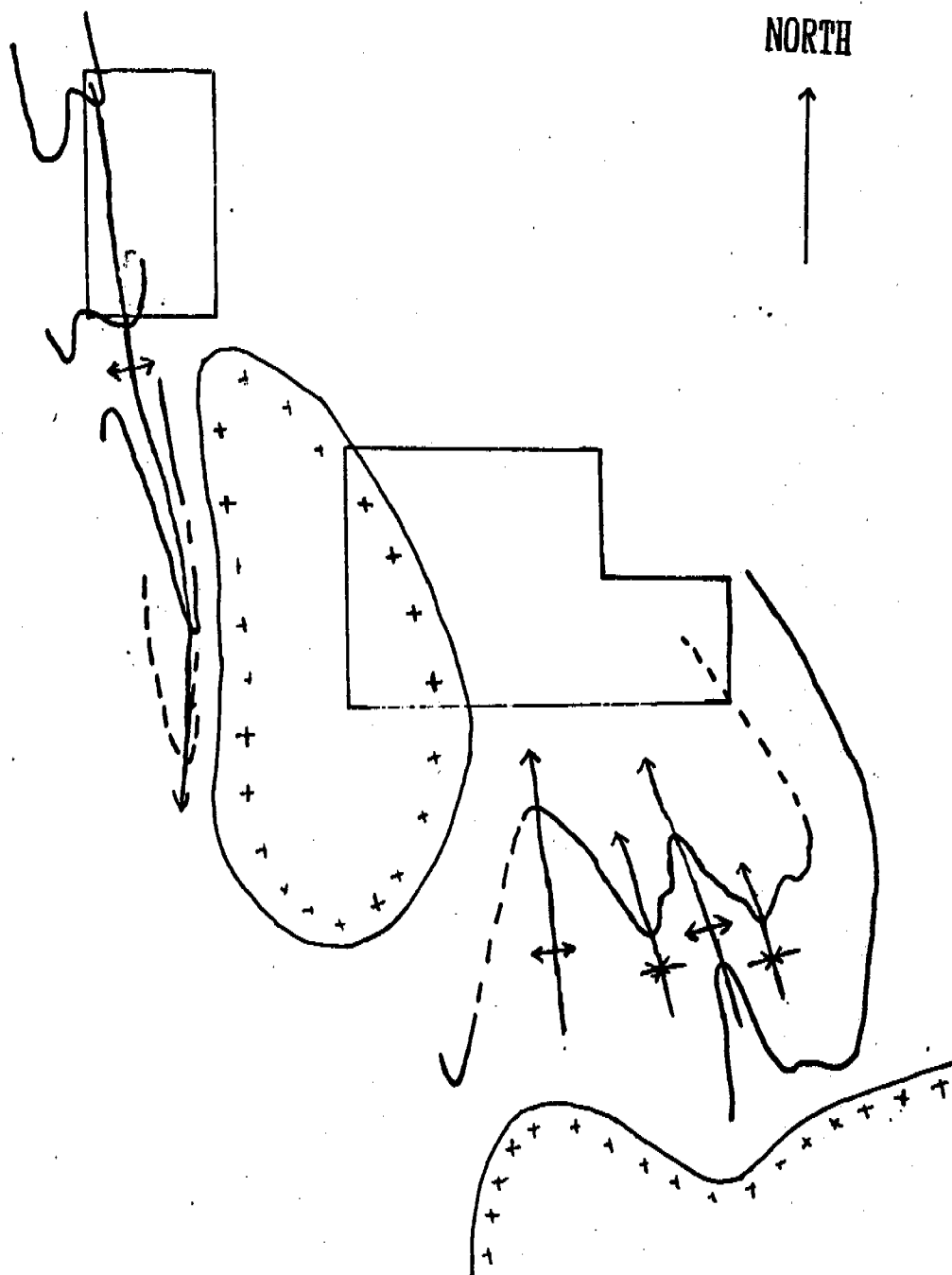
# REGIONAL GEOLOGY EXPLORATION LICENCE 5092









## Reference

- QUATERNARY Qa Soil and alluvium
- LOWER PROTEROZOIC Pgk McKinlay Granite Biotite-hornblende Granite
- Plb Burrell Creek Formation Greywacke, siltstone, slate.
- Geological boundary, position approximate.
- Strike and dip of strata
- Vein
- Photo centre and number
- Vehicle track
- Lease datum peg position approximate





# LEGEND

-  GRANITE OUTCROP
-  BEDDING TREND
-  PLUNGING ANTICLINE
-  PLUNGING SYNCLINE
-  EXPLORATION LICENCE BOUNDARY
-  MINERAL CLAIM BOUNDARY

DESTINY PROSPECTING PTY. LIMITED

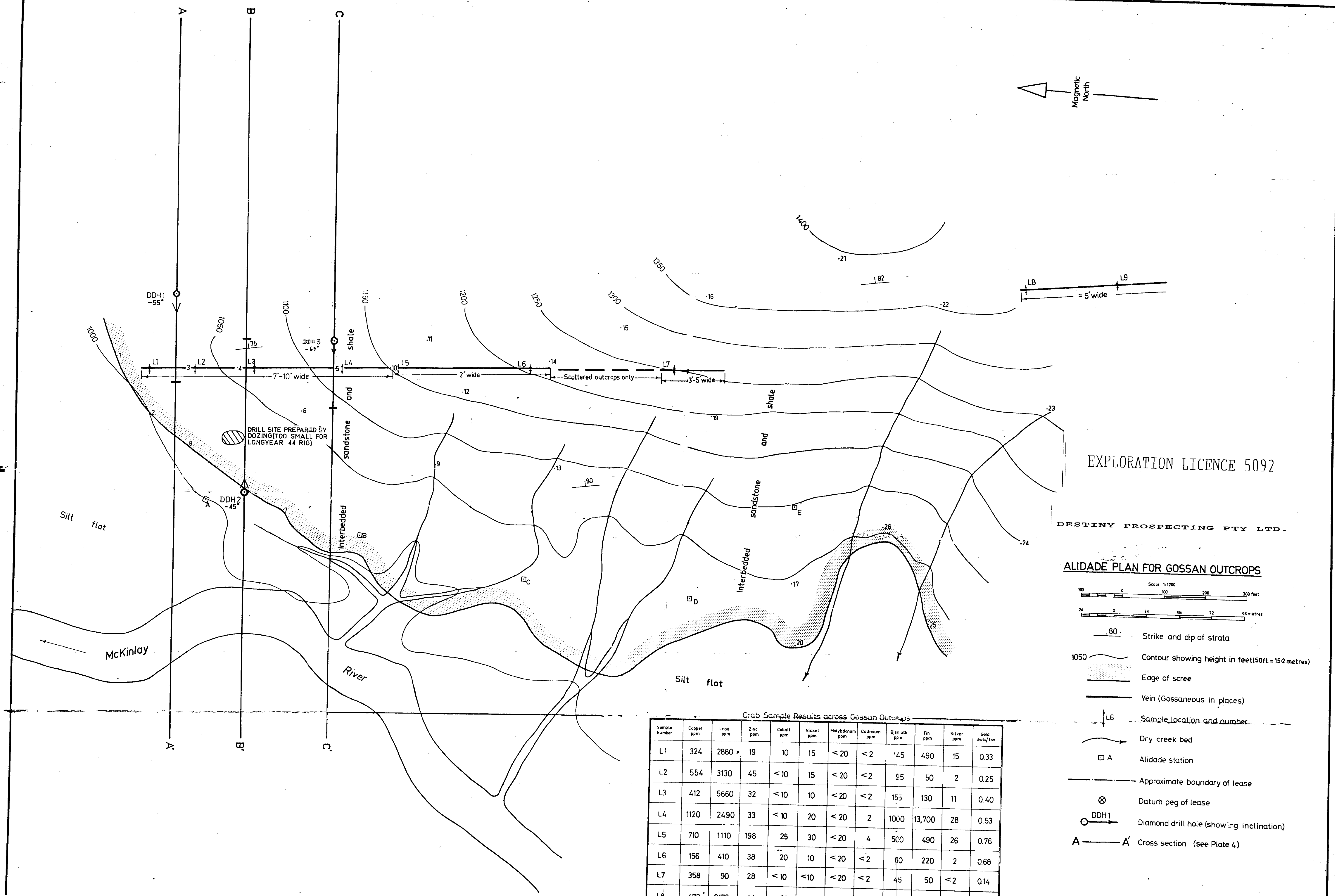
SKETCH MAP SHOWING  
STRUCTURAL INTERPRETATION

GEOLOGIST: J. SHIELDS DATE: Oct '87

SCALE: APPROX 1:100 000

MAP 3

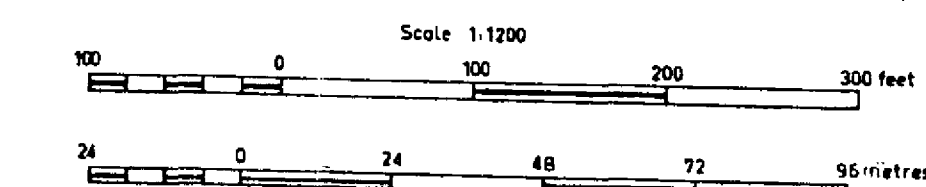
CR 88 / 132



EXPLORATION LICENCE 5092

DESTINY PROSPECTING PTY LTD.

ALIDADE PLAN FOR GOSSAN OUTCROPS

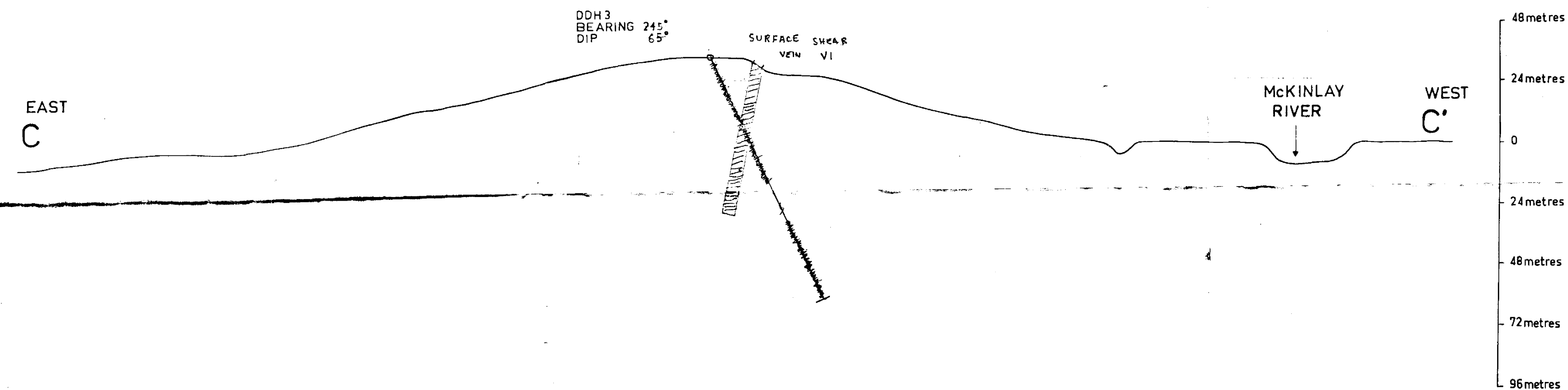
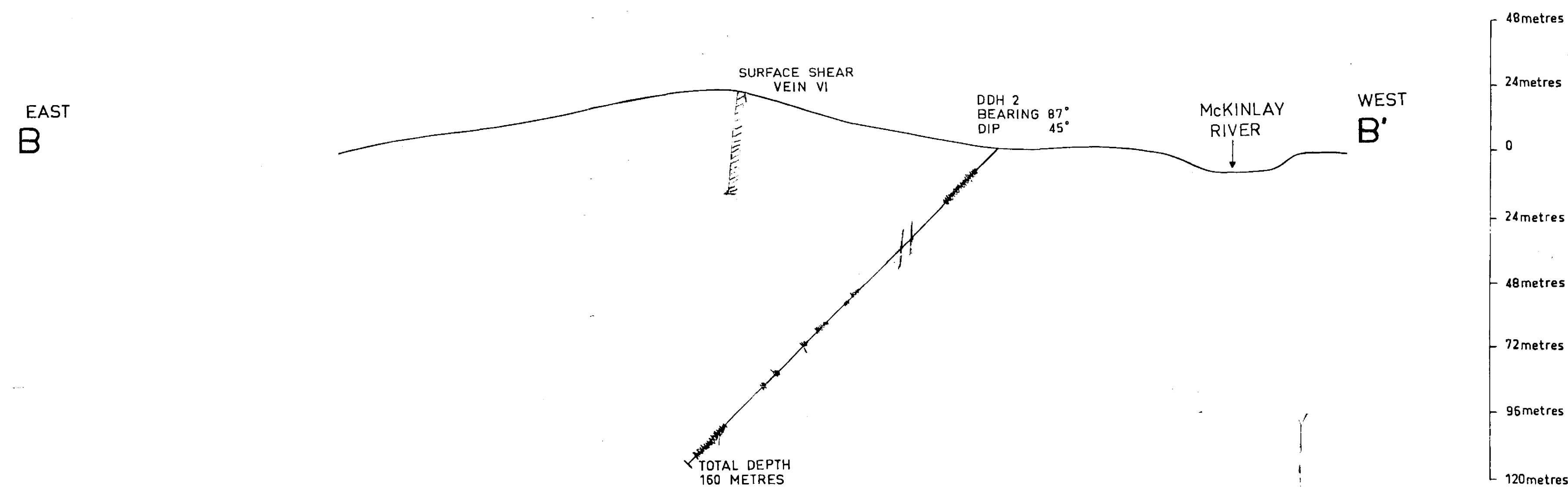
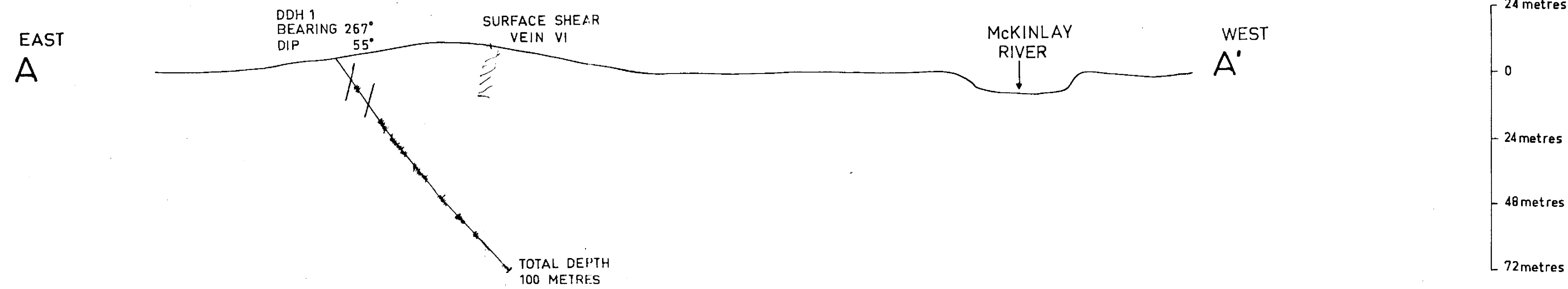


- 80 Strike and dip of strata
- 1050 Contour showing height in feet (50ft = 15.2 metres)
- Edge of scree
- Vein (Gossaneous in places)
- L6 Sample location and number
- Dry creek bed
- A Alidade station
- Approximate boundary of lease
- Datum peg of lease
- DDH1 Diamond drill hole (showing inclination)
- A-A Cross section (see Plate 4)

Grab Sample Results across Gossan Outcrops

Sample Number	Copper ppm	Lead ppm	Zinc ppm	Cobalt ppm	Nickel ppm	Molybdenum ppm	Cadmium ppm	Bismuth ppm	Tin ppm	Silver ppm	Gold dwts/ton
L1	324	2880	19	10	15	< 20	< 2	145	490	15	0.33
L2	554	3130	45	< 10	15	< 20	< 2	95	50	2	0.25
L3	412	5660	32	< 10	10	< 20	< 2	155	130	11	0.40
L4	1120	2490	33	< 10	20	< 20	2	1000	13,700	28	0.53
L5	710	1110	198	25	30	< 20	4	500	490	26	0.76
L6	156	410	38	20	10	< 20	< 2	60	220	2	0.68
L7	358	90	28	< 10	< 10	< 20	< 2	45	50	< 2	0.14
L8	472	2170	44	20	15	< 20	4	145	720	5	0.79
L9	488	2010	63	20	15	< 20	< 2	50	< 50	8	1.92

Note: < indicates less than detection limit.



EXPLORATION LICENCE 5092

DESTINY PROSPECTING PTY LTD.

LEWIS' PROSPECT  
CROSS SECTIONS THROUGH DRILL HOLES

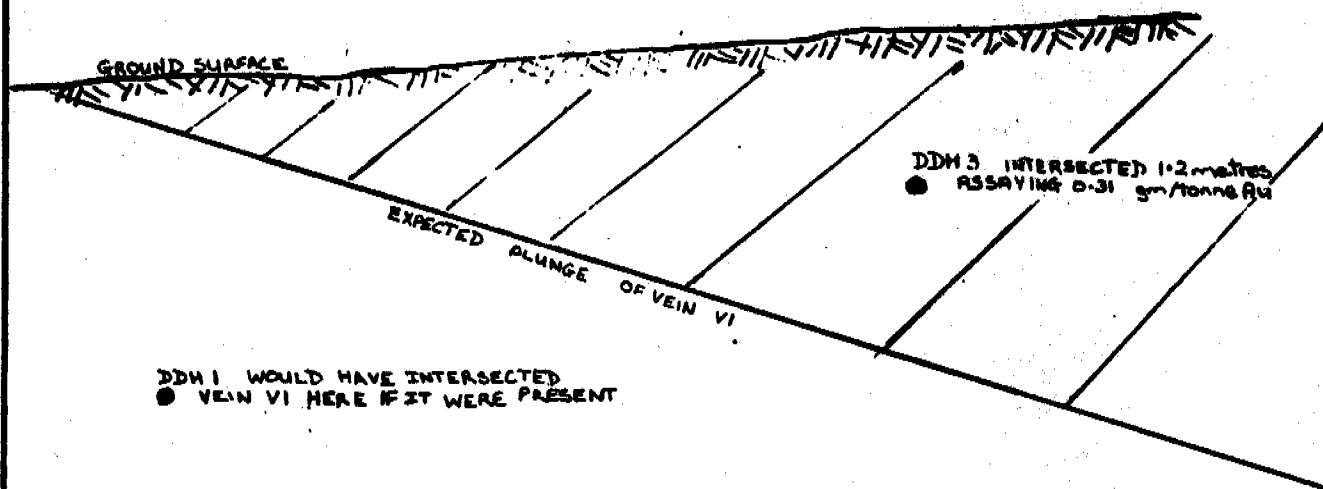
SCALE 1:1200



REFERENCE

- Ground surface
- DDH 2  
Diamond drill hole
- Bedding
- ANOMALOUS ARSENIC  
VALUES IN CORE

45



DDH 1 WOULD HAVE INTERSECTED  
● VEIN VI HERE IF IT WERE PRESENT

DDH 2 WOULD HAVE INTERSECTED  
● VEIN VI HERE IF IT WERE PRESENT

SCALE



DESTINY PROSPECTING PTY. LIMITED

LONGITUDINAL SECTION  
ALONG VEIN VI SHOWING  
DDH INTERSECTIONS

GEOLOGIST: J. SHIELDS DATE: Oct '81

MAP 6

CR 88 / 132