ANNUAL AND FINAL REPORT

EXPLORATION LICENCE 6474

WATTS CREEK NORTH

ROSEQUARTZ MINING NL

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1. SUMMARY

Exploration Licence 6474 was granted to Rosequartz Mining NL on 9th June, 1989 for a period of three (3) years.

It was proposed to carry out detailed geological mapping over the area in order to define structural targets within the Wildman Siltstone and overlying Koolpin Formation. Further surface sampling was also proposed over areas of gossan or vein quartz.

Due to funding restrictions imposed on Rosequartz Mining NL shortly after the grant of this licence the carrying out of the programme was deferred pending an assessment of the viability of the company's various properties.

A literature and geological review was undertaken of this area and the decision was made to surrender the licence. The licence was surrendered on 17th July, 1990.

2. INTRODUCTION

Exploration Licence 6474 consisting of three blocks is located on the Union Reef 1:50,000 mining tenement map and is located approximately 30 km due north of Pine Creek (see figure 1).

Access is east from the Mt. Wells tin mine via graded tracks for 13 kilometres, or north from Pine Creek along the Frances Creek mine then via exploration and graded pastoral tracks for 16 kilometres.

Topography comprises a series of northwest striking ridges and valleys with approximately 80 metres local relief, which reflect the local geological structure and lithologies.

3. GEOLOGY

The geology of the Pine Creek Basin has been well documented by the BMR eg Wallace et al (1985), Needham et al (1980).

The Lower Proterozoic sequence was deposited by alternating shallow marine and continental environments in an intracratonic basin setting. Following intrusion by conformable dolerite sills, a major period of deformation and regional metamorphism associated with batholithic and syntectonic granite intrusion produced a series of tight, upright, northwest trending anticlines (See Table 1).

EL 6474 is located within the Upper Wildman Siltstone/Koolpin Formation/Gerowie Tuff stratigraphic interval. Structural trends define a series of tight northwest trending synclines and anticlines.

4. WORK CARRIED OUT

When funding restrictions were imposed on Rosequartz Mining NL during the latter half of 1989 all proposed field work was deferred.

A literature review and geological re-assessment of this area was undertaken and it was considered that the area was "offline" with the main Watts Creek gold mineralisation. Accordingly the decision was made to surrender the licence.

5. EXPENDITURE

During the term of the licence expenditure totalled $2,100.00.

TABLE 1

EARLY PROTEROZOIC STRATIGRAPHY OF ADELAIDE RIVER/PINE CREEK AREA

GROUP	FORMATION	MEMBER	LITHOLOGIES	THICKNESS (m)
Finniss River	Burrell Ck		Greywacke,siltstone mudstone,rare chert, iron formation and conglomerate.	3000
South Alligator	Mt Bonnie	Upper	Mudstone,siltstone chert,iron formation.	100-250
		Lower	Greywacke,mudstone, siltstone,chert, carbonaceous mudstone, rare conglomerate.	50-100
	Gerowie Tuff		Chert,mudstone siltstone.	200-400
	Koolpin	Upper	Carbonaceous mudstone, mudstone,siltstone.	50-150
		Middle	Iron formation, mudstone,carbonaceous mudstone,siltstone.	30-100
		Lower	Carbonaceous mudstone, mudstone,siltstone, limestone.	0-250
Mount Partridge	Wildman Siltstone		Mudstone,phyllite siltstone,carbonaceous mudstone,sandstone.	200-400
	Mundogie Sandstone		Quartzite,arkose, pebble conglomerate, mudstone, siltstone.	500

NB: Thickness, as above, are for Type Areas only.

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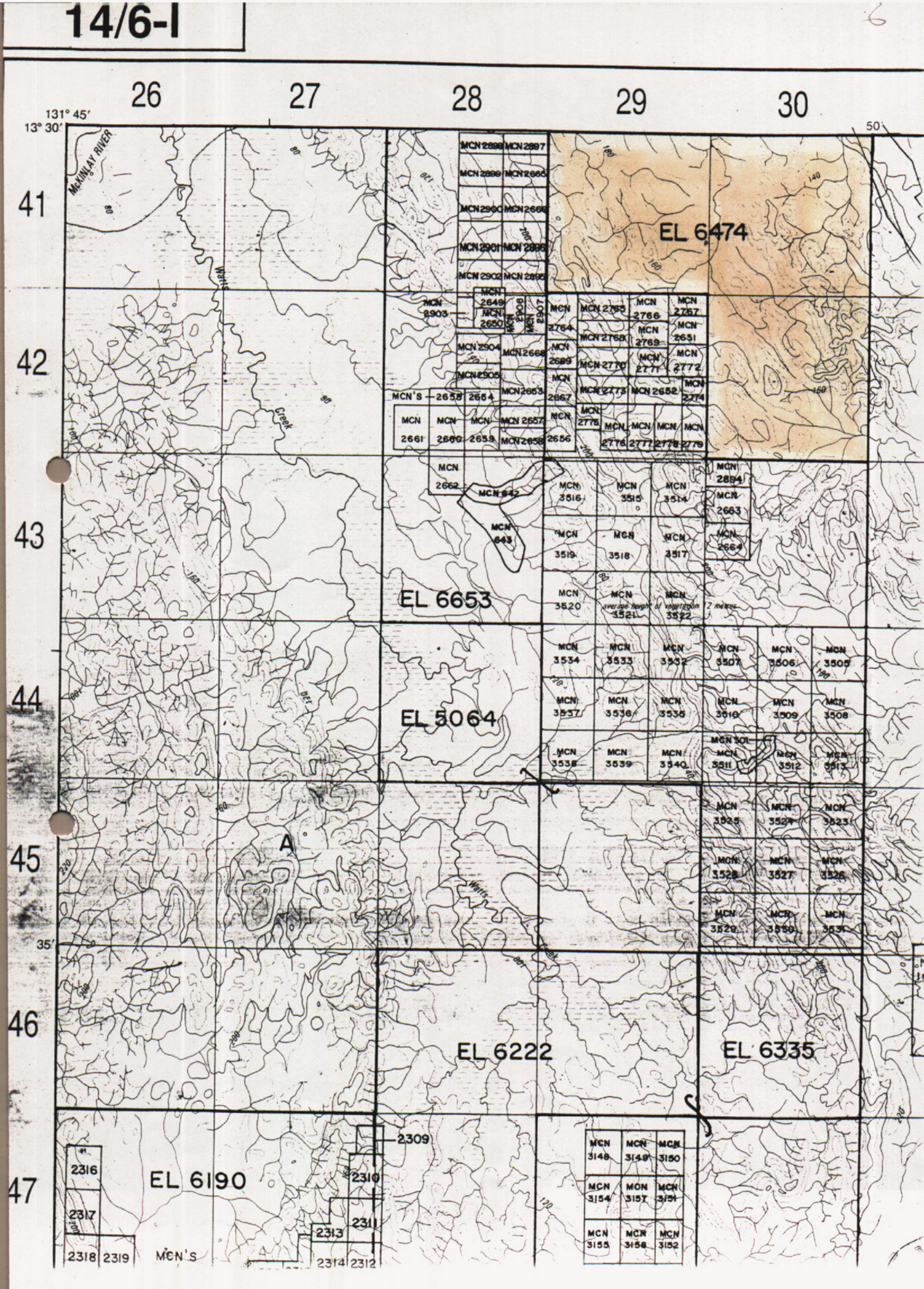
26
27
28
29
30
131° 45'
13° 30'
50'
41
42
43
44
45
35'
46
47
McKINLAY RIVER
Watts Creek
EL 6474
EL 6653
EL 5064
EL 6222
EL 6335
EL 6190
MCN 2898
MCN 2897
MCN 2899
MCN 2665
MCN 2900
MCN 2666
MCN 2901
MCN 2896
MCN 2902
MCN 2895
MCN 2649
MCN 2903
MCN 2650
MCN 2906
MCN 2907
MCN 2904
MCN 2668
MCN 2905
MCN 2653
MCN'S 2658 2654
MCN 2661
MCN 2660
MCN 2659
MCN 2657
MCN 2658
MCN 2662
MCN 642
MCN 643
MCN 2656
MCN 2667
MCN 2689
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MCN 2773
MCN 2652
MCN 2774
MCN 2775
MCN 2776
MCN 2777
MCN 2778
MCN 2779
MCN 3516
MCN 3515
MCN 3514
MCN 2894
MCN 2663
MCN 3519
MCN 3518
MCN 3517
MCN 2664
MCN 3520
MCN 3521
MCN 3522
average height of vegetation 2 metres
MCN 3534
MCN 3533
MCN 3532
MCN 3507
MCN 3506
MCN 3505
MCN 3537
MCN 3536
MCN 3535
MCN 3510
MCN 3509
MCN 3508
MCN 3538
MCN 3539
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MCN 3511
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MCN 3530
MCN 3531
MCN 3148
MCN 3149
MCN 3150
MCN 3154
MCN 3157
MCN 3151
MCN 3155
MCN 3158
MCN 3152
2316
2317
2318
2319
MCN'S
2309
2310
2311
2313
2314
2312
A

PINE CREEK

NORTHERN TERRITORY MAP 2