

Appendix 1: Review of the “New Waterdrum” Prospect

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Summary

The New Waterdrum prospect is located just off the south-west corner of IsMins current Compass Creek tenement (EL-25399). A new 4 sub-block EL (EL-29068) has been granted over the area. A review of past work on the New Waterdrum prospect provides encouragement for a gold discovery. The Woolwonga mine, which produced 0.24 million ounces of gold, is located seven kilometres to the northwest of New Waterdrum prospect, and is on the same structural and fold trend.

The New Waterdrum prospect resulted from the discovery of a high gold assay (33.1 g/t Au) from a vein sample collected by Magnum Resources in 1987. Subsequent soil and rock chip sampling provided encouraging results (rocks up to 1.97 g/t Au and two high soils of 0.52 & 0.98 g/t Au). The presence of a strong magnetic high just to the south of this prospect was also recognised by Robertson Australia as a positive exploration target (skarn type target next to granite, similar to Mavis area). The seven shallow RC holes (35 to 50m) drilled by Magnum Resources on the New Waterdrum prospect may not have been an adequate test for this prospect (best interval was 3m @ 0.33 g/t Au). It is suggested that the Magnum drilling may have been testing the wrong vein trend, and that such shallow holes were just scratching the surface.

Contract studies by Colin Thomas of Robertson Australia (circa 1995) recognised that the magnetic anomaly south of the New Waterdrum prospect (and the magnetic high south of the Mavis mine) were prime exploration targets due to the potential for skarn deposits in contact with the granite. Thomas drew an analogy with other magnetic related gold mines such as Iron Blow, Mount Bonnie and Mount Todd. Given our current knowledge of the magnetic anomaly south of Mavis, it is possible that the New Waterdrum magnetic body could also be related to the presence of large quartz-pyrrhotite veins (and other sulphides) coming off the granite.

Introduction

The New Waterdrum prospect is located about 1.5 km west-southwest from the SW corner of IsMins Compass Creek tenement (EL-25399). The New Waterdrum prospect is located in IsMins new EL-29068 which consists of four sub-blocks covering about 13 square kilometres.

Exploration was conducted in the Waterdrum area by Magnum Resources/Magnum Gold NL from 1983 to 1992. The Magnum tenements consisted of eleven mineral claims and a small exploration licence (EL). During the mid to late 1990s work was done in the Waterdrum and Mavis areas on EL-8047 (52 sub-blocks) which was originally taken up by North Mining Limited in 1993 and explored by Geopeko. Later EL-8047 changed hands through several companies including Platsearch, Solomon Pacific, Acacia Resources and AngloGold.

Magnum Resources limited (1983 – 1992)

Mineral Claims N53-58, N1314-16, N3471 & N3737 and EL-4834

According to the McKinlay River 1:100,000 scale geology map, the original Waterdrum prospect is located about 1,400m north-west from the SW corner of IsMins Compass Creek tenement block. This puts the location at around 782,500m E and 8,514,300mN, and is well within EL-24051 which is held by Crocodile Gold Australia Pty Ltd. The prospect is described as old workings on a prominent hill and on a major anticlinal axis. The name Waterdrum Prospect was derived from the presence of an old 44 gallon water drum located on top of the hill (Waterdrum Hill). The prospect consists of five hand dug costeans and several shallow pits. Magnum reported that three rock chip samples from this site only returned a high of 0.04 g/t Au; so the purpose of the diggings was considered unclear (gold, tin or base-metals).

The current NTGS reference for the Waterdrum prospect is no-longer the site noted above, but rather the site of Magnum's high gold assay (36.1 & 30.0 g/t Au = Avg 33.1 g/t Au) from a quartz vein located about 1,450m west of IsMins SW corner (at 781,865mE and 8,513,445mN MGA zone 52). This puts the sample site about 75m south of the southern boundary, and 330m east of the eastern boundary of ground held by Crocodile Gold. This site is within IsMins new EL-29068. The magnetic anomaly lies further to the south, well within IsMins new EL.

Magnum Resources held eleven mineral claims and a one sub-block exploration licence (EL) over the "Waterdrum" area between 1983 and 1992. Magnum noted that many quartz veins occur throughout the area, and in 1986, a rock chip sampling program (26 samples), found one localised area with several assays over 1.0 g/t Au. This was to become the New Waterdrum prospect.

The prospect is described as a north-westerly trending quartz reef containing localised masses of pale green scorodite (arsenic oxide), hosted in the Mount Bonnie Formation. Magnum's structural mapping showed the vein is located near the axis of a north plunging syncline. Initial rock chip sampling (7 or 8 samples) returned three assays over 1.0 g/t Au (averaged results = 33.1, 7.5 & 1.6 g/t Au) and 2 or 3 other assays in the 0.50 g/t Au range.

Work conducted by Magnum Resources

Mapping

Magnum conducted mapping at 1:10,000 scale over the area. The exposed rock units were described as the Mount Bonnie Formation (siltstones, greywacke and BIFs), the Gerowie Tuff (black flinty tuffaceous siltstone & mudstone) and a Zamu dolerite sill within the Gerowie Tuff. Structurally, three fold axes were defined, all trending north-south and plunging steeply to the north (up to 60°).

A major NNW trending fault cutting the Mount Bonnie Formation occurs just to the east of Magnum's tenements. This fault is close to the west boundary of the Prices Springs Granite. Quartz veining appears along this fault for over 2 km, and sampling by Rose Quartz Mining NL (15 samples circa 1990) returned only two anomalous gold assays (0.13 & 0.31 g/t Au) from the quartz vein.

Numerous quartz veins occur throughout Magnum's tenements, both in fold axes and apparently unrelated to folds. Most veins are clean white quartz with minor limonite coatings. Veins in fold axes commonly contain tourmaline and gossanous material, but generally only trace amounts of gold are present.

Bulk Drainage Sampling for Heavy Mineral Separation

Magnum collected a total of 21 bulk drainage samples (50 to 100 kg, Avg 65 kg) for heavy mineral separation using a Knelson concentrator. The gold grains were examined and described based on size and number. Gold was found in 17 of the 21 samples, but no "major" concentrations were found. This led Magnum to conclude that: although the bulk samples indicated the widespread occurrence of gold, it did not indicate specific areas worthy of follow-up. Magnum further concluded that the source of the gold was most likely from redistribution of paleosurface alluvials.

Rock Chip Sampling

Between 1984 and 1986, a total of 47 rock chip samples were collected over the tenements. Detectable gold is common (>0.01 g/t Au), but the only significant assays (>1.0 g/t Au) were from the one quartz vein outcrop noted above (now referred to as the New Waterdrum prospect).

Soil Sampling

In 1989 Magnum conducted a soil sampling program (217 x -80# samples) using selected lines over areas of interest such as the Waterdrum prospects (old & new) and the magnetic high to the southeast of the New Waterdrum prospect. Both Waterdrum prospects returned local highs of >200 ppb Au with weakly anomalous arsenic (up to 63 ppm As). The magnetic high area only returned one sample >20.0 ppb Au, but did have four anomalous arsenic values (50 – 200 ppm As).

Mapping, Rock Chip Sampling and RC Drilling on New Waterdrum Prospect

Magnum conducted a detailed mapping program (1:250 scale) and rock chip sampling of veins (37 samples), and drilled seven shallow RC holes to test the high grade vein (33.1 g/t Au) and extensions to the NW and SE.

The following description is taken from Magnum's Final Report by B.L. Jenkins (Dec 1992):

The area exhibits moderate outcrop of greywacke, siltstone, carbonaceous mudstone and quartz. Bedding strikes north-west south-east (140° to 170° magnetic) with dips in the range of 60° to vertical to the south-west. Cleavage is very steep ($80-90^{\circ}$) to the south-west. The main quartz zone trends north-west. Areas of smaller quartz outcrop and rubble branch to the north-east off the main zone and may be controlled by the greywacke units.

Thirty-six samples were taken from outcrop over the mapped area. Of these, five samples returned gold assays greater than 0.5 ppm (maximum of 1.97 ppm) and a further twelve produced assays in the range of 0.1 to 0.5 ppm. From these results it was evident that although the area was anomalous in gold, there was little in the way of ore grade material at the surface.

Despite the disappointing surface sampling, Magnum decided to drill the vein zone in case the low rock chip results were due to surface depletion of gold (leaching). Seven reverse

circulation (RC) drill holes between 35m and 50m depth (total 289m), were drilled along the vein trend. All holes were inclined at -60° , with five drilled to the SW and two drilled to the NE. Three holes (WDRC-001, 002 & 007) were drilled under the vein outcrop with good gold mineralisation. However one of these (WDRC007) did not reach the target due to caving. Two holes were collared 40m to the south-east (WDRC-003 & 006), and single holes were collared 40m and 80m to the north-west (WDRC-004 & 005 respectively) from the high gold/vein site.

WDRC-001 intersected 6m of quartz vein (6 – 12m) with 3m @ 0.33 g/t Au where it entered one side of the vein. The vein and wall rock were weakly anomalous (0.02 - 0.09 g/t Au) for at least 3m on either side of the 0.33 g/t Au zone. WDRC-002 was drilled under WDRC-001, and intersected quartz veining about 40m down-hole with a 1m interval @ 0.12 g/t Au, with weakly anomalous material (0.02 – 0.04 g/t Au) for 1-2m either side. [Note: parts of drill logs are missing]. The other drill holes to the north-west and south-east only intersected sporadic intervals of weakly anomalous gold (max 0.18 g/t Au) presumably in quartz veins (most of logs missing).

Reviewer's Comment

The main problem with the drill holes to the NW and SE of the main vein outcrop is that they were positioned on a grid basis to test the assumed NW-SE trending mineralised vein. However the rock chip sampling shows the best anomalous vein assays (0.14 to 0.82 g/t Au) appear to line up on N-S to NNW trend. Therefore it is possible the four holes away from the main vein outcrop could have tested the wrong vein trend. Hence the potentially mineralised vein zone remains to be tested.

EL-8047

North Mining, Platsearch, Solomon Pacific, Acacia & AngloGold

EL-8047 consisted of 52 sub-blocks that covered an area to the west and south of IsMins present Compass Creek tenement. EL-8047 covered prospects known as Gas Pipeline, Waterdrum Hill, New Waterdrum and the southern part of the Mavis prospect. This review of past exploration will be confined to the New Waterdrum prospect. The other prospects are currently held by major explorers in the region, and thus it is unlikely they would be available for joint venture. The area south of Mavis is now controlled by IsMins through the Spundaily agreement.

EL-8047 was taken out by North (Expl) Limited in November 1993. In October 1995 North sold the tenement to Platsearch NL. Then in April 1996 Platsearch gave Solomon Pacific Resources the right to earn 65% of the project. In June 1996 Acacia Resources Limited acquired all of Solomon's interests and then negotiated to earn 100% of the project with Platsearch reverting to a royalty interest. In late 1999, AngloGold Australia Limited assumed control of the project following the takeover of Acacia Resources Limited. With the closure of the nearby Brocks Creek Mine, AngloGold decided to relinquish the tenement on the expiration date in November 2001.

Most of the field exploration by North Limited was concentrated on the Gas Pipeline prospect which is currently held by Crocodile Gold, so will not be discussed here. No work is recorded by North on the New Waterdrum prospect or the Mavis area.

Platsearch commissioned Colin Thomas of Robertson Australia to do a photogeology study of the entire tenement. This study recognised the two spot magnetic anomalies, one south of the Mavis mine and the other south of the New Waterdrum prospect, as prime exploration targets. Both are located near the granite contact. The analogy for these magnetic anomalies was made with the Iron Blow and Mount Bonnie mines, and the pyrrhotite bearing Mount Todd mine. The Mount Todd mine is an interesting analogy as it is known to have a magnetic and electromagnetic signature due to the pyrrhotite (and other sulphides).

In 1996 Acacia Resources conducted a major soil sampling program (467 samples) which returned the two highest values in the vicinity on the New Waterdrum prospect. These values were considerably higher than any other anomalies elsewhere on the tenement. A value of 523 ppb Au was returned from the New Waterdrum prospect, while a value of 983 ppb Au occurs about 850m to the SE of New Waterdrum prospect, coincident with the north end of the spot magnetic high and a north plunging anticlinal axis. Both sites have several other moderate gold and arsenic values surrounding them. Apart from some additional short soil lines, there does not appear to have been any further exploration by Acacia Resources or AngloGold in the New Waterdrum area. These results reinforce (and build on) the earlier anomalous results received by Magnum Resources in this area.

Reviewer's Comment

Despite the weak shallow drill results (by Magnum), it may be worthwhile to drill some deeper holes to test the magnetic anomaly and major fold structures, as well as the apparent different mineralised trend (N-S).

During 1998 about 46 rock chip samples were collected (by Acacia Resources) from quartz veins around and to the south of the Mavis mine. Ten of these samples returned assays better than 50 ppb Au, and three of these were over 100 ppb Au (605, 405 & 107 ppb Au). Anomalous values for arsenic, copper and lead are also present.

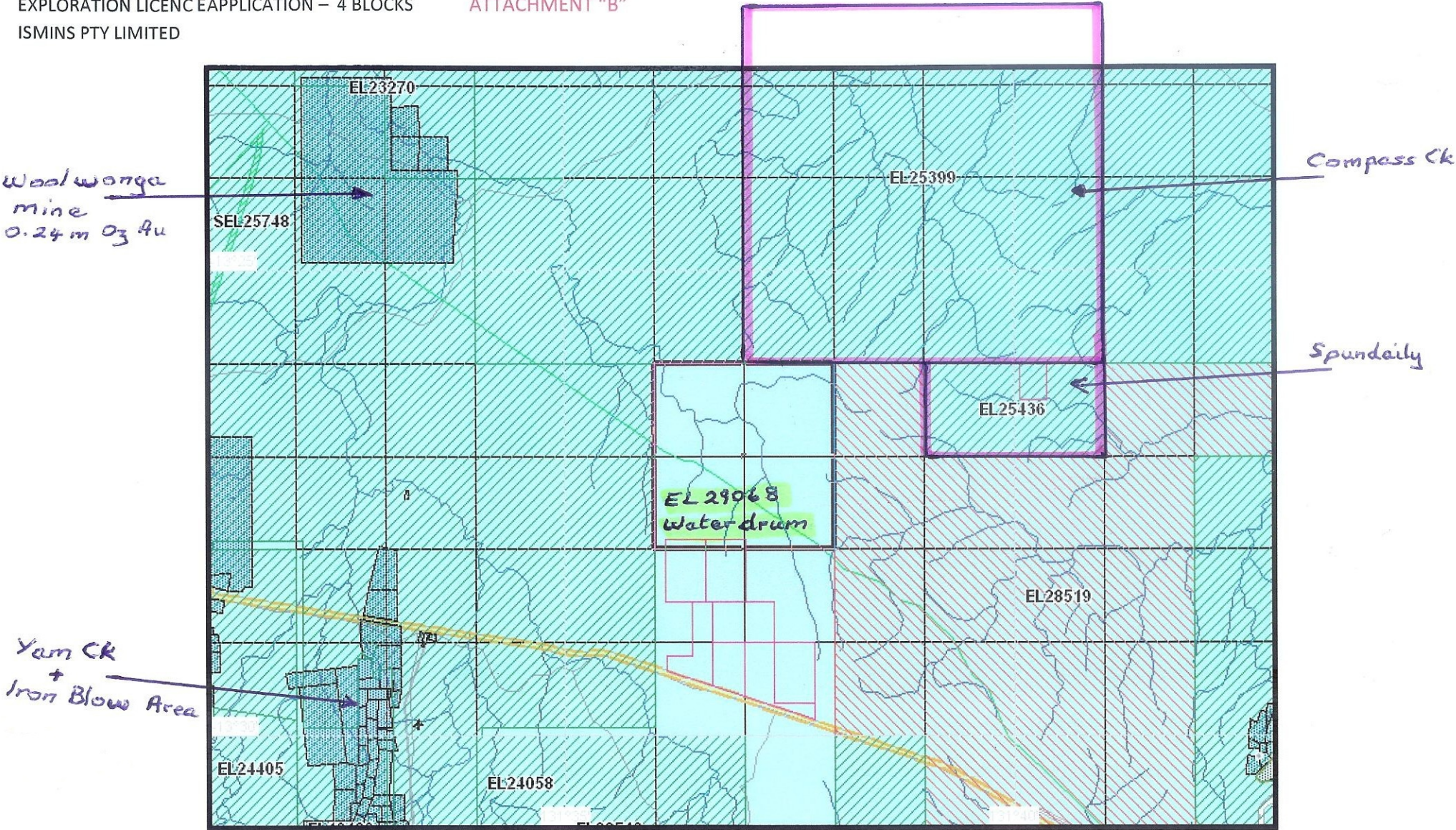
EL-25026

Held by Michael Morawa

This tenement consisted of about 36 sub-blocks and bordered both IsMins and Spundaily's southern boundaries, and extended slightly further east and west than these tenements. EL-25026 covered most of the Prices Springs Granite and various Finniss and South Alligator Group sediments around the edges of the granite. Three spot magnetic highs occur on the edge of the granite. The tenement also extended a considerable distance south of the granite where it covered the South Alligator Group which has reasonable prospectivity over a sizeable area (7 x 3.5 km). This southern area contains the Burrundie copper prospect which occurs on a major NNW trending fault structure that may well be loci for other mineralised systems. Michael Morawa had his EL ventured out to a uranium explorer (Great Western Exploration Ltd) who appears to have concentrated their work in the southern part of the tenement (south of Burrundie). Therefore it is likely that no significant work has been done in the New Waterdrum area during the life of this tenement. Several Mining Lease applications are present on IsMins south boundary of the Waterdrum EL, and it is likely these were taken out by Michael Morawa or Great Western Exploration, prior to releasing EL-25026.

Description of Attached Figures

1. (Page 7) NTGS tenement plan showing the Waterdrum EL and the Compass Creek and Spundaily ELs. Also shows the Woolwonga and Yam Creek mine areas.
2. (Page 8) The second figure shows the RTP airborne magnetics with the IsMins tenements outlined in black. The broad central low magnetic response represents the exposed granite and presumed shallow underlying granite. There are 4 or 5 spot magnetic highs around the edge of the granite which relate to mafic intrusives, skarn (magnetite mineralisation) or strong pyrrhotite sulphide mineralisation.
3. (Page 9) The third figure is the photo-geology interpretation by Robertson Australia, showing the main prospects and the primary magnetic highs they recommended for testing. Also shows the Woolwonga mine & Gas Pipeline prospect on trend to the NW of Waterdrum.
4. (Page 10) The fourth figure is Magnum Resources tenements and geology of the greater Waterdrum area. The New Waterdrum gold prospect is noted by an arrow indicating the area of detailed mapping and RC drilling (see next figure).
5. (Page 11) Figure five is the detailed mapping of the New Waterdrum area; showing RC drill holes and rock chip locations. The anomalous results have been highlighted in pink.
6. (Page 12) The sixth figure is of the soil sample highlights in the area of the Waterdrum EL. This soil sampling was done by a group of companies that held EL-8047 at various times (North, Platsearch, Acacia and AngloGold). The figure also shows the boundary of the Waterdrum EL (pink) and the outline of the airborne magnetic anomaly (yellow & orange). Note that a significant soil anomaly is present over the northern part of the magnetic anomaly.
7. (Page 13) The seventh figure is an enlargement of the soil highlights in Figure 6.



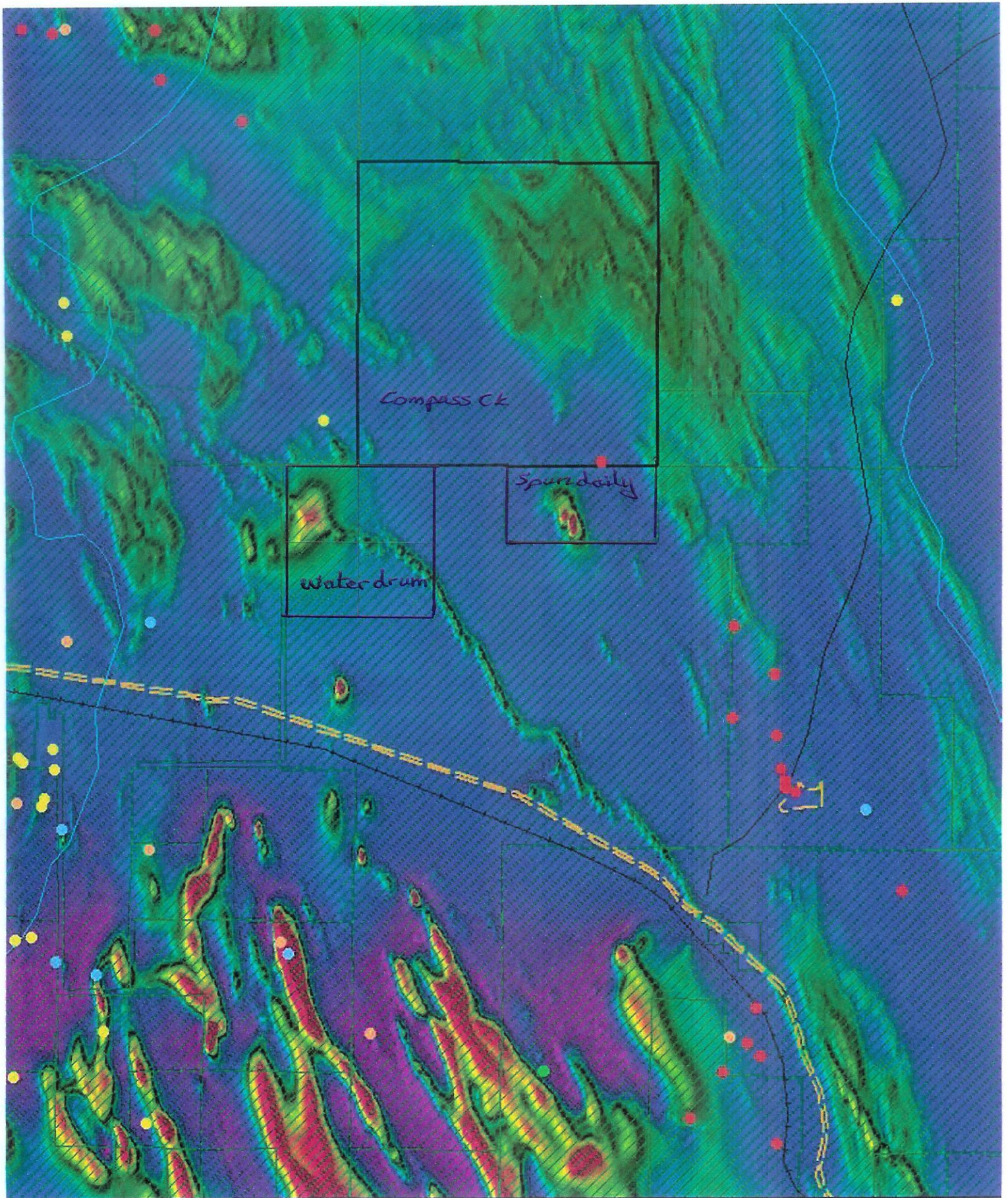
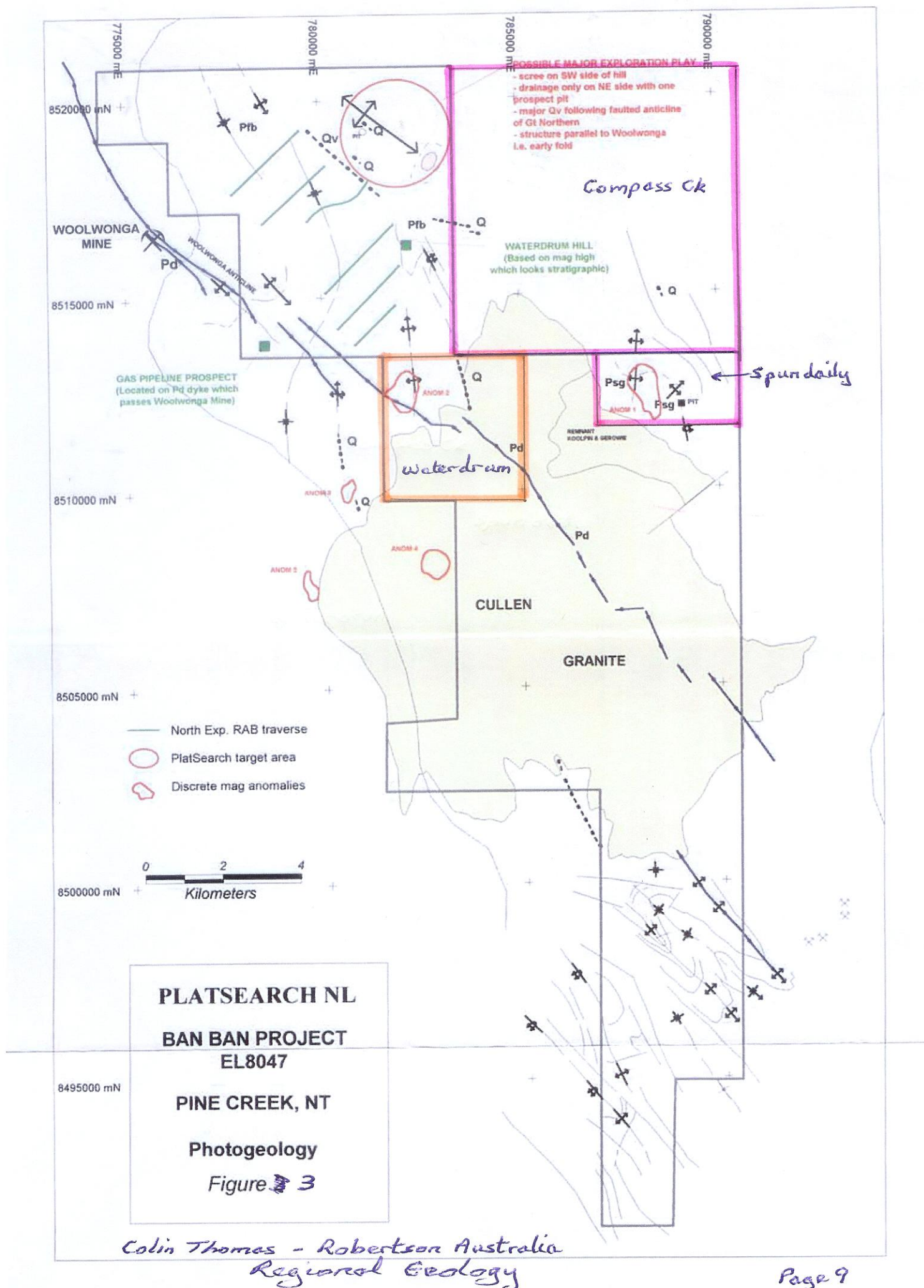
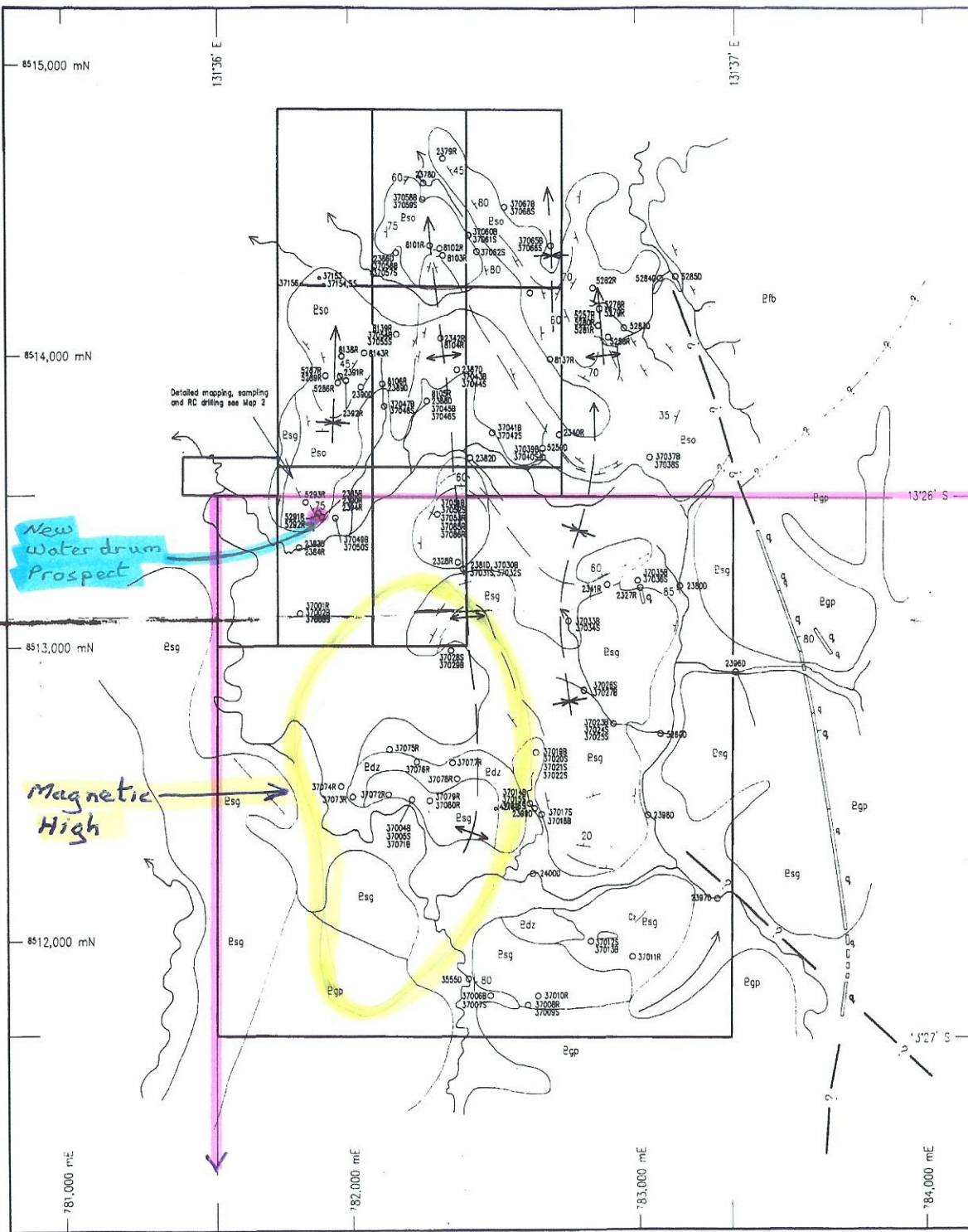


Figure 2
Homestake
Regional Airborne Magnetics
Page 8



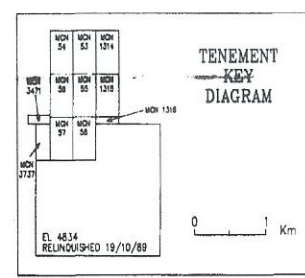


REFERENCE

- Geological boundary, approximate
- Geological boundary, inferred
- Possible fault
- Anticlinal axis with plunge
- Synclinal axis with plunge
- Strike and dip of strata
- Trend line
- Quartz outcrop/reef (with dip)
- Drainage
- Sample site
 - rock chip
 - drainage
 - bleg
 - 80# soil

ROCK UNITS (Outcrop Areas)

- Egp Prices Springs Granite
- Edz Zamu Dolerite
- Pfb Burrell Creek Formation
- Eso Mount Bonnie Formation
- Esg Gerowie Tuff



GRID: 1,000m intervals of the Australian Map Grid, Zone 52 L GL

EARTH RESOURCES AUSTRALIA PTY LIMITED

MAGNUM RESOURCES LIMITED

WATERDRUM PROJECT, N.T.

MC N54-N58, N1314-N1316, N3471 & N3737


| | | |
|-------------------|---|-------|
| SCALE 1:10,000 | 0  500 METRES | |
| REPORT NO. A/304 | FILE NAME: WDRUM1 | MAP 1 |
| DATE: MAY 1990 | GEOLOGY: J.M. MILLIGAN | |

Figure 4
Magnum's
Geology + Sample
Locations

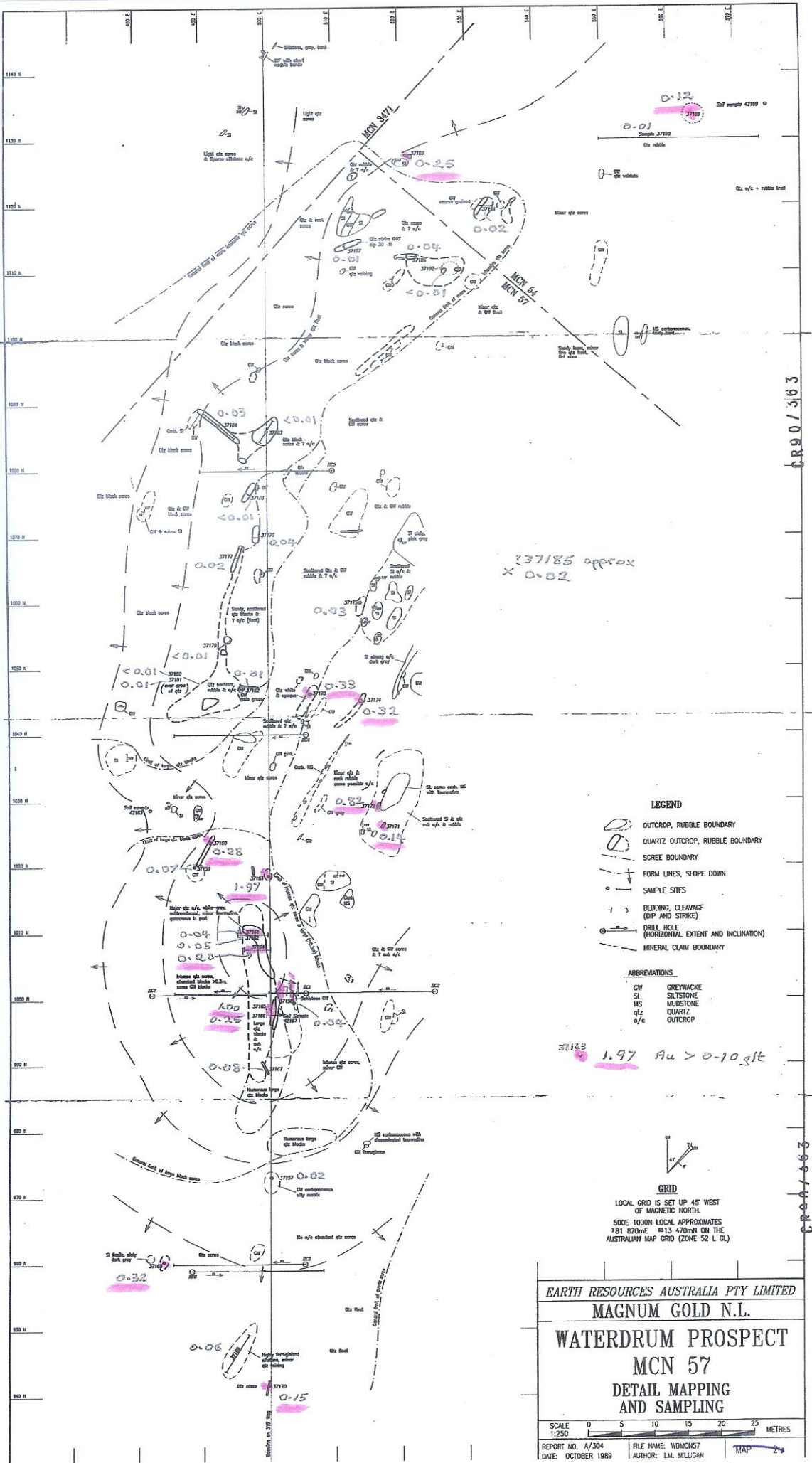


Figure 5

New Water drum
Prospect

Compass Ck EL

SWS Cnr

N

Water drum
EL

Central magnetic High

Magnetic High

Soil Results Max Au in PPB

| | |
|---|--------------|
| ★ | >1,000 |
| ● | 250 to 1,000 |
| ● | 100 to 250 |
| ● | 50 to 100 |
| ● | 10 to 50 |
| ● | 5 to 10 |
| ● | 2 to 5 |
| ○ | <2 |

Rockchip Results Max Au in PPB

| | |
|---|--------------|
| × | >1,000 |
| × | 250 to 1,000 |
| × | 100 to 250 |
| × | 50 to 100 |
| × | 10 to 50 |
| × | 5 to 10 |
| × | 2 to 5 |
| × | <2 |

By ~~Anglo Gold~~
Anglo Gold
~2002

* Annotated Sample numbers denote work completed
between 24/11/1993 and 23/11/2001

Figure 6

