

**THIRD ANNUAL REPORT
ON GLADSTONE MANGANESE PROJECT**

QUEENSLAND



Exploration Permit Mineral: 15771

BY

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1.0 GLADSTONE MANGANESE PROJECT

2.0 INTRODUCTION

The Gladstone Manganese Project is located approximately 15 road kilometres west of Gladstone in Queensland. This report describes the results of the studies carried out during the second year of the Licence. The largest mine on the tenements controlled by Genesis was at Mount Miller. The mine opened in 1895 and operated intermittently until 1916 and then from 1958 to 1960. A total of 21,785 tonnes of ore was mined with a grade which ranged from 71% to 75% MnO₂.

In March 2009, Genesis Resources contracted Mr. Alf Gillman of Odessa Resources (resource specialists) to complete a 3D model of the existing data over Mt Millar. Based on the 3D Model an approximation of the tonnage was calculated (non-JORC) of the remaining ore. The total amount of ore remaining is over 206,000t with the mineralisation still open at depth.

In March 2010, Hilmac Pty Ltd was commissioned to conduct reconnaissance mapping and geological sampling for the purpose of extracting between 5,000 and 10,000t for metallurgical purposes

Geological traverses were conducted over the three target areas and samples collected of manganese mineralisation. In parts the exposures in the North Eastern and South Western areas consisted of jasperites which sometimes contained manganese stains or thin veins. In cases a breccia of manganese, silica and ironstone were observed, perhaps indicating a crushed zone.

No outcrops of manganese mineralisation suitable for direct extraction were found. Several dozen old test pits were encountered and usually revealed that there was no substantial manganese mineralisation in those positions. The pits were up to 3m wide and possibly a metre deep.

An “in thefield” preliminary estimation of manganese ore remaining in the unworked areas of the Mount Miller mine concluded that very little tonnage remained above the Stopes at a level that would be easy to excavate. A run of ore from the Mullock shaft to the Northern Stope and shaft was estimated to be about 1,500 tonnes.

A hidden volume of ore was visualised to occur in the volume south of the Winding Shaft under and old dray track. The height above the pad level outside the main opening was measured at 15.5 m and the projected length of the ore underneath the old dray track was 25 m. The maximum width was assumed to be about the size of the dray track and similar to the exposed manganese in the drives. It is suggested that several costeans would be required to test the existence of your body under the old track. Subsequent reading of other reports, namely Canavan (1940), casts doubt on the quality of the ore in that volume. No tonnage estimate is given. The full Report can be viewed in Appendix 2.

3.0 LOCATION AND ACCESS

The Gladstone Manganese Project is located approximately 15 road kilometres west of Gladstone in Queensland. The project comprises one granted Exploration Licence (EPM15771) which covers a total area of 63.93 km² that is easily accessed from the Dawson Highway from the Gladstone Township. The EPM area lies on the Rockhampton 1:250,000 Geological Sheet Series (SF56-13).

The climate of the region is sub-tropical, characterized by distinct wet and dry season. Winters are warm and dry with most rain falling in the hot summer months. The topography over the current tenure is dominated by steep terrain in the northern portion with range is densely forested, with pockets of rainforest remaining in steeply incised gullies draining the NE and SW slopes. The remainder of the area is low and undulating, either lightly wooded with dry sclerophyll forest or cleared for grazing purposes.

4.0 TENEMENTS

The project is comprised of one granted exploration licence (EPM) with the tenement details summarised in Table 1 and their locations are shown in Figures 1 and 2.

Table 1: Gladstone Project - Tenement Summary

Project	Tenement Number	Status	Current Area		Current Holder	Granted Date	Expenditure Covenant (\$)
			Blocks	(sq km)			
Gladstone	EPM15771	Granted	21	63.93 km ²	Genesis Resources Ltd	19/06/07	\$17,300

5.0 REGIONAL GEOLOGY & MINERALISATION

The Gladstone Project broadly straddle the Berserker Graben, a narrow fault bound trough. The EPM area is dominated by the Doonside Formation (Devonian – Carboniferous age) which makes up the Curtis Island Group. It forms a northwest trending series of strike ridges and hills which cut diagonally across the sheet area. The outcrop width of the formation is about 4 kilometres, but because of internal folding the true thickness of the unit remains uncertain. The western boundary of the Doonside Formation with the Berserker beds, Crana beds and Calliope beds (basaltic to andesitic (rarely dacitic and rhyolitic) volcanoclastic sandstone and conglomerate, limestone, siltstone, andesite) is everywhere faulted by the Boyne River Fault to the west. The Berserker Beds are considered to have been deposited in an actively subsiding marine trough. Intermediate to acid volcanoclastic, sediments, sandstone and mudstones are typical components.

The dominant lithology in the Doonside Formation is rhythmically interbedded chert and mudstone with minor tuff and arenite. The cherts are white to grey, brown to pin or in some places greenish and are characteristically thin-bedded, though massive varieties are also common. The chert is highly fractured and sheared in many places and is cut by numerous siliceous veinlets. Thin bedded, hard, grey to blue-grey chert together with fine-grained, blue-grey, indurated arenite are well exposed in quarry workings about 3 kilometres west of Fisherman's Landing.

Northwest of EPM15771, Chalmers Formation (siltstone, lithic sandstone, rhyolitic to andesitic volcanoclastic breccia, rhyolitic and dacitic tuff, minor andesitic tuff) hosts the Mt. Warmister (Cu), Mt. Chalmers (Au-Cu) and North Star (Au) mineral deposits. The Mt. Chalmers mine produced 1,581.75 kg of gold, being worked intermittently from 1896-1943. Several northwest striking manganese ore deposits occur in the Doonside Formation (within the tenement area) west of Gladstone. The deposits occur as structurally controlled lenses parallel to bedding in the enclosing sediments.

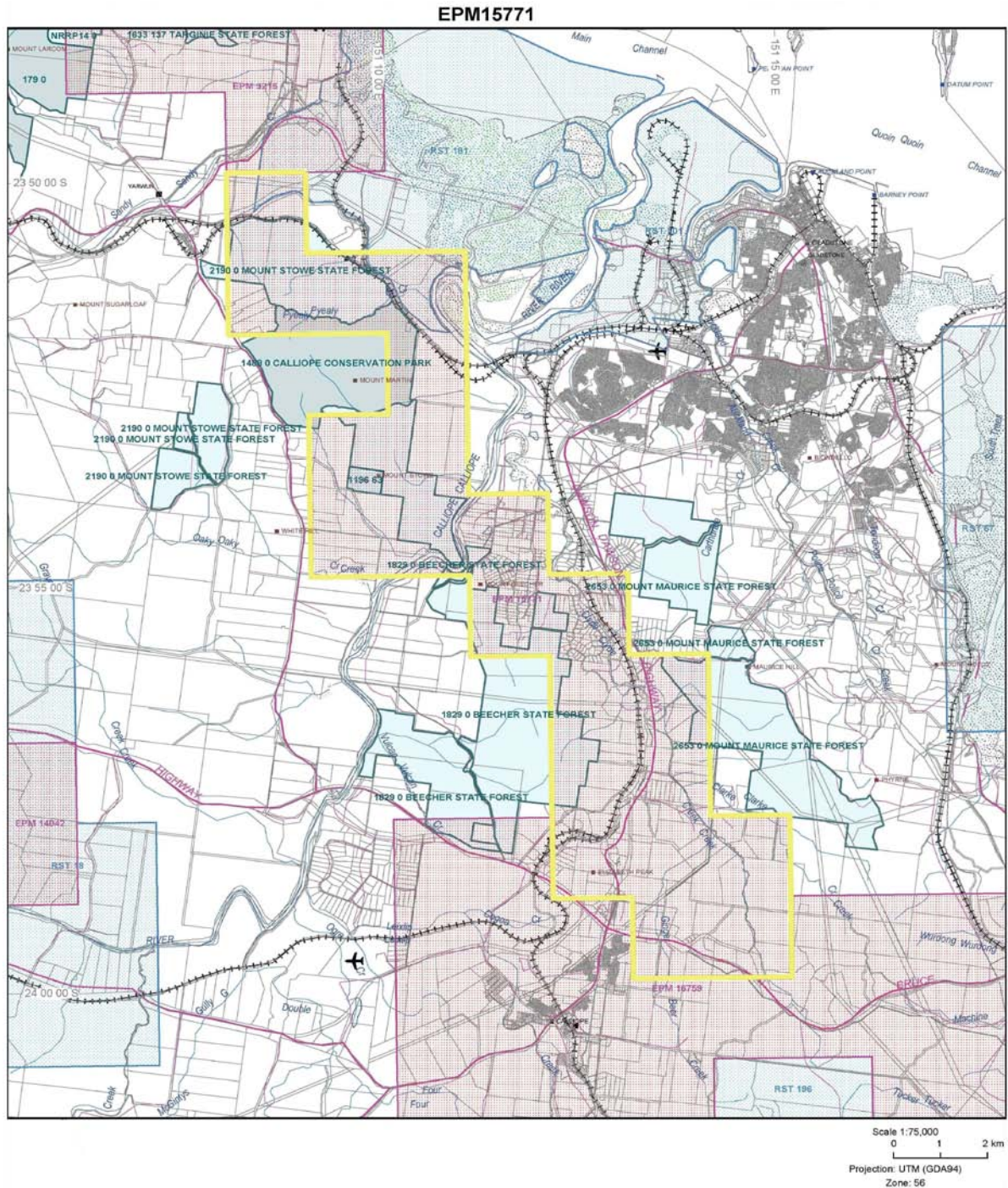


Figure 1: Gladstone Project – Topographic/Cadastre Map

6.0 PREVIOUS EXPLORATION AND MINING HISTORY

The first reported discovery of gold northwest of EPM15771 was in April 1892 at the “Golden Fleece near Sneaker’s Gully. At Spring Creek, which drains the southeastern side of Mt Larcom gld was reported being produced from both hard rock as well as alluvials during 1898. Cherry Creek on the western slope of the Mt Larcom Range also produced alluvial gold, although Gold Fields Exploration refuted tis report n the basis o low geochemical stream responses from the area. The Targinie Field

consisted of the Archer reefs which were worked in 1901 and the field was worked intermittently until 1943. Production records indicate a total of 10,980t of ore mined yielding 227.9 kg of gold.

The largest mine on the tenements controlled by Genesis was at Mount Miller. The mine opened in 1895 and operated intermittently until 1916 and then from 1958 to 1960. A total of 21,785 tonnes of ore was mined with a grade which ranged from 71% to 75% MnO₂. Most of the manganese was used for smelting at Mount Morgan. The ore body at Mount Millar is lensoidal with the long axis paralleling to local bedding. It is approximately 70 metres long, 1 to 6 metres wide and mineralisation is reported to have exceeded 40 metres in depth.

There are four other historic workings on the project. A summary of manganese production on the Gladstone project is shown below:

Name	Years of Production	Ore production (tonnes)
Mt Millar	1895-1903, 1913, 1915-16, 1958-60	21,785
Cairncross	1882-1900	45
Reids and Morgan	1897-1899	150
Reids	Around 1904	20
Shaw and Morris	Around 1900	37
Total		22,037

In 1915, L.C Ball from the Geological Survey of Queensland undertook a detail review of the historical mining activities over the Mt Millar Manganese Mine. Through rough estimation of the ore reserves in the various parts of the mine, he concluded the following is still available for mining and extraction;

Area	Tons of Manganese	Grade of Mn
Above the Little Stope	2,000	40-51%
Above the Mullock Stope	500	40%
Above the 7.7m Level South	400	42-50%
Above the N/S Stope, S of N Shaft	250	37-48%
Above the N/S Stope, N of N Shaft	800	37-39%
Above the Middle Stope	400	34-36%
Above the Big Stope, North End	1,100	42-47%
Above the Big Stope, South End	700	47-52%
Above the North Stope	600	33-49%
South of Mullock Shaft below Surface	400	40-46%
North of Mullock Shaft below Surface	400	43%
Above the S End, North Stope	200	22-36%
Above the S End, Middle Stope	1,200	41-49%
Above the S End, No. 1 Level	400	18-39%
Below the S End, No. 1 Level	300	18-38%
Above No. 2 Level, Southern Part	8,900	40-49%
Above No. 2 Level, Northern Part	5,900	36-49%
Between South No. 2 Level & No. 2.5 Level	7,800	40-49%
Between North No. 2 Level & No. 2.5 Level	2,200	36-50%
Below No. 1 Level at Mullock Shaft	100	48-49%
Total	35,350	

The high grade manganese ore contains between 75% and 86.06% total manganese dioxide (54.38% Mn L.C.B). The silica levels of the high grade manganese ore shows 5%, with the decrease of manganese, there is a constant increase in silica as shown in the below table.

Sample	Grade of Mn	Grade of Silica
Big Stope	54.38%	5.2%
Mullock Stope	48.6%	5.8%
Middle Stope (siliceous portion)	48.7%	9.1%
Mullock Shaft, 18.1m Level	46.4%	12.6%
Poor Ore thrown over dump	45.5%	14.9%
Mullock shaft above No. 1 Level	41%	15.3%

Other elements assayed the following:

MnO₂ = 86.06%

FeO₂ = 1.31 or Fe = 1.02% L.C.B,

BaO = 2.85%

CaO = 0.16%

MgO = 0.11%

P₂O₅ = 0.17% or P% = 0.076

Al₂O₅ = trace

H₂O = 0.38%

Combined H₂O and undetermined = 3.76%

Total = 100%

At the 7.72m level ore body there is a wide body above this level, which is probably continuous with that exposed on the northern side of the mullock cut. The ore appears high grade with quartz veins hosted within joint fractures which accounts for the assays showing only 37-47% Mn.

At the 22.7m level connecting the north and mullock shaft and tending beyond them shows at the northern end a small ore body of medium to high grade, with the southern end the mullock slope exposes 10.45m width of 40% Mn ore. The same ore body is exposed in the little stope at the 38.6m level, with the assays nearly 50% Mn.

Over the 44.5m level again the middle stope with has a wide body assaying in places 40-47% Mn. The ore surrounding the mullock shaft below No. 1 level is also very rich and high grade.

In 1940, K.C Church and F. Canavan reviewed the existing mine plans over Mt Millar, corrected them where necessary and sampled sections of interest and dumps. Very limited sampling was undertaken as most of the drives and stope were under water with unstable underground working due to the timbers rotted. Where areas could be assessed, visual assessments were concluded.

The manganese mineralisation between Mullock and North Shaft appears high grade over a width of 3.6m with minor clay seams. In the Mullock Shaft the ore appears to be of good grade over a width of 5m. Assays from this section include:

Grade of Mn	Grade of SiO₂	Grade of Fe	Grade of P
41.5%	17.32%	8.10%	0.108%
50.0%	8.63%	3.32%	0.096%

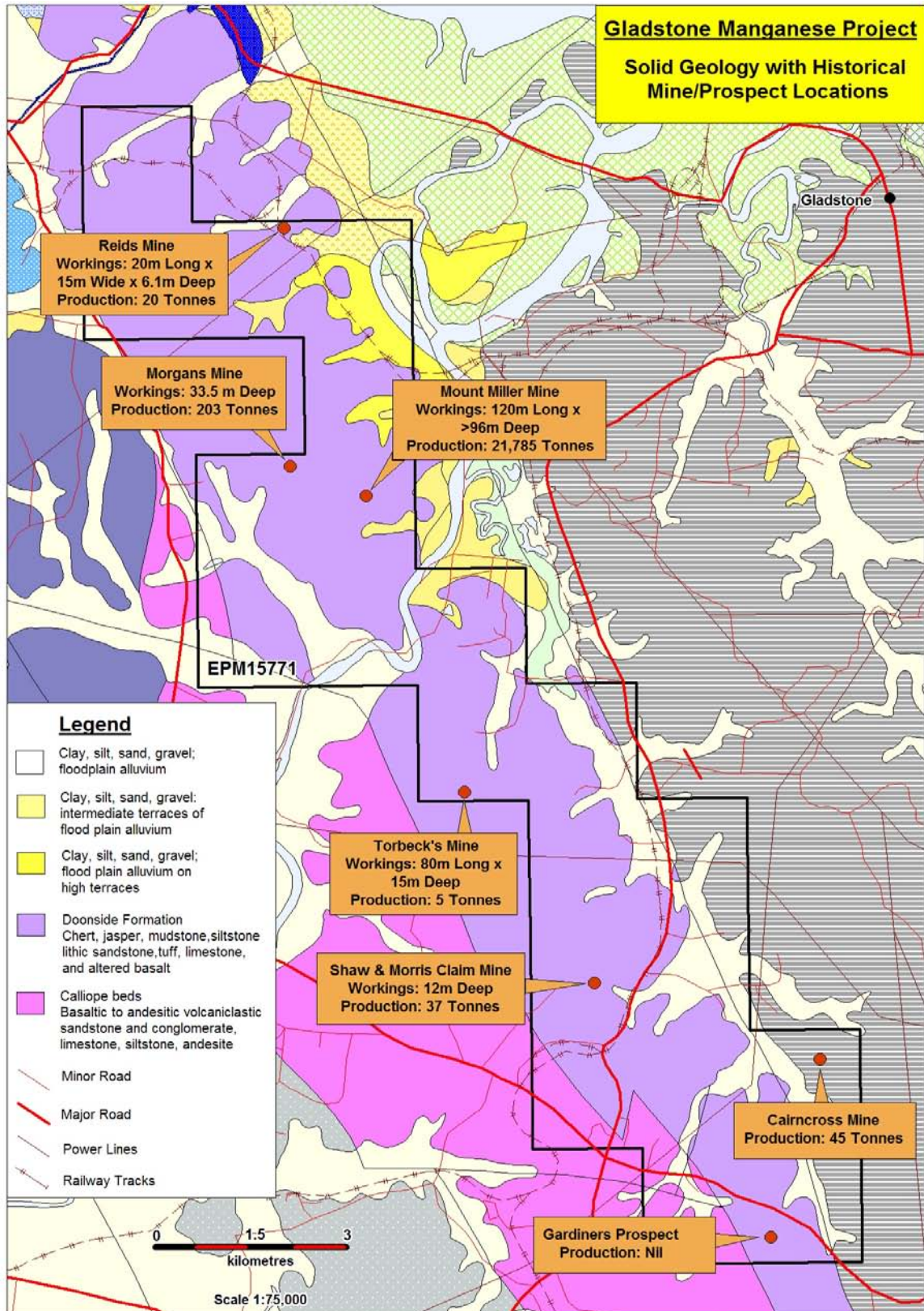


Figure 2: Gladstone Project – Regional Geology with Prospect Location Map

Sampling was also undertaken where manganese ore was exposed in the Main Shaft between the depths of 19.54 to 35.9 metres. The widths refer to width of sample and not to total width of ore body, which was not exposed during the time.

Depth	Grade of Mn	Grade of SiO ₂	Grade of Fe	Grade of P	Width
19.54-24.54	44.55%	11.50%	3.95%	0.123%	2.27 m
24.54-30.45	45.78%	5.68%	4.05%	0.150%	2.09 m
30.45-35.90	48.70%	5.77%	2.49%	0.148%	1.81 m

Samples from the back of the Little Stope resulted in the following:

Grade of Mn	Grade of SiO ₂	Grade of Fe	Grade of P	Width
46.63%	8.20%	2.18%	0.115%	5.00 m
49.93%	5.80%	3.79%	0.138%	5.45 m
46.25%	10.90%	2.08%	0.111%	8.63 m
45.12%	10.70%	3.74%	0.117%	6.36 m
38.15%	-	-	-	6.36 m

The topmost section south of the Main Shaft is tentatively shown as an upward pointing triangular peak. Where visible in the Mullock Stope the ore appears to be very good and was sampled over a width of 5.45m. Apparently good ore is present on the south side of the mullock shaft and this has been sampled over 6.36m at the lower and 2.72m at the upper sections. The surface outcrop is not visible as it was under the engine house.

In 1969, Sampey Exploration Services carried out airborne radiometrics and ground magnetics survey, regional geological mapping and stream sediment geochemistry targeting base metals mineralisation to the north-west of EPM15771. Anomalous copper results were obtained in Mina and Springs creeks excised from EPM15771. Traces of surface malachite were found a calc-silicate hornfels in the headwaters of Mina Creek. In the headwaters of Spring Cree (700 ppm Cu anomaly) bedrock was mainly intermediate to acid volcanics (pyritised) which were silicified and anomalous in zinc. Radiometric results showed a low grade peripheral torbernite anomaly associated with the Targinie Adamellite.

BHP conducted both ground and airborne geophysics over the area, the Mina Creek anomaly was soil sample and intensive soil sampling was conducted over the headwaters of Spring Creek. Results from Spring Creek showed only anomalous Cu, Pb and Zn. Two holes were drilled at Spring Creek which intersected elevated Cu-Zn-Ag. In 1984, Gold Fields changed the focused on targeting gold in high level alteration systems in volcanic terrains. They focused their attention of the Mt Larcom intrusive. Mapping identified numerous alteration zones within the intrusive complex. They observed that the zone were situated within coarser volcanic-clastic (breccia zones) had sharply defined boundaries, argillic mineralogy, disseminated pyritisation, minor chalcopyrite and chrysocolla. However, no indication of precious metals mineralisation was delineated. A total of 144 rock chip samples were collected and 97 stream sediment samples were re-assayed for Ag and Au with no significant results.

7.0 WORK COMPLETED DURING THE FIRST AND SECOND YEAR UNDER GENESIS

During the second year of the Licence, work commenced during the month of October 2007, a review of re-processed and re-interpretation of magnetic data from the Queensland Geological Survey

Database was undertaken with a site visit. This was conducted for the purpose of identifying exploration targets for manganese. Extensive amounts of magnetic targets were outlined.

In August 2008, a brief rock chip sampling program was also conducted, concentrating around the Mt Millar Mine area. High grade manganese assay results were obtained and are presented in the Table 2.

Table 2: Reconnaissance Rock chip Sampling over Mt Millar - Assay Results

SITE	EAST	NORTH	Mn%	Fe%	Al%	K%	Si%	P%	Ca%	Mg%
Mt. Miller 1	314453	7357061	26.3	4.33	0.472	0.769	22.8	0.0449	0.082	<0.006
Mt. Miller 2	314453	7357061	58.7	0.926	1.01	2.14	0.978	0.0877	0.038	<0.006
Mt. Miller 4	314453	7357061	23.3	5.78	1.125	0.27	22.8	0.0658	<0.007	<0.006
Mt. Miller 5	314453	7357061	60.5	0.705	1.02	2.38	0.829	0.0826	0.024	<0.007
Mt. Miller 6	314453	7357061	61.1	0.197	0.799	1.815	0.125	0.1315	<0.008	<0.007

In September 2008, detail geological mapping was conducted by R. Russell to map the area surrounding the old Mt. Miller manganese mine. The mapping outlined two major and two minor occurrences of manganese. They are as follows:

- a) A north-south trending jaspilite outcrop diverges from the major north-northwest trending quartzite ridge in the southwest of the area and extends northward for at least 200m ('A', Figure 3). A shear zone extends along the eastern side of the outcrop and the eastern part of the outcrop contains manganese in vughs and along internal slickensides. The unit dips to the west. It is recommended that drilling from this direction should be carried out to test the mineralisation within the unit and particularly on the shear zone on the eastern side of the jaspilite. Further detailed mapping is recommended, particularly to the north of the outcrop.
- b) A north-south trending jaspilite outcrop containing minor manganese mineralisation extends for about 100 metres immediately to the north of the Mt. Miller mine site ('B', Figure 3). The manganese is in vughs and along minor slickensides in the jaspilites. The dip is difficult to measure as the outcrop is poor but the unit is thought to be sub-vertical. Further detailed mapping followed by drilling is recommended here.
- c) A minor manganese show was recorded at 'c' (Figure 3) to the west of the mine. This occurrence represents a single large jaspilite floating boulder with manganese staining. Outcrop could not be found in the vicinity. However, further examination of the area, particularly along the main northeast trending fault which runs close to the occurrence, should be carried out. A further minor manganese show was recorded at 'd' on the south western flank of the main ridge in the south of the area. A quartzite floating boulder contains manganese stains and vugh fillings.

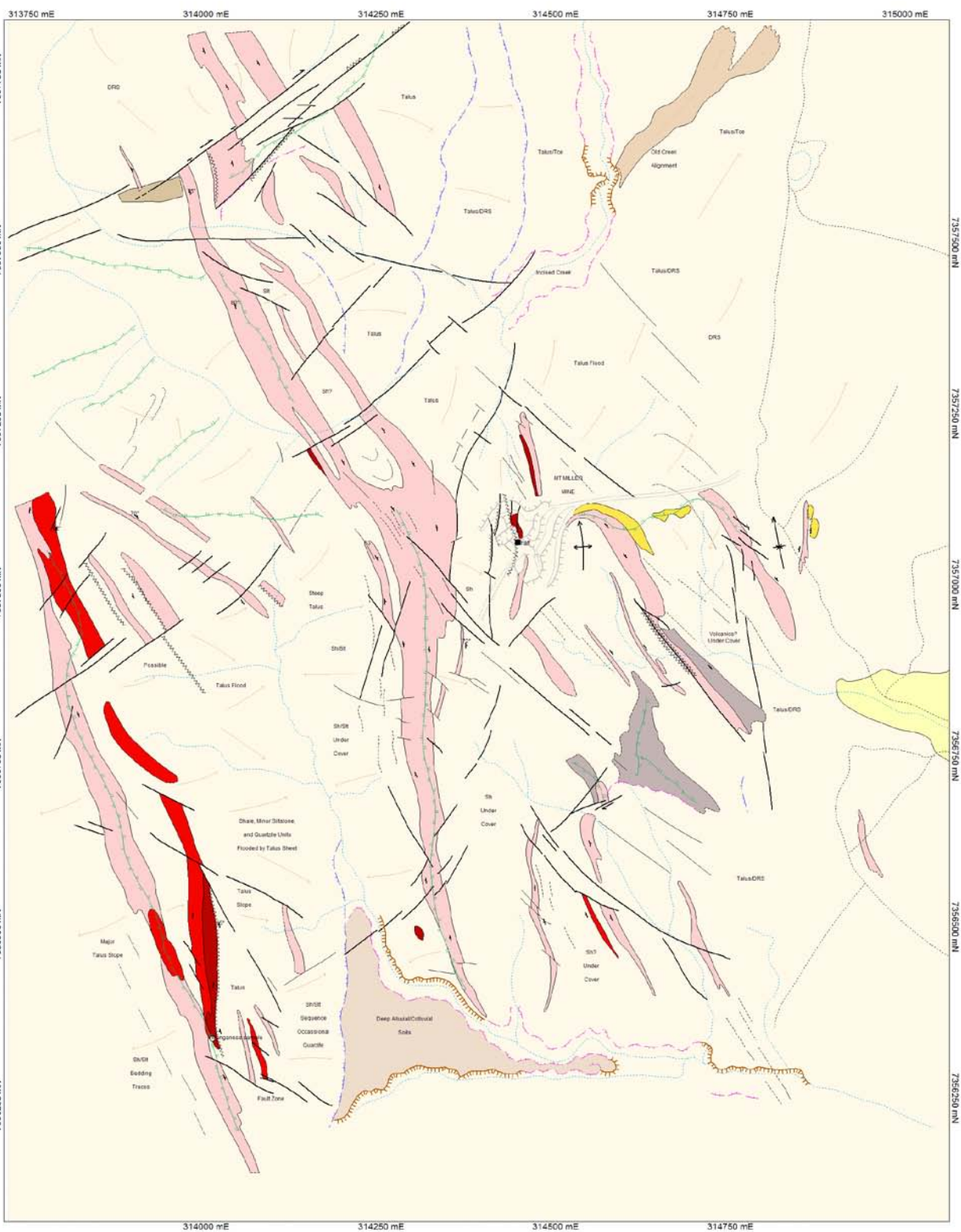


Figure 3: Fact Geology Outlining Manganese Mineralisation proximal to Mt Millar Mine



Photo 1: Massive outcropping manganese mineralisation at Mt Millar



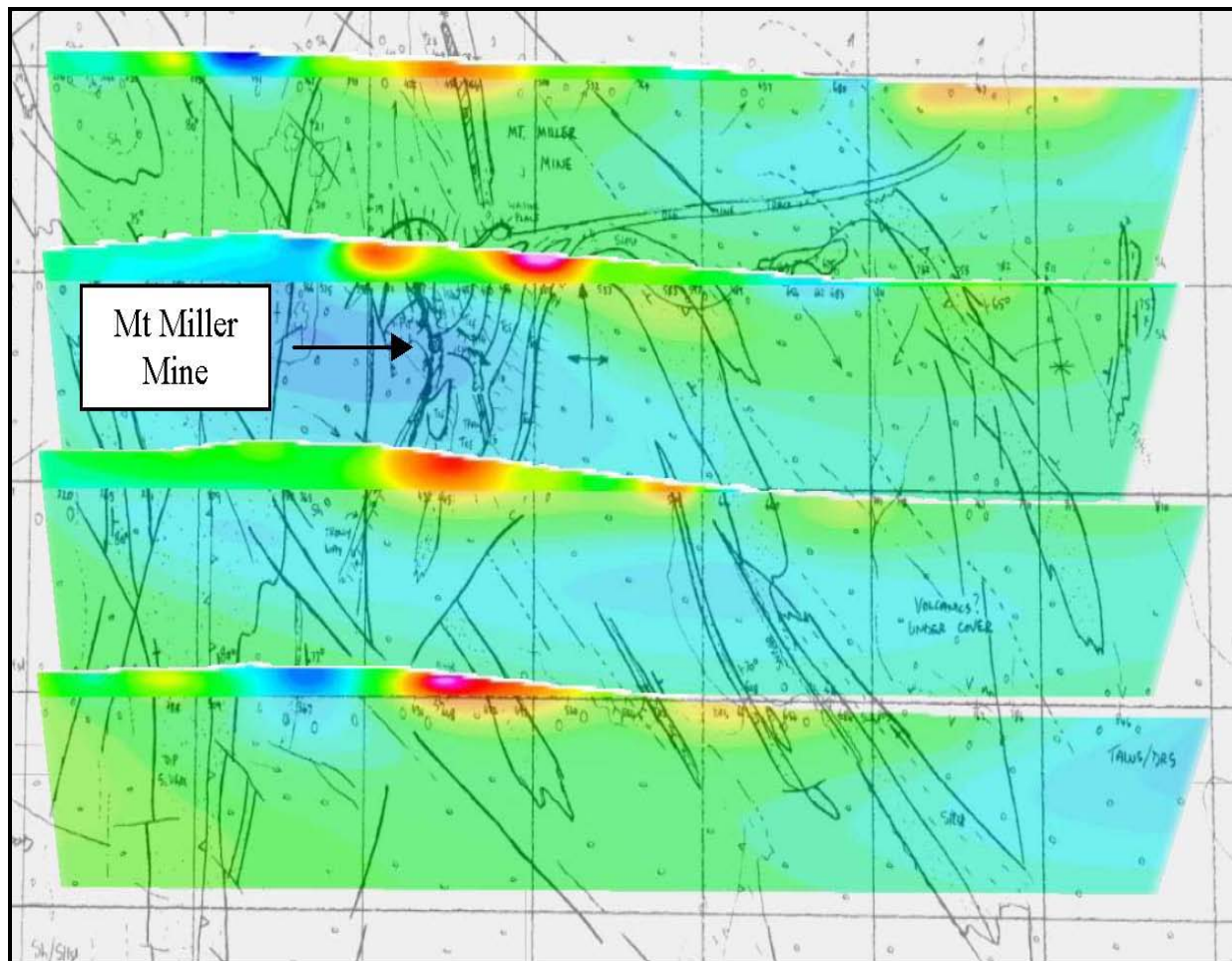
Photo 2: Historical Shaft entrance at Mt Millar

Resource Potentials were engaged by Western Desert Resources Ltd (WDR) and Genesis Resources Ltd to assist in the planning, implementation, processing and interpretation of an orientation induced polarisation (IP) survey to be conducted over the Mt Miller manganese project. The survey was carried out by Zonge Engineering and Research Organisation (Zonge) from 19th August to the 2nd September 2008.

Four lines of Pole-Dipole Induced Polarisation were completed over the historical Mt Miller Manganese mine and surrounds to delineate possible extensions of the manganese mineralisation at depth and along strike from the old workings. All lines highlighted shallow anomalies of which some can be correlated to the mapped position of the remnant manganese mineralisation at Mt Miller. Additional shallow anomalies were also detected along strike and may represent extensions to Mt Miller mineralisation under cover. The chargeability values associated with these anomalies were moderate and ranged from 10 to 15msec, with the strongest response on the southern most line 7356900N approximately 150m to the south of the Mt Miller main shaft.

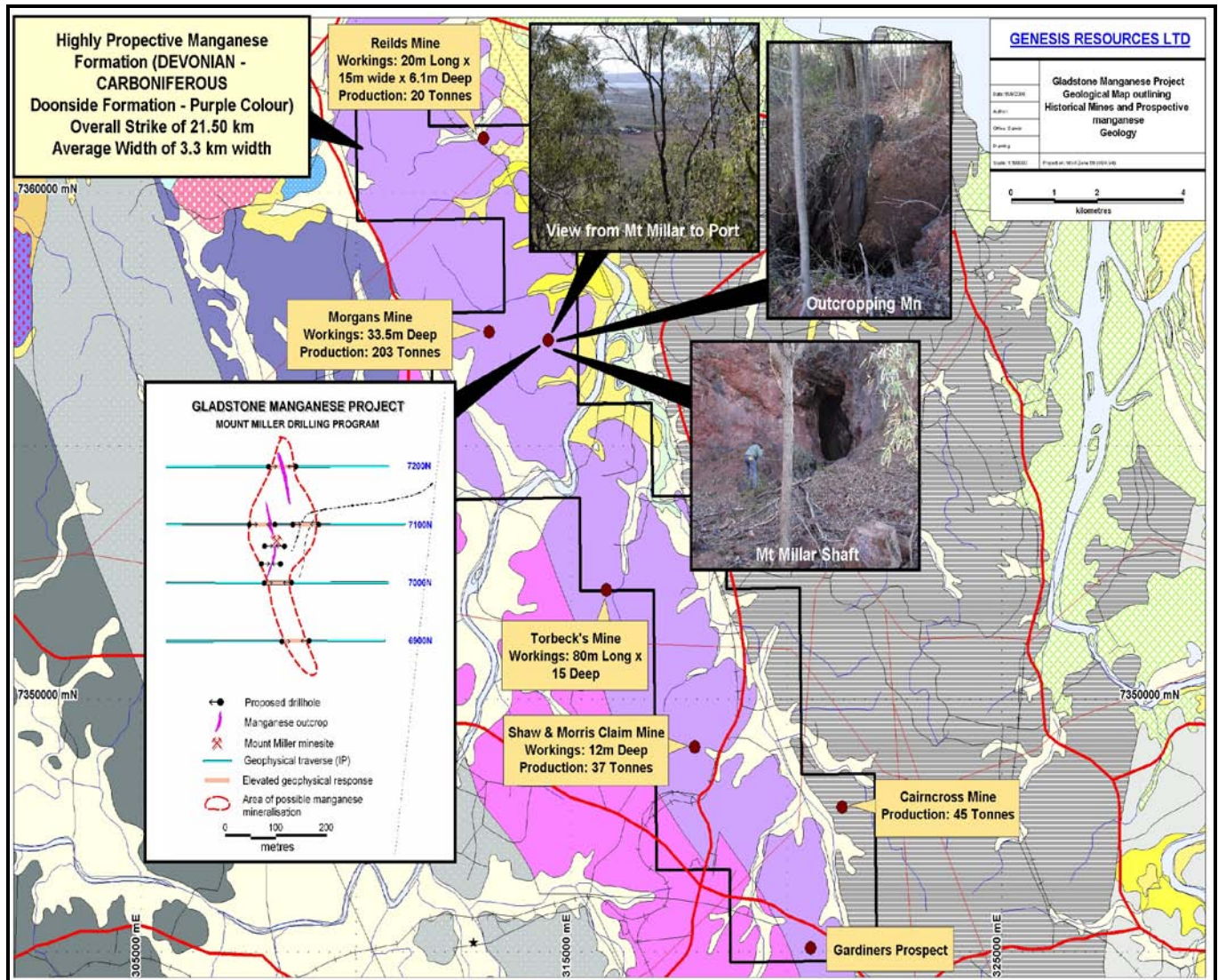
No anomalies representing deeper extensions of the manganese mineralisation at Mt Miller below 75m from surface were detected in this survey. This may be due to a combination of the terrain and deep groundwater depth limiting the effectiveness of the technique to delineate deeper sources of manganese mineralisation. A full report presented in Appendix 1;

Figure 4: Mt Miller chargeability inversion results with reconnaissance geological



The manganiferous outcrop and coincident IP anomalies represent the first round of priority drill targets towards defining a manganese resource at Mt Millar. As part of the joint venture with Western Desert Resources Ltd (ASX: WDR,

Figure 5: Solid Geology & Proposed Drilling

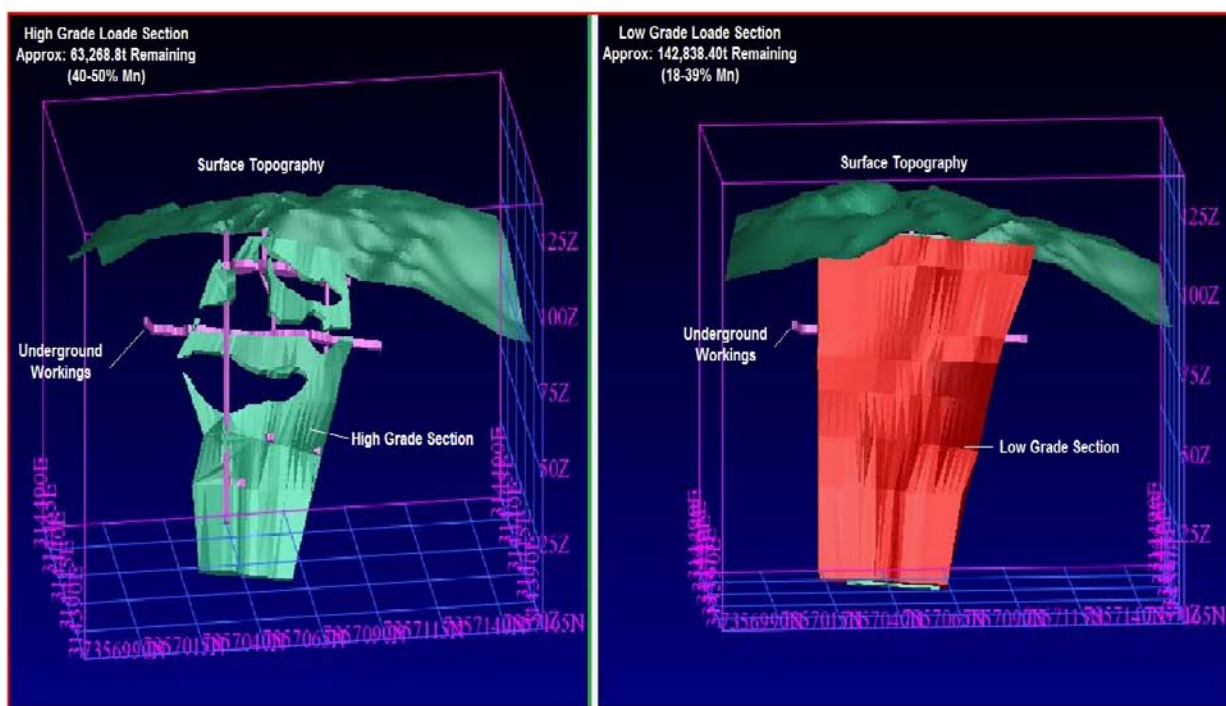


In March 2009, Genesis Resources contracted Mr. Alf Gillman of Odessa Resources (resource specialists) to complete a 3D model of the existing data over Mt Millar.

Based on the 3D Model an approximation of the tonnage was calculated (non-JORC) of the remaining ore. The total amount of ore remaining is over 206,000t with the mineralisation still open at depth.

High zone (less stopes): 15,064m³ x 4.2 SG is approx 63,268.80t of High grade
Low grade 44,637m³ x 3.2 SG is approx 142,838.40t of Low grade

Figure 6: 3D Model Outlining Manganese Mineralisation over Mt Millar Mine



8.0 WORK COMPLETED DURING THE THIRD YEAR UNDER GENESIS

The drilling programme was designed to test the extent of Manganese left in the Mt Miller mine area. A number of drill holes were planned, originally based on IP geophysical data collected over the area. Onsite reconnaissance work was conducted in December 2008 to locate the targets indicated by the IP data. Due to the rugged terrain and access issues it was determined that only 5 of the original 15 sites chosen from the IP data would possibly be accessible, with some sites still to be confirmed based on the size of the drill rig available as the old mine area was tight on space.

A site visit in January 2009 pegged proposed drill sites and showed a representative of the EPA the area and our proposed drill locations. The EPA had applied limits on the amount of clearing that could be done with 225 square metres of area allowed for creating drilling pads and sump. Due to the terrain it was determined early on in the planning process that the old terraces & tracks of the mine site would be re-used to create new access through to the site and for creating drilling pads.

Old cross sections and plans of underground mine levels were re-scaled to correlate data on one datum, and drill holes proposed to aim for locations above and below underground mine levels were planned to test the extent & depth of ore that may remain within the mined area. The “X”s marked on the old cross section indicates area under mine levels etc. that were aimed for. These old plans and sections date prior to the last mining in the area (pre 1958-60). A drill hole on the north & the south ends of the old mine with azimuths aiming to intersect along inferred strike & dip of the ore body were planned to test the linear extent of the ore body.

During the drilling programme a total of 290.4 mm fell over the Gladstone area. The wettest 24 hour period was 139.2 mm on February 10-11. This caused disruption to the programme over three 12 hour shifts as the tracks to the drilling site became too slippery & boggy to allow safe access for all

personnel and the sheer amount of rain caused conditions under foot on the drilling pad to become unsafe.

Prior to establishing proposed drilling locations, an IP survey was conducted on two traverses over & around the old mine site.

A contour survey was conducted in October 2008 over the old Mt Miller mine site. This survey excluded survey positioning of the mine shafts. This survey was conducted by Fredriksen Maclean & Associates.

A follow up survey of the mine site, including updated contours, positioning of mine shafts & actual drill hole locations was carried out on Friday March 6, 2009 by Fredriksen Maclean & Associates following completion of the drilling programme.

8.1 DRILL PAD PREPARATION & DRILL HOLE LOCATIONS

After our January site visit, WDR's senior field supervisor arranged for the preparation of the drill sites creating two drilling pads and a sump. Photograph 2 shows the amount of rain that fell in the sump area in the first week of the programme. Taken on February 15, 2009 the sump had been dry at the commencement of drilling on February 8, 2009 (see photograph 3). The water in the sump is from rainfall (& runoff) only, the drill rig tanks were not pumped into the sump until a later date.

8.2 DRILLING

The tenement area was visited in January 2009 to survey proposed drill sites based on previous reconnaissance work, and old mine plans & drawings. A total of 5 holes were pegged with the sixth to be positioned after ground levelling was completed. The site was also visited by a representative of the EPA at this time so that our Environmental Authority Application could be approved.

Due to rig availability for the tightness of the area, it was determined that a diamond drill rig would be used for this project. It was noted however that even this rig may find access a little tight at some locations especially at site 2 where an additional metre of the cliff face was cut back to make more room.

Six diamond holes were completed by Titeline Drilling P/L, using a Sandvik UDR 200DLS rig, between February 8th and March 2nd, 2009 (23 days), with a total depth of 640.9 metres drilled.

Table 3: Completed DDH over Mt Millar Manganese Prospect

Hole Name	Survey Easting	Survey Northing	Depth (m)	Dip (°)	Azimuth (° MN)	Azimuth (° TN)
GLDDH1A	314461.45	7357109.21	0	-65	240	250
GLDDH1B	314463.48	7357110.02	0	-75	240	250
GLDDH2A	314456.02	7357038.83	0	-60	240	250
GLDDH2B	314455.53	7357040.55	0	-85	240	250
GLDDH3	314457.47	7357022.15	0	-85	195	205
GLDDH4	314456.9	7357118.89	0	-50	280	290

The first hole, GLDDH1A, was drilled to a depth of 99.4 metres, and the second hole, GLDDH1B, was drilled to a depth of 150.7 metres. The third hole drilled was GLDDH4, to a depth of 96.3 metres. These holes were on the northern drill pad.

On the southern drill pad, hole GLDDH2A was drilled to 44.3 metres, cut short from the targeted 50 metres due to hitting a 3.2 metre stope (or equivalent) at the 41.1 metre mark. Hole GLDDH2B was drilled to a depth of 150.2 metres and the last hole, GLDDH3, was drilled to a depth of 100 metres.

A very brief summary of drill holes at Mt Miller, QLD; assay results are still pending.

GLDDH1A	a couple of mineralisation zones present between 25.6 – 34.4m and 59.8 - 60.4m. These do not all show large concentrated Manganese but is occasionally disseminated throughout barr a few minor patches... Hole depth 99.4m
GLDDH1B	a zone around 55.4 – 62.9 shows some mineralization. Hole depth 150.7m
GLDDH2A	zones of weak mineralization at 16-22m, 34-41m with stronger mineralization around 37m. Core to 41.1m, hole to 44.3m as hit 3.2m ?stope
GLDDH2B	a zone mineralization at 18-20m, disseminated pyrite at various intervals. Hole depth 150.2m
GLDDH3	some veining of Manganese & Iron present, some graphitic areas and pyrite present. Hole depth 100m
GLDDH4	a few zones of weak mineralization at 37.8-38m, 41-44m & 61-78m but mainly as veining and on fracture surfaces. Some disseminated pyrite also deeper in hole. Hole depth 96.3m.

A series of plans can be found in Appendix 1 – Planning, and Appendix 2 – Results, showing the old plans and cross sections, most of which have been re-scaled by the author of this report, and displayed onto the initial and then updated contour maps with the drill hole locations, drill hole traces & mine shaft locations. These plans have been created using Interdex, MapInfo &/or drawings by the author of this report. Cross sections through the mine area were created using Interdex and show the drill hole cross sections with lithology & mineralization plotted down hole.

As can be seen from the plans and sections, the majority of drill holes have drilled into, through or up to the target zone of the ore body as indicated by the underground levels.

The contour plan of October 2008 was regenerated in January 2009 to allow display in MapInfo & Interdex formats and was used as an orientation guide for the old plans and cross sections along with the old Mt Miller Mine Plan. It was discovered in the beginning stages of compilation of this report that since the initial contour plan (October 2008) had not surveyed the actual positions of the mine shafts that regeneration of the contours had resulted in the shafts appearing to be closer to the proposed drill holes positions than actual positioning, and since this contour plan was used as a base for proposed drill hole locations, depths and azimuths this has resulted in a couple of the steeper dipping holes stopping short of the target zone when plotting on the updated contour plan (March 2009). This however does not mean that we have not achieved the objectives of the programme as we have still tested to some degree the eastern extent of the width, or thickness, of the ore body at depth and have worked to the best of the data available.

Considering access restrictions at ground level, the rugged terrain surrounding the mine site, approximation of positioning of the old plans, both for underground level plans and sections based on the initial contour plan, and rig size and spacing requirements the objectives of the programme have been achieved on most counts.

Although visual analysis of the mineralization within the core is disappointing we have achieved objectives to test extent and further reserves of ore in the mine area within the constraints provided.

In March 2010, Hilmac Pty Ltd was commissioned to conduct reconnaissance mapping and geological sampling for the purpose of extracting between 5,000 and 10,000t for metallurgical purposes

Geological traverses were conducted over the three target areas and samples collected of manganese mineralisation. In parts the exposures in the North Eastern and South Western areas consisted of jasperites which sometimes contained manganese stains or thin veins. In cases a breccia of manganese, silica and ironstone were observed, perhaps indicating a crushed zone.

No outcrops of manganese mineralisation suitable for direct extraction were found. Several dozen old test pits were encountered and usually revealed that there was no substantial manganese mineralisation in those positions. The pits were up to 3m wide and possibly a metre deep.

An “in thefield” preliminary estimation of manganese ore remaining in the unworked areas of the Mount Miller mine concluded that very little tonnage remained above the Stopes at a level that would be easy to excavate. A run of ore from the Mullock shaft to the Northern Stope and shaft was estimated to be about 1,500 tonnes.

A hidden volume of ore was visualised to occur in the volume south of the Winding Shaft under and old dray track. The height above the pad level outside the main opening was measured at 15.5 m and the projected length of the ore underneath the old dray track was 25 m. The maximum width was assumed to be about the size of the dray track and similar to the exposed manganese in the drives. It is suggested that several costeans would be required to test the existence of your body under the old track. Subsequent reading of other reports, namely Canavan (1940), casts doubt on the quality of the ore in that volume. No tonnage estimate is given. The full Report can be viewed in Appendix 2.

10.0 PROPOSED EXPLORATION

Kastellco Geological Consultancy recommends that Genesis Resources Ltd exploration programmes should be designed to test the tenement for manganese targets is described below;

1. Carry out airborne EM surveys over high grade base metal areas generated by the surface sampling programme to delineate any manganese targets at depth for future drilling.
2. Detailed regional structural interpretation with strong emphasis on the identification of untested mineralised structural trends

11.0 REFERENCES

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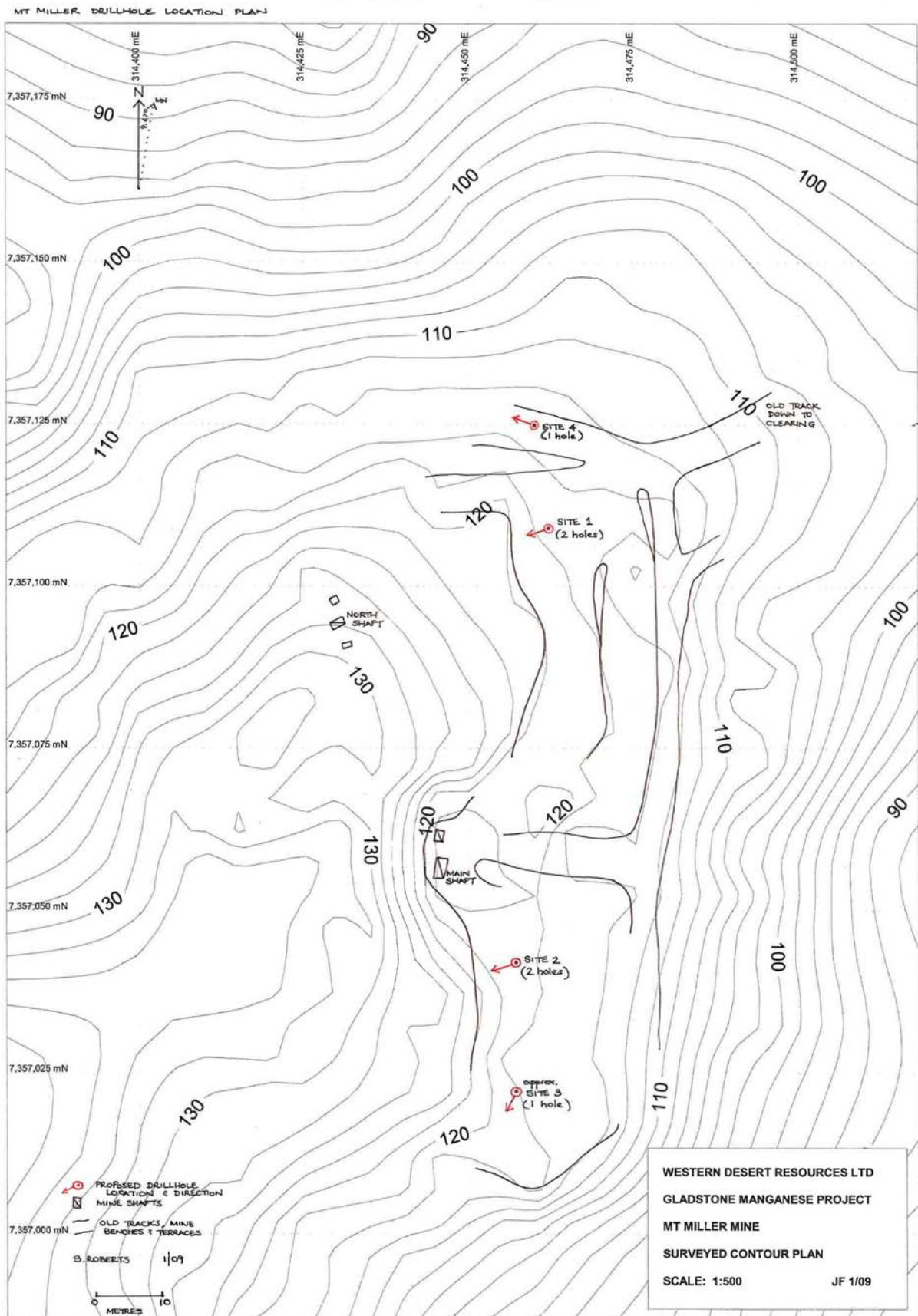
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APPENDIX 1

DRILLHOLE ASSAY DATA

Hole No	Core	From	To	Length	WEI-21	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-GRA05	PUL-QC	ME-ICP61	ME-XRF11b	ME-XRF11b	ME-XRF11b
	Sample				Recvd Wt.	Mn	P	S	SiO2	LOI	Pass75um	Mn	Al2O3	CaO	Fe
	No:				kg	%	%	%	%	%	%	ppm	%	%	%
					0.02	0.001	0.001	0.001	0.01	0.01	0.01	5	0.01	0.01	0.01
GLDDH1A	GL1001	35	36	1	3.63	1.13	0.064	0.002	71.8	3.59		8100	11.5	0.04	4.4
GLDDH1A	GL1002	36	37	1	2.86	1.245	0.063	0.006	86.6	1.61		10450	3.2	0.03	3.69
GLDDH1A	GL1003	37	38	1	2.9	0.533	0.03	0.002	90.6	1.21		5150	2.89	0.03	2.21
GLDDH1A	GL1004	68	69	1	2.41	0.277	0.046	0.062	70.7	2.45		2860	12.1	1.11	4.5
GLDDH1A	GL1005	69	70	1	2.46	0.217	0.039	0.077	76.1	2.18		2210	9.92	0.88	3.42
GLDDH1A	GL1006	70	71	1	2.15	0.419	0.067	0.082	59.4	3.45		4020	14.9	1.78	7.4
GLDDH1A	GL1007	71	72	1	2.29	0.408	0.067	0.078	63.3	2.9		3790	14.45	1.14	6.18
GLDDH1A	GL1008	72	73	1	2.74	0.357	0.048	0.051	73.2	2.24		3250	11.25	0.84	3.89
GLDDH1A	GL1009	73	74	1	1.83	0.194	0.035	0.032	80.7	1.77		1880	8.2	0.55	2.86
GLDDH1A	GL1010	74	75	1	2.9	0.281	0.039	0.073	76	2.42	96.8	2600	9.71	0.46	3.65
GLDDH1A	GL1011	75	76	1	1.99	0.263	0.055	0.048	71.2	2.89		2420	11.75	0.42	4.57
GLDDH1A	GL1012	76	77	1	1.01	0.204	0.047	0.03	74.6	2.49		1860	11	0.36	3.62
GLDDH1A	GL1013	77	78	1	2.29	0.204	0.046	0.032	74.5	2.13		1880	11.85	0.73	2.85
GLDDH1A	GL1014	78	79	1	2.56	0.216	0.032	0.091	73.8	1.78		2140	11.55	1.14	3.52
GLDDH1A	GL1015	79	80	1	2.11	0.247	0.033	0.096	73.5	1.43		2450	11.85	1.08	3.46
GLDDH1A	GL1016	80	81	1	2.43	0.198	0.027	0.072	74.5	1.01		1890	11.75	0.69	3.24
GLDDH1A	GL1017	81	82	1	2.29	0.242	0.042	0.032	73.9	1.2		2310	11.7	1.58	3.32
GLDDH1A	GL1018	82	83	1	2.36	0.163	0.028	0.077	74.4	1.45		1570	11.4	1.76	3.04
GLDDH1A	GL1019	83	84	1	2.83	0.147	0.031	0.082	72.3	1.78		1390	12.25	1.82	3.47
GLDDH1B	GL1020	57.5	58.5	1	2.46	0.1	0.031	0.002	78	2.94		953	11	0.09	2.34
GLDDH1B	GL1021	64	65	1	2.31	0.251	0.07	0.004	69.2	2.86		2510	12.75	0.71	4.68
GLDDH1B	GL1022	65	66	1	2.16	0.253	0.044	0.001	73.6	3.17		2240	11.05	0.36	3.9
GLDDH1B	GL1023	66	67	1	2.5	0.174	0.035	0.008	77.5	2.62		1710	9.42	0.23	3.52
GLDDH1B	GL1024	67	68	1	2.2	0.159	0.06	0.002	79	2.36		1460	8.19	0.39	3.83
GLDDH1B	GL1025	118	119	1	2.85	0.124	0.028	0.077	76.3	2.8		1110	9.62	1.89	2.88
GLDDH1B	GL1026	119	120	1	2.91	0.127	0.033	0.091	75.6	3.3		1170	9.3	2.32	3.16
GLDDH1B	GL1027	120	121	1	2.33	0.128	0.029	0.142	69.8	5.43		1150	9.77	5.59	2.8
GLDDH1B	GL1028	121	122	1	2.2	0.104	0.025	0.113	72.5	3.54		976	10.8	2.67	3.18
GLDDH1B	GL1029	122	123	1	2.62	0.102	0.027	0.108	73.3	2.32		973	11.2	2.11	3.01
GLDDH1B	GL1030	123	124	1	2.42	0.086	0.018	0.05	77.7	2.18		816	9.39	2.12	2.21

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Hole No	Core	From	To	Length	WEI-21	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-GRA05	PUL-QC	ME-ICP61	ME-XRF11b	ME-XRF11b	ME-XRF11b
	Sample				Recvd Wt.	Mn	P	S	SiO2	LOI	Pass75um	Mn	Al2O3	CaO	Fe
	No:				kg	%	%	%	%	%	%	ppm	%	%	%
					0.02	0.001	0.001	0.001	0.01	0.01	0.01	5	0.01	0.01	0.01
GLDDH1B	GL1031	144	145	1	2.11	0.124	0.031	0.184	72.7	3.12		1150	10.45	2.02	3.6
GLDDH1B	GL1032	145	146.4	1.4	2.58	0.141	0.036	0.158	76.1	3.17		1310	8.52	2.99	2.96
GLDDH2A	GL1033	37	38	1	2.42	10.45	0.152	0.005	41.6	6.54		8540 0	14.15	0.04	9.99
GLDDH2A	GL1034	38	39	1	2.13	3.23	0.059	0.006	72.3	2.75		2600 0	7.23	0.04	5.97
GLDDH2A	GL1035	39	40	1	2.13	0.224	0.026	0.004	85.7	0.53		2090	1.94	0.03	7.31
GLDDH2A	GL1036	40	41	1	2.41	0.746	0.013	0.004	90.6	0.2		6660	0.26	0.02	5.38
GLDDH2A	GL1037	41	44.3	1	0.9	10.05	0.04	0.032	53.8	5.3		7700 0	11.2	0.02	6.54
GLDDH2B	GL1041	18	19	1	2.22	3.18	0.106	0.051	68.1	4.72		2700 0	6.01	0.02	10.65
GLDDH2B	GL1042	19	20	1	2.38	5.66	0.096	0.057	61.6	5.51		4550 0	5.96	0.01	12.25
GLDDH2B	GL1043	34.4	35.4	1	3.92	0.74	0.04	0.004	90.7	0.79		7350	1.76	0.05	3.41
GLDDH2B	GL1044	35.4	36.4	1	3.16	0.757	0.038	0.005	90.2	0.8		6990	1.87	0.04	3.74
GLDDH2B	GL1045	36.4	37.4	1	3.28	0.587	0.053	0.006	89.3	0.81		5000	1.7	0.03	4.61
GLDDH2B	GL1046	56	57	1	2.5	0.969	0.098	1.165	68.7	4.99		8290	6.53	0.25	8.73
GLDDH2B	GL1047	57	58	1	2.7	3.09	0.099	0.022	68.7	5.13		2350 0	6.34	0.6	8.35
GLDDH2B	GL1048	75	76	1	2.77	0.173	0.054	0.013	86.9	0.77		1520	2.58	0.23	5.58
GLDDH2B	GL1049	76	77	1	1.46	0.198	0.039	0.017	89.1	0.81		2090	2.17	0.18	4.34
GLDDH2B	GL1050	77	78	1	2.4	1.375	0.048	0.019	69.3	4.63		1030 0	7.58	1.74	5.78
GLDDH2B	GL1051	78	79	1	2.36	0.349	0.056	0.029	64.2	5.69		3210	9.1	4.75	5.33
GLDDH2B	GL1052	79	80	1	1.65	0.374	0.062	0.032	64	5.55		3350	9.38	4.29	5.58
GLDDH2B	GL1053	80	81	1	2.33	0.364	0.07	0.06	60.1	4.68	88.6	3330	11.95	2.58	6.81
GLDDH2B	GL1054	81	82	1	2.93	0.438	0.062	0.016	56.2	6.48		3940	12.3	4.36	6.65
GLDDH2B	GL1055	82	83	1	2.39	0.35	0.06	0.01	58.9	6.41		3310	10.6	5.32	6.45
GLDDH2B	GL1056	83	84	1	2.57	0.258	0.072	0.009	66.5	4.6		2310	8.99	3.64	5.6
GLDDH2B	GL1057	84	85	1	2.38	0.229	0.071	0.008	70.6	3.67		2040	8.01	2.81	5.06
GLDDH2B	GL1058	85	86	1	2.75	0.404	0.05	0.011	65.1	6.27		3610	8.07	5.52	4.93

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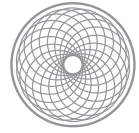
Hole No	Core	From	To	Length	WEI-21	ME- XRF11b	ME- XRF11b	ME- XRF11b	ME- XRF11b	ME- GRA05	PUL-QC	ME- ICP61	ME- XRF11b	ME- XRF11b	ME- XRF11b
	Sample				Recvd Wt.	Mn	P	S	SiO2	LOI	Pass75um	Mn	Al2O3	CaO	Fe
	No:				kg	%	%	%	%	%	%	ppm	%	%	%
					0.02	0.001	0.001	0.001	0.01	0.01	0.01	5	0.01	0.01	0.01
GLDDH2B	GL1059	86	87	1	2.5	0.347	0.044	0.024	70	5.73		3280	6.52	5.24	4.23
GLDDH2B	GL1060	87	88	1	2.46	1.93	0.048	0.021	65.2	5.77		1480 0	8.56	1.86	6.2
GLDDH2B	GL1061	88	89	1	2.1	0.377	0.076	0.032	81.7	1.88		3380	4.86	0.42	4.96
GLDDH2B	GL1062	89	90	1	2.46	0.221	0.044	0.048	92.9	0.58		2200	1.61	0.19	2.52
GLDDH2B	GL1063	116	117	1	2.86	0.618	0.086	0.027	81.6	2.59		5330	2.6	1.66	6.89
GLDDH2B	GL1064	117	118	1	2.58	0.335	0.029	0.026	91.4	1.22		3170	1.44	0.56	3.08
GLDDH2B	GL1065	118	119	1	1.78	0.411	0.038	0.099	88.7	1.36		4170	2.26	0.27	3.96
GLDDH2B	GL1066	119	120	1	2.34	0.347	0.054	0.076	88	1.42		3750	3.05	0.52	3.38
GLDDH2B	GL1067	123	124	1	2.46	0.59	0.089	0.817	83.2	1.88		4790	3.41	0.31	4.82
GLDDH2B	GL1068	124	125	1	2.69	0.361	0.043	0.497	88.3	1.18		3340	2.4	0.16	3.63
GLDDH2B	GL1069	125	126	1	2.65	0.308	0.041	0.124	90.4	0.92		3260	2.56	0.19	2.81
GLDDH2B	GL1070	126	127	1	2.88	0.614	0.06	2.27	76	3.49		4820	3.72	0.23	5.85
GLDDH2B	GL1071	141	142	1	2.36	0.457	0.04	0.834	80.2	2.1		5000	5.1	0.17	5.23
GLDDH2B	GL1072	142	143	1	2.6	0.958	0.059	0.073	81.5	2.19		6980	4.39	0.33	5.81
GLDDH2B	GL1073	143	144	1	2.25	0.586	0.051	0.023	84.8	1.62		5420	3.77	0.27	5
GLDDH2B	GL1074	144	145	1	2.43	0.491	0.053	0.081	85.3	1.45		4920	3.84	0.25	4.63
GLDDH3	GL1075	44	45	1	2.44	0.411	0.041	0.002	88.6	1.16		4220	3.38	0.02	3.29
GLDDH3	GL1076	45	46	1	2.59	0.781	0.055	0.002	85.4	1.59		7320	4.12	0.03	4.16
GLDDH3	GL1077	46	47	1	2.33	0.706	0.046	0.002	86.3	1.61		6130	3.5	0.03	4.35
GLDDH3	GL1078	47	48	1	2.19	0.547	0.061	0.004	83.3	2.31		4990	5.1	0.04	4.53
GLDDH3	GL1079	48	49	1	2.65	1.01	0.039	0.004	88.3	1.46		7820	3.04	0.04	3.24
GLDDH3	GL1080	49	50	1	1.94	0.563	0.038	0.018	90.1	1.15		5510	2.26	0.06	3.32
GLDDH3	GL1081	69	70	1	2.88	0.664	0.071	0.771	83.9	2.12		5300	2.42	0.29	5.06
GLDDH3	GL1082	70	71	1	2.69	1.505	0.126	0.012	74.7	3.08		1165 0	5.57	0.61	6.98
GLDDH3	GL1083	71	72	1	2.33	1.295	0.118	0.006	70.3	3.02		9930	7.52	0.63	7.99
GLDDH3	GL1084	80	81	1	2.29	0.607	0.064	1.335	75.9	3.83		4590	4.71	0.26	6.46
GLDDH3	GL1085	81	82	1	2.41	1.17	0.061	0.134	77	3.7		1065 0	4.48	0.33	7.6

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Hole No	Core	From	To	Length	WEI-21	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-XRF11b	ME-GRA05	PUL-QC	ME-ICP61	ME-XRF11b	ME-XRF11b	ME-XRF11b
	Sample				Recvd Wt.	Mn	P	S	SiO2	LOI	Pass75um	Mn	Al2O3	CaO	Fe
	No:				kg	%	%	%	%	%	%	ppm	%	%	%
					0.02	0.001	0.001	0.001	0.01	0.01	0.01	5	0.01	0.01	0.01
GLDDH3	GL1086	82	83	1	3.1	0.719	0.07	0.958	79.9	3.18		5830	3.92	0.26	5.45
GLDDH3	GL1087	83	84	1	2.29	0.359	0.093	2.62	69.9	7.26		3640	3.63	0.32	7.06
GLDDH3	GL1088	84	85	1	2.71	1.27	0.118	0.451	71.6	5.03		10050	5.79	0.55	7.97
GLDDH3	GL1089	85	86	1	2.57	1.645	0.057	0.067	75.1	4.95		12500	4.92	0.41	6.85
GLDDH3	GL1090	86	87	1	2.18	1.91	0.047	0.095	78.1	4.07		14500	4.23	0.37	6.03
GLDDH3	GL1091	87	88	1	2.94	1.725	0.088	0.595	72.2	4.19		13850	6.03	0.44	7.68
GLDDH3	GL1092	88	89	1	2.49	0.744	0.073	2.01	76.8	3.82		6330	2.9	0.28	6.32
GLDDH3	GL1093	89	90	1	2.62	0.744	0.035	0.055	89.9	1.77	88.5	7080	1.64	0.18	3.32
GLDDH4	GL1094	26	27	1	1.1	0.59	0.014	0.014	70.1	3.08		5270	12.85	0.1	4.87
GLDDH4	GL1095	27	28	1	3.17	0.754	0.028	0.009	67.1	3.93		5700	13.95	0.06	5.11
GLDDH4	GL1096	28	29	1	3.54	0.651	0.045	0.003	70.2	2.88		5490	12.55	0.12	4.78
GLDDH4	GL1097	29	30	1	3.38	0.281	0.048	0.003	68.4	3.39		2800	14.15	0.11	4.62

APPENDIX 2

HILMAC RECONNAISSANCE GEOLOGICAL REPORT



Hilmac Pty Limited

Mount Miller manganese sampling

Prepared for: Pedro Kastellorizos, Director

Genesis Resources Ltd

Prepared by: Phillip C Mackenzie, Geologist MAIG, MSEG

10 March 2010

Report number: 55266

EPM 15771

MLA 80166

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Executive Summary

Objective

A brief was given to obtain samples from three areas of the tenements around Mount Miller (a.k.a. Mount Millar [sic]), conduct detailed geological mapping in these areas and delineate high grade material. The tenements are EPM 15771, MLA 80166 and the former MLA317.

1. Detail geological map over the Mt Millar Mine area outlining potential areas to mine approx 5,000 to 10,000 t of high grade material. As part of this can you please also collect 15-20 rock chip samples over the areas that you recommend to dig.
2. There is a small mineralised lens of manganese north-east of the Mt Millar Mine – can you please map and rock chip this area also, as this might be another area by which we could mine (again minimum of 15 rock chip samples to be taken)
3. Approx 500m south-west, the largest manganese occurrence need detail geological mapping and approx 20 rock chip along strike will also help, as this might be another area for us to potentially drill test.

Each area was defined as a **manganese show in Jasperites** and a sample size of about 4 kg was required. A current notice of entry to the property of Mister Robert Beak [sic. Beck] gave access to the locality. It is understood from Mister Beak that his title to the property has been taken away by the government for a rail loop and he's due to give them vacant possession from 1 April 2010.

The three target areas are described in the table below and essentially were chosen from the map of Russell:

target areas

name	Description	location
Mount Miller mine	The main mining area at Mount Miller containing drives and shafts plus open Area	Queensland Geological Survey site number 486426 23.8836S 151.17582E
North Eastern manganese show	manganese show in jasperite outcrop 90m long, about 5m wide.	60m NE of Mount Miller mine
South Western manganese show	manganese show in jasperite outcrop 260m long intermittently, up to 20m wide	680m SW of Mount Miller mine

Previous work

Information provided include a detailed geological map (composed by R Russell in Sept 2008) outlining the manganese mineralisation and an EPM Annual Report containing historical data on previous exploration, especially referring to LC Ball (1915). LC Ball conducted two assessments of the Mt Miller deposit, 1904 and in 1914. Canavan (1940) supplemented, updated and critiqued the work of Ball. Canavan and Church (1940) had previously made a tentative assessment of the deposit.

Curtis (1919) "The orebody here is extremely irregular in strike, dip and thickness, the width of clean ore varying from 3 feet up to 21 feet." "only a few hundred tons of first-grade shipping ore had been exposed"

Findings

Geological traverses were conducted over the three target areas and samples collected of manganese mineralisation. In parts the exposures in the North Eastern and South Western areas consisted of jasperites which sometimes contained manganese stains or thin veins. In cases a breccia of manganese, silica and ironstone were observed, perhaps indicating a crushed zone.

No outcrops of manganese mineralisation suitable for direct extraction were found. Several dozen old test pits were encountered and usually revealed that there was no substantial manganese mineralisation in those positions. The pits were up to 3m wide and possibly a metre deep.

An "in the field" preliminary estimation of manganese ore remaining in the unworked areas of the Mount Miller mine concluded that very little tonnage remained above the Stopes at a level that would be easy to excavate. A run of ore from the Mullock shaft to the Northern Stope and shaft was estimated to be about 1500 tonnes.

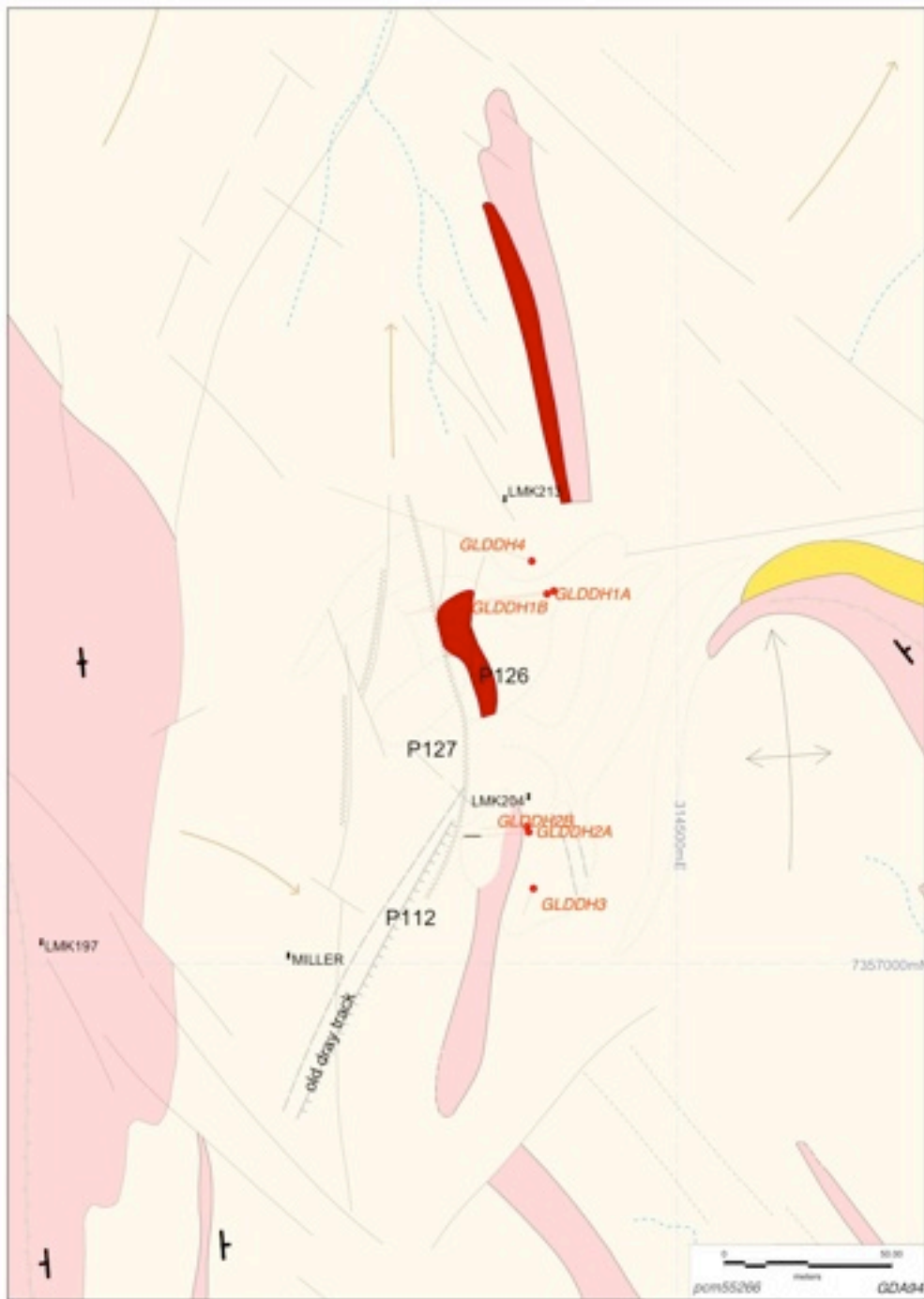
A hidden volume of ore was visualised to occur in the volume south of the Winding Shaft under and old dray track. The height above the pad level outside the main opening was measured at 15.5 m and the projected length of the ore underneath the old dray track was 25 m. The maximum width was assumed to be about the size of the dray track and similar to the exposed manganese in the drives. It is suggested that several costeans would be required to test the existence of your body under the old track. Subsequent reading of other reports, namely Canavan (1940), casts doubt on the quality of the ore in that volume. No tonnage estimate is given.

Note: a standard GPS was used for locating the positions of samples, be aware of the inaccuracy that is normally associated with this type of measurement. At best 10 m accuracy. The location of the landmarks has not been adjusted to fit the base map provided by Russell). A list of the co-ordinates is attached at the end of this report.

The remainder of this report presents observations around the prospective areas with photographs and commentary.

NE Manganese show

Jasperite in the north eastern area occurs on a scree slope which contains very little outcrop. Manganese was observed mostly as stains on the jasperite and some heavy ironstone lumps associated with minor manganese were found. In instances the manganese in this area appeared to be contamination from the mining process.

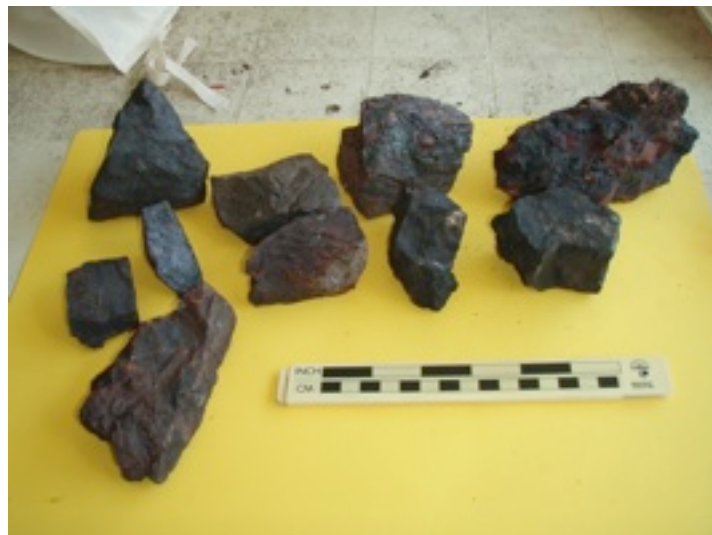


map of Mt Miller main mine area and NE body
(after Richard Russell 2008)

map of Mt Miller main mine area and NE body

Location LMK213**Location LMK213**

The outcrop of the North Eastern body mainly consists of scree on a slope covered with vegetation (Location LMK213 photo P3070147). Sample L213 shown below was collected from the scree in which there were a few high grade cobble sized pieces but no outcrop.



Location GLDDH4



NE Manganese show Jasper exhibiting magnenese staining (Location GLDDH4, photos P340073,5

Location GLDDH4

South Western Manganese show

Jasperites in the **South Western manganese show** exhibited in places manganese mineralisation as thin sheets or stains. In the Northern and Southern ends of the manganese bearing jasperite the Jasper changes from a red colouration into a light brown jasper and quartzite which appears to be barren of any manganese mineralisation. No substantial manganese mineralisation was encountered. **map of SW manganese show**

map of SW manganese show



Location LMK201



Jasperites in the ***South Western manganese show*** exhibited in places manganese mineralisation as thin sheets over a botryoidal like surface. Specimen broken to reveal manganese mineralisation is surficial only. (location LMK201 photos P3040053,5)

Location LMK201





An old pit on the crest of a ridge dug into red jasperite revealed a minor occurrence of manganese, probably with less than 5% manganese mineral. (photo P3060096, location LMK208; sample L208)

Location LMK208





Jasperite outcrop with very minor evidence of manganese mineralisation. White and yellow quartzite 15 m to the east. (location LMK 210, photo P3060098, 9)

Location LMK210





Jasperite on a screen slope which contains some higher-grade lumps from a lead which has been turned over previously by old-timers on an east facing slope where the pit was dug on a face. (location LMK212, photo P3060102; P309149 sample L 212)

Location LMK212



Mt Miller main mine area

Location LMK204

An investigation around the main working area of Mount Miller indicated that there were no continuous bodies of manganese mineralisation which could be mapped to the extent required to dig 5000+ tonnes. A diagrammatic section from Ball (1915) suggested there may be a suitable tonnage on the left-hand side (to the south of the winding shaft), shown in the photograph below. An old dray track led to the shaft was cut into the jasperite and heading south down the hillside public to a shipping point on the Calliope River. A practice of the miners would have been to dig the track through ore to the shaft. The Photograph below (P3070110) illustrates the remnant of ore underneath the dray track which is above out of sight.

Location main opening LHS

Location main opening LHS



Footwall of old Dray track



Footwall of the old dray track

Western side (uphill) of old dray track (leading from the winding shaft to the south). The track is cut into the rock and contains low-grade ore occurring as thin manganese sheets. Track is about 25 m long under which ore may be contained. Hand excavation of the track did not reach through the rubble to hard ground.

(Location P112 , photo P3 070112)

Canavan (1940) describes the body above the No 1 level, south drive and an orebody which may be under the old dray track and was not visible at the time because of the presence of the engine house. The body above the number one level is a dual orebody with the western part being low-grade which didn't warrant mining or sampling at that time. Diamond drill holes GLDDH2A&B drilled under the No 1 level zone (one of them probably hitting a drive in level 2 ½). Costeans across the old dray track may expose some of the ore. "the rise shown in this section is on the western band of the Eastern orebody and the low-grade is indicated by the absence of stoping" (Canavan, 1940 p 7).

Mullock shaft

The mullock shaft (photo P3070120) shows a pinched out lens of manganese ore which is approximately 22 m from manganese ore seen in the opening on the right-hand side of the main pit (photo P3070143)

Mullock shaft



Northern drives and stope

Northern drives/stopes

The Northern drives and shaft contain a pinched out continuation of the manganese mineralisation, and on the photo below (P3070118) manganese can be seen in the all rock to the lower right nearest the viewer and a small quantity less than a metre wide between the two levels. The wall rock appears to be only surficial manganese mineralisation.



Canavan (1940) remarks that are above the North Stope " the low grade material bounding the ore appears if it cuts the ore off a foot or so behind the back. That is, instead of the ore body widening above the exposure as shown by Mister Ball, it probably narrows very rapidly and is only a shell of a few feet thickness. In other words the North Stope is worked out." (p5)

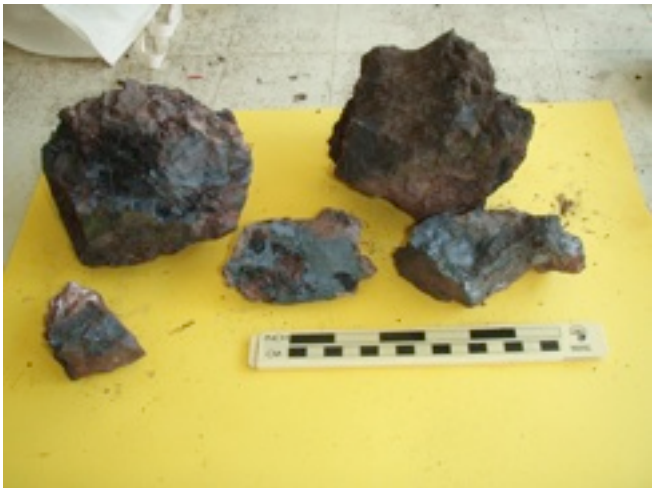
The body between the mullock shaft and the northern shaft is described as having "more filling in the stope below than indicated in the earlier plan, (of Ball, 1915) the present filling being shown in the new longitudinal section. Estimated Recoverable Ore -NIL" (Canavan, 1940 p5).

Main Mt Miller mine opening RHS

Main Mt Miller mine opening RHS



Right hand side sample location photos (P3070126 P3070144, P3090158) ; sample P126



Main main mine opening LHS



Left hand side sample location photos (P3070127, P3070141, P3090157); sample P127



Landmarks

grid	land-mark	zone	E	N	note	altitude
UTM	MILLER	56K	314385	7357001	486426	75
UTM	LMK196	56K	314875	7358510	GATE	32.9
UTM	LMK197	56K	314312	7357005		161.8
UTM	LMK198	56K	314198	7356782		92
UTM	LMK199	56K	313924	7356520		152.1
UTM	LMK200	56K	313943	7356522		139.9
UTM	LMK201	56K	313994	7356518		120.1
UTM	LMK202	56K	314058	7356450		96
UTM	LMK203	56K	314235	7356397	CK	70.1
UTM	GR MLA	56K	314310	7356756	SW CNR	107.9
UTM	LMK204	56K	314456	7357048		124.1
UTM	CK	56K	314295	7356451		57
UTM	LMK205	56K	314109	7356405	STAIN	82.9
UTM	LMK206	56K	314080	7356299		96.9
UTM	LMK207	56K	314025	7356337	RED MN	130.1
UTM	LMK208	56K	314015	7356341	MN SMPL	128
UTM	LMK209	56K	314011	7356285	S JSPR	121.9
UTM	LMK210	56K	314001	7356372	JPR	132
UTM	LMK211	56K	313866	7356730	JSPR	143
UTM	LMK212	56K	313973	7356538	MN	132
UTM	LMK213	56K	314449	7357136		116.1

Abbreviations

- LMK### = Landmark (GPS point)
- L### = sample number at LMK
- P30##### = photo number
- P### = photo point associated with sample

References

Ball LC (1904) **Certain iron ore, manganese ore, and limestone deposits in the central and southern districts of Queensland.** GSQ publication number 194.

Ball LC (1915) **Mount Miller manganese mine. Geological Survey Reoprt.** Queensland Government Mining Journal vol XVI, p12-15.

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Canavan, F (1940) **Report on the Mount Miller manganese mine near Gladstone, Q'land** CR256.

Curtis, AH (1919) **Manganese Ores** Monographs on mineral resources with special reference to the British Empire Imperial Institute. Pub John Murray Lond.