

EL 06/2015
HENTY ROAD, TASMANIA

FIRST ANNUAL REPORT
FOR THE YEAR ENDED
25 AUGUST 2016

LICENSEE:
KINGFISHER EXPLORATION PTY LTD
A.C.N 169 842 728

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August 2016

KINGFISHER
EXPLORATION PTY LTD

EXECUTIVE SUMMARY

EL06/2015 is located approximately 10 kilometers southwest of Zeehan on the West Coast of Tasmania. It was granted by Mineral Resources Tasmania to Kingfisher Exploration Pty Ltd (Kingfisher) on 24th August 2015. The EL covers 67 square kilometers of ground that is considered prospective for base metal, primarily Zn-(Pb-Ag), deposits of Mississippi Valley Type (MVT) and Irish-type style.

Considerable exploration work carried out in the project area by several previous explorers since the 1980's includes geological mapping, surface geochemistry sampling, costeaning and pitting, geophysical surveys (including airborne magnetics, gravity, electromagnetics and IP), drilling (13,500+ meters of aircore drilling and around 11,000 m of diamond core drilling), metallurgy, mineralogy, petrography, resource assessment and scoping studies. This has resulted in a vast amount of data contained in historical exploration reports and Kingfisher's first year's exploration efforts have largely involved collating, digitising and reviewing this data. While still ongoing the review work has resulted in identifying a number of priority exploration target areas that will be the focus of forward field exploration activities.

A revised (non-JORC) resource estimate was calculated for the Grieves Siding deposit and indicates a current total resource potential of around 2.2 Mt grading 8.2% Zn, which includes 1.9 Mt grading 8.7% Zn comprised of primary mineralisation. This represents a significant resource increase from previous estimations and improves the potential viability of the project dramatically. Geological modelling of the deposit has resulted in an improved understanding of combined stratigraphic and structural controls to mineralisation.

This report documents Kingfisher Exploration's first year exploration activities, for the year ending 25th August, 2016.

TABLE OF CONTENTS

1	INTRODUCTION	5
1.1	LOCATION, ACCESS & TENURE	5
1.2	EXPLORATION RATIONALE	5
2	REGIONAL GEOLOGY	8
3	LOCAL GEOLOGY	12
3.1	MOINA SANDSTONE	12
3.2	SILTY TRANSITION UNIT	12
3.3	GORDON LIMESTONE	13
3.3.1	Ugbrook Formation	13
3.3.2	Myrtle Formation	13
3.3.3	Black Jacks Formation	14
3.4	ELDON GROUP	16
3.5	STRUCTURE.....	16
4	REVIEW OF PREVIOUS EXPLORATION	19
4.1	RESOURCE ESTIMATES BY PREVIOUS WORKERS	19
5	EXPLORATION COMPLETED	21
5.1	COLLATION AND REVIEW OF PRE-EXISTING DATA.....	21
5.2	MINERALISATION STYLES REVIEW	21
5.2.1	Basal Siderite Zone (BSZ)	21
5.2.2	Lower Dolomite Zone (LDZ) Mineralisation	23
5.2.3	Middle Dolomite Zone (MDZ) Mineralisation	23
5.2.4	Upper Dolomite Zone (UDZ) Mineralisation.....	24
5.2.5	OTHER MINERALISATION TYPES.....	24
5.3	ALTERATION STYLES REVIEW	25
5.4	PRELIMINARY MINERAL RESOURCE ASSESSMENT	27
5.4.1	GRIEVES SIDING RESOUC E ESTIMATE.....	27
5.5	EXPLORATION TARGETS REVIEW	38
5.5.1	GRIEVES SIDING DEPOSIT	38
5.5.2	MYRTLE PROSPECT.....	43
5.5.3	SOUTH GRIEVES PROSPECT	47
5.5.4	FIREWOOD SIDING PROSPECT	47
6	DISCUSSION OF RESULTS	51
7	CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE WORK	52
8	ENVIRONMENT	53

9	EXPENDITURE.....	54
10	REFERENCES.....	55

LIST OF FIGURES

Figure 1.	Location plan showing EL 06/2015 area. Datum used is Map Grid of Australia 1994 (MGA94), Zone 55, GDA94.....	7
Figure 2.	Schematic Late-Proterozoic-Cambrian tectonic evolution of western Tasmania from Crawford and Berry (1992).....	10
Figure 3.	Regional geology of the Zeehan area. EL06/2015 shown as red polygon.	11
Figure 4.	Summary of Ordovician lithostratigraphy in the Zeehan region (Burrett, 1995).	17
Figure 5.	Geology map of the Gladstone-Portland goldfields area.....	18
Figure 6.	Local stratigraphic column showing the position of primary carbonate hosted zinc mineralisation... ..	25
Figure 7.	Plan showing the position of section lines used in calculate the resource estimate at Grieve Siding.	30
Figure 8.	Cross Section GXS-1, Grieves Siding.	31
Figure 9.	Cross Section GXS-2, Grieves Siding.	32
Figure 10.	Cross Section GXS-3, Grieves Siding.	33
Figure 11.	Cross Section GXS-4, Grieves Siding.	34
Figure 12.	Cross Section GXS-5, Grieves Siding.	35
Figure 13.	Cross Section GXS-6, Grieves Siding.	36
Figure 14.	Cross Section GXS-7, Grieves Siding.	37
Figure 15.	Plan showing interpreted geology and structure with resource section lines and drillholes, Grieves Siding.....	39
Figure 16.	Plan showing surface (wacker hole) zinc geochemistry with resource section lines and drillholes, Grieves Siding.	40
Figure 17.	Plan showing bouger gravity image from EZ (1980's) with resource section lines and drillholes, Grieves Siding.....	41
Figure 18.	Representative section through Grieves Siding.	42
Figure 19.	Plan showing surface geochemistry distribution (zinc) with interpreted geology and drillhole collars, Myrtle prospect.	44
Figure 20.	Plan showing surface geochemistry distribution (zinc) with bouger gravity image, interpreted structure and drillhole collars, Myrtle prospect.....	45
Figure 21.	Plan showing interpreted mineralisation boundaries adjacent to structures within the Professor Range Fault Zone and significant drillhole assay intercepts, Myrtle prospect.	46
Figure 22.	Plan showing surface geochemistry distribution (zinc) with interpreted geology, Firewood Siding prospect.....	48

LIST OF TABLES

Table 1. Grieves Siding primary ore zone resource estimate calculation figures.	29
Table 2. Resource estimates for Grieves Siding Deposit.....	29
Table 3. Summary of key exploration target prospects, EL06/2015.....	50
Table 4. Exploration expenditure on EL06/2015 during the reporting period.....	54

1 INTRODUCTION

This report is the first Annual Report for EL06/2015 located approximately 10 km south of Zeehan on the Henty Road, in Western Tasmania, granted to Kingfisher Exploration Pty Ltd (Kingfisher) on 24th August 2015. EL06/2015 covers 67 square kilometers of ground that is considered prospective for base metal, primarily Zn-(Pb-Ag), deposits of Mississippi Valley Type (MVT) and Irish-type style.

The area of interest has undergone significant previous exploration resulting in the identification of at least 15 base metal prospects and delineation of resource, the largest of which is at Grieves Siding. Despite the area being highly prospective for the discovery of base metal deposits, there has been no significant exploration completed since the early 2000's.

This report documents exploration activities carried out between the dates 25 August 2015 and 25 August 2016 (the Reporting Period).

All maps and location coordinates contained within this report are presented in GDA94 datum format unless otherwise noted.

1.1 LOCATION, ACCESS & TENURE

EL6/2015 was granted to Kingfisher Exploration on 29th August 2015. The 67 square kilometre licenced area is located approximately 10km south of Zeehan (Figure 1). The tenement is easily accessed by Henty road, a sealed highway that dissects the project area. The Queensberry Track crosses and provides 4WD access to the eastern part of the Grieves Siding area. Several other smaller dirt or gravel tracks constructed and utilized by previous explorers provide access to other individual prospect areas. Many of these tracks require four-wheel drive access or are currently inaccessible due to infestation of thick strands of gorse weed, particularly leading to and surrounding the Myrtle prospect area.

The area comprises topographically flat, low lying button grass and peat bog. Low lying scrub flanks the steep sided Professors Range running south-east / north west through the area forming a prominent topographic high. Land tenure of the area is split between Regional Reserve to the south-east and Managed Informal Reserve to the north-west.

1.2 EXPLORATION RATIONALE

The main exploration target model for the licensed area is for medium to large tonnage Mississippi Valley Type and Irish-style carbonate-hosted Zn-Pb-Ag deposits within the Ordovician Gordon Limestone. The area is also considered prospective SEDEX and Devonian Zeehan style carbonate-hosted Zn-Pb-Ag vein and replacement deposits.

Kingfisher has revised its global exploration target to 3 to 10 Mt averaging 7-10% Zn occurring above 200 m depth.

The Gordon Limestone was deposited over a large area at the close of a major period of tectonic and volcanic activity that produced the metal-rich Cambrian Mount Read Volcanics. During and immediately before carbonate deposition the tectonic regime was still unstable as evidenced by rapid changes in stratigraphic thickness of Late Cambrian and Ordovician

strata. It is considered that cooling hydrothermal systems may have continued to emit metals into the system, and these could have been focussed by basement irregularities and syn-sedimentary basin-forming faults. Lead isotope studies indicate a Cambrian source for the Ordovician carbonate-hosted deposits at Oceana and Grieves Siding lending support to this theory which adds significant new prospectivity to the Ordovician limestone sequence.

Although there remains strong evidence to continue a concerted exploration focus for primary base metal sulphide mineralization within the tenement there has been an increase in attention and research into the prospectivity and treatment options of Zn-carbonate or “Zn-oxide” mineralogy. A significant amount of mineralogy at the Grieves Siding Deposit is reportedly of Zn-oxide mineralogy and this has commonly discouraged previous explorers from further developing the Grieves resource. Kingfisher has become aware during the reporting period of new Australian developed technology for the treatment of Zn-oxide ores and has entered into negotiations with a potential Joint Venture partner to further explore and evaluate the potential for developing such mixed zinc-oxide/sulphide ore in the project area. Researching and assessing the treatment of zinc carbonates will continue and may direct future exploration activities within the tenement.

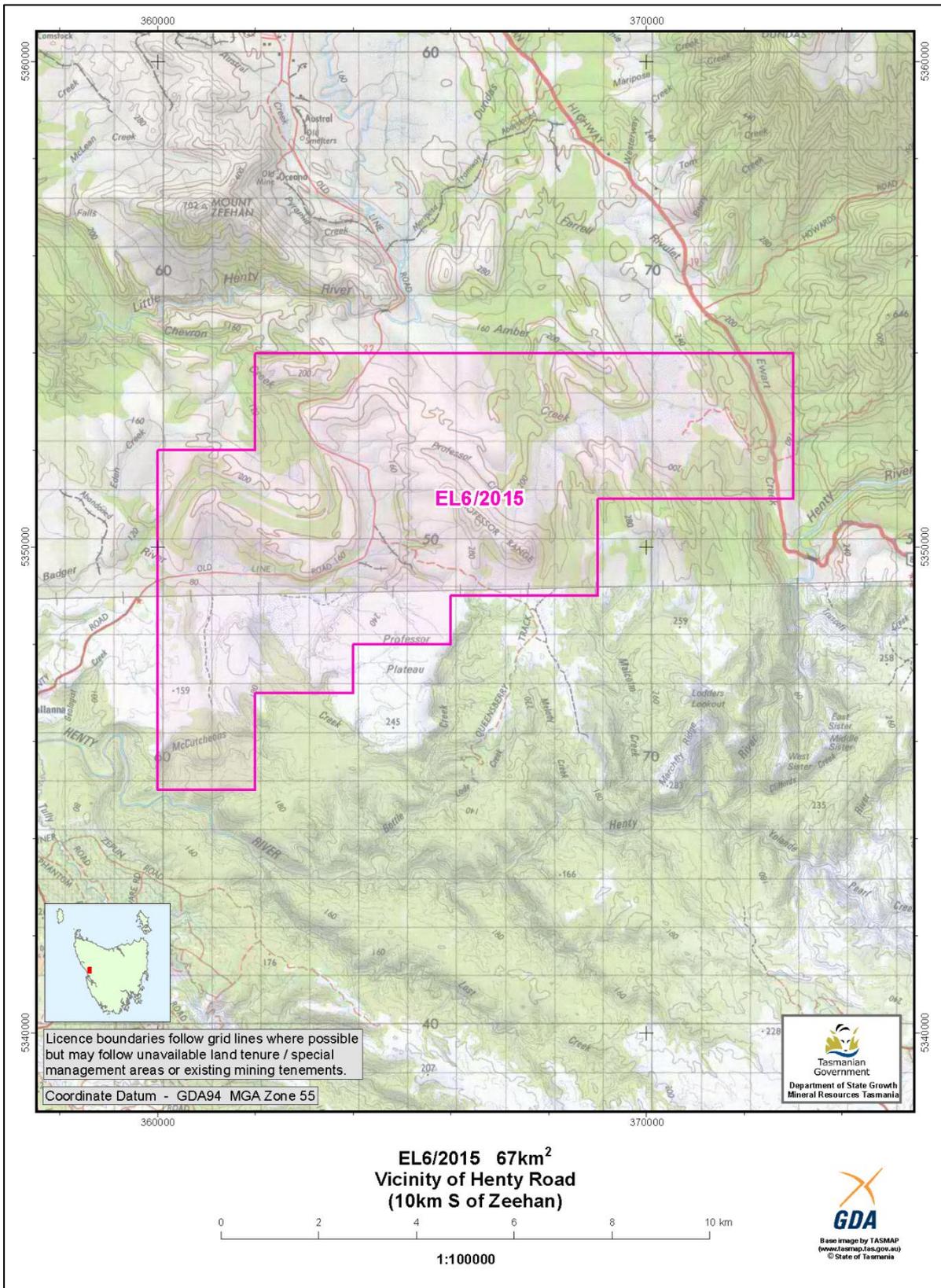


Figure 1. Location plan showing EL 06/2015 area. Datum used is Map Grid of Australia 1994 (MGA94), Zone 55, GDA94.

2 REGIONAL GEOLOGY

The geological history of western Tasmania between the Late Neoproterozoic (circa 600 Ma) and the Early Ordovician (circa 490 Ma) as described by Crawford and Berry (1992) records a cycle of continental rifting and ocean opening (circa 600 Ma), subduction (starting circa 515 Ma), and arc-continent collision, with important post-collisional extension, magmatism (500 Ma) and associated VMS mineralisation, exhumation of underthrust Neoproterozoic continental crust, and molasses deposition (Crawford et al, 2003) (Figure 2). This was followed by deposition of shallow-marine platform sequence carbonate and fine grain siliciclastic sediment sequences through to Early Devonian times. Orogeny during the Early to Middle Devonian resulted in widespread folding and metamorphism of the earlier formed rocks and was closely followed by extensive granitoid intrusion.

Basement geology of much of the western Tasmania region consists of metamorphosed Precambrian siliciclastic rocks of the Tyennan Block, now dominated by massive quartzite sequences. The Tyennan Block rocks were intruded by dolerite/microgabbro dykes and sills around 570-600 Ma, which following metamorphism are now represented by mainly amphibolites and lesser eclogite.

A major episode of rifting of the continental crust during the Late Precambrian to Early Cambrian (circa 600 Ma) affected much of eastern Gondwanaland and produced a thin passive continental margin transected by rift basins along the modern-day western Tasmania (Crawford and Berry, 1992). Advancement of rifting probably extended to breakup and ocean opening around 570 Ma (Crawford, 2005) forming a volcanic passive margin along south-eastern Australia, facing an actively opening basin to the east. At around 515-520 Ma, a boninitic intra-oceanic island arc developed on this opening ocean basin followed by arc-continent collision, subduction and ultramafic allochthon emplacement (circa 515 Ma). This allochthon emplacement event was the first phase of the Tyennan Orogeny, a complex, multistage deformation event recorded by widespread major thrusts throughout western Tasmania.

Post-collisional extension saw the development of a small graben – the Dundas Trough (Crawford and Berry, 1992), a northerly trending, 20-30 km wide mid-Middle Cambrian trough flanked by the Precambrian basement regions. Basal Dundas Trough sediments consist of 3500 m of conglomeratic flysch sequences with ultramafic detritus derived Cambrian volcanics. The Middle to Late Cambrian Mount Read Volcanics (MRV) formed on the eastern-most part of the Dundas Trough, and interfinger westward within the Dundas Trough sequences. The 10-15 km wide MRV belt consists of interbedded, subaerial to subaqueous felsic, intermediate and mafic volcanics which host a number of world class polymetallic volcanogenic massive sulphide deposits (Including the Mt Lyell, Rosebery, Hellyer and Que River deposits).

Cessation of volcanism and regional uplift through major reverse faulting and upright open north-trending folding during the mid-Late Cambrian to Early Ordovician saw the rapid deposition of Precambrian basement derived coarse siliciclastic molasses and sediments of the Denison Group onto the Dundas Trough and unconformably overlying the MRV. The Owen Group conglomerate and correlates (including the Mount Zeehan Conglomerate) commonly rests with angular and/or erosional unconformity on the older Dundas Trough units, forming the base of the Denison Group. It consists of siliciclastic shallow marine to

fluvial pebble to boulder conglomerates and quartz sandstones, typically as coarse conglomerate composed of metaquartzite clasts. Variations recorded in the thickness and grain size of the Owen Conglomerate and correlates suggest that deposition occurred as a series of continental alluvial fans formed as piedmont deposits around the margins of the uplifted Tyennan basement block in fault-controlled graben (basin) structures (Corbett and Turner, 1989).

The presence of worm castings, burrows, brachiopods and gastropods in the upper Owen sediments indicates a transition to a marine environment in the Late Cambrian to Early Ordovician and marks the onset of a period of quiescence and shallow water platform sedimentation that lasted until Middle Devonian times.

The Owen Conglomerate and correlates are overlain by a 10 to 20 m thick unit of well-sorted sandstone of the Pioneer Sandstone and correlates (including the Moina Sandstone, representing the upper units of the Denison Group but recently reassigned to the base of the overlying Gordon Group).

Conformably overlying and/or interfingering with the Pioneer Sandstone is the Ordovician to Silurian aged Gordon Group carbonates (Gordon Limestone) comprising a sequence of transgressive shallow marine to peritidal platform limestone and dolomitised limestone with minor interbedded siliciclastic/argillaceous units. The Gordon Group has a measured thickness of up to about 1.8 km in central-southern and is widely distributed across western Tasmania. It represents the thickest and most stratigraphically continuous Ordovician carbonate sequence in the southern hemisphere. The internal stratigraphy of the Gordon Limestone is discussed in more detail in Section 1.3 Local Geology.

Carbonate-hosted stratiform sulphide mineralisation and an associated breccia unit in the Zeehan area indicate local synsedimentary faulting and possible carbonate replacement or exhalative activity (Taylor and Mathison, 1990). The carbonates also became an important host for skarn mineralisation associated with Late Devonian-Early Carboniferous granite intrusions.

The Gordon Group carbonates are overlain concordantly, but locally with disconformity by the shallow marine siliciclastic quartz sandstone and mudstone sequences of the Silurian to Early Devonian Eldon Group sediments. The lower part of the Eldon Group succession is dominated by shallow-marine quartz sandstone (Crotty and Florence formations and correlates); the upper by a thick, shelf-facies shale unit with minor limestone (Bell Shale and correlates).

The Denison, Gordon and Eldon Groups, together the Wurawina Supergroup, were folded together in Early to Middle Devonian time resulting in low grade metamorphism and regional north-northwest trending open folds with steep reverse faults (Tabberabberan Orogeny). Devonian granitoids with K-Ar ages ranging from 332 to 367 Ma intruded the sequence.

The folded and intruded rocks of the Wurawina Supergroup are overlain with angular unconformity by the Parmeener Supergroup shallow marine and glaciomarine rocks of Late Carboniferous to Triassic age which preceded Jurassic dolerite dyke and sill intrusion. A widespread unconformity representing a pre-Permian landscape, known as the Henty Surface, occurs in the West Coast Range. Mesozoic and Cenozoic structures are related to

the breakup of Gondwana and were followed by Tertiary basaltic activity. Further glaciation in the Pleistocene added to the modern day topography, otherwise Holocene alluvial deposits can be found on the modern day surface.

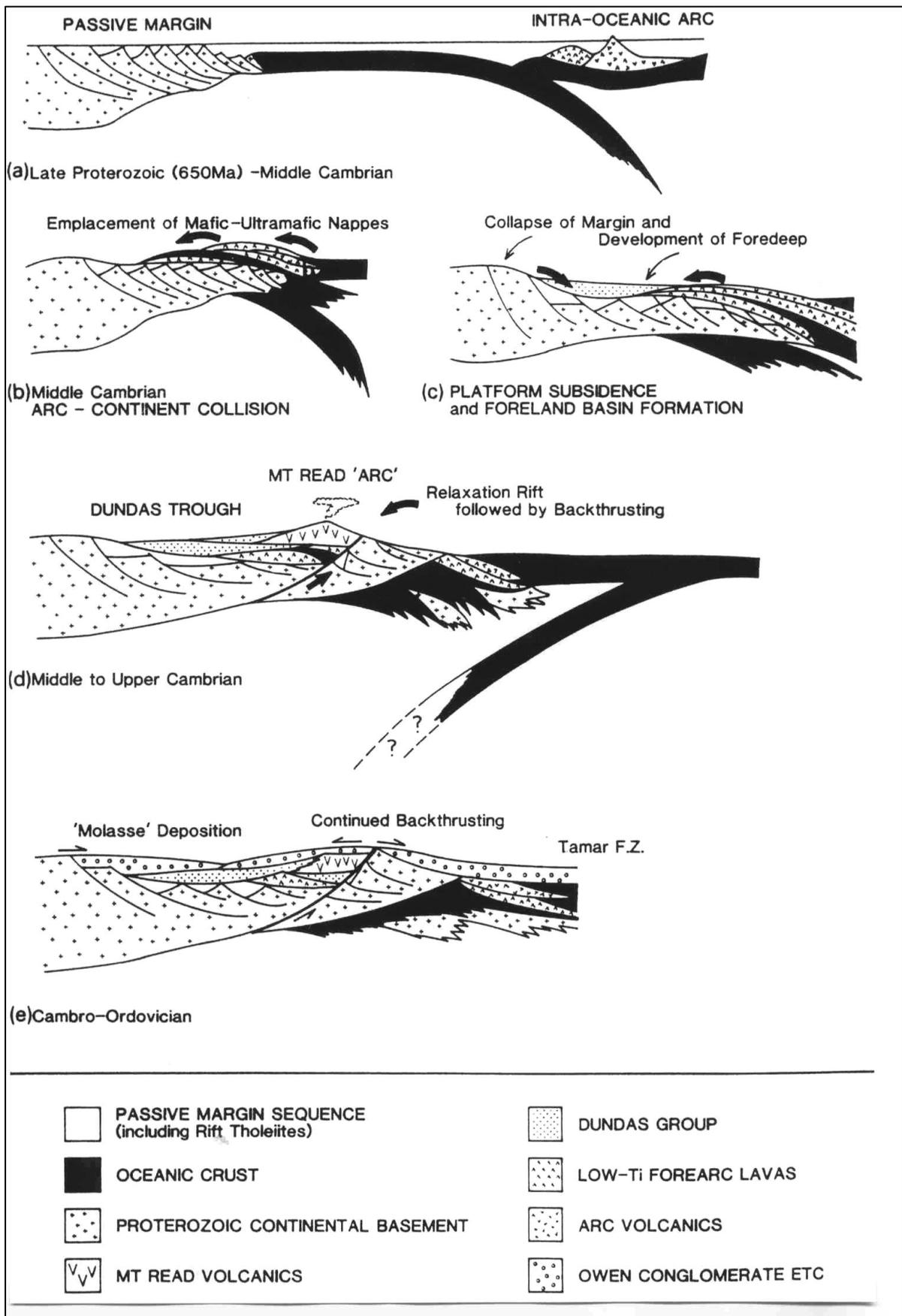


Figure 2. Schematic Late-Proterozoic-Cambrian tectonic evolution of western Tasmania from Crawford and Berry (1992).

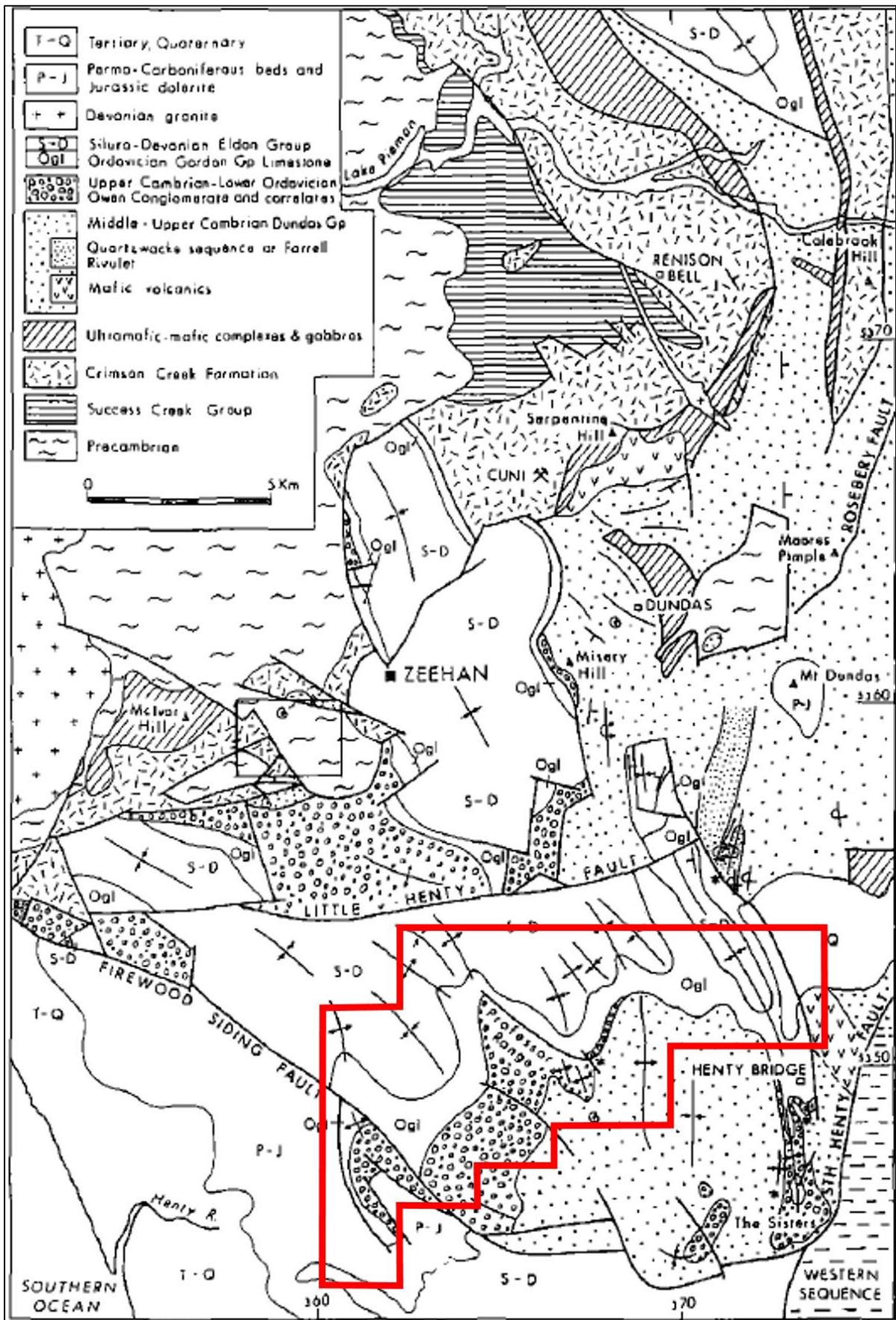


Figure 3. Regional geology of the Zeehan area. EL06/2015 shown as red polygon.

3 LOCAL GEOLOGY

The local scale geology of the Henty Zinc Project (EL 6/2015) area represents a sequence of the Wurawina Supergroup rocks comprising Dundas Group and Denison Group (Mt. Zeehan Conglomerate and Moina Sandstone) siliciclastics rocks in the south, younging stratigraphically northwards through the Owen Group carbonates (Owen Limestone) and overlying Eldon Group siliciclastics. The sequence is folded and north-plunging along northwest trending fold axes and also faulted by regional to district and local scale structures along the same trend; including the prominent Professor Range the Firewood Siding Faults. The general younging-northwards trend in stratigraphy is terminated north of the project area by the east-west trending Little Henty Fault which juxtaposes the upper Eldon Group rocks (south of the fault) against older Denison and Dundas Group rocks (north of the fault).

The Ordovician stratigraphic nomenclature of Burrett (1995) for the Zeehan area has been adopted for use in describing the stratigraphy of the project area and also combined with CRA terminology that has been largely adopted by previous explorers. Figure 4 shows a stratigraphic column for the main units of interest within the project area. Figure 5 shows the geology of the project area based on combined stratigraphic nomenclature of Burrett (1995) and that developed by previous explorers (namely CRAE). Major rock units are described below.

3.1 MOINA SANDSTONE

The Early to Middle Ordovician siliciclastic Moina Formation (Moina Sandstone), being a correlate of the Pioneer Sandstone, is the uppermost unit of the Denison Group, conformably overlying the Mount Zeehan Conglomerate. It is characterised by fine sandstone, generally strongly silicified to quartzite with localized conglomerate bands, often becoming a pink silicic quartzite. Modal grain size (0.25-1.5mm) is medium to coarse sand with conglomeratic bed containing sub-angular to sub-rounded clasts up to 4mm (Ellis, 1996). Thin (5 cm) laterally discontinuous mudstone interbeds occur within the unit, as well as minor lithic fragments and quartzose beds. Cross bedding, ripple marking and intensely bioturbated beds are common (Banks, 1989).

The Moina Sandstone is a relatively thin unit (<100m) with variable thickness and presence. It is interpreted to be a littoral to sublittoral marine sequence at the base of the Gordon Limestone, deposited during a period of quiescence and shallow water sedimentation (Banks, 1989). It overlies slope or basinal deposits and shallow marine alluvial fans (Mt Zeehan Conglomerate). Cessation of sandstone deposition and the initiation of limestones may suggest a depleted sandstone source or signify the start of the Early to Middle Ordovician transgression.

3.2 SILTY TRANSITION UNIT

The boundary of the Moina Formation and the Gordon Group is marked by a siltstone-mudstone calcarenite transitional zone (the "Silty Transition Unit") that may vary in thickness from 1 m up to 30 m thick. This unit is regarded here as the topmost part of the Moina Formation and the base of the Gordon Group is defined as the start of clearly discernible carbonates (Ugbrook Formation). However, it should be noted that this boundary is often arbitrary due to common interdigitation of the Silty Transition Unit with the carbonates and/or alteration and replacement of limestones by siderite and mineralisation.

It is variably dolomitised, more so in the north at Grieves Siding, however, no significant mineralisation is recorded with the dolomitisation. Mineralisation is commonly positioned directly above the Silty Transition Unit.

3.3 GORDON LIMESTONE

The average thickness of the Gordon Limestone in the project area around 500 to 700 m. Generally, the limestone is a mixture of clean calcsiltite/calculutite with argillaceous calcsiltite/calcarenite, all deposited in a shallow marine environment.

Past workers (Burrett and Ellis) have identified distinct lithotypes for stratigraphic logging and basin interpreting purposes. This involved recognising depositional environments and depth of water during deposition. Carbonate deposition occurred on a mini-platform with 4 main depositional environments recognised: (i) intertidal-supratidal flats, (ii) lagoonal and restricted lagoonal, (iii) intertidal-subtidal bars and shoals, (iv) shallow to medium subtidal open shelves and platforms. Distinctive laminated units periodically occur and these represent shallowing intratidal sequences. Carbonate sedimentation occurred in a tropical environment with an Ordovician seawater temperature between 23 and 25° C (Rao, 1990).

3.3.1 Ugbrook Formation

The Ugbrook Formation forms the base of the Gordon Group, succeeding the siltstones of the Silty Transition Unit by alternating thin micrites, argillaceous micrites, biomicrites and shales/mudstones, sometimes with siltstones and sands. The alternating units are centimetre to decimeter in scale, forming repetitive sequences up to 20 m thick and are commonly bioturbated and nodular (due to sedimentary boudinage). The sequences are strongly pelloidal and show a subtidal fauna dominated by corals, gastropods and brachiopods. Comminuted shells are common and asaphid trilobites are also recorded. Several sections have developments of biocalcarenites and/or biosparites composed mainly of crinoidal debris. It often contains ooids, oncoids, corals and comminuted shell debris that can exhibit a sparry matrix representing onco-biosparite and oosparite lithofacies (Glover, 1996). These units are likely to correlate to the Oolite Unit of CRAE.

Lithofacies of the Ugbrook Formation were deposited in a subtidal and protected subtidal lagoons formed behind migrating carbonate bars (Burrett, 1995).

The Ugbrook Formation at Grieves Siding (including the Silty Transition Unit) averages 100 m in thickness, reaching a maximum thickness in the north of 230 m, and a minimum of 50 m in the south (Glover, 1996). The thickness of the formation is often obscured by pervasive hydrothermal dolomitisation and siderite alteration, signifying a halo to ore.

Calcarenite of the Silty Transition Unit interfingers with the Ugbrook Formation sporadically throughout the Grieves Siding area, intensifying towards the south where the Ugbrook Formation thins (Glover, 1996).

3.3.2 Myrtle Formation

The Myrtle Formation consists of between 40-170m of micrites, biomicrites, dolomitised micrites and minor calcarenites and shales deposited as upwardly shallowing tidal flat cycles known as Punctuated Aggradational Cycles (PACs) due to response to changing sea level (Burrett, 1995). The Myrtle Formation contains 15 recognised PACs, 20 to 160 m thick,

making it a useful marker unit. However, not all 15 PACs are typically represented at any one place and broad correlation between the individual PACs may be unreliable. Faulting, stylotisation, dolomitisation, tidal channel crosscut, and poor core recovery can all act to conceal PACs.

PACs are meter-scale upwardly shallowing units separated by surfaces marked by abrupt change to deeper facies. PACs represent sedimentation produced over relatively long period (tens of thousands of years) of base-level stability punctuated by geologically instantaneous relative base-level rises of at least basin-wide extent (Goodwin & Anderson, 1985). Minor scouring and rip-up clasts are seen on such boundaries. A typical PAC sequence consists of subtidal mudstones and argillaceous micrite grading into bioturbated micrites, pale micrites, intertidal microbial laminated micrites and domal stromatolites. They often terminate in “birdseye” diamictites with some terminating in red beds (Glover, 1996). These indicate oxidation in a very shallow, possibly exposed peritidal environment.

It has been suggested (Burrett, 1995) that faulting could have ended the Ugbrook Formation deposition by producing significant shallowing and thus allowing the formation of the Myrtle Formation PACs. Alternatively, faulting assisted or caused the stabilisation of carbonate bars allowing the development of the PAC sequence (Glover, 1996). With a transgressive sea level and stabilised offshore carbonate bar, the Ugbrook Formation was soon covered with argillaceous micrites, calcisiltites and biomicrites as the carbonate factory kept up (Glover, 1996).

The Laminated Micrite Unit of CRAE terminology can be correlated to part of the Myrtle Formation. It is described as comprising of banded and stylolitic fine grained calcarenite and micrite. Sometimes the laminae consist of argillaceous material. The individual laminated units have an upper thickness limit of generally <3m.

3.3.3 Black Jacks Formation

The Myrtle Formation is succeeded by the Black Jacks Formation which consists of alternating micrites and shales with some biomicrites, calcarenites and calcisiltites. It is divided into lower and upper units, separated by the Lords Siltstone member.

Deposition of the Black Jacks sediments was largely below wave base with graded units and shell lags being produced by periodic storms (Glover, 1995). This represents a significant deepening event that ended deposition of the Myrtle Formation. It is suggested that movement along basinal faults (Firewood Siding Fault?) could have caused this deepening. Radiometric age determinations of faults show multiple movements relevant to the deposition sequence at Grieves Siding (Glover, 1995), providing evidence that faulting is likely to have initiated and ceased sedimentation of some stratigraphic formations. The probability of mineralisation being related to such fault activity is significant.

3.3.3.1 Lower Black Jacks Formation

The Lower Black Jacks Formation contains two peritidal members comprising calcarenites, minor sparites, biomicrites, argillaceous micrites, mudstones, and nodular limestones and includes two PACs labelled Black Jacks 1 (BJ 1) and Black Jacks 2 (BJ 2). It contains some silty interbeds and shows weak dolomitisation.

3.3.3.2 Lords Siltstone Member

The Lords Member (Lords Siltstone) conformably overlies the Lower Black Jacks Formation. It is a thin (1-20 m) generally non-calcic siltstone-shale-sometime sandstone unit that marks a major break in the sedimentological regime not only in the Zeehan sub-basin but also throughout the whole Gordon Limestone basin, and is thought to represent a significant but short lived tectonic event. It is often underlain by a coarse bioclastic calcarenite to calcirudite unit of the Lower Black Jacks Formation which can be locally hydrothermally dolomitised and mineralised. The Lords Siltstone appears to form a cap and partial host to the sulphide zinc mineralisation at the Myrtle prospect.

In drill core the Lords Siltstone is noted as predominantly dark grey to green, commonly bioturbated, micaceous siltstone and fine sandstone. The lower contact often contains angular rip-up clasts of limestone with a sharp upper contact into carbonate.

At Grieves Siding, the Lords Siltstone forms a discontinuous but traceable topographic ridge. It often supports dense and varied heathland vegetation that conceals outcrop. The siltstone is commonly fossiliferous, containing abundant trilobites, brachiopods, ostracods, bivalves, and bryozoan.

The Lords Siltstone member is correlated to the Siltstone Unit of CRAE.

3.3.3.3 Upper Black Jacks Formation

The Upper Black Jacks Formation is partially to completely dolomitised limestone. The dolomitisation is characteristic by being vuggy. Where undolomitised, the sequence consists of pale, argillaceous and bioturbated micrites and alternating biomicrites. It contains subtidal to intertidal fauna especially corals, stromatoporids and large oncoids. The sequence represents shallow subtidal conditions returning after the Lords event. An Upper Peritidal Member was identified by Burrett (1995) that contains up to 5 PACs and is likely to represent deposition on a short lived peritidal flat before the resumption of shallow subtidal deposition. The development of the peritidal flat may have been fault related as it suddenly appears without shallowing of lithofacies or biofacies (Glover, 1996).

The Upper Black Jacks Formation is correlated to the Upper Dolomite unit of CRAE. Drilling indicated the unit varies between 25 – 100 m in thickness.

The top of the dolomite unit is usually represented by a black clay zone which can range in thickness from 5 to 30m. This clay is thought to be weathered dolomitised limestone caused by water flow through the overlying porous Crotty Quartzite. Progressing down sequence this vuggy dolomite gives way to a similar pervasive dolomite but without the vugs. This suggests that there may have been two phases of dolomitisation, either a diagenetic reflux dolomite followed by hydrothermal fluid introduction or two phases of hydrothermal fluid introduction corresponding to the Ordovician Benambran Orogeny and the Devonian Tabberabberan Orogeny.

At the Firewood Siding prospect, the Upper Black Jacks dolomite unit has undergone localized intense siderite alteration which may be either the result of hydrothermal fluid flow or possibly the oxidation of pyrite due to supergene processes.

3.4 ELDON GROUP

The Silurian Crotty Quartzite forms the base of the Siluro-Devonian Eldon Group and consists of a series (max. 490 m) of massive to thinly bedded, white, medium to coarse grained friable sandstones interspersed with finer grained white to light grey siltstones. It has a disconformable basal contact with the underlying carbonates and a gradational conformable upper contact with the Amber Slate.

The disconformity has been correlated by Pitt (1962) to the Late Ordovician Benambran Orogeny which signifies the beginning of uplift that rapidly spread clastic material over the Gordon Group carbonate sequence.

At Grieves Siding the typical Crotty Quartzite is a relatively homogeneous, well bedded unit consisting of quartz sandstones, quartz pebble conglomerates and minor mudstones.

The overlying sequence to the Crotty Quartzite comprises the Amber Slate (240m), Keel Quartzite (120m), Austral Creek Siltstone, Florence Quartzite (490m) and the Bell Shale (420m). This is a series of fining up siliciclastics (due to basin deepening) that ultimately terminated with the deep basinal mudstones of the Bell Shale.

3.5 STRUCTURE

The Wurawina Supergroup sequence are folded around anticlinal and synclinal axes that trend NW and plunge to the north. A number of NW trending faults cut the sequence.

Some of the larger faults, including the Firewood Siding and Professor Range Faults appear to have a basement relationship, dividing the area into sub-blocks, and are interpreted to represent original basin-forming faults.

The Professor Range Fault trends northwest along the Professor Range into the Myrtle prospect area where it is represented by a zone of intense cleavage, shearing and folding. It degrades into a series of tight fold axes in the overlying Silurian sediments.

The Firewood Siding Fault is a fault of regional significance. It trends northwest across the Baura, Rose Valley and Firewood Siding prospect areas with an apparent dextral offset of the Moina Sandstone of 1.5 km.

Numerous smaller northwest trending faults appear to be related to the larger faults and possibly responsible for forming 2nd and 3rd order basins which have been interpreted in the Grieves Siding and Myrtle prospect areas. They clearly offset the basal contact of the Gordon Limestone but appear to die out within the upper sequences. At least some of these faults are associated with mineralisation, e.g. the Grieves Fault at Grieves Siding.

The east-west trending Little Henty Fault terminates the generally northwards young folded sequence to the north of the tenement with the down-throw apparent on the south side. It is uncertain if the steep-angled fault has normal or reverse movement.

Structural complexity increases in fold hinges, particularly if proximal to major structure propagation. This is apparent at the Myrtle and Grieves prospects.

Parkinson (1994) speculated that the NW-trending Professor Range Fault that separates the Gordon Limestone from the Mt Zeehan Conglomerate along the Professor Range could be crucial in controlling the location of mineralisation in the Myrtle-Professor Range area. He noted the important observation of a marked change in thicknesses of Ordovician clastics from the Grieves – Myrtle (west) side of the Professor Fault to the Amber Creek (east) side from about 1000 m down to perhaps less than 100m. This suggests that the Professor Range area was a Cambrian basement high due to either simple topographic variation, or by growth faulting on the syn-sedimentary Professor Fault. In either event the result is the same; a Cambrian basement high against which the Ordovician clastics pinched out. Mineralisation may have been introduced along these Ordovician syn-sedimentary faults, or forced into the pinch outs by basin dewatering. Both scenarios provide potential for mineralization source and transport to favourable host stratigraphy and or contact zones where economic accumulations of metals may be concentrated.

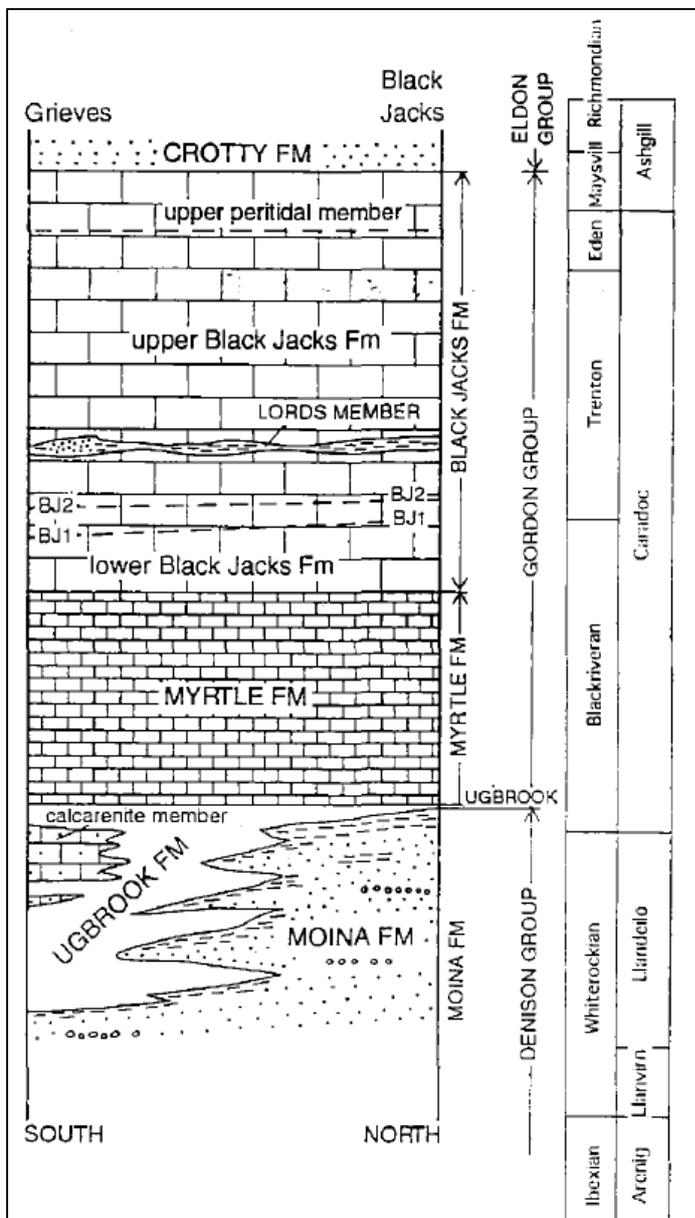


Figure 4. Summary of Ordovician lithostratigraphy in the Zeehan region (Burrett, 1995).

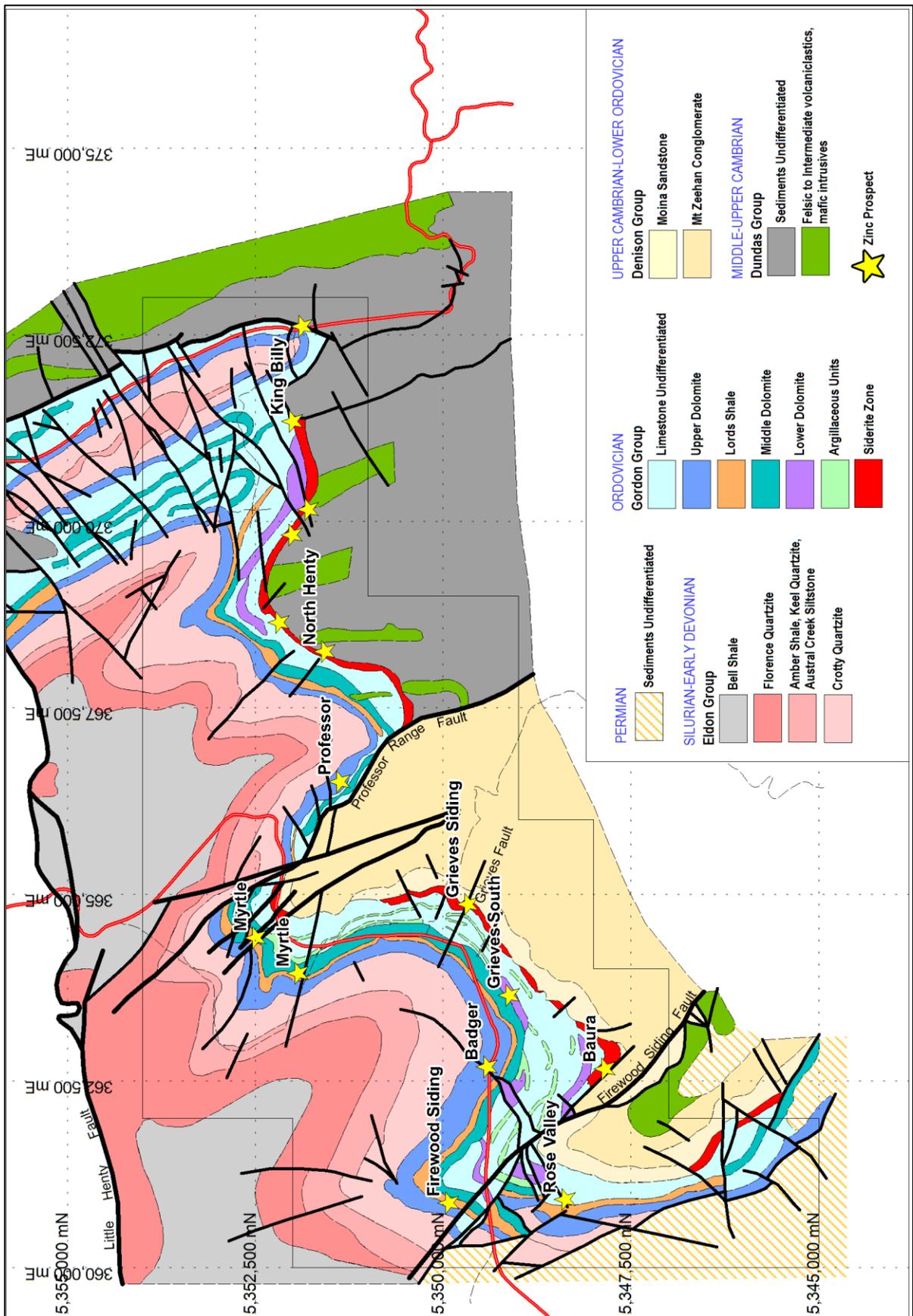


Figure 5. Geology map of the Gladstone-Portland goldfields area.

4 REVIEW OF PREVIOUS EXPLORATION

The tenement area has been subjected to considerable exploration efforts by several previous companies. Extensive data sets have been generated including geology, geochemistry, airborne magnetics, gravity, and electromagnetics surveys, drilling and metallurgical test work. Previous workers have generally abandoned the area as a result of low commodity prices, target size, corporate restructuring or change of corporate direction rather than lack of exploration results.

The general area of the Zeehan basin was subject to considerable exploration effort from the mid 1980's through the mid 1990's with sporadic efforts since. Initially the main explorers were Amoco and EZ followed by CRAE. Mathison & Taylor (1987) reviewed the geology of the Oceana Mine, a carbonate hosted Zn-Pb-Ag deposit mined in the late 1950's and concluded it had many similarities to the Irish Style carbonate hosted. This led to detailed exploration around the mine by an EZ/Amoco joint venture which confirmed the style and estimated a resource of 2.45Mt @ 9% Pb and 4% Zn.

The search then expanded to cover the wider historical Zn-Pb-Ag Zeehan mineral field which hosts numerous small-scale deposits and prospects hosted in the Ordovician carbonates. CRAE acquired a dominant position in 1991 with a JV with Major Mining whose interest was later acquired by Allegiance Mining NL. CRAE discovered the Grieves Siding prospect and estimated a near-surface 0.7 Mt @ 8% Zn resource. CRAE also discovered the Myrtle prospect and estimated a resource there of about 0.5 Mt @ 2-3% Zn. CRAE restructured and terminated their program abruptly in May 1996.

Allegiance held the Grieves Siding deposit area under a retention licence for some time before turning their full attention to the Avebury nickel deposit. Noranda acquired much of the carbonates south of Zeehan in 2001 including some of the area within this EL application. Having discovered interesting targets and drilling some holes without great success they too abruptly abandoned the field due to corporate restructuring.

South Eastern Resources Pty Ltd (SER), a wholly owned subsidiary of Icon Resources Ltd acquired the area around the Grieves Siding deposit during early 2005 (EL47/2004). SER's main focus was on exploration of the Grieves deposit and carried out geophysical and metallurgical studies, excavator and auger sampling, and resource assessment work. SER engaged AMC consultants to review previous exploration work and resource estimates at Grieves. SER abandoned the area seemingly after being discouraged by the difficult metallurgy of the Grieves near-surface zinc mineralisation. Little or no exploration was done on the prospective surrounding areas.

The recent history (post the mid-1990's) of the tenement area is of limited follow up outside of the immediate Grieves Siding deposit area, where quality zinc targets remain inadequately tested.

4.1 RESOURCE ESTIMATES BY PREVIOUS WORKERS

Resource estimates have been carried out by previous explorers for the Grieves Siding and Myrtle deposits. Most resource estimates have focused on the surficial clay mineralisation at Grieves with little attention given to the deeper mineralised zone there. Newnham (1999b) calculated a non-JORC Potential Resource estimate of 294,000 tonnes grading 5.3% Zn for

the surficial clay mineralisation at Grieves. This was later revised to a JORC-compliant Inferred Resource of 409,000 tonnes grading 3.9% Zn by Burrows (2005) and then again by Purvis (2006), based on more accurate bulk density data, to 283,000 tonnes grading 4.5 % Zn, 0.4% Pb.

Newnham (1999b) and Burrows (2005) used a density factor of 1.7 dry tonnes to the cubic meter for their in situ surficial clay deposit resource calculations at Grieves Siding. This was later revised by Purvis (2006) to 1.4 based on bulk density measurements made by Ammtec on clay samples from five test pits.

The resource potential of the deep “primary” mineralisation at Grieves Siding appears to have been largely ignored by previous explorers with Newnham (1998) providing the only resource estimate of 650,000 to 750,000 tonnes grading 7 to 9% Zn defined in two resource blocks (North and South Blocks) divided by the Greives Fault (cut-off grade of 4% Zn applied). Newnham considered that modest potential exists for further primary resources down-dip of his resource blocks.

CRAE estimated a resource at Myrtle of about 0.5 Mt @ 2-3% Zn. No information relating to how they arrived at the estimated has been sourced to date.

5 EXPLORATION COMPLETED

Exploration activity undertaken during the first year of tenure of EL06/2015 included:

- Collation and review of pre-existing data, mineralisation and alteration styles and genetic models;
- Digitisation of pre-existing data including geological, geophysical, geochemical, and drilling data;
- Preliminary mineral resource assessment of the Grieves Siding deposit “deep” primary mineralisation, and Myrtle and South Grieve shallow sulphide resource potential.
- Reconnaissance site visits.

5.1 COLLATION AND REVIEW OF PRE-EXISTING DATA

A centralized data base containing available data was compiled enabling uploading into MapInfo software. The review of this data (still ongoing) has resulted in advancements in tenement to deposit scale targeting with a number of key target areas identified for priority follow-up at the Grieves Siding, Myrtle and Grieves South prospect area. Field work validation of this work will lead to continued confidence in drill program targeting and planning.

Much of the pre-existing data has been digitised for use in geological software and due to the vast amount of data recorded during previous exploration efforts that is largely only in paper form, this process remains ongoing.

Reconnaissance site visits to the project were made to assess access and possible environmental issues, and become more familiar with the geology and prospect locations.

5.2 MINERALISATION STYLES REVIEW

Numerous mineralisation styles are recognised within the Gordon Limestone at the Henty Zinc Project, EL06/2015. A review of work by previous explorers indicated that primary stratiform zinc-lead mineralisation occurs at four main stratigraphic levels (Figure 6) within the Gordon Limestone in the project area:

5.2.1 Basal Siderite Zone (BSZ)

Basal Siderite Zone mineralisation occurs at the base of the Gordon Limestone and is characterised by a carbonaceous (CRAE Black Clay Unit) and/or ferruginous clay zone (CRAE Ferruginous Clay Unit) up to 50 m thick above the contact with the underlying Moina Sandstone. It is commonly overlain by a massive siderite clay zone (CRAE Siderite Unit) up to 25 m thick that in turn passes stratigraphically upwards either gradationally or abruptly into unaltered and unmineralised limestone of the Ugbrook Formation. The lower carbonaceous/ferruginous and siderite clay zones are laterally quite uniform and may contain zinc mineralisation up to several percent.

Mineralisation of this style has an alteration halo that is both visually and geochemically distinct. This halo, characterised by vuggy, broken or massive recrystallised Fe-carbonate and Fe-rich clays, may extend laterally hundreds of meters beyond the main zinc mineralisation, and thus presents a considerable vector for exploration targeting of the

mineralised core zones. Lateral alteration geochemistry is reflected by elevated to anomalous Fe-Mn-As-Zn, while vertically (stratigraphically) above the mineralised core alteration may present as halo of elevated Zn <± As values.

At the Grieves Siding deposit, mineralogy of the BSZ mineralisation is complex with a mixture of zincian siderite, smithsonite, hemimorphite and sphalerite-galena in the siderite zone, and a Zn-clay with sphalerite-galena in the clay zone. Comb and cockade textures are common throughout the LSM with colloform growth-banded sphalerite spherules also common (Glover, 1996). These textures are indicative of open-space filling and minor carbonate replacement.

Zn-Carbonate or “Zn-oxide” mineralisation commonly forms a significant component of the BSZ. It is massive gray grey to light brown in colour and comprised of fine grained intergrowths of calcite, siderite, dolomite, smithsonite, rhodochrosite, and magnesite. Dolomitisation and siderite overprint typically obscures original carbonate textures and in many intersections the Zn-carbonate mineralised zone is partly decomposed to a distinctive grey-brown clay, which retains high zinc grades up to 37.4 % Zn.

Paragenetic studies on the Grieves Siding deposit by Glover (1996) suggest early diagenetic dolomitisation with overprinting by hydrothermal dolomitisation associated with mineralisation. Dolomitisation was followed by siderite deposition and pyrite/marcasite infilling with sphalerite and galena precipitated almost contemporaneously, followed by repeated sphalerite dissolution and precipitation producing botryoidal colloform sphalerite spherules. Minor barite, chalcopyrite, covellite and a late phase calcite throughout the BSZ. Late sulphide oxidation and remobilization of HCO₃⁻ resulted in the precipitation of smithsonite, rhodochrosite and magnesite. Hemimorphite was precipitated last, cross-cutting and replacing all other minerals.

The Grieves mineralisation is both stratiform and controlled by structure, with the richer ore located proximal to fault lines. Given that the stratigraphy is now folded and plunging to the northwest, the high grade ore zones against the faults should also be plunging along and down the faults. Previous exploration efforts generally failed to target these zones but instead followed mineralisation laterally away from the faults.

Tear (1997) suggested that the preferred stratigraphic horizon for zinc mineralisation at Grieves Siding is the dolomitised Oolite Unit. An underlying argillaceous bioclastic unit may also be mineralised as well as overlying strongly dolomitised limestone.

In drillholes DD95ZG406 and DD93ZG107, two mineralised zones occur with the upper zone occurring associated with siderite alteration and dark grey clays while the lower zone occurs associated with ferruginous clays. Generally, the upper siderite zone is lead deficient whilst the lower zone is lead enriched. This pattern of mineralisation and lead distribution appears to be matched in numerous other drillholes, although the stratigraphic/alteration control is yet to be fully understood.

The mineralization at Grieves is very different from the Devonian vein style of the Zeehan Field to the north. It has a lead isotope signature plotting towards the edge of the Cambrian field, and well outside that attributed to Devonian Mineralisation. This suggests a Late Cambrian source for the lead and that the mineralisation metals were derived from the

underlying Cambrian volcano-sedimentary units of the Dundas Trough. The fluids may have been warmed by the still cooling Dundas Trough and related igneous activity. The mineralization appears to be syn-depositional and it has been hypothesized that the Grieves Fault was a controlling feature in channeling fluids.

Fluid inclusion studies by Glover (1996) suggest a low salinity (3.5 wt %), low temperature (150°C) fluid was responsible for mineralisation. The temperature of homogenization is consistent with MVT and Irish type deposits, however, the low salinity fluids at Grieves differs from these deposits types and may be explained by a lack of evaporites.

The stratiform character, replacement style of alteration/mineralisation, intense Fe-Mn alteration, and reasonably predictable geometry has been suggested as similar to the Navan (Ireland) and Reocin (Spain) large Zn-Pb deposits.

Preliminary metallurgical testing of the primary Basal Siderite Zone mineralisation at Grieves Siding by CRAE indicates that the mixed sulphide-oxide ore mineralogy may be amenable to pre-concentration by gravity method. The preliminary test results showed that 87% of zinc minerals were recoverable for a pre-concentrate grade of 22% Zn. Higher grades may be expected with improved liberation. From such a pre-concentrate there may be opportunity to produce separate sulphide- and oxide-concentrates using modern flotation techniques.

5.2.2 Lower Dolomite Zone (LDZ) Mineralisation

Mineralisation of the Lower Dolomite Zone occurs in dolomitised limestone of the upper Myrtle Formation, below the contact with the Lower Black Jacks Formation. It occurs at the South Grieves within EL06/2015 and also speculated to occur at a similar stratigraphic level at the Oceana deposit near Zeehan (2.6 Mt @ 7.7% Pb, 2.5% Zn).

The mineralisation at South Grieves is described as breccia-hosted mineralisation, locally forming massive sulphide and has a possible stratiform linear aspect. The metallurgy is mixed zincian siderite and sphalerite-galena mineralogy.

At Oceana lead-zinc mineralisation occurs as two parallel lodes in steeply east dipping calc-siltites, calcarenites and syn-sedimentary breccias. Mineralisation comprises stratabound semi-massive galena and sphalerite, locally with semi-massive pyrite, associated with an intense, pervasive hydrothermal siderite alteration. The mineralised body is split into two sections by the obliquely dipping cross-cutting Oceana Mine Fault with the northern limit truncated by the Oceana Fault.

5.2.3 Middle Dolomite Zone (MDZ) Mineralisation

Middle Dolomite Zone mineralisation at the Henty Zinc Project occurs near the Lords Siltstone member (generally below the siltstone). It is stratabound and often occurs within a brecciated (possibly syn-sedimentary), dolomitized and/or siderite altered limestone. Examples of this style of mineralisation occurs at the Grieves and Myrtle prospects.

Mineralogy includes fractures pyrite in calcite veins, isolated massive marcasite, and galena, sphalerite and pyrite with pervasive dolomitisation of the Lower Black Jacks Formation. At Grieves there is very little indication of proximity to mineralisation as there is virtually no alteration outside the breccia zone itself.

Massive marcasite located proximal to black matrix breccias have been noted in trenches below the contact of the Lords Siltstone in the northern and north-western Grieves Siding

area. The breccias apparently become more silicified to the west and south towards the Badger, Firewood Siding and Rose Valley prospect areas.

5.2.4 Upper Dolomite Zone (UDZ) Mineralisation

The upper stratabound mineralisation (UDZ) occurs near the contact between the Upper Black Jacks Formation (CRAE Upper Dolomite Unit) and the overlying Crotty Quartzite. Mineralisation is not closely bound to the upper quartzite contact, but may "wander" up to 100m stratigraphically below the contact. Low-grade but widely anomalous zones from the Firewood Siding, Grieves, Badger and Professor Range prospects are examples of this mineralisation type. The West Lode at the Mariposa deposit (0.4 Mt grading 5.51% Pb, 1.25% Zn, 59.3 g/t Ag) also occurs in this stratigraphic position.

UDZ mineralisation in the Henty Zinc Project area appears characterised by widespread but low-level Zn in the 0.1% to 2% Zn range. To date, none of the prospects tested has revealed a higher-grade core as yet, although given that only limited drilling has targeted this stratigraphic level, it is entirely possible high-grade cores may exist. Limited mineralogy suggests all Zn to be as sphalerite.

Air-core drilling shows the near-surface mineralised zones to be comprised of clays and decomposed carbonate. Rare fresher material is usually a granular recrystallised dolomite and ferroan-dolomite. Intense siderite alteration characteristic of the lower Grieves-style mineralisation, is absent in the upper mineralisation. Alteration associated with the upper stratabound mineralisation has not been studied in any detail.

At Mariposa, the West Lode occurs as a strata-parallel vein or replacement zone with disseminated galena and sphalerite hosted within limestone. The mineralisation occurs some 50 m below the contact with the overlying Crotty Quartzite, potentially at the base of the regional dolomitised Upper Black Jacks Formation. It measures 340 m long and extends down-dip for 100 to 200 m with a true width ranging between 1 and 6 m (Tear, 2006).

The upper dolomite zone style may be occurring within karstic structures formed by Ordovician weathering before deposition of the Crotty Quartzite. This setting could be considered as possibly analogous to the Bleiberg or Cracow-Silesia style deposits.

5.2.5 OTHER MINERALISATION TYPES

Surficial Clay Hosted Mineralisation

The surficial clay hosted mineralisation occurs as accumulation of predominantly ultra-fine sphalerite disseminated in decomposed carbonate that typically occupies the trace of underlying primary stratabound mineralisation. Depth of the Zn-rich clays and decomposed carbonates averages 10 to 20 m but have been reported up to 100 m at Oceana.

While a thin layer of decomposed carbonate is typically widely developed of large areas of the Gordon Limestone, this layer only thickens and becomes substantially Zn-rich as the primary mineralisation is approached. Clay thickness and Zn grade may therefore be useful vectors towards primary mineralisation zones. At Grieves Siding the surficial Zn-clay is geochemically distinct from the underlying primary mineralisation with generally higher sulphur values and significantly less Fe and Mn.

Geochemically barren peat and gravels up to 5 m thick typically overly the clays over all of the project area.

Late-Stage Structurally Controlled Mineralisation (Zeehan Style)

Structurally controlled mineralisation may occur at any stratigraphic level. It appears to be late-stage filling of brittle fractures. Alteration of wall-rocks is absent, and the gangue to mineralisation may be pure calcite. Mineralisation within the structures is patchily distributed. Ore minerals are coarse-grained sulphides. Devonian deformation is the likely cause of the fracturing and mineralisation. Potential deposit size is considered small, although the presence of discordant mineralisation may indicate a nearby stratabound source.

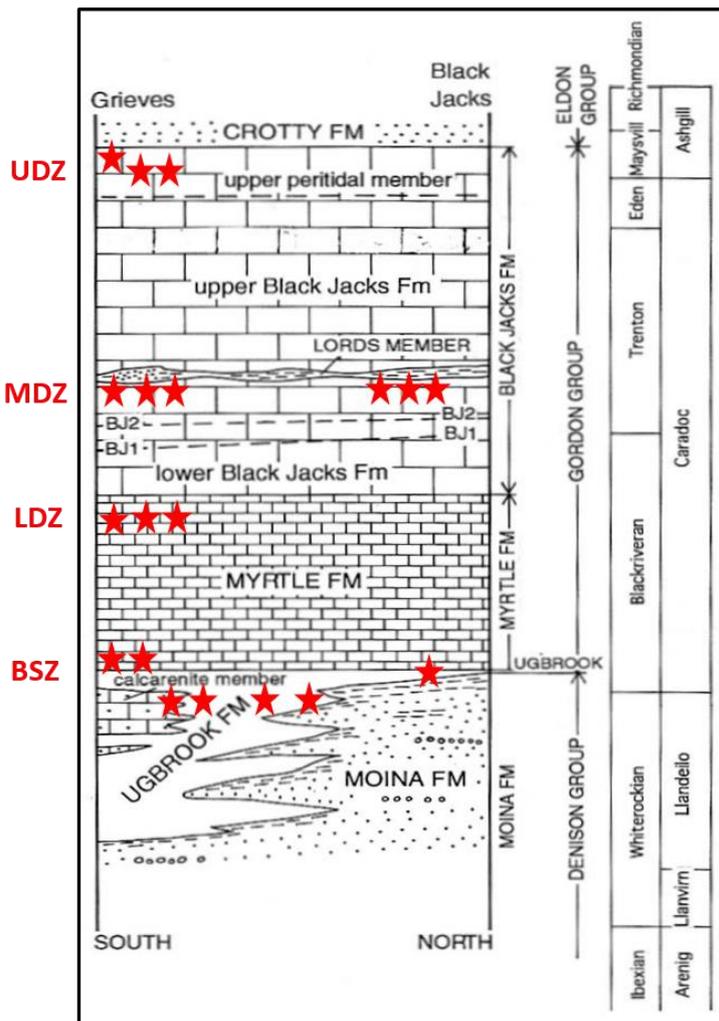


Figure 6. Local stratigraphic column showing the position of primary carbonate hosted zinc mineralisation. BSZ – Basal Siderite Zone, LDZ – Lower Dolomite Zone, MDZ – Middle Dolomite Zone, Udz – Upper Dolomite Zone.

5.3 ALTERATION STYLES REVIEW

Moody (1994) theorised a zoned hydrothermal alteration system associated with the carbonate-hosted base metal mineralisation in the Zeehan sub-basin based on aircore/diamond core logging, petrographic and mineralogical studies and observations from the Grieves, Firewood Siding, Myrtle, Mariposa, Sunny Corner, Bannockburn and Pyramid prospects. The Oceana deposit in the same district is noted to have similar alteration characteristics. These alteration patterns provide a useful vector in assisting exploration efforts in locating high-grade Zn-(Pb-Ag) mineralisation in the district although it should be

noted that character of the alteration may vary according to primary lithology, porosity and limestone facies distribution.

Alteration characteristics defined by Moody (1994) include:

- Zonation from unaltered or "calcite-dominated" limestones to altered "dolomitised" limestones which include an outer dolomite zone (weak alteration), ankerite-dolomite zone (moderate alteration) and siderite-ankerite zone (intense alteration) associated with increasing Zn-Pb-Ag mineralisation.
- Disseminated or pervasive carbonate mineral species become more Zn, Mg, Fe and Mn rich as alteration intensifies.
- Hydrothermal maturation of organic material to pyrobitumen and/or mobilisation of hydrocarbon material is associated with alteration and mineralisation.
- High grade zinc-lead mineralisation is spatially associated with intense hydrothermal zincian-manganian-magnesian siderite, ankerite and local illite-sericite alteration, and volume decrease creating pore space.
- Disseminated, vein and replacement style zinc, lead, silver, iron and rare copper sulphides and barite mineralisation increase with increasing alteration.

Areas of silicification have also been identified, although it is currently not understood if these are an indicator of proximity to zinc mineralisation. Black matrix breccias and silicified dolomite breccias have also been observed, generally with increasing proximity to the Firewood Siding Fault.

The pattern of increasing alteration and Zn-(Pb-Ag) mineralisation includes (Moody 1994):

Un-mineralised: limestones typically display weak dolomitisation and diagenetic silica alteration. Organic matter is less thermally mature than in altered limestones associated with zinc mineralisation.

Dolomite zone: Involves subtle fine grained pervasive dolomitisation and recrystallisation characterised by weak/slow reactivity to dilute HCl. This process may have involved some introduction of carbonate into some less carbonatic facies, minor vein/fracture-hosted Zn-Pb mineralisation and possibly an increase in bituminous stylolites (? due to calcite dissolution).

Ankerite-Dolomite zone: This includes increased and coarser recrystallised dolomite alteration and introduction of fine-medium grained sparry ferroan dolomite and ankerite. Dolomite and ankerite veining and brecciation increase approaching high grade base metal mineralisation. This zone is associated occasionally with development of saddle dolomite lined voids, destruction of primary textures or fabrics and minor disseminated and vein-hosted pyrite±galena±sphalerite±chalcopyrite±marcasite.

In the ankerite-dolomite and dolomite zones, field discrimination between ankerite and dolomite is not precise. Visual indicators for this pervasive dolomite ankerite mineralisation include bone or cream coloured veins and/or oxidation of exposed limestones or cut surfaces to a cream colour. In fresh samples the altered limestones in this zone become inert or very weakly reactive to dilute HCl. An increase in specific gravity and veining/fracturing may be noticeable. Blocky rhombs of bone/opaque ankerite or dolomite can be observed under 10x and 25x magnification.

Siderite-Ankerite zone: Characterised by intense, pervasive iron-carbonate (siderite and ankerite±dolomite) alteration and replacement (completely obliterating primary textures), local intense solution and fracture-controlled brecciation, colloform banded carbonate replacement, sparry colourless calcite, rare barite veining, pervasive and vein/open-space sphalerite-galena-(pyrite) mineralisation. Limestones in this zone may also decompose to a poorly consolidated puggy carbonaceous material (yellow or brownish when zinc mineralised). This alteration is most obvious in the silty-sandy clastic and oolitic limestone facies. In black lutites or "black matrix breccias"/wackestones the alteration and very fine grained *high-grade zinc carbonate & sulphide mineralisation may be very difficult to identify with the naked eye.* Higher grade mineralisation is indicated by inertness to dilute HCL, breccia texture in some samples, and oxidation of core or chips to a chocolate brown colour on exposed surfaces.

Organic material/bituminous material in fractures and brown organic staining is more common immediately peripheral to the iron-carbonate alteration zones. Thermal alteration of organic material to pyrobitumen is intimately associated with zinc carbonate and sulphide mineralisation. At least two generations of stylolite development are present with an early set developed along bedding and later "post" stylolite steeply cross cutting the- earlier set. The post stylolites contain- pyrobitumen and locally traces of pyrite- and sphalerite suggesting later deformation linked timing of some of the sphalerite mineralisation. The association of hydrothermal maturation of organic matter to pyrobitumen observed both in core and thin section, demonstrate alteration and zinc-lead-silver mineralisation are associated with a thermal anomalism.

Strongest alteration zones are commonly located immediately above the Moina Sandstone and immediately beneath the Crotty Quartzite, but may occur at several levels in the stratigraphy. The alteration is apparently asymmetric and may correspond to an alteration-mineralising front/migration pathway. Boundaries between the alteration zones may also be sharp.

Intense alteration and associated base metal mineralisation is often associated with basin margin facies near reef, slope and back-reef mud facies immediately overlying apparent irregularities in the underlying Moina Sandstone and higher in the stratigraphy. This may reflect preparation of limestones by early porosity associated with dolomitisation, limestone composition (finer grained facies more susceptible to alteration), primary and solution porosity, faults and basement architecture (indicated by limestone facies distribution). The porous nature of the altered, often oolitic, limestone near the base of the Gordon Limestone may have facilitated deep weathering or ground water activity. This may be responsible for development of soft limestone pug to considerable depth.

5.4 PRELIMINARY MINERAL RESOURCE ASSESSMENT

5.4.1 GRIEVES SIDING RESOUC E ESTIMATE

The "primary" mineralisation at Grieves Siding occurs as a stratabound deposit in the Basal Mineralised Zone within the lower 50 m of the Gordon Limestone, dipping approximately 50° north over a NE-SW strike length of 800-900 m. The deposit has been drill tested by aircore and diamond core along sections spaced mostly 100m apart with some 50 m spaced

sections. Deep (>50 m) drillhole spacing along sections is variable but generally in the order of 50 to 100 m. The drilling has tested the deposit enough to show geological continuity of mineralised zones to a vertical depth of 100 to 150 m below surface. Some widely spaced deeper drilling shows that mineralisation, is still present some 300-400 m vertically below surface and up to 1000 m laterally down-plunge.

The deep “primary” mineralisation is defined as all the mineralisation occurring below the black surficial clay zinc mineralised zone, and in the Basal Siderite Zone. The mineralogy of the Basal Siderite Zone at Grieves is complex, often comprised of mixed Zn-oxide and Zn-sulphide species. In calculating a preliminary mineral resource estimate, no attempt has been made (at this stage) to differentiate resources zones based on differing dominant mineralogy.

The methodology used to calculate the resource estimate was by the sectional influence area method. In this method the resource area is divided into a series of cross sections where drillhole locations and down hole intercepts are sufficient enough to allow a reasonable geological interpretation of sectional mineralised/resource zone polygons. An area of influence is then attributed to each sectional resource polygon to provide an estimate of resource volume (m³) by extending the previously calculated sectional resource area (m²) along strike to points half way between adjacent cross sections. Each sectional volume is then summed to give the overall resource volume estimate.

Figure 7 shows a plan of section lines used for the resource estimation calculations. Figures 8 to 14 show the cross section with interpreted ore boundaries and significant drillhole intercepts.

Currently there is no reported bulk density data available for the deep primary mineralisation at Grieves Siding or other prospects in the tenement area. As such, bulk density estimates have been applied based on density measurements taken on the nearby Oceana deposit (Tear, 2006) and using a number of geologically reasonable qualitative parameters. For the calculation of resource tonnages, a bulk density estimate of 2.7 g/cm³ was applied which is considered to be the conservative preference at the current stage of exploration and takes into account the likely effect of weathering, porosity and cavities, and the alteration and ore mineralogy.

Average ore grades were estimated for each sectional resource polygon area by calculating the simple weighted mean of the composited drillhole intersections above a nominal cut-off value of 3% Zn. The grade was then assigned to the resource tonnage previously estimated for the section.

Table 1 shows the calculated sectional resource volumes, tonnages and grades for the Grieves Siding primary ore. Table 2 shows the calculated potential inferred resource tonnages for the primary ore, surficial Zn-clay Inferred Resource (after Purvis, 2004) and the total estimate resource potential at Grieves Siding.

The resource was broken up into 3 Blocks to show variation in terms of grade and tonnage across the deposit. Block 1 forms the central ore zone and is located on the south (footwall) side of the Grieves Fault. It contains the thickest and highest grade ore and is delineated using section GXS-4 and GXS-5. Block 2 occurs east of Block 1 and on the hanging wall of

the Grieves Fault, delineated using section GXS-6 and GXS-7. Block 2 is bounded to the east by the interpreted North Fault. Block 3 occurs west along strike of Block 1 and is bounded to the west by the interpreted South Fault. Block 3 ore zones were delineated using sections GXS-1, GXS-2 and GXS-3.

Block No.	Cross Section ID	Sectional Area (m²)	Strike Length Influence (m)	Volume (m³)	Est. Bulk Density	Tonnes	Estimated Weighted Avg. Grade (% Zn)
Block 3	GXS1	260	100	26000	2.7	70,200	8.25
Block 3	GXS2	254	100	25400	2.7	68,580	7.2
Block 3	GXS3	782	100	78200	2.7	211,140	3.3
Block 1	GXS4 Upper	2,444	80	195520	2.7	527,904	7.2
Block 1	GXS4 Lower	911	80	72880	2.7	196,776	10.7
Block 1	GXS5 Upper	1,275	80	102000	2.7	275,400	19.8
Block 1	GXS5 Lower	626	80	50080	2.7	135,216	5.5
Block 2	GXS6	671	100	67100	2.7	181,170	7.7
Block 2	GXS7	1,050	80	84000	2.7	226,800	5.4

Table 1. Grieves Siding primary ore zone resource estimate calculation figures showing conversion from the defined sectional Area (m²) to Volume (m³) by factoring for the length of influence along strike (midpoint between sections), and then to tonnages by multiplication with the estimated bulk density. "Upper" and "Lower" for sections GXS4 and GXS5 refer to the upper and lower ore lodes.

Zone	Block	Tonnage	Estimated Weighted Avg. Grade (% Zn)
Grieves Primary	Block 1	1,135,296	10.7
Grieves Primary	Block 2	407,970	6.4
Grieves Primary	Block 3	349,920	5.1
Grieves Primary Total (Potential Resources)		1,893,186	8.7
Grieves Surficial Total (Inferred Resources)		283,000	4.5
Grieves Total (Inferred and Potential Resources)		2,176,186	8.2

Table 2. Resource estimates for Grieves Siding Deposit. Potential Resources are classified as non-JORC Inferred. The Surficial resource estimate is for the surficial clay hosted Zn from (Purvis, 2004).

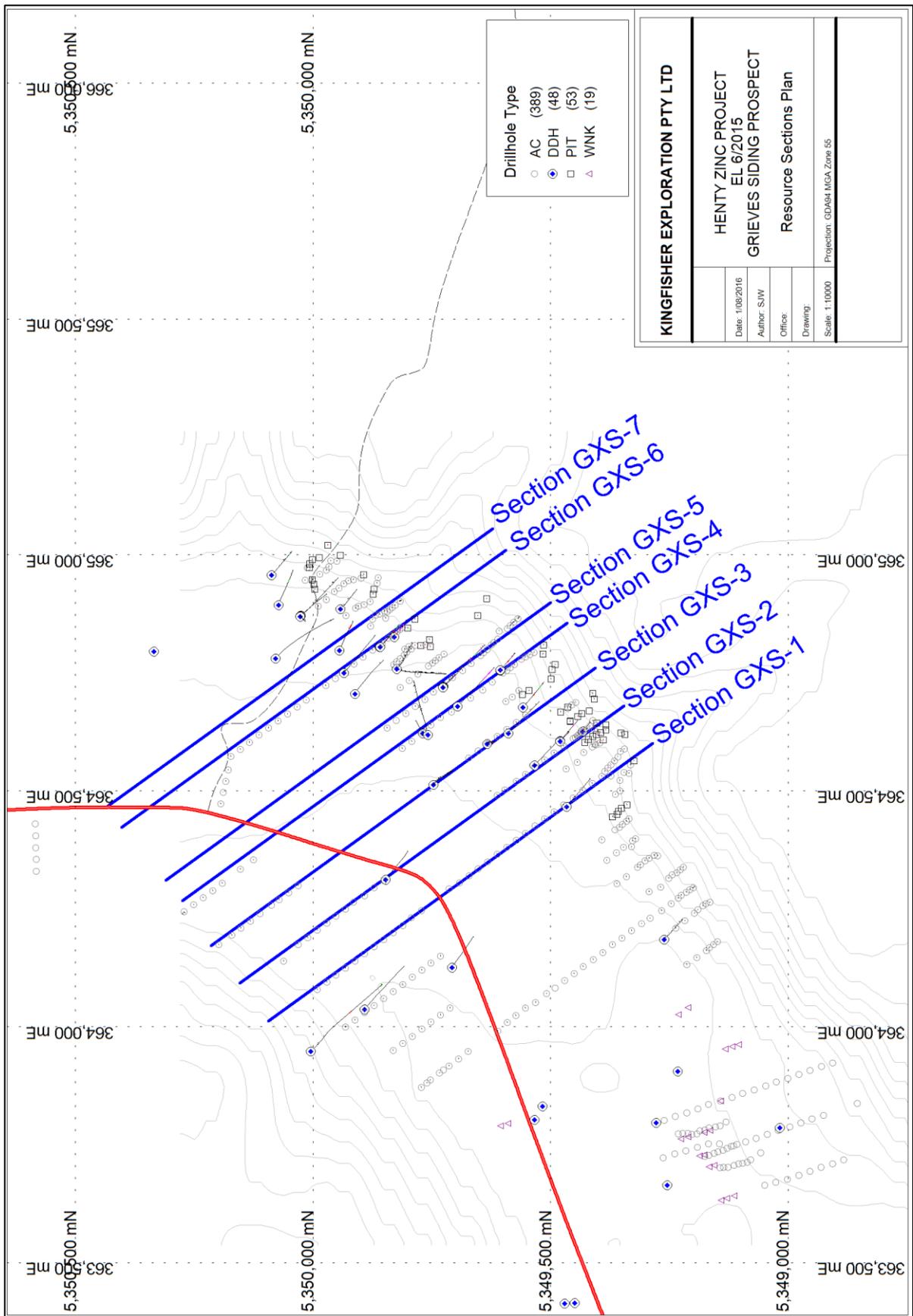


Figure 7. Plan showing the position of section lines used in calculate the resource estimate at Grieve Siding.

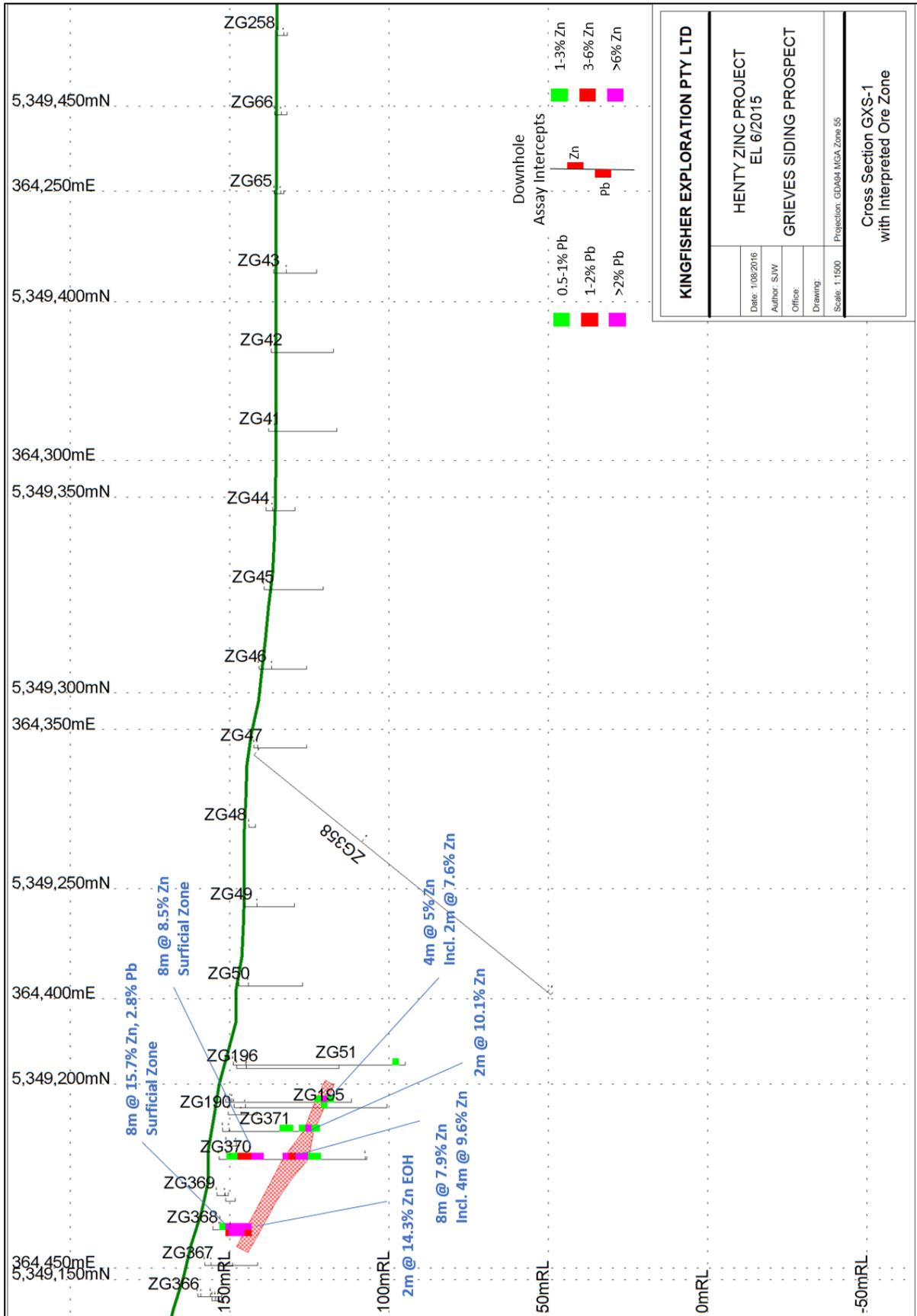


Figure 8. Cross Section GXS-1, Grieves Siding.

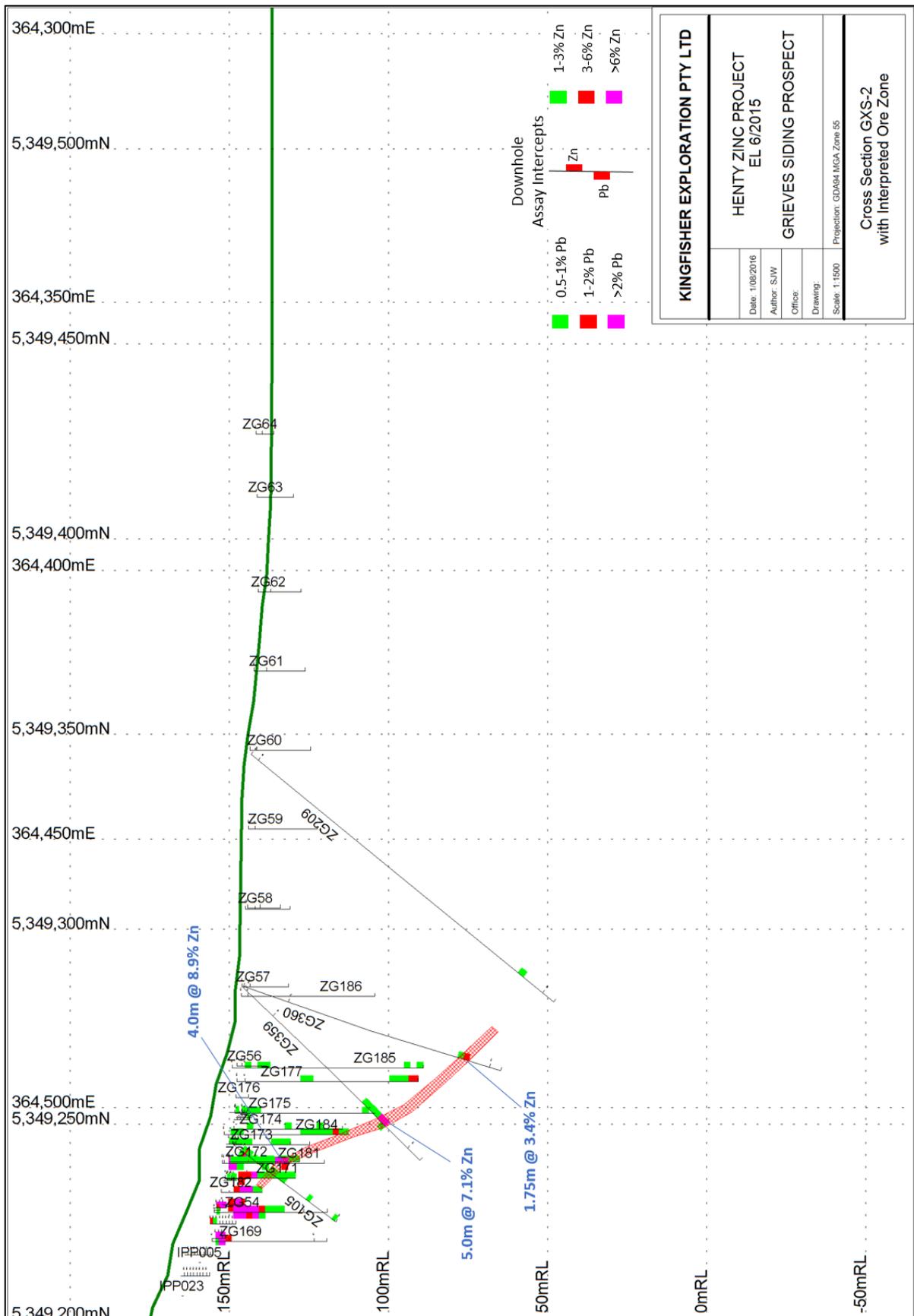


Figure 9. Cross Section GXS-2, Grieves Siding.

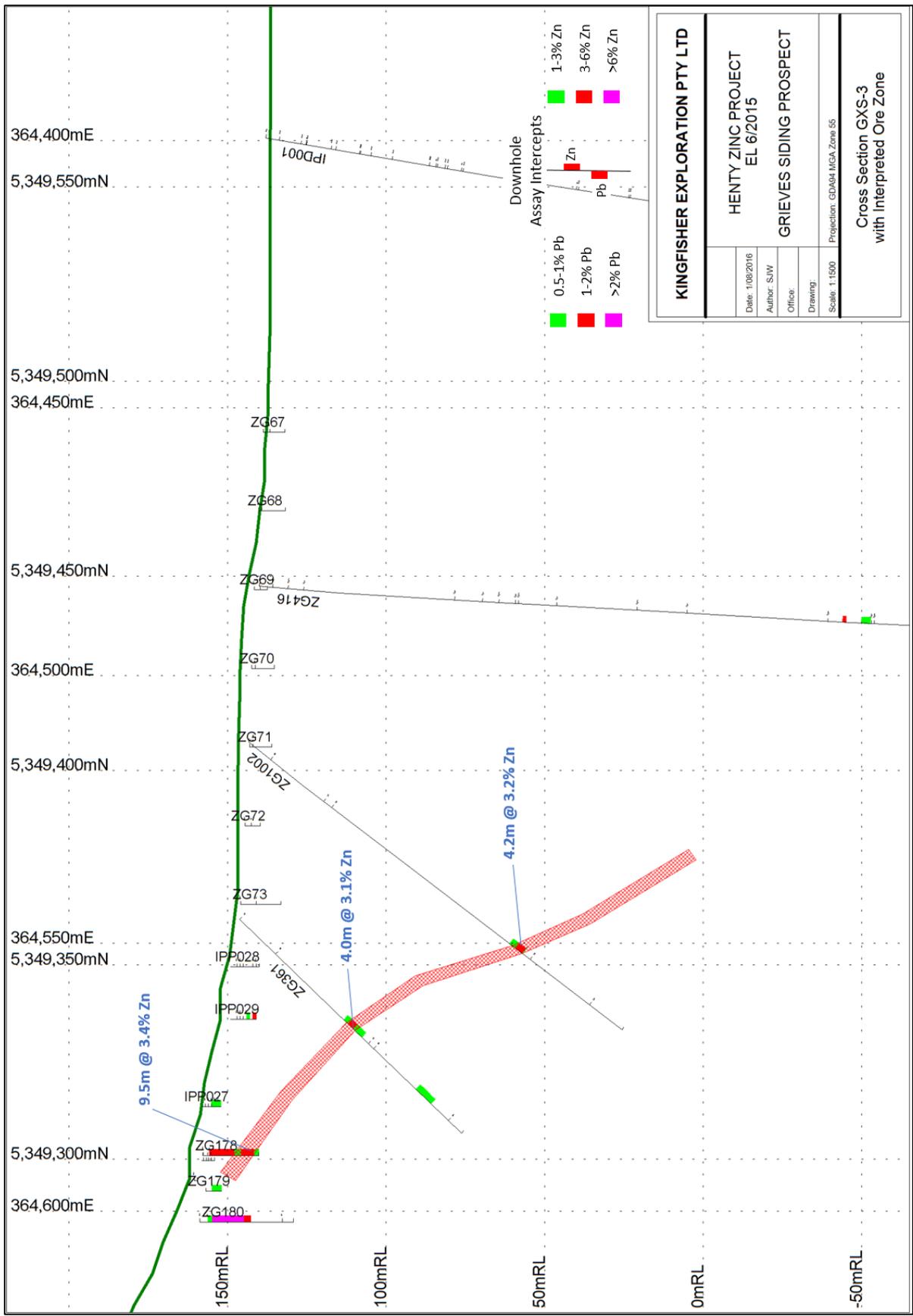


Figure 10. Cross Section GXS-3, Grieves Siding.

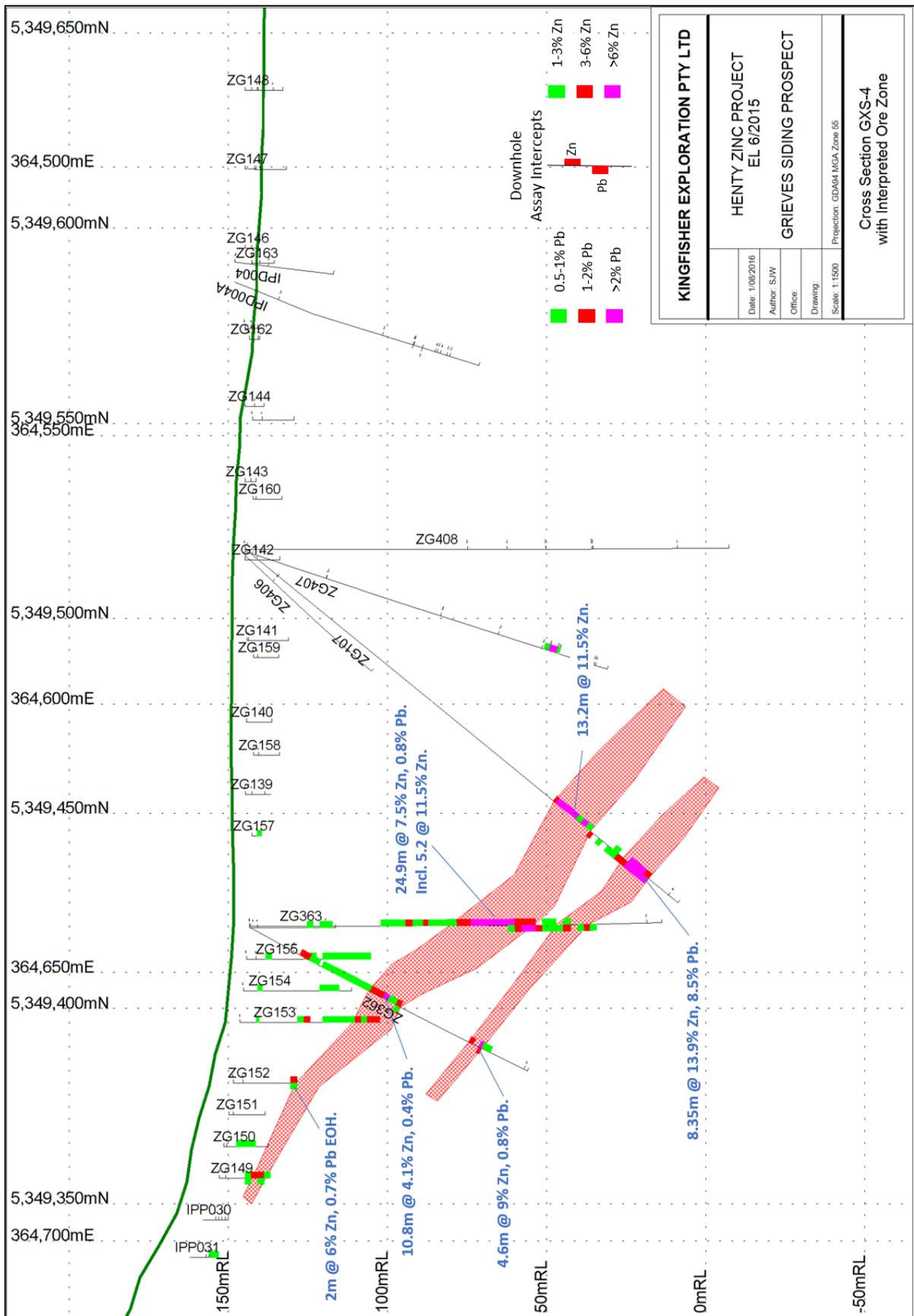


Figure 11. Cross Section GXS-4, Grieves Siding.

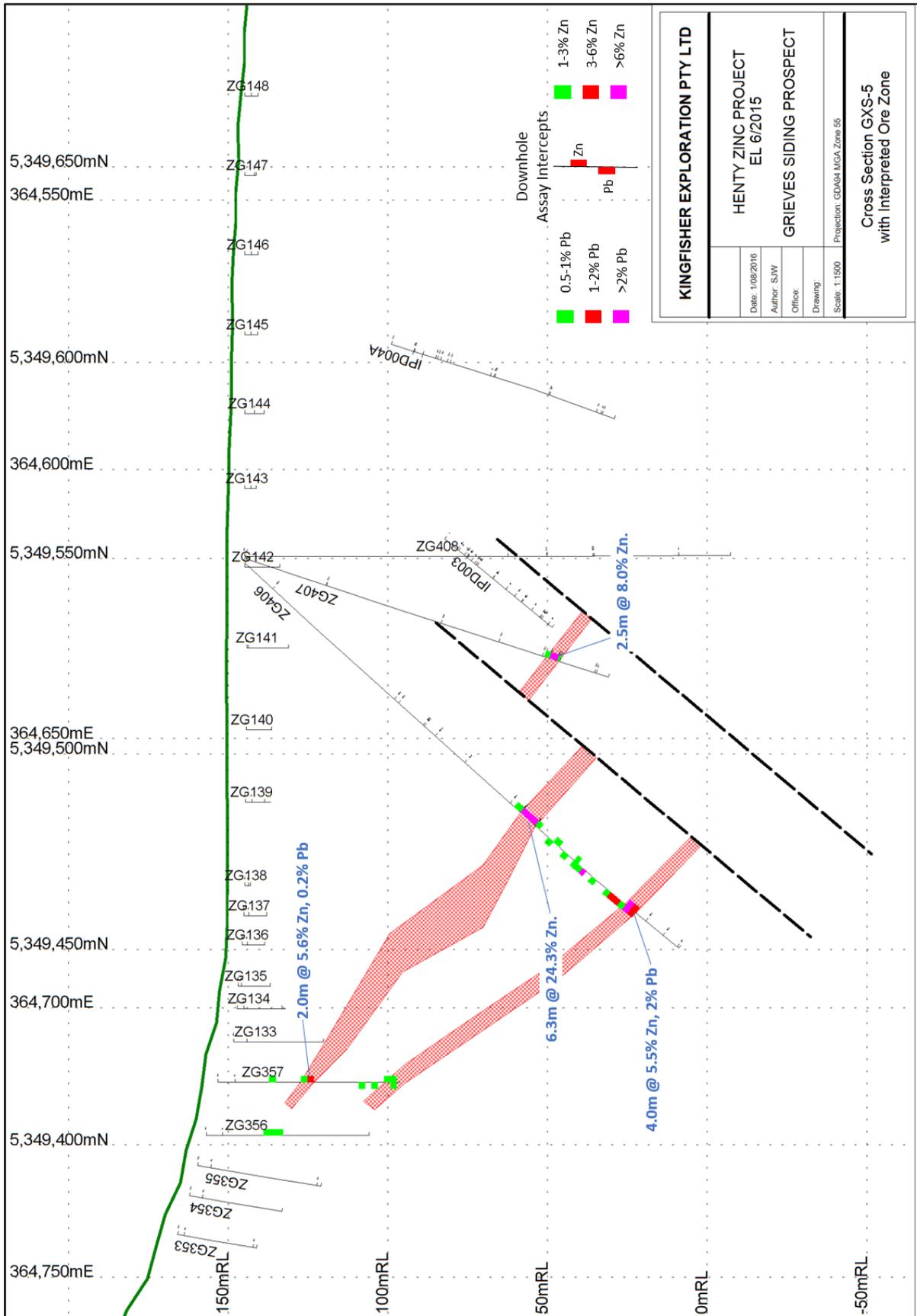


Figure 12. Cross Section GXS-5, Grieves Siding.

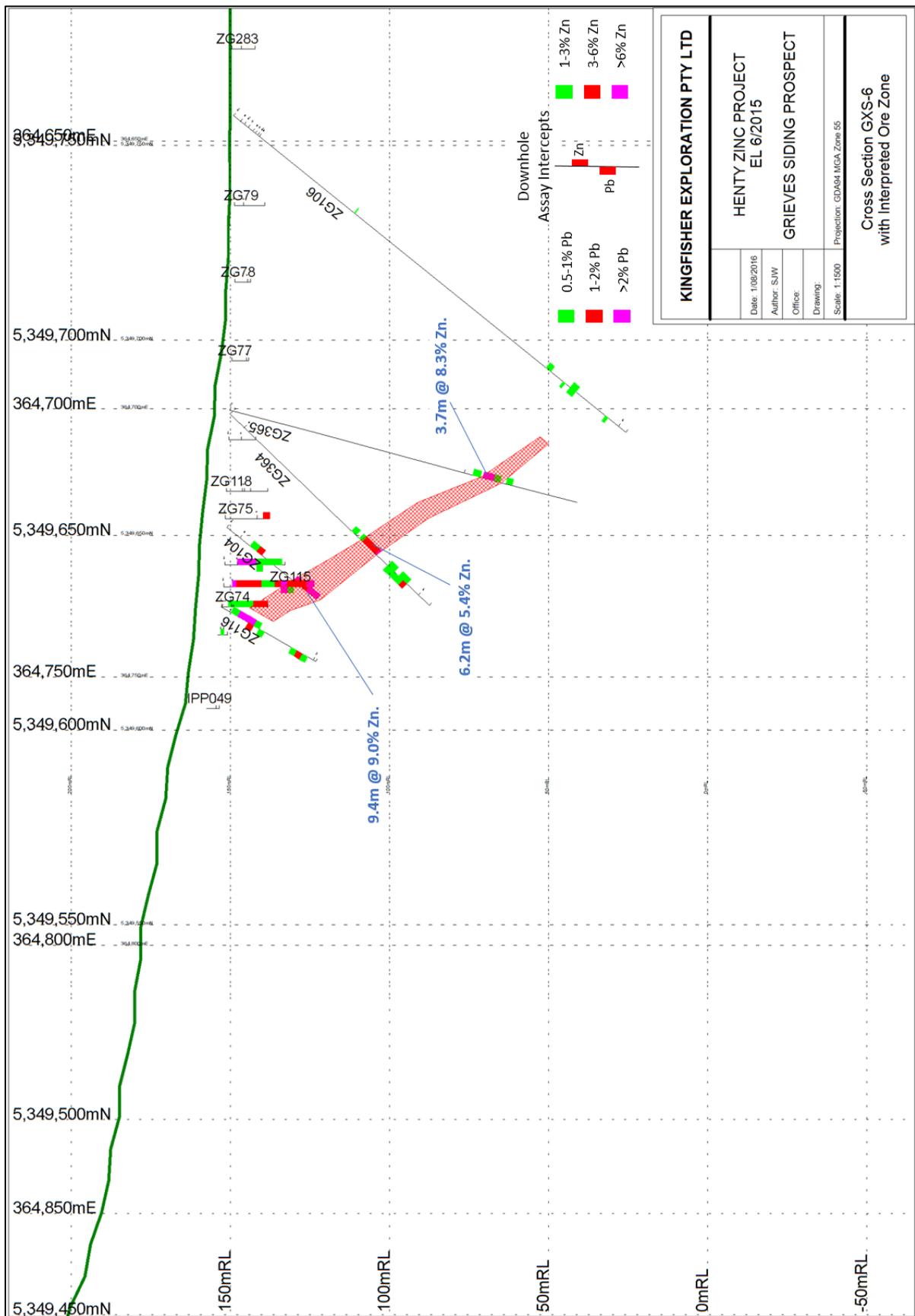


Figure 13. Cross Section GXS-6, Grieves Siding.

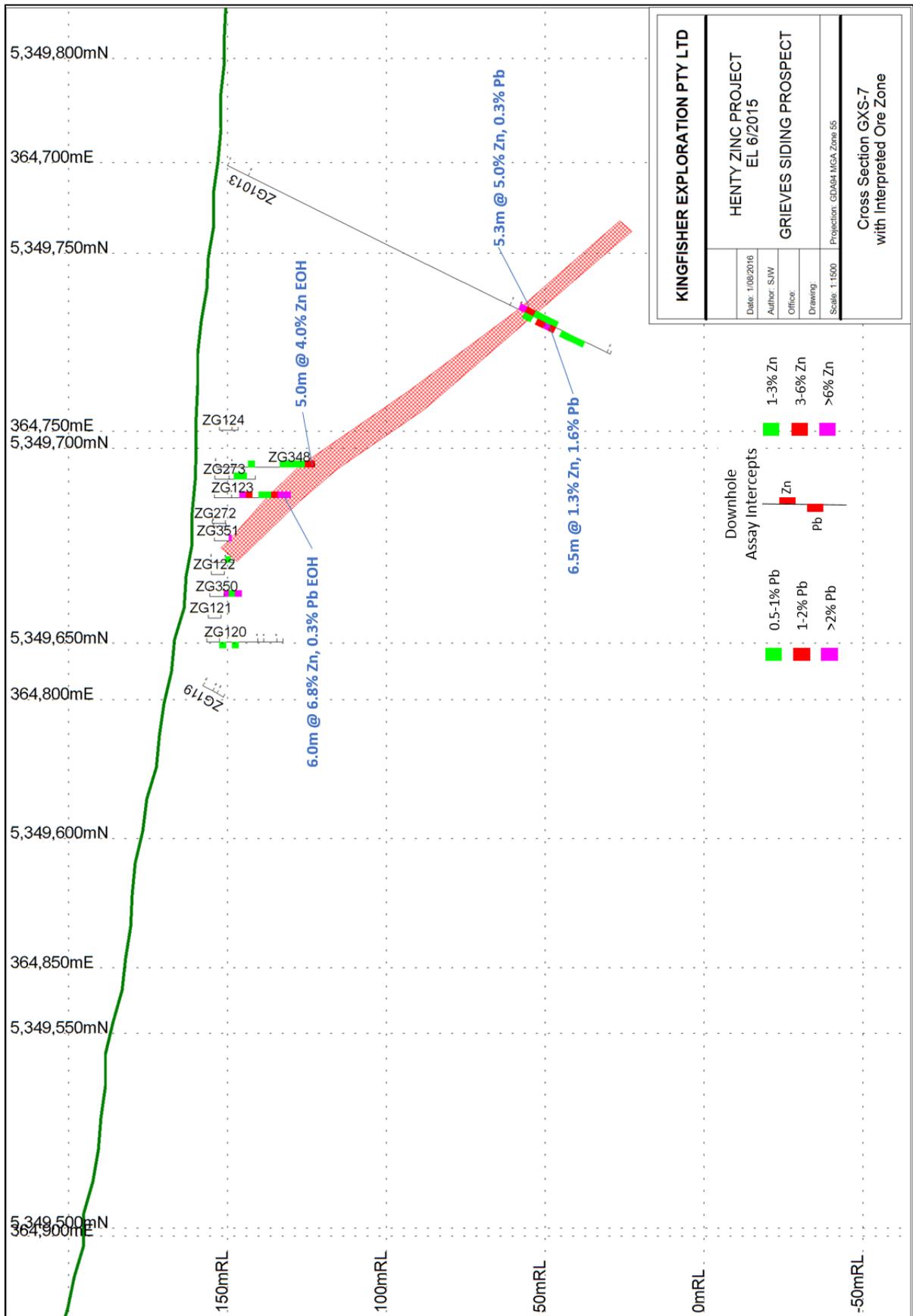


Figure 14. Cross Section GXS-7, Griefes Siding.

5.5 EXPLORATION TARGETS REVIEW

Table 3 shows a summary of key exploration targets identified within the EL06/2015 tenement area from data review during the reporting period. Priority targets include the Grieves Siding, Myrtle, South Grieves and Firewood Siding prospect areas. These are discussed briefly below.

5.5.1 GRIEVES SIDING DEPOSIT

At Grieves Siding the new potential resource estimates indicate opportunity to develop a relatively shallow resource (<200 m deep) within the primary ore blocks. Most of the resource is held within Block 1 which contains the thickest and highest grade mineralisation. Block 1 occurs on the interpreted footwall side of the Grieves Fault and contains upside potential by targeting the down-plunge extension of the Basal Siderite Zone/Grieves Fault intersection. Resource Block 2 occurs on the hanging wall of the Grieves faults and also contains similar upside potential to Block 1. Block 3 extends west of Block 1 (west of the midpoint between sections GXS-3 and GXS-4) and has potential upside by targeting the ore intersection zone with the South Fault where previous drilling shows and increase in grades towards the fault, and also possibly at depth towards the extrapolated Grieves Fault.

Deep drillholes from previous exploration at Grieves Siding indicate that the Basal Siderite Mineralisation and alteration zone extends down-plunge (north) for at least 1 km to a vertical depth of 400 m from surface e.g. drillhole ZG1007 intersected 4.8 m grading 1.9 % Zn and 0.4 % Pb from 723.5m downhole (Figure 18). While these grades are probably not economic, assessing the 3D position of such intercepts relative to the position of the Grieves Fault may provide additional deep targets (i.e. targeting potential higher grade and thicker mineralisation proximal towards the fault).

Potential also exists for further mineralisation to be discovered at the Lower Dolomite Zone level at Grieves Siding (Figure 18). Drillhole ZG1007 intersected 2.2 m grading 5.12% Zn and 0.2% Pb from 416.8 m, and 6.0 m grading 5.4% Zn and 0.3% Pb from 425.5 m within this zone. Again, assessment of the mineralisation in relation to the position of structures will assist in assessing the potential of such targets.

Surface geochemistry and bouger gravity data (Figure 16 and Figure 17) indicate that the main strike length of the Grieves Siding deposit has already been drilled, although there is some indication it may be still open to the northeast and southwest for at least another 200 m in each direction. The zinc surface geochemistry (Figure 16) an moderate zinc anomaly to the north of the main Grieves Siding resource, corresponding to stratigraphic positions of the Middle to Upper Dolomite Zones.

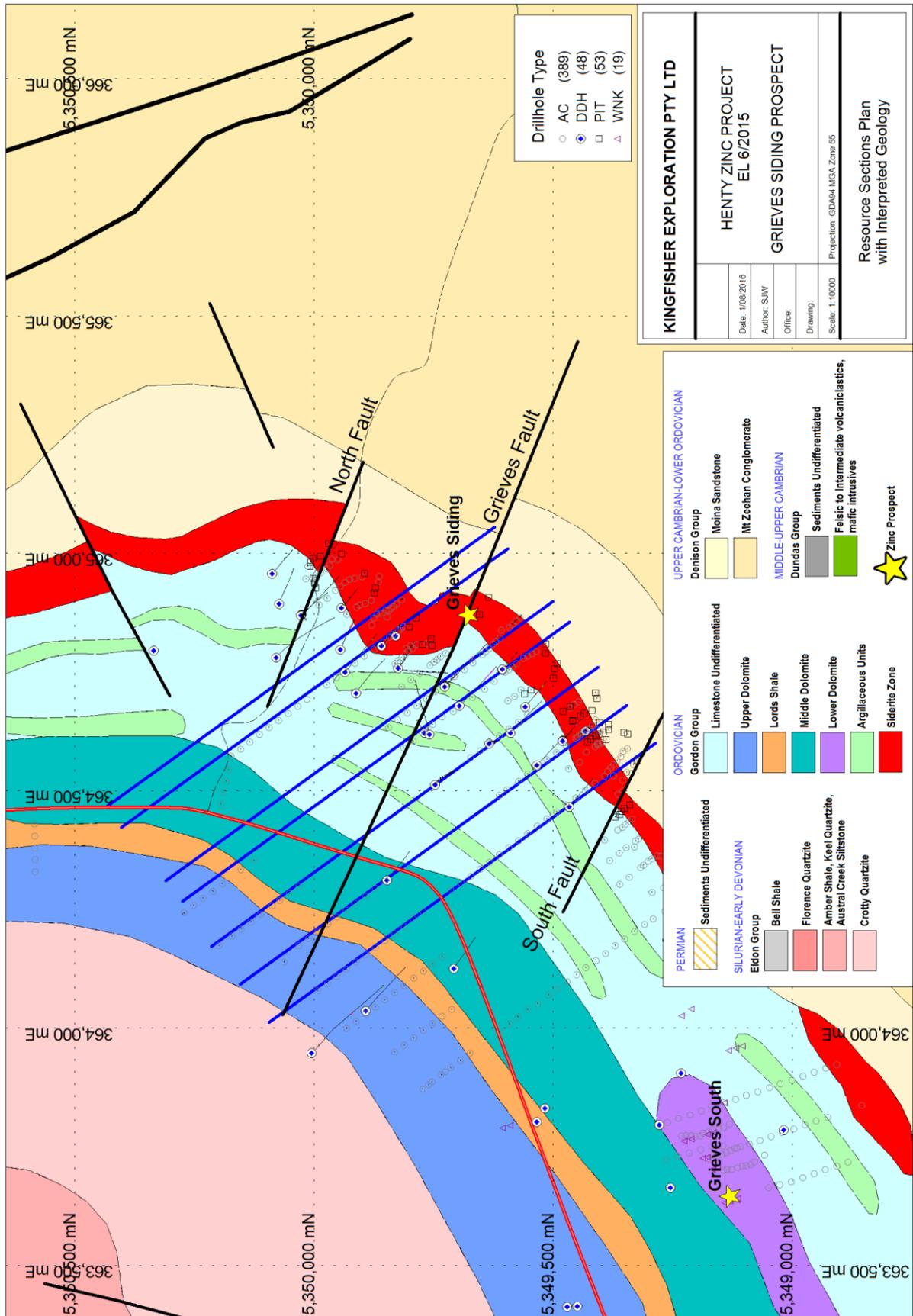


Figure 15. Plan showing interpreted geology and structure with resource section lines and drillholes, Grievess Siding.

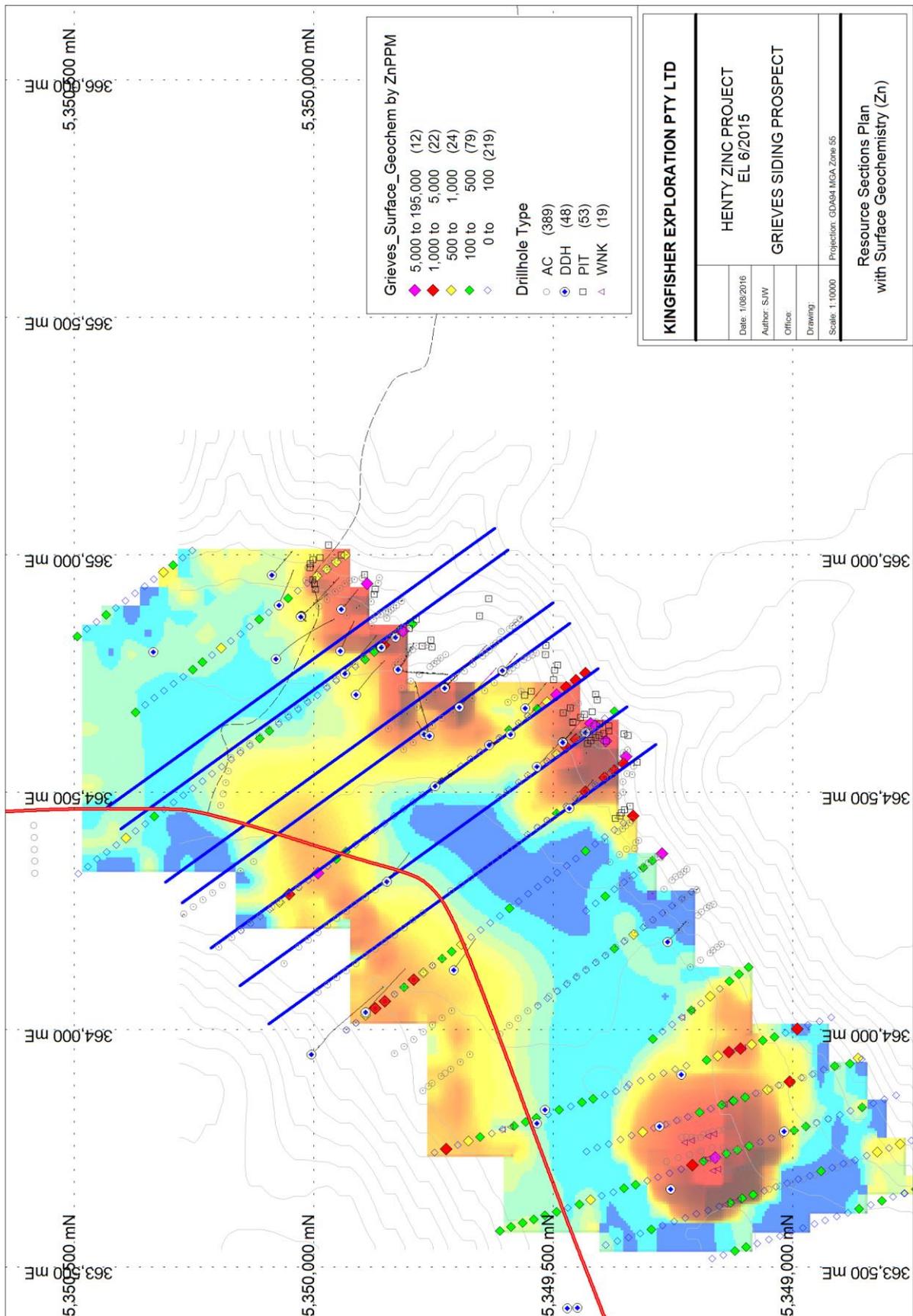


Figure 16. Plan showing surface (wacker hole) zinc geochemistry with resource section lines and drillholes, Grieves Siding. South Grieves is located at the zinc anomaly in the south west corner of the image.

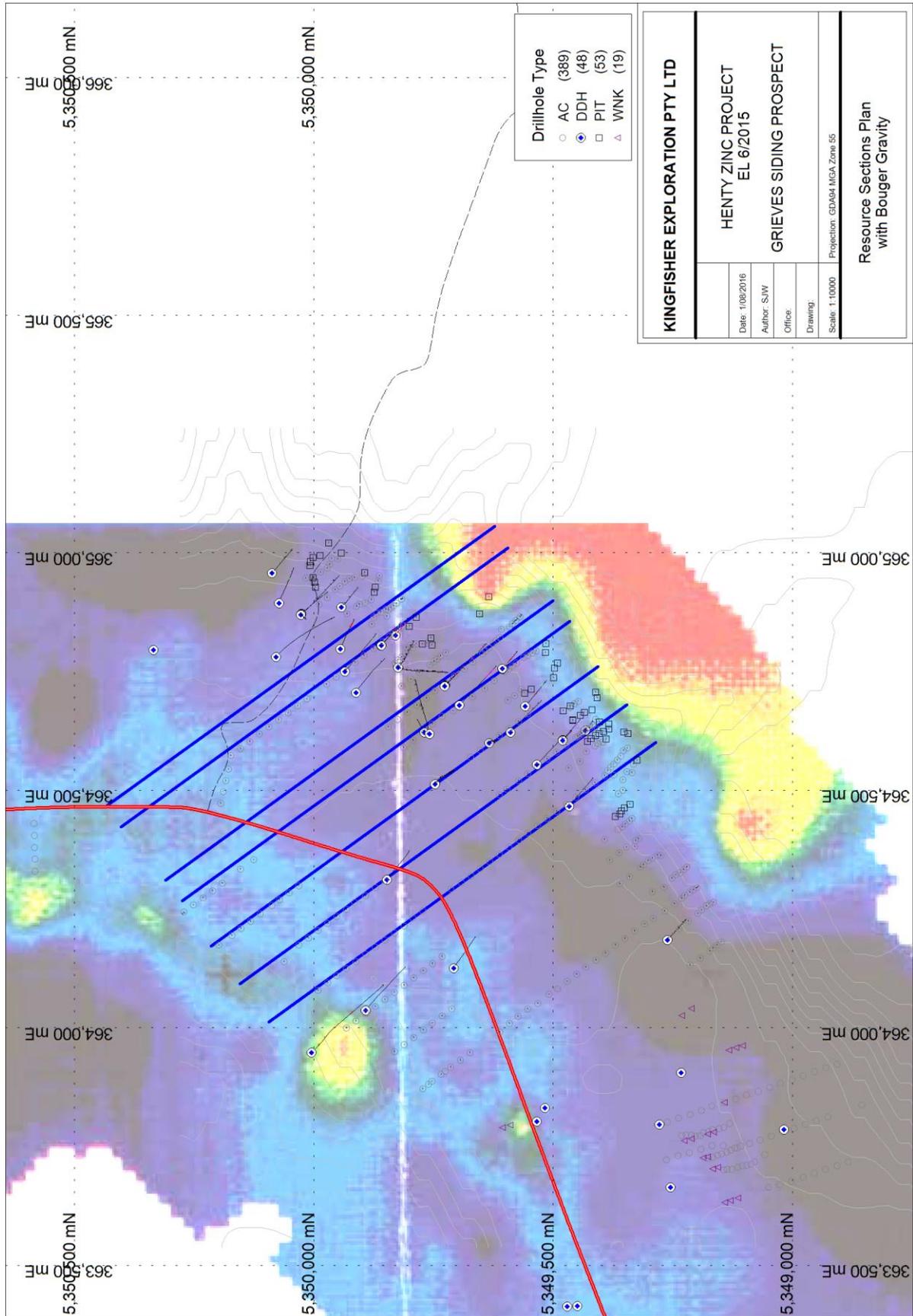


Figure 17. Plan showing bouguer gravity image from EZ (1980's) with resource section lines and drillholes, Grieves Siding.

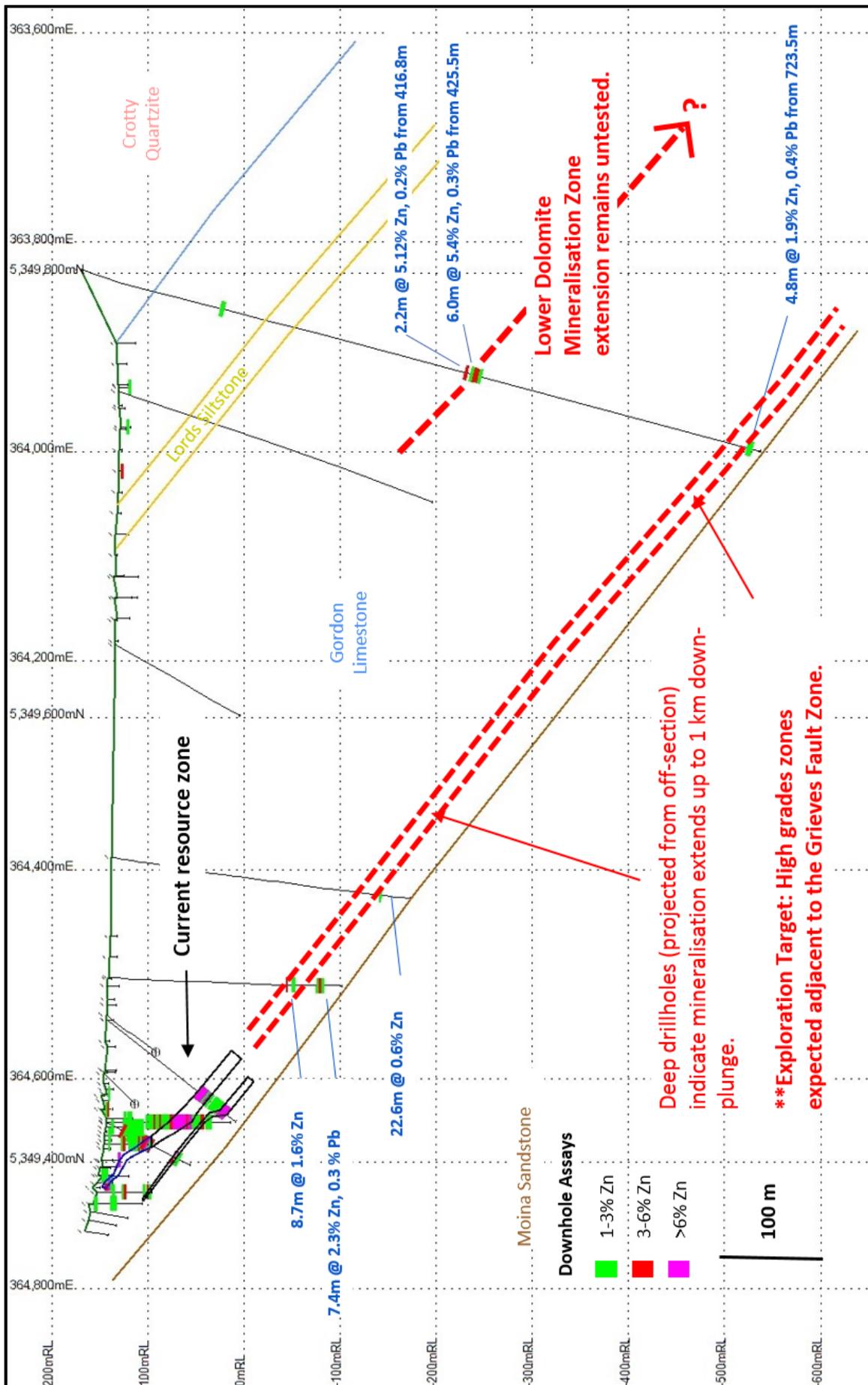


Figure 18. Representative section through Grieves Siding showing deep down-plunge extension of the Basal Siderite Zone mineralisation and potential for Lower Dolomite Zone mineralisation north of the outcropping mineralisation and current defined resource area.

5.5.2 MYRTLE PROSPECT

At the Myrtle prospect, the potential for relatively small but shallow (<30m) resources with predominantly sulphide mineralogy is recognised. Such small resources may be amenable to small-scale mining should grade, mineralogy, mining costs and zinc price prove suitable. Preliminary metallurgy test carried out by CRAE on Myrtle core indicates that the mineralisation is sulphide dominant with coarse grain, low-Fe sphalerite that should be suitable to treatment by traditional flotation methods.

There also remains significant exploration potential in the wider Myrtle area for larger orebodies. The presence of the Professor Range Fault zone, which is interpreted as a major basin bounding structure, and favourable stratigraphy in a complex anticlinal fold hinge and its western limb represents a key exploration target area. Large positive stratabound gravity features in this area remain unexplained and should be considered using Irish-type exploration models that target the edges of such gravity features. Previous shallow drilling at Myrtle shows that near-surface disseminated to semi-massive, stratabound Zn-Pb mineralisation occurs over a known strike length of 1 km which is coincident with a wide surface geochemistry anomaly, the northern end of the positive gravity feature and the anticline fold hinge zone.

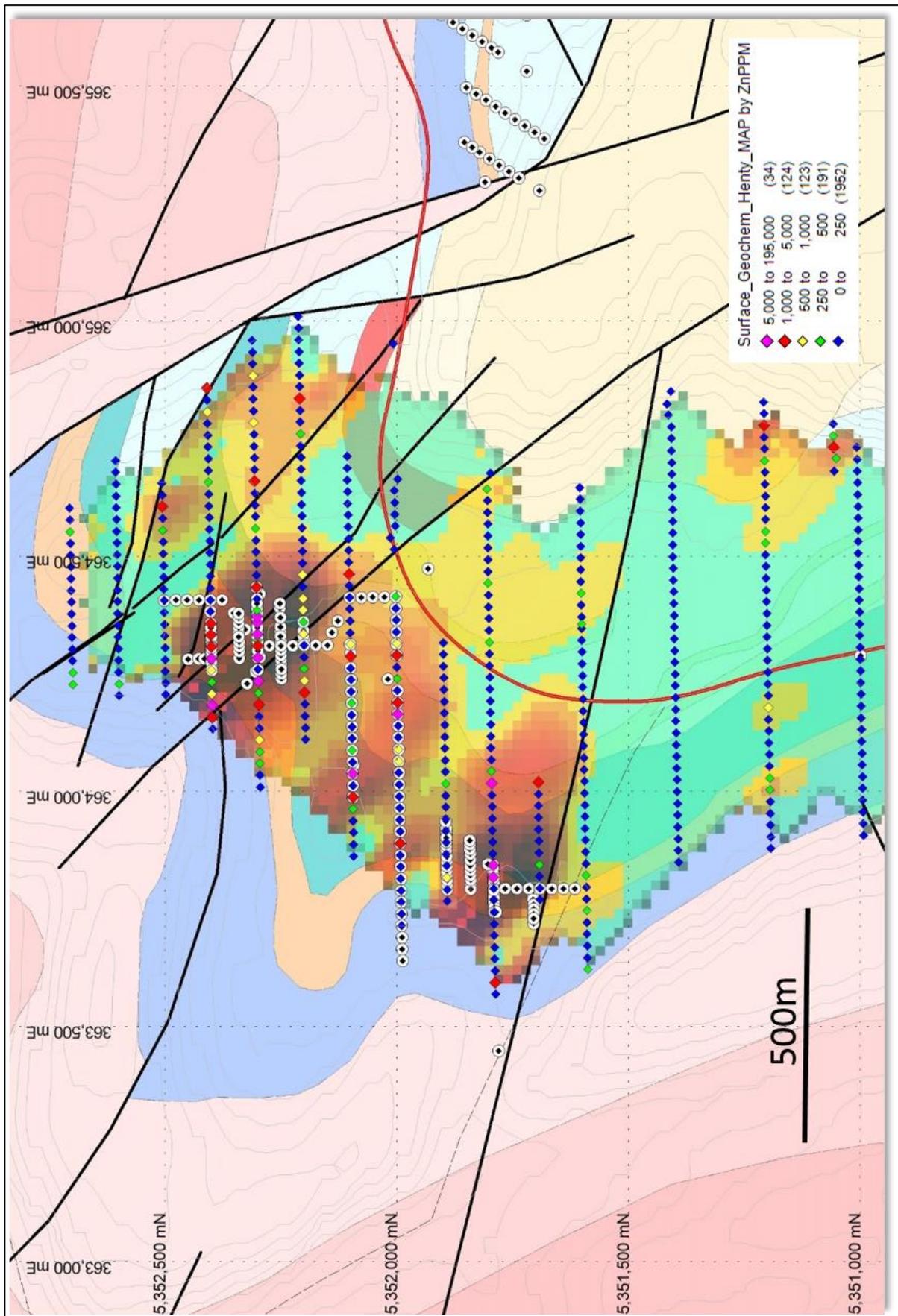


Figure 19. Plan showing surface geochemistry distribution (zinc) with interpreted geology and drillhole collars, Myrtle prospect.

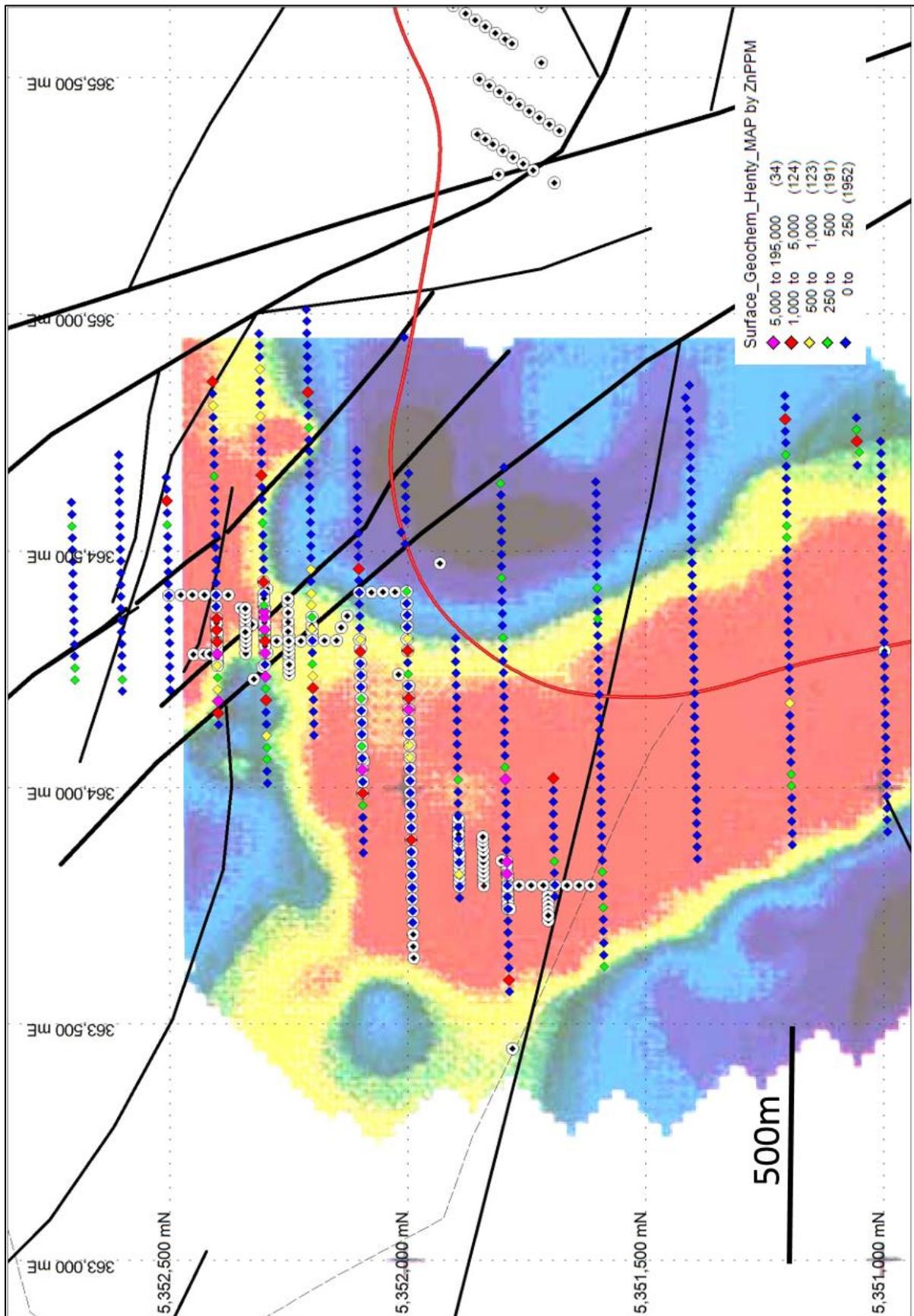


Figure 20. Plan showing surface geochemistry distribution (zinc) with bouger gravity image, interpreted structure and drillhole collars, Myrtle prospect.

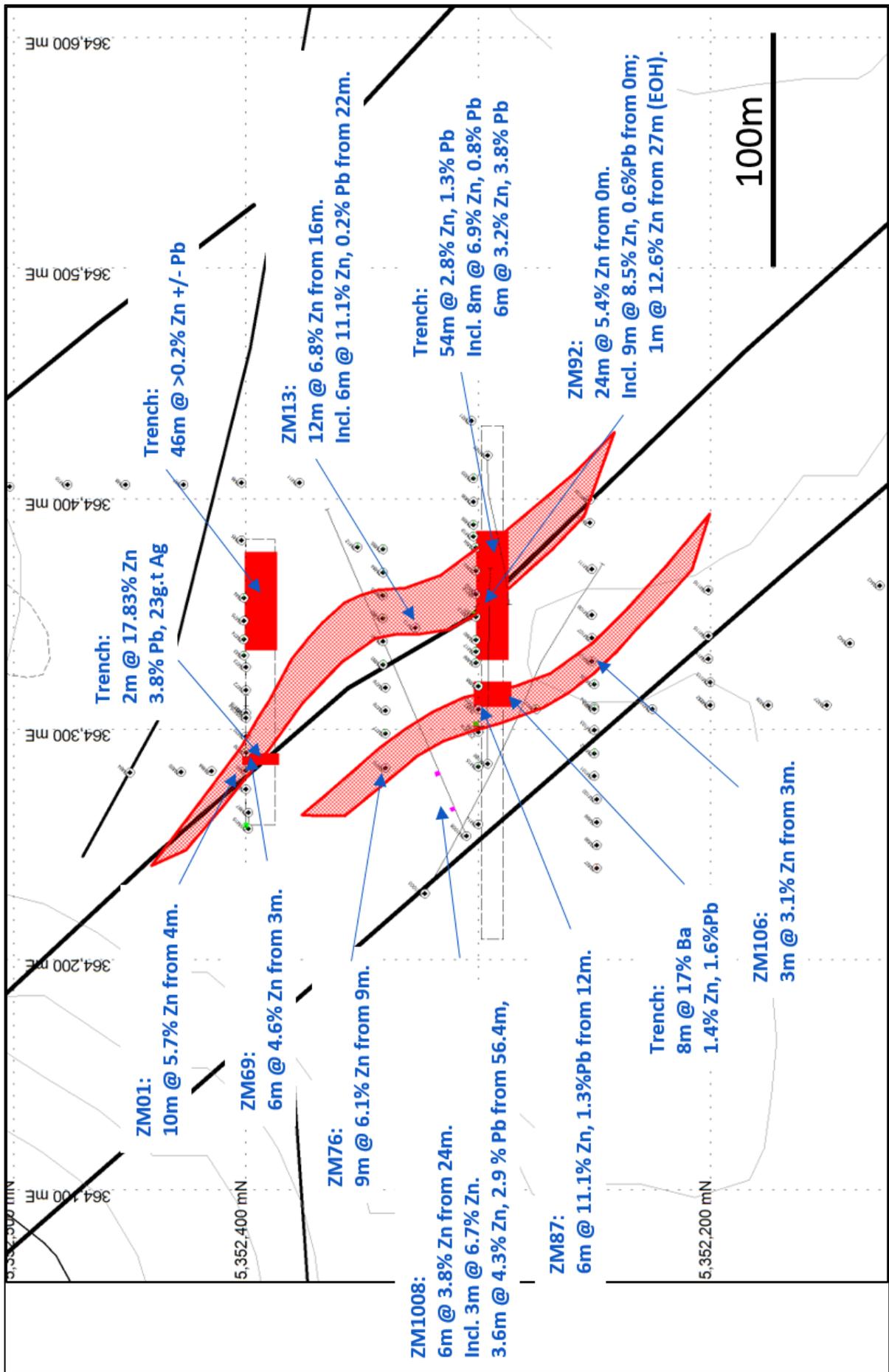


Figure 21. Plan showing interpreted mineralisation boundaries adjacent to structures within the Professor Range Fault Zone and significant drillhole assay intercepts, Myrtle prospect.

5.5.3 SOUTH GRIEVES PROSPECT

The South Grieves prospect area represents a similar opportunity to Myrtle with near-surface (0 to 30 m depth) high-grade sulphide mineralisation. The general prospect area is defined by a discrete surface zinc anomalous zone 300-400 m wide (Figure 16). A larger target also exists with previous explorers speculating that the mineralisation at South Grieves may be a surface expression of the Lower Dolomite Zone deep mineralisation intersected in drillhole ZG1007 (Figure 18) and this concept is yet to be tested and requires further assessment.

Best results from previous drilling at South Grieves include:

- ZWG1: 11.8m @ 6% Zn.
- ZWG22: 0.8m @ 17.5% Zn.
- ZWG26: 1.9m @ 7.3% Zn.
- ZWG26: 1m @ 6.9% Zn.
- ZG1007: 17.8m @2.95% Zn, including 6m @ 5.4% Zn (300 m vertical depth).

5.5.4 FIREWOOD SIDING PROSPECT

At Firewood Siding widespread low grade mineralisation and anomalous surface geochemistry over 1.3 km of strike is interpreted to occur associated with the Upper Dolomite Zone below the Crotty Quartzite contact. The area is located in the hinge and limbs of a plunging anticline and adjacent the regionally significant Firewood Fault zone. Extensive dolomite alteration, silicified carbonate and black matrix breccias have been observed in outcrop in the area and there are unconfirmed reports of outcropping massive sulphide. A gravity high feature is apparent in the anticlinal fold hinge area but is not fully resolved due to it occurring on the edge of the gravity survey coverage.

Best results from previous drilling at Firewood Siding include:

- ZF30: 22m @ 1.5% Zn and 0.5% Pb from 10m.
- ZF29: 9m @ 1.9% Zn and 0.3% Pb from 14 m.

Numerous other targets areas exist within the tenement area, particularly to the east of the Professor Range Fault and south of Firewood Siding in the Rose Valley and Baura prospect areas. These will be more fully assessed in the coming year.

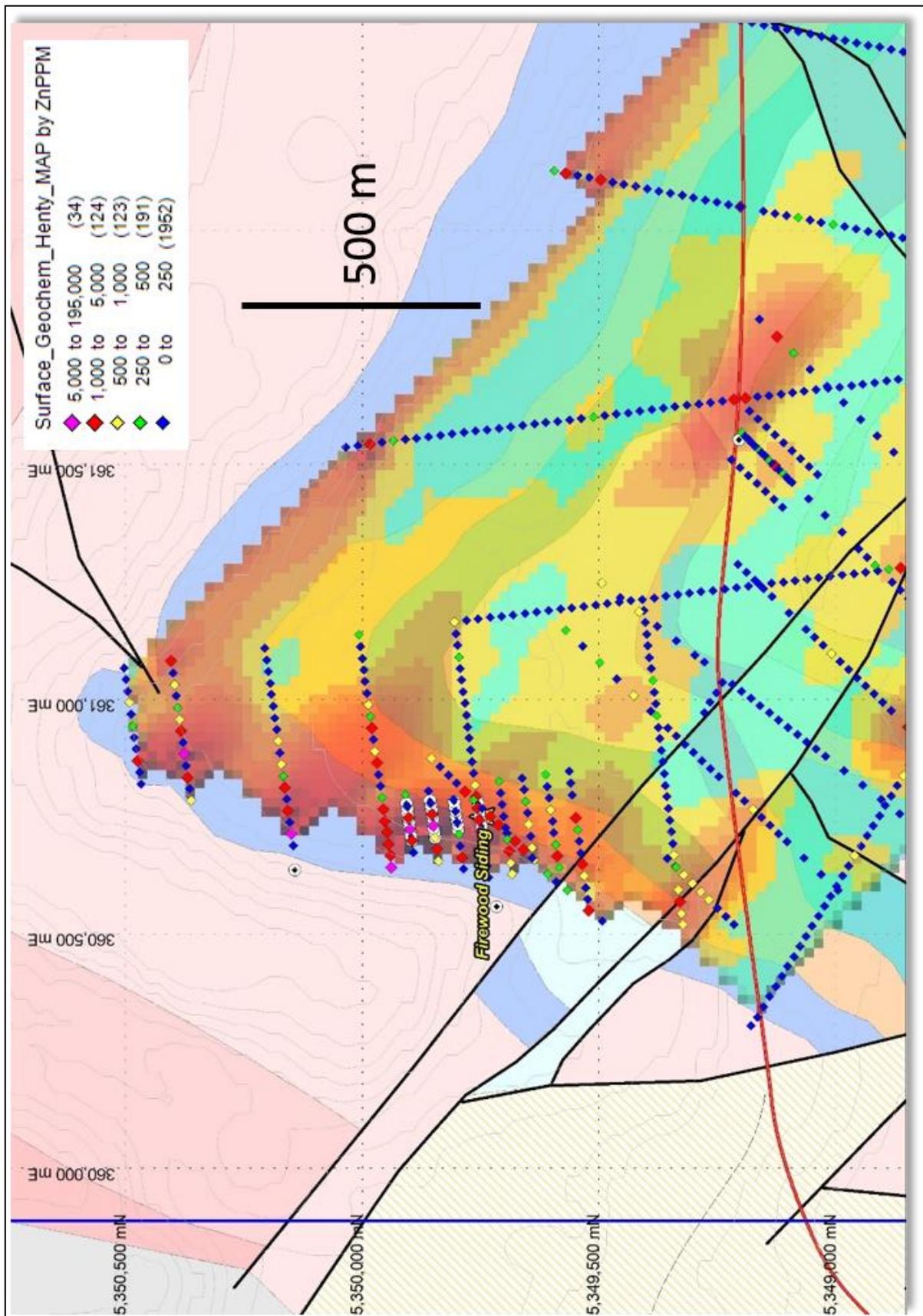


Figure 22. Plan showing surface geochemistry distribution (zinc) with interpreted geology, Firewood Siding prospect.

Target / Prospect	Description	Previous Results
Grieves Siding	<ul style="list-style-type: none"> • Potential Resource of primary ore of 1.9 Mt @ 8.7% Zn, including 1.1 Mt @ 10.7% Zn in Block 1. • Surficial Zn-clay Inferred Resource of 0.3 Mt @ 4.5% Zn. • Infill and exploration drilling required to update resource classification of primary ore blocks. • Significant exploration upside to expand resource by targeting thickest and highest grade ore zones within 200m of controlling fault zones, specifically targeting the plunging BSZ/fault intersection zones. • Previous drilling indicates that the BSZ mineralisation and alteration system extends down-plunge for at least 1 km from surface. • Exploration target of 5 to 10 Mt. 	<p>ZG107: 13.2 m @ 11.5% Zn from 124 m, & 8.4 m @ 13.9% Zn, 8.5% Pb from 154.5 m;</p> <p>ZG363: 24.9 m @ 7.5% Zn, 0.8% Pb from 65 m, & 2.4 m @ 2.8% Zn, 1.6% Pb from 98.6 m;</p> <p>ZG406: 6.3 m @ 24.3% Zn from 115.0 m, & 4.0 m @ 5.5% Zn, 2% Pb, 32g/t Ag from 162 m.</p>
South Grieves	<ul style="list-style-type: none"> • Lower Dolomite Zone mineralisation, generally <20 m vertical depth but extending down-plunge to 300 m vertical depth. • Low-Fe Sphalerite, zincian siderite and willemite. • Inferred same stratigraphic position as Oceana deposit. • Potential for small, shallow (<30m) open-pittable resource – current potential resource estimate of 0.1 Mt @ 7% Zn, 1% Pb. 	<p>ZWG1: 11.8m @ 6% Zn</p> <p>ZWG22: 0.8m @ 17.5% Zn</p> <p>ZWG26: 1.9m @ 7.3% Zn</p> <p>ZWG26: 1m @ 6.9% Zn</p> <p>ZG1007: 17.8m @ 2.95% Zn, including 6m @ 5.4% Zn (300 m vertical depth).</p>
Myrtle	<ul style="list-style-type: none"> • Potential Resource of shallow (<30m) open-pittable ore of 0.4 Mt @ 4.3% Zn, including 0.19Mt @ 6.7% Zn at Myrtle 1. • Upside potential along 1.5km strike of anomalous surface geochem. • Mineralisation spatially associated with major basin-forming fault zone (Professor Range Fault). • SEDEX style feeder zone at Myrtle 1(?) Within Professor Range Fault Zone. • Poorly tested large gravity features (key irish-type exploration targets). • Clean, sulphide dominant mineralogy amenable to traditional flotation processing methods. 	<p>ZM87: 6 m @ 11.1% Zn, 1.3% Pb from 12 m</p> <p>ZM1008: 3.0 m @ 6.7% Zn from 24 m, & 6.0 m @ 4.3% Zn, 2.9% Pb from 56.4 m.</p> <p>ZM92: 24 m @ 5.4% Zn from 0 m.</p> <p>ZM128: 5.6 m @ 6.4% Zn from 18 m.</p> <p>ZM58: 6.0 m @ 5.2% Zn from 0m.</p>
Firewood Siding	<ul style="list-style-type: none"> • Upper Dolomite Zone mineralisation adjacent to regionally significant basin-bounding Firewood Siding Fault. • Extensive dolomite alteration and silicified carbonate and black matrix breccias envelope a 350 m wide gravity feature adjacent to the fault. • Unconfirmed reports of massive sulphide at surface. • Same stratigraphic level as West Lode at Mariposa deposit (0.4 Mt @ 5.5% Pb, 1.3% Zn, 59.3g/t Ag). 	<p>ZF37: 10m @ 0.38% Zn, 0.11% Pb from 49m, & 3.2m @ 0.5% Zn from 87.8 m.</p> <p>ZF30: 22m @ 1.5% Zn & 0.5% Pb from 10m.</p> <p>ZF29: 9m @ 1.9% Zn & 0.3% Pb from 14 m.</p>
Badger	<ul style="list-style-type: none"> • Upper dolomite zone. 1-2km long stratabound gravity high with cross-cutting syndepositional(?) fault. Anomalous bedrock geochem 0.1-0.2% Zn+Pb. 	<p>ZG402: 2.5m @ 3% Zn & 4% Pb.</p>

Rose Valley	<ul style="list-style-type: none"> • Conceptual target with outcropping silicified carbonate breccias and large gravity high feature. 	Anomalous surface geochemistry with max. 242ppm Zn.
King Billy	<ul style="list-style-type: none"> • Widespread siderite altered and silicic hydrothermal breccias. Anomalous 80m wide zone up to 1.5% Zn and 1.5% Pb. Potential basement related structural breaks. 	2.6% Zn aircore anomaly. ZC01-01: Intersected 100m zone of hydrothermal red-matrix breccias.
Professor	<ul style="list-style-type: none"> • Numerous historical mine workings and widespread Fe-dolomite alteration. Adjacent to major basin-forming fault. Significant stratabound surface geochemical anomaly >1.3km strike and at least 100 m wide. 	Aircore to 2% Zn and 2.6% Pb.

Table 3. Summary of key exploration target prospects, EL06/2015.

6 DISCUSSION OF RESULTS

The data compilation and review effort that was commenced during the reporting period has significantly advanced geological and conceptual understanding of the mineralisation system and highlighted numerous exploration target areas within the tenement. Most of the targets display characteristics analogous to MVT and/or Irish-type deposit models. Given the large volume of pre-existing exploration data and amount of quality targets, detailed assessment of prospects is still ongoing.

A key outcome has been recognising the geometric and geological complexity of the targeted mineralisation. This complexity results from the folded and plunging nature of the host stratigraphy (and therefore the stratiform mineralisation) and also the relationship with faults that appear closely associated with the localisation of high grade mineralisation. Most previous exploration efforts focused drilling along the present day surface strike of the stratigraphy and mineralised zones, whereas the actual original strike of the ore zones (during ore formation) adjacent to basinal fault structures is now north plunging. The thickest and highest grade mineralisation, for example at Grieves Siding, is located proximal to these faults (within 200 m of the faults). Future exploration targeting therefore needs to focus on these high grade zones proximal to the faults and at the intersection of the fault and the plunging favourable stratigraphic unit. While this may not immediately add extra significant tonnage to potential shallow (<200 m depth) resources, it has a high chance of significantly increasing the grade of such resources. Extrapolating the same exploration concept to deeper targets would be required to add resource tonnage.

Successful targeting for this exploration model will be best done with accurate 3D modelling of stratigraphy, mineralisation and structures, and incorporating 3D geophysical models where possible.

The revised resource estimate for Grieves Siding, while currently non-JORC, is geological reasonable and methodology was suitable for the stage of exploration. It has significantly enhanced the resource potential of the deposit and resulted in the primary mineralisation at Grieves Siding being identified as the priority exploration target for follow up in the short term. The reviewed resource estimate and geological model indicates that further exploration including infill and extension drilling could quickly develop the deposit into a potential economic resource.

Other targets for ongoing consideration include the near-surface sulphide dominant mineralisation and potential deep extensions at Myrtle and South Grieves prospects.

Research into the zinc-carbonate mineralogy identified at Grieves Siding and other prospects within the tenement and metallurgy issues associated with these ore types has increased confidence that this ore type can produce economically viable base metal projects. Discussions with a group who specialize in research and development of the metallurgy of zinc carbonate ore types was initiated with options presented to their effective treatment. These discussions are ongoing.

7 CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE WORK

Kingfisher is encouraged by the work completed and results obtained within the first year of tenure of EL06/2015. The newly created Preliminary Resource Estimate covering historic resource areas provides a focused target for exploration activities. Several other key target prospects have been generated requiring follow up.

Work to date on the project has significantly advanced understanding the geology and mineralization styles within the tenement that has facilitated prospect to deposit scale targeting. The work also highlighted exploration upside opportunities outside known resource areas. The presentation of this work has also greatly assisted in making the project more attractive to potential investors.

Collation and review of historical exploration data and various other information sources during the reporting period has been used to determine the prospectivity of the tenement area for base metal deposits and to identify key priority areas for follow up with field exploration programs.

The area is assessed to be highly prospective for MVT and Irish-type Zn-(Pb-Ag) deposits styles, and possible SEDEX style. Four priority target areas have been identified including the Grieves Siding, Myrtle, South Grieves and Firewood Siding prospect areas. A revised (non-JORC) mineral resource estimate for the primary mineralisation at Grieves Siding indicates a relatively shallow (<150m) current potential resource of 1.9 Mt grading 8.7 % Zn, representing a significant increase in tonnage from previous estimates.

Recommendations for future work includes:

- Continued collation of pre-existing exploration data, particularly data entry and digitisation of detailed drillhole lithology, mineralisation and alteration logging data that currently remains only in paper format in various historical reports;
- 3D Modelling of stratigraphy, mineralisation and alteration from drillhole and surface mapping data;
- Where datasets are available, reprocess pre-existing geophysical data and create 3D geological models with modern software.
- Detailed geological and structural mapping and sampling in identified target areas;
- Reopen vehicle access along existing but overgrown tracks;
- Validation, infill and extension drilling at Grieves Siding to develop the resource potential of the primary ore zone;
- Metallurgical tests on Grieves Siding primary ore;
- Detailed airborne gravity survey over the whole tenement area, covering the prospective Gordon Group and immediately adjacent stratigraphy.
- Possible RC drilling at Myrtle and South Grieves to test the continuity of near-surface sulphide mineralisation.

8 ENVIRONMENT

There was no environmental disturbance from exploration activity during the reporting period. However, thick strands of Gorse weed (*Ulex euroaeus*) were identified in places on the sides of Henty Road as well as significant infestations within the larger tenement area. The weed has particularly taken hold of large areas on existing access tracks to and surrounding the Myrtle prospect area. Very thick tall gorse crosses the previous track restricting access to the area of previous drilling.

The Company is aware of and recognises the significant impact of this environmental weed and the importance of correct environmental management. A policy to properly manage the impact of exploration activities will be drafted and sent as part of an environmental management plan accompanying future work program applications.

9 EXPENDITURE

Exploration expenditure over the reporting period for EL06/2015 is summarized in Table 5.

	ITEM	EXPENDITURE (AUD)
1.	GEOSCIENTIFIC COSTS Geology Geochemistry Geophysics Remote Sensing	 \$ 60,000 \$ 0 \$ 0 \$ 0
2.	DRILLING AND GRIDDING COSTS Gridding Drilling	 \$ 0 \$ 0
3.	LAND ACCESS COSTS	\$ 0
4.	REHABILITATION COSTS	\$ 0
5.	FEASIBILITY STUDY COSTS	\$ 0
6.	OTHER COSTS Rental Fees	 \$ 1800
7.	ADMINISTRATION COSTS Legal Administration	 \$ 0 \$ 3,000
	Total Expenditure	\$ 64,800

Table 4. Exploration expenditure on EL06/2015 during the reporting period.

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