NI 43-101 TECHNICAL REPORT FOR HAPPY VALLEY MINE

Bulawayo, ZIMBABWE

Prepared for

PENNINE PETROLEUM CORPORATION

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30 MARCH 2022

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CERTIFICATE

I, **MARY GAYLE HANSSEN** do hereby certify that:

1. I am the Principal Consulting Geologist of Digital Mining Services, located at 3 Coleshill Close, Greendale, Harare, Zimbabwe.
2. This certificate applies to the report entitled "NI 43-101 Technical Report for Happy Valley Mine, Bulawayo, Zimbabwe (the "Technical Report") with an effective date of 30th March 2022 and a signature date of 30th March 2022. The Technical Report was prepared for Pennine Petroleum Corporation (the "Issuer").
3. I am a member in good standing of the South African Council for Natural Scientific Professions (SACNSP), Registration Number 400069/03. I obtained a Bachelor of Science (Geology) degree and an Honours degree from the University of Natal, Pietermaritzburg, South Africa in 1984 and 1985 respectively.
4. I have practiced my profession continuously as a geologist for a total of thirty-five (35) years since 1986. I acquired my expertise in mineral exploration starting with Anglo American Corporation in the 1980s, with exploration experience and an Archaean gold discovery in the 1990s with Reunion Mining plc. Since 1998, I have been consulting for numerous clients in the Central and Southern African region, including 10 years as First Quantum Minerals Resource consultant from 2003 to 2011.
5. I have read the definition of a qualified person ("QP") set out in Regulation 43-101/National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a QP for the purposes of this NI 43-101 report.
6. I visited the property on 7th March 2022 and also have been involved in neighbouring projects in the past.
7. I am the author of this Technical Report and responsible for items held within.
8. I am independent of the Issuer applying all of the tests in section 1.5 of NI 43-101.
9. I have not had prior involvement with the Project that is the subject of the Technical Report.
10. I have read NI 43-101, and the items of the Technical Report have been prepared in compliance with that instrument.
11. As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed this 30th day of March 2022 in Harare, Zimbabwe.

Signature of Qualified Person	30th March 2022 Date
SACNASP Professional Membership	400069/03 Membership Number

1. SUMMARY

Happy Valley Mine is an operating gold mine, strategically located 15 kilometres from Bulawayo city centre. The location has the potential to be an excellent mining project in the Hope Fountain structural domain.

The Happy Valley mining claim covers a series of East-West striking shear zones containing known gold mineralisation. This is an Archaean gold mining camp, with the largest deposit in the vicinity be How Mine, with a recorded production since discovery of 1.1million ounces, with a further 1 million ounces reported in their resource.

On site, the Main zone has 2 historical and currently accessible shafts located on it and is trenched and worked the strike length of the claim (500m). This is Banded Iron Stone (BIF) hosted mineralisation, and stockpiles of coarse sulphide mineralisation are evident on surface. A similar BIF hosted reef has an open shaft on it to the south, and to the north of the Main Zone is a series of echelon trenched zones in a talcose schist. It is reported that there is a further parallel on the north margin of the claim, which has only been identified by geophysical surveys.

Ground geophysics, both magnetic and induced polarisation surveys were undertaken on the property 3 years ago, and they defined drill targets. These targets were trenched and surface geological mapping correlated the zones with the old underground mining operations. Exploration holes have not been drilled on the site, and one of the main purposes of this report is to outline the potential of the project and raise financing to define an initial resource for mining operations.

The opinion of the author is that this project is certainly ready for a resource definition and there is a good opportunity for a small scale mining operation to start to finance a regional gold play. The area has several active gold operations within 500m of the Happy Valley mine, with much bigger historical deposits on the same greenstone belt. An initial Reverse Circulation drilling programme of 1,180m is proposed in this report, that will define the main zone of the deposit, between the 2 shafts at a 40 x 40m grid down to an elevation of approximately 140m below surface. This is defined as Phase 1 of the work programme, and is budgeted at $85,000, and considered to take 6 months. Dependent on positive results for Phase 1, a provision is given for Phase 2, in which 1,180m is proposed, and again budgeted at $85,000 with a timeline of 6 months.

There is also an existing tailings dumps from a historical mining operation with grab assays of 0.6 g/t, plus a small rock dump of sulphide samples, that are believe to not have been of interest to the small scale workers which are generally only intersected in oxide hosted gold. No sampling of these dumps has been undertaken to date, but could quite readily be surveyed and quantified with grab and auger sampling.

An Environmental Assessment of the property is nearing completion and this will allow the commencement of mining operations. There has been an agreement signed between Techshed Investments, the current owner of the operation, and WaZeeva Investments, a mining contractor, to start mining operations. 3 shafts are accessible and 2 require equipping to start operations.

This technical report complies with National Instrument 43-101 ("NI 43-101") and was prepared by MARY GAYLE HANSSEN (SACNSP No 400069/03) for Pennine Petroleum Corporation ("Pennine") (TSX-V: PNN) following the signature of an Earn-in Agreement between Pennine and Techshed Investments (Private) Limited ("Techshed"), the owner and operator of the Happy Valley Mine.

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2. INTRODUCTION

This technical report complies with National Instrument 43-101 ("NI 43-101") and was prepared by MARY GAYLE HANSSEN, South African Council for Natural Scientific Professions (SACNSP), Membership Number 400069/03 for Pennine Petroleum Corporation ("Pennine") (TSX-V: PNN) following the signature of an Earn-in Agreement between Pennine and Techshed Investments (Private) Limited ("Techshed"), the owner and operator of the Happy Valley Mine.

The author has visited the site on the 7th March 2022, along with Moses Banda, BSc., a consulting geologist, the author of an exploration report prepared for Techshed in July 2020 (the "2020 Report"). Mr Banda's resume is appended to this report (APPENDIX A). The author has known Mr Banda professionally for a period of more than 10 years, and he is currently a member of the Geological Society of Zimbabwe.

This report places Hope Fountain within a structural domain so as to understand the controls of gold mineralization and therefore aid in the exploitation of Hope Fountain ores in general and Happy Valley Mine specifically.

It summarizes mining history from early days of mining in the camp to the present noting that, in particular for Happy Valley Mine, any data available on mining methods, production and possible errors that might have happened and especially in the absence of geological information and advice.

The study summarises the exploration work done during the present period (2010 to 2020) to shed light on geological knowledge of the gold deposits at Happy Valley Mine.

There is no compliant resource at Happy Valley and the purpose of this report is to outline the previous exploration and recommend a drilling programme to define a preliminary resource in the vicinity of the two shafts that are currently open. This is followed by an assessment of infrastructure development.

From this it is envisaged that a mining plan can be drafted that seeks to exploit the deposit for maximum benefit using present and projected capacity, alongside the exploration programme.

2.1 PREVIOUS REPORTS ON HAPPY VALLEY MINE

Besides the Geological bulletins that have focused on the Zimbabwe and Bulawayo greenstone belts, reports on previous work are extensively used and quoted in the 2020 Report. These reports, as well as internal reports generated during the mining exploration work currently underway are referenced at the end of the report and include:

- A 2010 report by P. Hastings BSc. following his visit to the mine;
- A magnetic survey by Pexmin over the claim (report);
- An RSIP survey on two lines 150 metres apart (report);
- Follow-up trenching and sampling by M Banda BSc. (report); and
- An infill RSIP survey by Pexmin reducing the spacing to 75 metres across the length of the claim (report).

- 2020 Report by Moses Banda that summarises all previous exploration and assists in the interpretation of the geophysics that allows for the creation of a drill programme.

3. RELIANCE ON OTHER EXPERTS

The author has reviewed the claims certificates and siting of works plans filed with the Ministry of Mines, and believes them to be correct. However, the author has relied on the title information as provided by the company and provides no legal opinion thereon.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 AREA OF CLAIM

The Happy Valley A Mining Claim, registration number 37375, is a parallelogram measuring 500 metres by 200 metres with its long length striking east west. It has a perimeter of 1.41km and an area of 9.90 hectares.

4.2 LOCATION OF THE PROJECT

The map below shows the location of Happy Valley Mine in Zimbabwe, within the Bulawayo Greenstone Belt.

The project is located on a single Claim, numbered 37375 south of the city of Bulawayo, the second biggest urban centre in Zimbabwe. This is illustrated on a Google earth image in Figure 2 below.

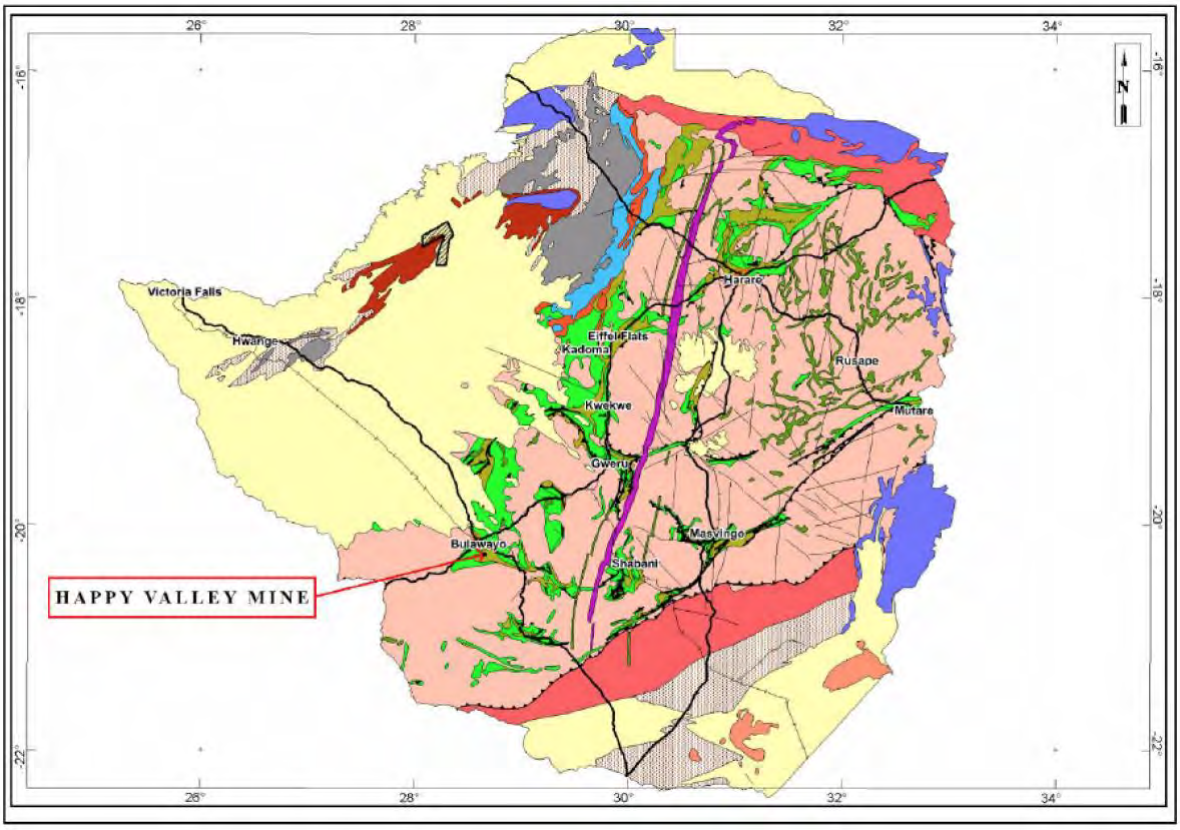

Figure 1: A map of the location of Happy Valley Mine on the Geological Map of Zimbabwe

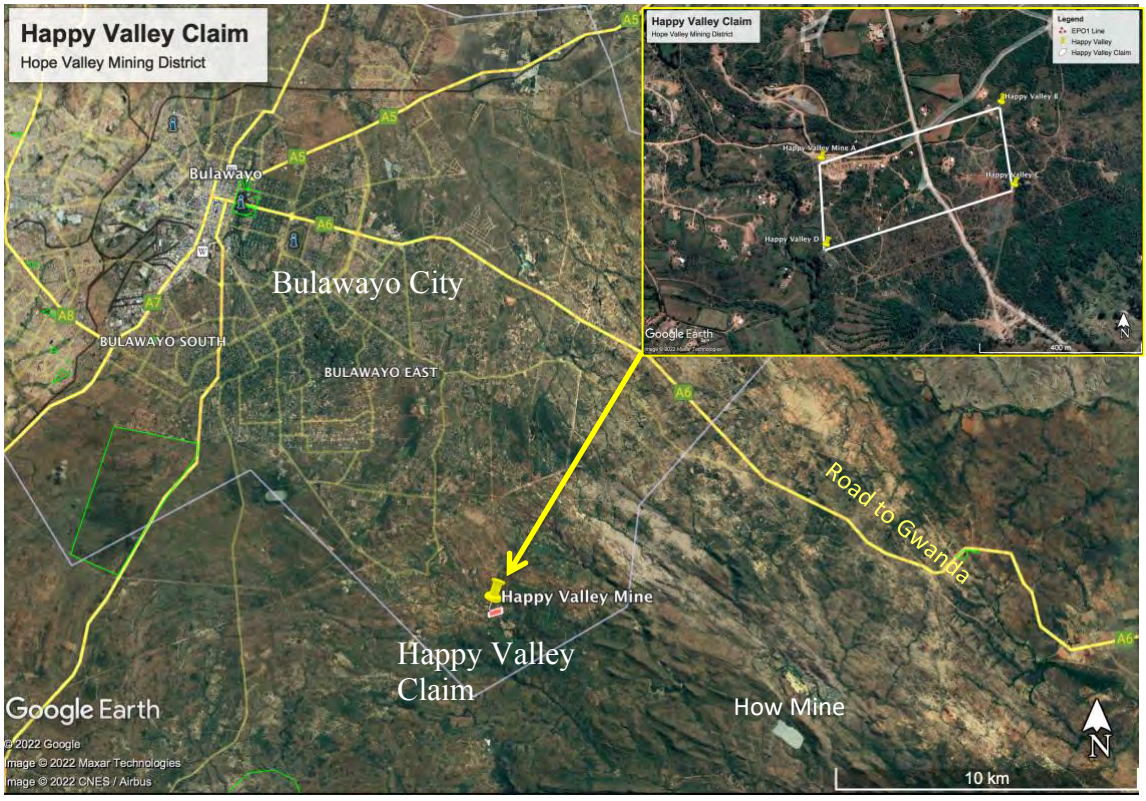

Figure 2 : Claim map of Happy Valley in relation to Bulawayo city

Using Google Earth the following are define the location of the Happy Valley Claim (in WGS84 UTM Grid). However, it should be noted that all claims in Zimbabwe are defined in ARC1950 UTM Grid, and are reported as such. For use in WGS84, 300m should be subtracted from the Northing to define the Coordinates in ARC1950 UTM Grid.

BEACON	COORDINATES (UTM WGS 84)
A	35 K 674470 7756910
B	35 K 675110 7757040
C	35 K 675140 7756840
D	35 K 674680 7756700

Table 1 : UTM WGS 84 Coordinates of rationalised Happy Valley claim 37375

4.3 MINERAL TENURE OF THE CLAIM

The Happy Valley A Mining Claim, registration number 37375, is registered for gold. Inspections are statutory and should be done by producing and declaring work or gold production. The claim was verified in December 2021 by a letter from the Ministry of Mines, Zimbabwe. This letter is included as Appendix B. The claim is current and was issued for a year, expiring on 9th February 2023. This certificate is included in Appendix A.

4.4 ISSUER'S TITLE TO THE CLAIM

Pennine Petroleum Corporation (the "Issuer") signed an Earn-In Investment agreement on the 28th November 2021. The agreement allows for a 51% interest in the project on expenditure of US$1,000,000, increasing up to a maximum interest of 75% on expenditure of US$7,500,000. The earn in period is 5 years.

4.5 ROYALTIES

There is a 5% royalty payment to the Government of Zimbabwe, payable to the sale of gold to Fidelity. This is the same for all gold operations in Zimbabwe. There are no other known royalty agreements or back-in rights.

4.6 ENVIRONMENT LIABILITIES

All mining operations in Zimbabwe are subject to an Environmental Impact Assessment (EIA) study prior to mining by law. This study encompasses the process and mining operations on the environment as well as the impact on the local community's way of life. TechShed have signed a contract with Ecoview Environmental, a Government accredited EIA company in mid 2021. Their studies have been ongoing and the final report is expected early May 2022. They are on the final phase of the study currently which includes consultations with the local communities. The EIA study includes the approved Siting of Works plan for mining and this is illustrated below. On the positive completion of the EIA study, mining operations are authorised to commence. This EIA study will also cover the permission to conduct exploration drilling.

4.7 OTHER PERMITS

An Exclusive Prospecting Licence (EPO) was issued in 2021 to Duration Gold. These exploration licences cover a large area of ground for exploration purposes. The EPO is initially granted for a p period of 3 years, and is renewable twice. (Maximum period of issue is 9 years). During this time, there is a freeze on the pegging of claims, without the permission of the EPO holder. Individual title of already pegged claims can, however be bought and sold.

The author is in communication with Duration Gold, and initially there will be no further pegging of claims, but further into the EPO, when broad scale regional work has been done and follow up targets are identified, there may be some leeway to approach Duration to all the pegging of additional areas contiguous to the claims.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

5.1 ACCESS

The Project Area is accessed from Bulawayo using the How Mine Road. From town along 12th Avenue, at the old Rio Hotel you turn right and drive for 5km on a tarred road to a rural shop on the left-hand side of the road. From here you take a left turn on to a gravel road and drive straight to the mining claim, 3.7km away.

The map below shows the access route to the mine from Bulawayo's central business district.

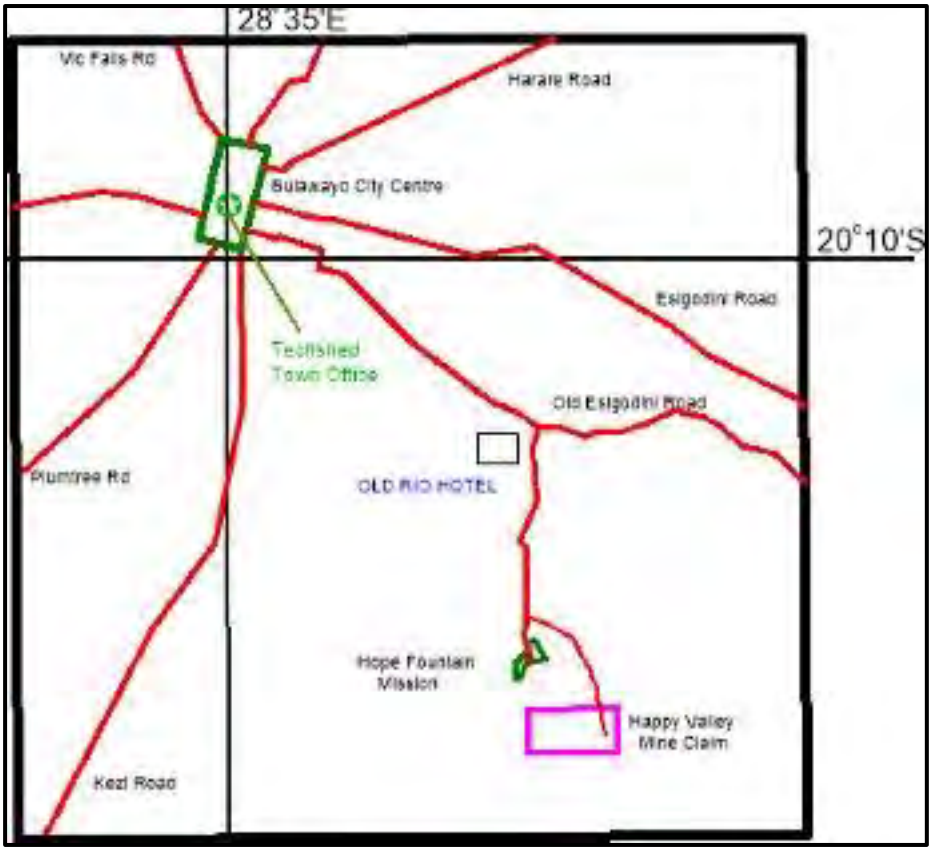

Figure 3 : A sketch map of an access route to Happy Valley Mine from Bulawayo CBD.

5.2 CLIMATE

The area of Hope Fountain forms part of the highveld of Zimbabwe and has a mild to chilly winter from May to August, and a warm to hot summer, with a rainfall generally lower than most of the northern part of Zimbabwe, but slightly higher than the average of Matabeleland.

Months	Maximum Temperature	Minimum Temperature
June-July	21°C	7 °C
October	29 °C	15 °C

Table 2 : Average temperatures of Bulawayo.

The rainy season is from mid-November to mid-March with some showers and misty periods in June and July. The rain varies from an exceptional season at 1,260mm to poor seasons as low as 280mm.

5.3 LOCAL RESOURCES AND INFRASTRUCTURE

The city of Bulawayo is the second largest city in Zimbabwe and the country' main industrial centre. As the headquarters of Zimbabwe railways, Bulawayo is the country's main transhipment point for goods to and from South Africa.

Bulawayo has the highest Human Development Index in the country and Bulawayo is home to over a dozen colleges and universities, most notably the National University of Science and Technology, Bulawayo Polytechnic College and the Zimbabwe School of Mines.

With mining being a major part of Zimbabwe's economy, a local work force with the requisite mining industry skills is readily available. Housing is readily available both in Bulawayo and closer to the mine. There is a good all-weather road network providing access to the project using local bus services.

5.4 PHYSIOGRAPHY

The relief within the Hope Fountain structural domain ranges from as high 1,484m above sea level to as low as 1,360m above sea level. The terrain is rugged with resistant banded ironstones forming ridges incised by south and east flowing streams which eventually drain to the Mzingwane River. (Garson, 1995)

The vegetation type is closely related to the underlying rock-types. The mafic and calc-alkaline greenstones support a heavy growth of varieties of *brachystegia* bush (known locally as *igonde* and *itshabela*), while the more felsic greenstones carry more open acacia and mopane scrub.

5.5 ON SITE INFRASTRUCTURE

There is National Power (ZESA) on site, with its own transformer. The site has a borehole water supply that is pumped into tanks illustrated on the figure below, which allow gravity feed. The underground workings are also flooded on the lower levels, and will be a supply of water for the plant prior to the dewatering.

Photo 1 : Water storage tanks and power supply on Happy Valley Claim

5.6 SITING OF WORKS – ON SITE PLANNING

The siting of works plan is a Zimbabwe requirement for all mining operations, and the current plan was submitted and approved by the Ministry of Mines in late 2018. On the left of the plan is the site of the claim on the Government 1:50,000 topography maps, with a more detailed siting of works plan on the right. All is referenced on a UTM grid and the claims boundary is shown.

The plan illustrates the power line and the water tanks in the north on the ridge. The plant location is illustrated and the dump marked on the plan is a tailing dump currently in existence. The dotted blue line running north south through the centre of the claim is the road access.

There is a position of the tailings, and it is envisaged that this position will continue to be used. However, rock waste dumps are not on the siting of works, and after a drilling programme, which would include a sterilisation programme, it is envisaged

that waste dumps will probably be located on the northern section of the claim. The Siting of Works plan would then be amended accordingly with the Ministry of Mines.

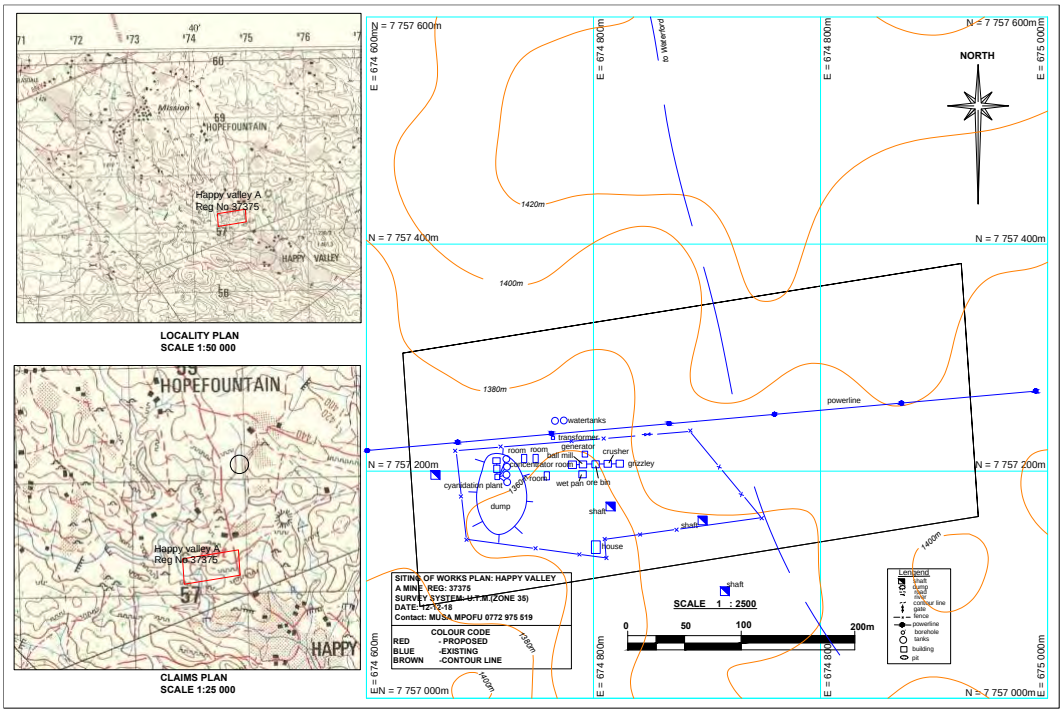

Figure 4 : Siting of Works Plan approved by the Ministry of Mines.

6. HISTORY

6.1 HISTORICAL OWNERSHIP AND PRODUCTION 1956 - 1985

Records at the Ministry of Mines show that the area was first pegged as the Noddy Mine in 1956 by Scenery Syndicate, which was later sold to W. G. Birkin, who took in I. A. Behr as a partner. In 1957 a small amount work was carried out, and in the following year was sold to Mr G.D. Lamont, who continued the work of the previous owners. Mr Lamont fell ill and died in 1959. However, production records state that from 1956 to 1959 620 tons of ore was milled for 110 ounces, at a grade of 5.35g/t Au.

In March 1963, Mr N. Young re-pegged the ground, cleaned out the three shafts and installed stamp mill, portable compressor and headgear using a generator to run the winch. From the first shaft 30 tons was produced grading at 11.16 g/t before flooding caused the abandonment of operations at a depth of 28m. The second shaft gave 19 tons at a grade of 35.8g/t again stopping due to flooding at 30m. The third shaft gave 20 tons at 4.4g/t Au to a depth of 26m. He managed to mine a further 800 tons by stoping above the water table, with an average grade of 10.1g/t before letting the claims go to forfeiture in 1966.

There was minor operation in 1974-9 but limited production. The claim was then re-pegged by Tawuya Syndicate from 1984-5 again with paltry production

Period From	Period to	Owner	Tonnes Milled	Gold Produced (kg)	Recovery Grade (g/t)
1956 - 9	1958	Messrs Behr & Berkin/ Lamont	620	3.42	5.35
1962	1963	W Young	240	7.02	29.25
1964	1966	Mrs M.M. Quinn-Farwell	138	1.46	10.57
1974	1979	Hope Fountain Ore Chemical Company (Pvt) Ltd	482	0.36	0.74
1984	1985	Tawuya Syndicate	35	0.01	0.15
TOTAL			1,515	12.26	8.02

Table 3 : Summary of production figures for Noddy Mine.

In 1988, it is purported that Chase minerals explored over the claims as part of their EPO 520 programme, but this is not substantiated in the records. Mr Mpofu pegged the claims in 1998 and held them up to September 2021when the claims were transferred by a sale agreement to TechShed P/L. while the last two operators had bad

recoveries due, most likely, to taking over and following an exhausted resource.

6.2 UNDERGROUND SAMPLING BY PERCY HASTINGS, October 2010

In October 2010, Percy Hastings visited the mine site and carried out a underground sampling programme. A summary of the work undertaken is given below, and illustrated in the Figure below.

Figure 5 : Surface Map 2010 showing shafts and Interpreted Reefs

Below is a summary of the Shafts on the above map, aligned with the names currently used, and a description given in the 2010 report.

Shaft Numbering	Current Naming	Remarks
Shaft 1		5 metres deep, in hanging wall of vein. Used as second exit
Shaft 2	Main Shaft	30 metres deep and on reef outcrop. Equipped with small hoist, Without pillars at depth. This was sampled by P Hastings
Shaft 3	Phenga Shaft	40 metres deep. Served what was the main working, but not equipped
Shaft 4	Zulu shaft	8 metres deep, very close to the boundary of the claim Quartz vein flattens and widens at depth (reported)

Shaft 5		Shallow
Shaft 6		Shallow
Shaft 7		Shallow
Shaft 8		Shallow, abandoned and collapsed. Close to boundary
Shaft 9	Shaft 9/East Shaft	30 metres – not accessible. Vein said to be 50cm @4g/t

Table 4 : Comparison of Hastings naming of shafts and current names.

Shaft 2 and the corresponding open stope below was sampled and the positions of the samples given in the figure below. The reef widths were given as 20cm to 50m, grading from 0.74g/t Au to 17.72 g/t Au, all associated with quartz veins. Samples 5 and 6 were taken in the hanging wall of the mined reef, suggesting some mineralised halo to the veins . It is not reported where the assays were done.

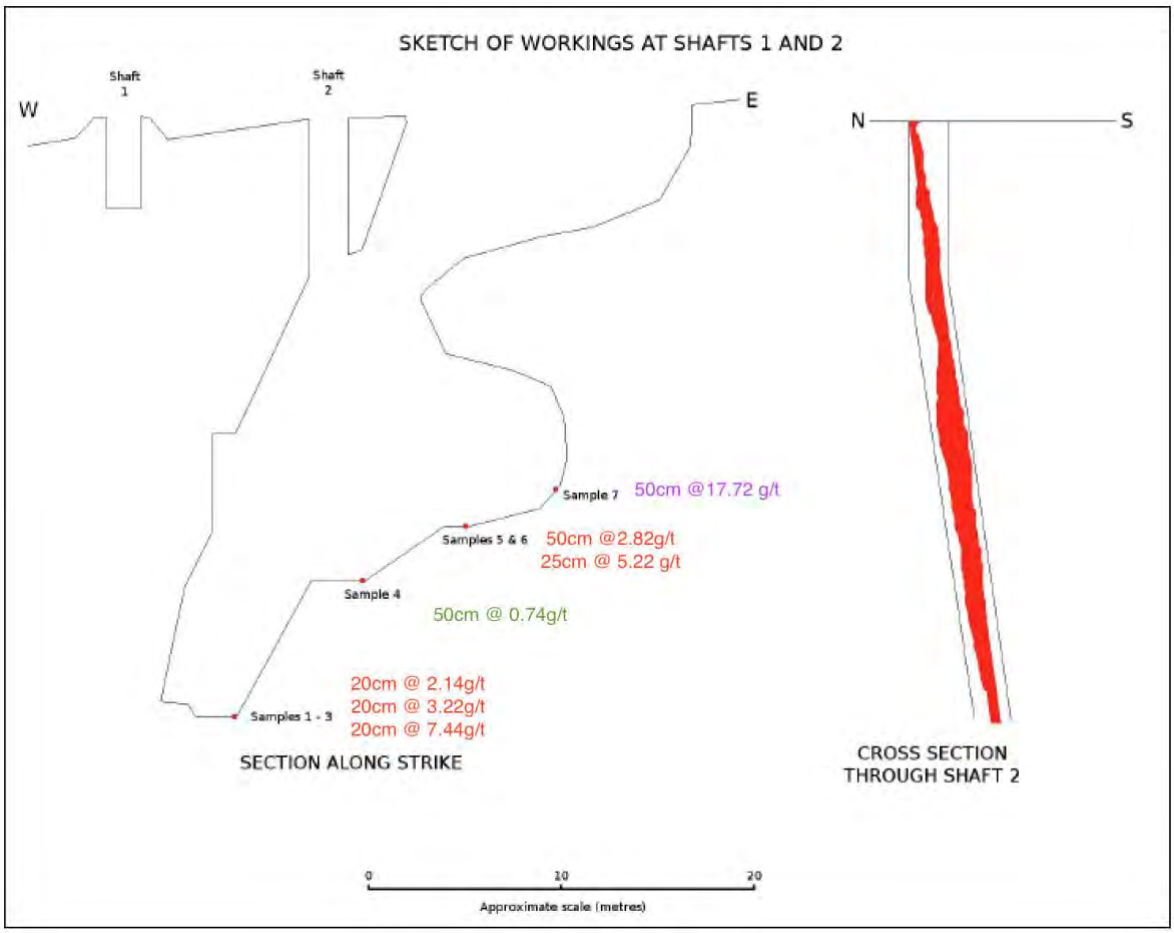

Figure 6 : Sampling of Main Shaft and Stope by P. Hastings

P. Hastings mapped a wide shear zone of over 100m on surface. He noted that the mineralisation that has been mined is associated with quartz veining within this shear zone. Minor pyrite and galena are associated with the gold mineralisation, but no assays for anything other than gold have been undertaken. He certainly noted that the grades are not solely confined to the quartz veins but extend into the sheared wall

rocks. He further notes that strike lengths are long, but payable zones may not necessarily be continuous along strike. He considers there should be a greater persistence of pay zones down dip. All veins have almost parallel strikes in an E-W direction and dips are near vertical or very steeply to the south. There may also be some leaching in the near surface of these veins. On occasions these veins are disturbed by faulting.

He suggests that the geology could sustain narrow seam underground mining with production of a few thousand tonnes per month, using suitable equipment and controlled mining of an approximate 1m width. He noted the limited testwork suggested 70% of the gold may be available through fine grinding and gravity concentration, with the remainder won through cyanidation.

6.3 RECOMMENDED MINING METHODS, M MABHIKA January 2011

Further to P. Hastings visit, M. Mabhika wrote a report in January 2011 to recommend a mining plan. He noted that the mine has a 2 tonne per hour milling plant, but this was not supported by mining methods.

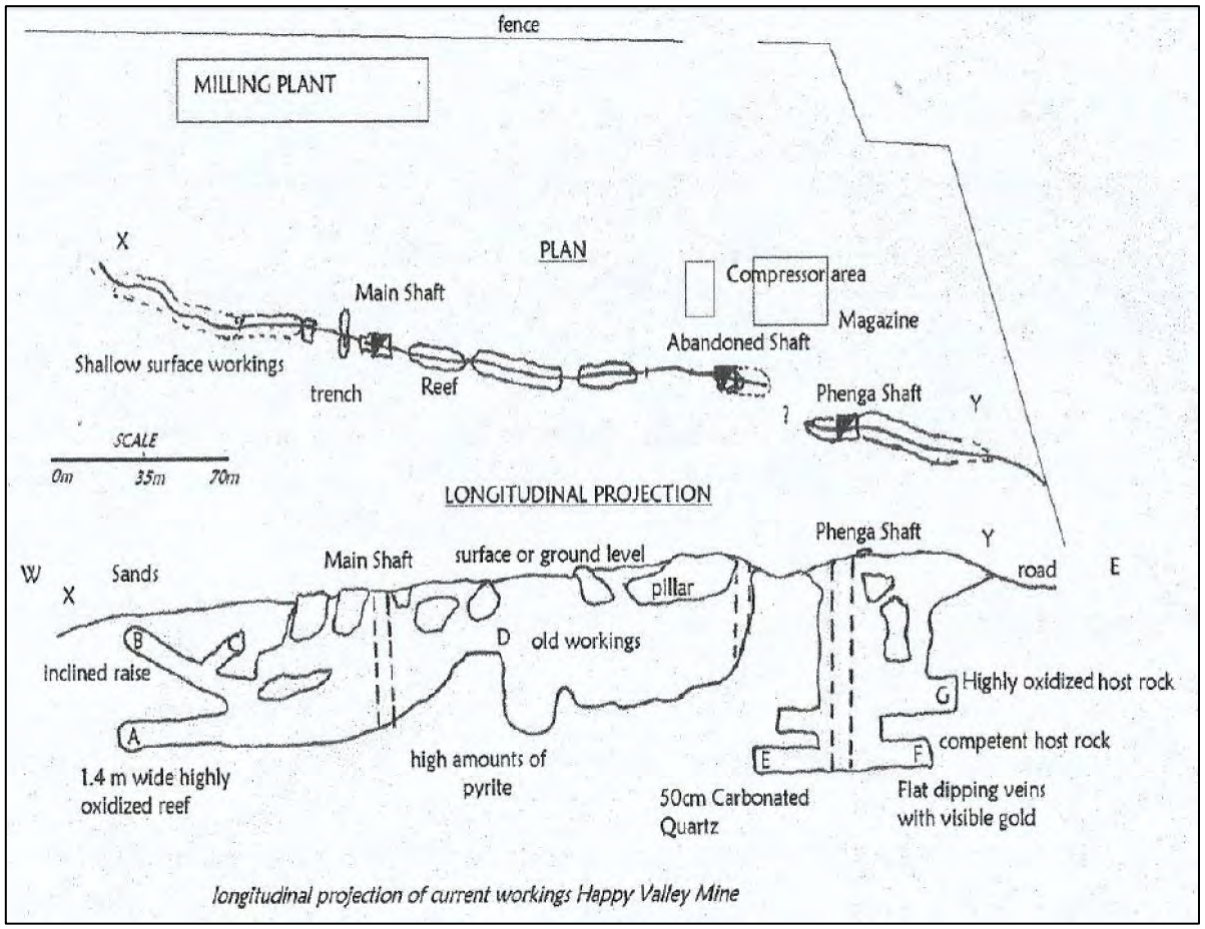

Figure 7 : Mabhika Plan and Long Section of Main Reef 2011

He suggested sinking a 12m long winze on reef from the base of both shafts, and the implementation of a crown pillar to stop collapse. He suggested another drive at 34m and stoping blocks of 30 x 1.2 x 25m to produce 2,400 tonnes of ore per block. He planned on a grade of 4g/t with a 50% recovery, yielding 1.6kg of gold per month. He also suggested to develop a "Main" Shaft from which all the reefs could be mined. He went as far as to propose a location for this shaft. The two figures below illustrate these plans.

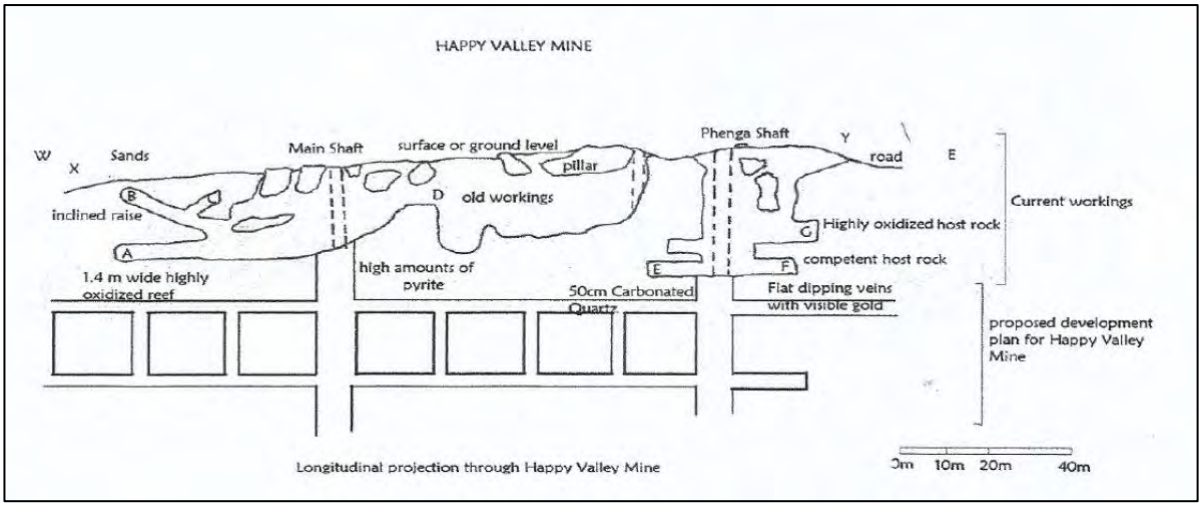

Figure 8 : Mabhika Plan for deeper development between Main and Phenga Shafts

6.4 GEOPHYSICAL SURVEYS AND TRENCHING 2019 - 2020

TechShed – the current owner and the party that Pennine Petroleum Corporation has entered into an Earn In Agreement, commissioned Precambrian Exploration and Mining (PexMin) to undertake geophysical surveys, followed up by trenching. This is detailed in the Exploration Section, due to the current agreement in place, and it is the recent exploration that has defined the drill targets.

7. GEOLOGICAL SETTING and MINERALISATION

7.1 REGIONAL GEOLOGY

Happy Valley Mine falls in the central part of the Bulawayo Greenstone Belt and its surrounding granitic terrain. The Bulawayo Greenstone Belt is roughly triangular in shape with E to W- trending southern base, 70km long, the eastern edge of which is continuous with the greenstones of the Filabusi area. The greenstones comprise a succession of tightly-folded metavolcanics and metasedimentary rocks with generally steep dips away from margins of the granitic rocks. The metamorphic grade is low, varying from lower to middle greenschist facies.

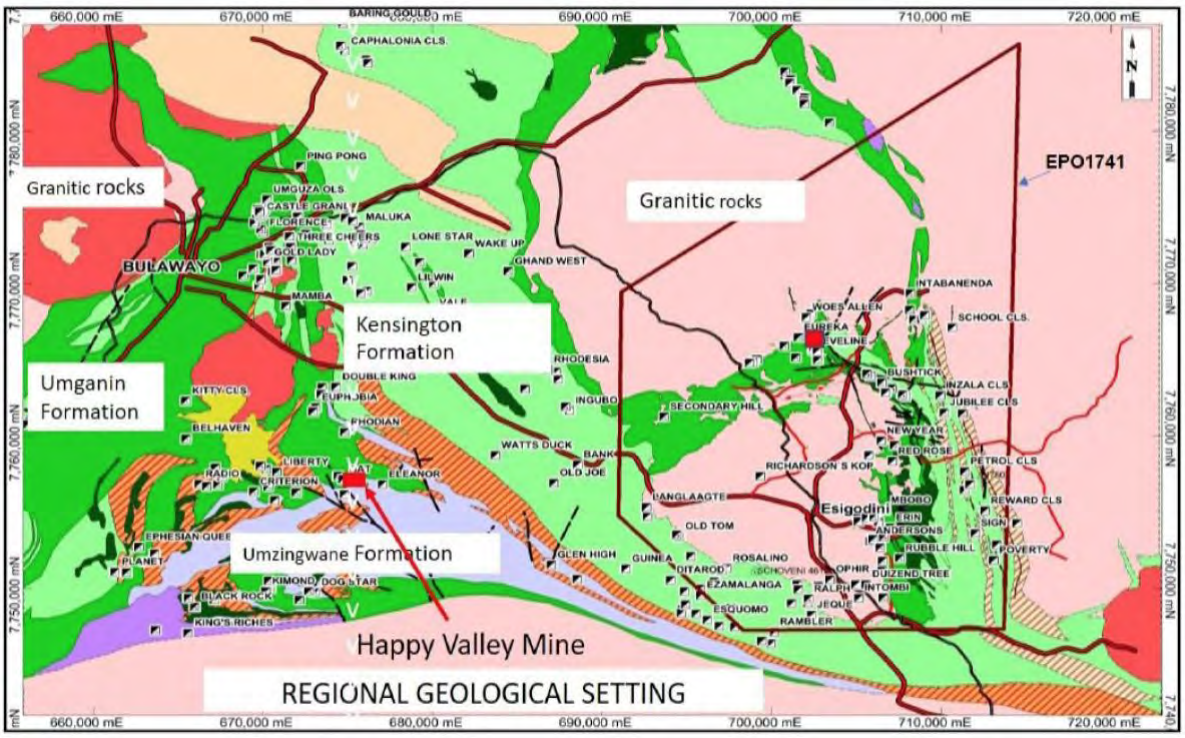

Figure 9 : Regional Geology of the Happy Valley Mine

The Bulawayo greenstone belt is subdivided into nine formations shown below:

Bulawayo Group – Upper Greenstones

1. **The Tonbridge Formation** is made up of basaltic pillowed lavas and associated sills and dyke of metagabbro and metadolerite, layered mafic/ultramafic sills and komatiitic basalt flows.
2. **The Umzingwane Formation** comprise conglomerates, arenites, wackes, shales, volcanic breccias, slates, banded iron formations and late rhodacitic/rhyolites.
3. **The Avalon and 4 Kensington Formations** occur in the west and east respectively of the greenstone belt. They comprise andesite/microdiorite and andesitic/rhyodacitic breccias; andesitic and rhodacitic flows and autoclastic flow breccias.
4. **The Sauerdale Formation** is made up of komatiites and komatiitic basalts and

associated serpentinite and gabbro bodies.

5. **The Umganin Formation** comprise pillowed basalts, tholeiite flows and associated sills, dykes and intrusions of dolerite, gabbro and metagabbro.
6. **The Westacre Formation** forms the base of the Upper Greenstones. It comprises Greywackes, conglomeratic mudstones, argillites and calcareous conglomerates.
7. A basal metasedimentary formation lies unconformably on the Lower Greenstones and is succeeded by the Upper Greenstones. Bulawayo Group Lower Greenstones:

Bulawayo Group – Lower Greenstones

8. **The Vreigevight Formation** comprise striped ambhibolitic gneiss consisting of highly deformed volcanic pyroclastic, mixed pyroclastic - epiclastic rocks and altered mafic rocks.
9. **The Lonsdale Formation** overlies the Vreigevight Formation. It consists of Metandesitic and metarhyodacitic flows, breccia and intrusions

7.2 REGIONAL STRUCTURE AND MINERALISATION

The structural geology in this area plays a critical role in the reef geometry and payability. This is modified by the lithology acting as zones of structural weakness, amenable to gold mineralisation. The Hope Fountain is a tight anticlinal fold. The banded iron formation is acting as marker horizon tracing the fold of the Hope Fountain rocks.

The Bulawayo Greenstone Belt forms the south-western lobe of a more extensive greenstone area which originally stretched from the Bubi area in the north to the Shangani-Fort Rixon area in the east and to the Filabusi area in the south-east, and as discovered by recent work by the author, Tsholotsho (Dokwe) greenstone belt to the west, and which subsequently was broken up into its separate belts by the invasion of granite rocks.

During the F1 phase, the pre-cleavage regional deformation, the Bulawayan belt was folded into a large-scale east-north-east to north- east synclinal fold structure before the F2 deformation. This syncline plunges steeply eastwards. Locally F1 folding was tight to isoclinals but the lack of penetrative fabric may indicate that the deformation occurred at high crustal level.

Deformation associated with granitic diaper emplacement produced a compression of the Bulawayan Belt resulting in refolding of the syncline to form a more intensely folded synclonorium with new axial folds in the south-western part of the belt trending parallel or near parallel to the original fold axis aligned roughly north-east to east-north-east.

Regional deformation which produced the main fabric caused earlier structures and diapiric granites to be deformed. Probably at this time, the southern thrust sheets and planes were tightly folded along axes trending roughly east-west.

Deformation in the late phases in the Bulawayan belt appears mainly to have taken

the form of intense shearing. It is also possible that there was some cleavage-forming deformation during these late phases of shearing. The main direction of shearing is north-westerly with more west-north-west trends in the west of the Bulawayo area and there was later transcurrent faulting along several of these shear zones, notably at the How shear zone.

Many of the major gold mines and numerous lesser ones in the region are situated within or adjacent to the NW-trending shear zones.

The domain is at the core of the anticlinal structure of the Bulawayo greenstone belt. It has the following characteristics:

- It has mines within 2km of each other with adjacent mines outside the ellipse being more than 2km from those within
- Its long axis is 18.7km east west and the north-south axis is 6.7km long
- It is has 87 mines that have produced at various times from 1895 to1984.
- Post 1984 production is patchily recorded.
- Total production of gold to 1984 has been 1,993 kilograms from 246,186 tonnes, a recovery of 8.10 grammes per tonne.

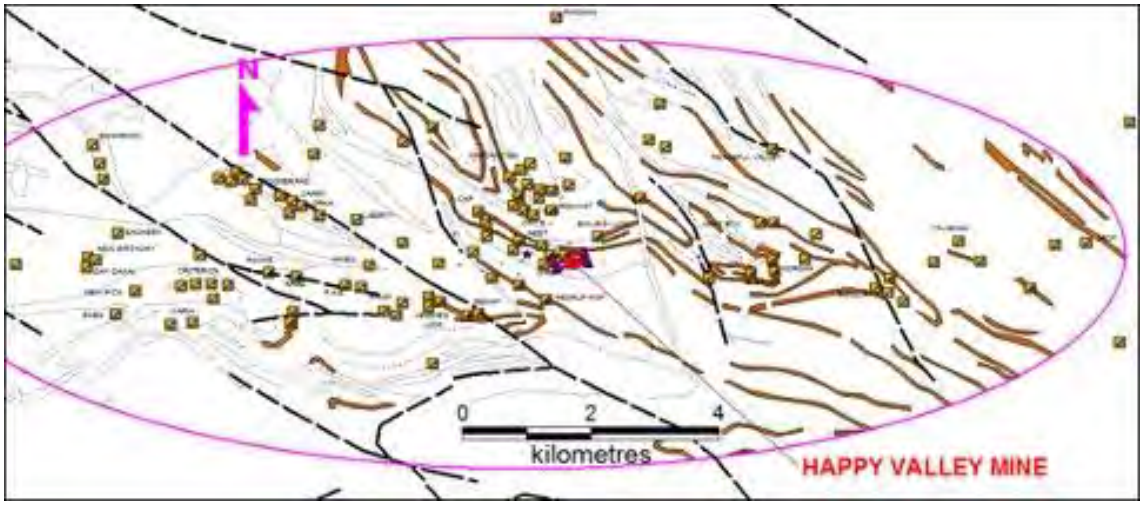

Figure 10 : The Hope Fountain structural domain, with yellow indicating mines that have produced during the last 120 years.

The Kensington formation, which hosts the Happy Valley Mine, and several other mining properties in the vicinity comprises metandesitic lavas and flow-breccias. The lavas are fine-grained, relatively massive, pale greyish green rocks, which in places are amygdaloidal. They may be porphyritic,with plagioclase phenocryst, 0.5mm to 2 mm long, with smaller dark green to black hornblende phenocrysts of slightly smaller size.

Volcanic breccias are intercalated with flows and bands of more tuffaceous material, and where they are highly attenuated and sheared it is difficult to distinguish the various lithologies.

The Happy Valley Mine is in the “Hope Fountain structural domain” which is defined as an ellipse centred on the mine itself.

7.3 PROPERTY GEOLOGY AND MINERALISATION

The Happy Valley Mine Project Area falls within the cleavage triple point of the Umzingwane Geological Formation, Kensington Formation and the UmganinFormation. It falls more within Umzingwane Formation close to the boundary with the Umganin Formation. The Umzingwane formation comprises conglomerates, arenites, wackes, shales, volcanic breccias, slates, banded iron formations and late rhodacitic/rhyolites. As shown in the above map, a number of gold mines are associated with this cleavage triple point I.e. Wasp, Iron Hat, Bat, Owl's Nest, Emilie's Luck, Coronation, Redrup Kop, Cap etc

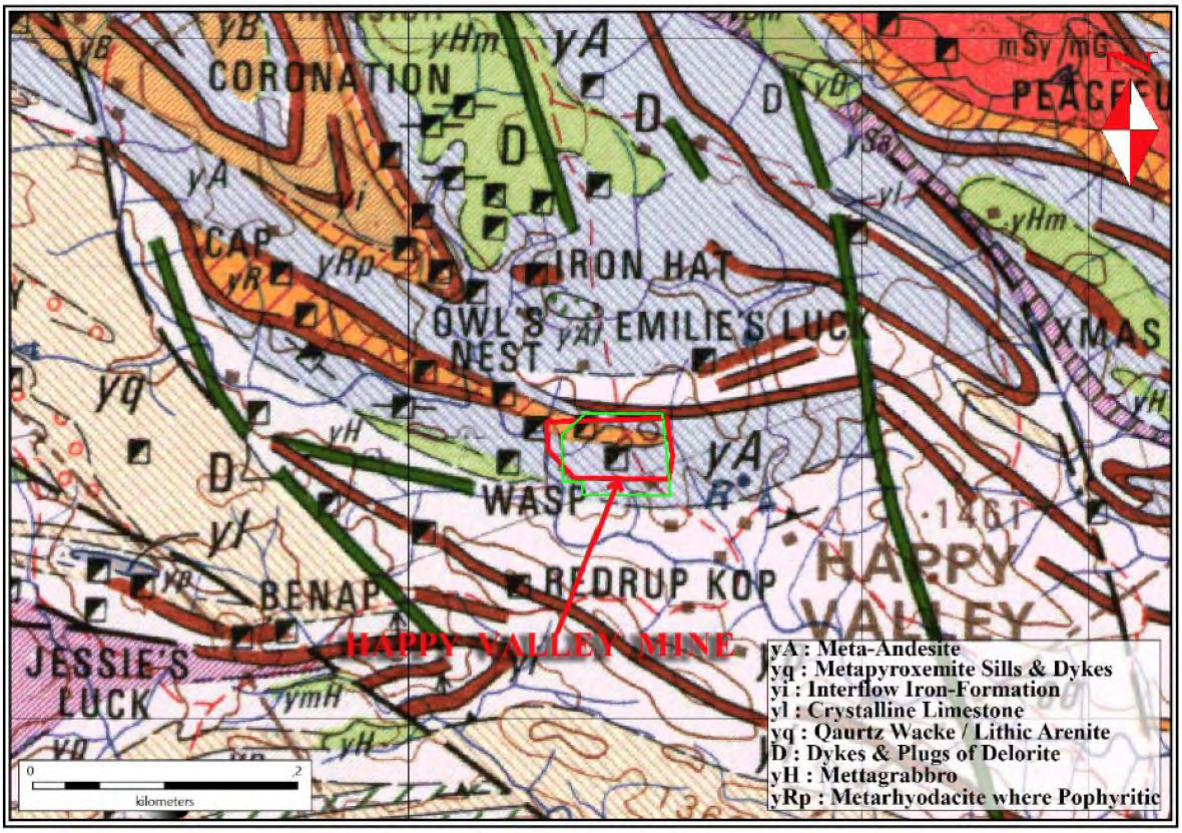

Figure 11 : Location of the Happy Valley Mine on the Regional Geology Map (Bulletin 93)

The Happy Valley Mine claim is dominated by meta-andesite (yA) with a tongue of WNW-ESE of meta-rhyodacite/meta-rhyolite intruding the meta-andesite. These are rocks of the Kensington formation, the upper strata of the Upper Greenstones. There is a main east-west fabric which is shearing and, in some places, a strong cleavage.

The figure below illustrates the mine scale geological map. The main reef mineralisation and the drilling target between the Main Shaft and the Phenga Shaft and is believed to be a silicified Banded Iron Formation (BIF).

Rock Pile from Underground

Silicified BIF mineralisation

Silicified Mineralisation

Photo 2 : Sulphide Mineralisation Rock pile from Main Shaft

This is illustrated as a blue dotted line on the map. Illustrated previously is photographs of the rock containing sulphide mineralisation from this rock pile. This is believed to be the widest reef on the property.

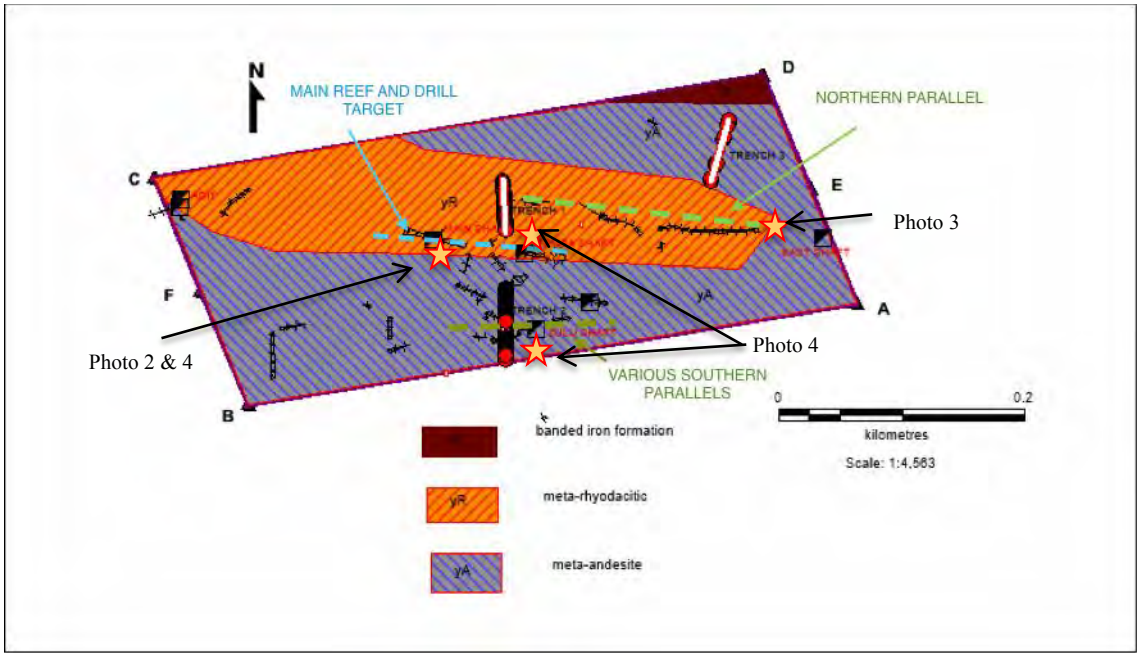

Figure 12 : Geological map of Happy Valley Mine.

The northern parallel has been exposed in Trench 1 and is marked as a pale green dotted line. This reef can be followed from the East Shaft (again illustrated in the photographs) and current trenching on surface by the artisanals suggest an echelon structure in talcose schists. The meta-rhyodacite mapped is probably a mixture of sheared and silicified banded iron formation and quartz veining in schist.

Near East Shaft – looking east onto BIF ridge

Strong Iron alteration with the East Shaft trenching

Photo 3 : Reef Trenching by Artisanals near the East Shaft on strong Iron Alteration

There are various reefs to the south of the main reef. The Zulu shaft is on one of these and they certainly require clearer definition. The Zulu shaft is illustrated in the photograph below, along with the Main and the Phenga Shafts

Main Shaft

Phenga Shaft

Zulu Shaft

Photo 4 : Three Main Shafts that are currently accessible, when equipped adequately

There is evidence of a mapped BIF ridge in the north, and is probably the hill that the water tanks are on (see Photo 1). Some geophysics has been conducted over this zone. It does not have evidence of previous artisanal mining operations, but has potential as a geophysical target.

The continuity and the widths of the various reefs is not currently quantifiable, as there has been no recent underground access and there has yet to be a drilling programme.

8. DEPOSIT TYPES

The gold mineralisation at Happy Valley mine is typical of the Archaean greenstone narrow quartz reef shear hosted deposit. Foster (1983) reported that 83% of all gold in Zimbabwe have the source of quartz veins and lodes. It is considered that the Happy Valley deposit fits this model. These types of deposits are seen throughout the Bulawayan greenstone belt and are characterised by silicified schistose and shear-zone vein systems of ribbon textured and massive quartz. There is pervasive wall rock alteration, with carbonatization and pyritization being most common adjacent to the veins and lodes.

These loads / veins / shear zones form in a compressional type environment during regional deformation and metamorphism at the end of the tholeiitic/ komatiitic-calc-alkaline volcanism. These compressional environments are closely associated with the intrusion into the greenstone belts of a suite of early trondhjemite-tonalite-granodiorite granitoids. Often within the greenstone stratigraphic sequence there could be banded iron hosted strata bound type gold deposits.

Gold bearing vein deposits consist of tabular or lenticular bodies of massive quartz, or quartz together with minor carbonate and sulphides from a few centimetres up to several meters wide, with lengths a few meters up to few hundred meters.

Gold bearing shear zones deposits can often comprise numerous sub-parallel veins of quartz and quartz carbonate within a ductile to brittle deformation zones bordered by highly schistose wall-rocks. Alteration zones may extend several 10s of meters, and themselves be mineralised with low grade gold, primarily associated with pyrite, but to a lesser extent, pyrrhotite and arsenopyrite.

Later cross cutting thrusts are known to displace these vein type reef deposits.

9. EXPLORATION

- *Describe the sampling methods and sample quality, including whether the samples are representative, and any factors that may have resulted in sample biases;*
- *Describe relevant information of location, number, type, nature, and spacing or density of samples collected, and the size of the area covered; and the significant results and interpretation of the exploration information.*

Pennine Petroleum Corporation has not conducted any exploration on this property and is using this document to source funding for a drilling programme to provide a preliminary resource. Geophysical and Trenching exploration has been done by the current owner, TechShed.. The Issuer has signed a earn in agreement with the owner, TechShed therefore this is believed to be current and pertinent to the claim, and will be detailed in this section.

9.1 GEOPHYSICAL SURVEYS

Geophysical surveys were the first exploration exercise carried out by TechShed which were followed by trenching. The ultimate objective was to define drill targets to identify a resource for mining.

Initially, a magnetic survey was undertaken to define structural lineaments. These would be shear zones, faults, mineralised ferruginous quartz, and contact zones etc, which would be considered to be structural traps for gold mineralisation.

The magnetic survey was followed up by a Real Section Induced Polarisation ("RSIP") Survey to check the defined zones for resistivity and chargeability. The development of quartz veins with depth is expected to be picked up as zones of resistivity on the RSIP profiles. Disseminated sulphides that characterise the gold hosted horizons will be picked as zones of chargeability on the RSIP profiles. Therefore a consistent magnetic / RSIP anomaly would suggest a shear zone with quartz veining and sulphide mineralisation, and hence provide a prospective target for drilling.

9.1.1 Magnetic Survey – Methodology

The magnetic survey was conducted using a GSM 19T magnetometer with a built-in location GPS. A single base station method was employed to correct for magnetic diurnal variations during the survey. The sensitivity was set at plus minus 0.1nT, with a sensor height of 2m. Line spacing of 25 m and station spacing of 5m was used in the magnetic survey. A total of 6.4km were surveyed over the 15.4 hectares survey block.

9.1.2 Magnetic Survey – Results and Interpretation

The total field magnetic data is processed to vertical derivative data, which enables the identification of deep-seated objects that may not be immediately discernible from the total field magnetic data. This increases the resolution of possible hidden ore bodies and other geological structures which could be significant to mineralization. Figure 12, below is the first derivative image.

Six major lineaments have been delineated by Total Field Magnetics: Five of the lineaments are trending north-west and are crosscut by a north-east trending lineament.

The five north-west trending lineaments are defining boundaries for four or five distinct units most probably representing different rock types or alteration zonation and are broadly within the strike of the orebody. The geophysicist (Luckson Manda) has interpreted the contacts of these units are zones of weakness and potential sites for gold deposition. There is gradation of magnetism from the north-east corner to the south-west corner of the grid.

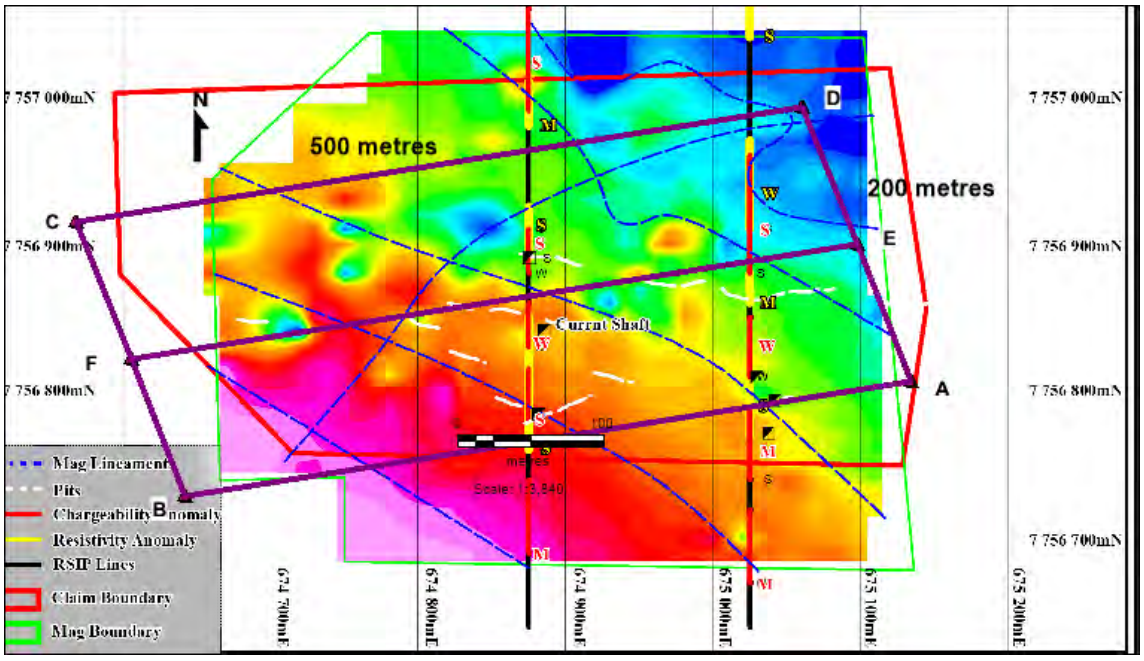

Figure 13 : Total Magnetic Field map of Happy Valley Claim.

The total field magnetic data is processed to vertical derivative data which enables the identification of deep-seated objects that may not be immediately discernible from the total field magnetic data. This increases the resolution of possible hidden ore bodies and other geological structures which could be significant to mineralization. The lineaments are clearly illustrated in the figure below. It can be noted that there are certainly continuity along strike from the Main Reef, particularly to the west, where the NE-SW structure seems to displace the reef.

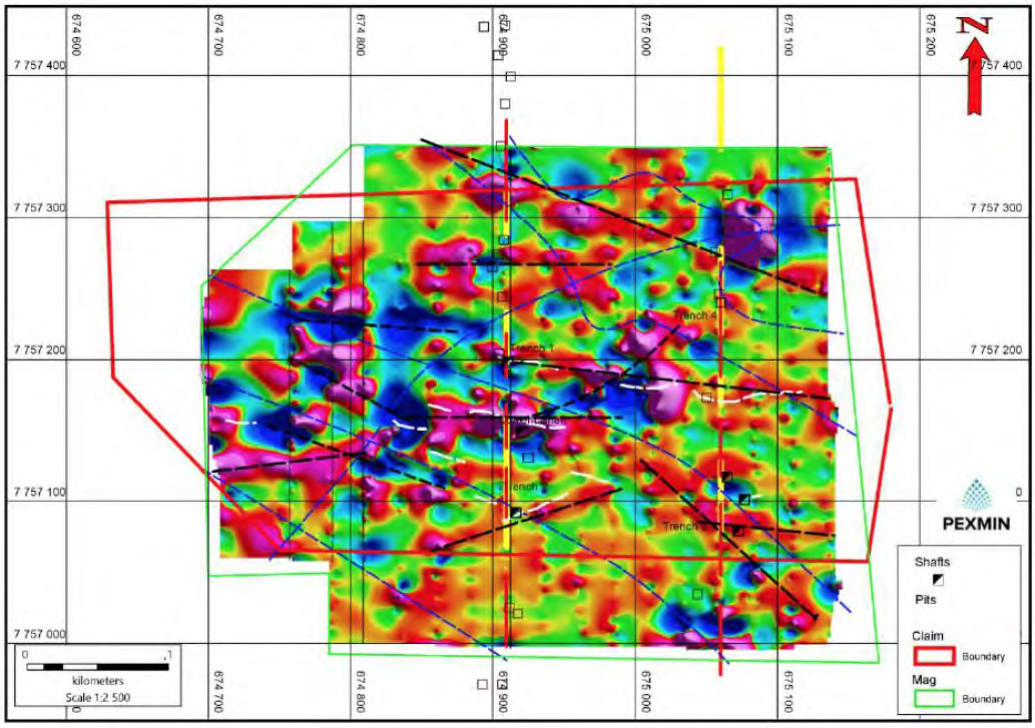

Figure 14 : First Vertical Derivative

9.1.3 Induced Polarisation Survey – Equipment and Methodology

A Mig 12 20 KVA Generator, a Huntec-time domain transmitter and a 6 Channel Iris model receiver were used. The electrical current input was transmitted via 2mm diameter electric cables with a tolerance of 5000 Volts. Steel pegs were used as current electrodes on adequately prepared ground to ensure good signal input. Porous pots with copper sulphate electrolyte were used as potential electrodes to measure the ground chargeability.

The Real Section Induced Polarisation (RSIP) method was employed using different current electrode separations (AB) to investigate varying depth levels (AB/2) of 50, 100, 200 and 300 metres below the ground. Potential electrode separations (MN) of 25 metres were used for shallow levels (50 and100) and an NM separation of 50m for deeper levels (200 and 300).

9.1.4 Induced Polarisation Survey – Results

The following anomalies were defined:

1. Anomalies A and B on line 674875 (line 0a) are close to surface while anomalies C and E are 75 and 125m below surface respectively.
2. Anomaly G on line 675025 (line 0b) has both strong chargeability and resistivity Anomalies E and F are moderate.
3. The presence of old workings on all the above anomalies indicates that they

represent mineralised zones.

4. The Project Area is situated in a gold mining area. A review of the historical mining of the mines in the vicinity indicates that gold occurs in Banded Iron Formations (BIF) as ore bodies and is also occurring in lenticular quartz veins in shear zones.

5. The RSIP Survey undertaken indicates that the magnetic lineaments delineated above are associated with chargeability and resistivity hence could potentially be carrying quartz veins mineralised with sulphides. The IP sections indicate that the anomalies continue to depths below 250m.

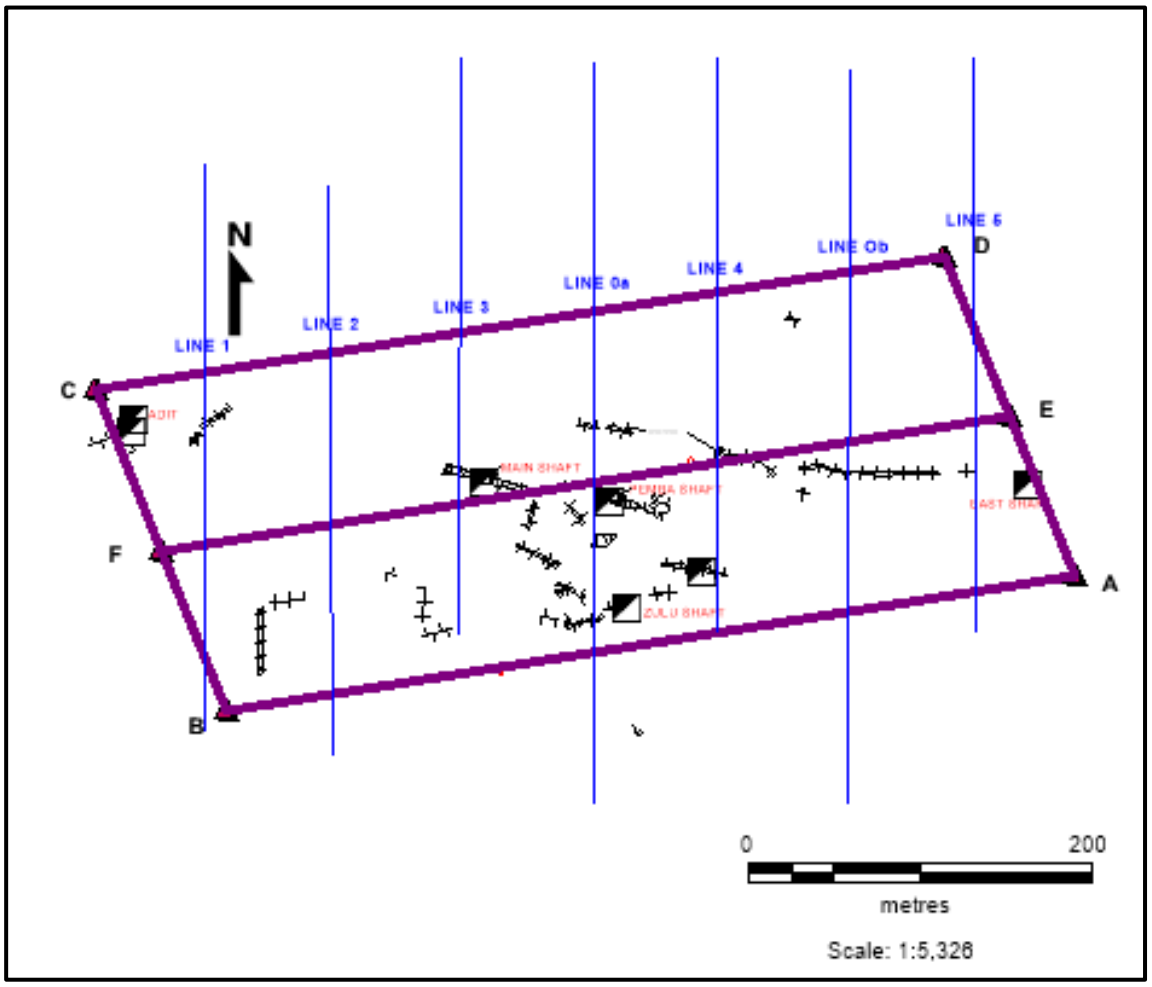

Figure 15 : The Real Section Induced Polarization (RSIP) lines that were surveyed

The magnetics has delineated the subtle boundaries of rocks in thevolcanic sequence varying in composition from felsic to mafic from north-east to the south-west; a direction coincidentally along which exploitation excavations trend across the claim.

The Real Section IP has been quite definitive in outlining possible sulphide zones that are hosted within resistive quartz veins or within silicified zones. This where the gold is normally found. This justified the completion of 75-metre spaced RSIP lines covering the entire breadth of the claim to complement the two already done.

Design an exploration model with images thus produced.

9.2 TRENCHING

Following the magnetic and RSIP survey conducted in September 2019 by Pexmin (Pvt) Ltd., a recommendation was made to follow up anomalies picked up by the survey with a programme of trenching.

Four trenches were recommended in the Pexmin report. Work was then conducted by excavator in March 2020. Three trenches totalling 156 metres were excavated. The fourth trench was not dug as it lies outside the claim boundary.

Details of sampling programme, sample preparation and associated QA/QC are given in Section 11.

TRENCH No.	LENGTH (METRES)	No. OF SAMPLES/ASSAYS
1	43	40
2	60	39
3	53	17
TOTAL LENGTH	**156**	96

Table 5 : Summary of trenching.

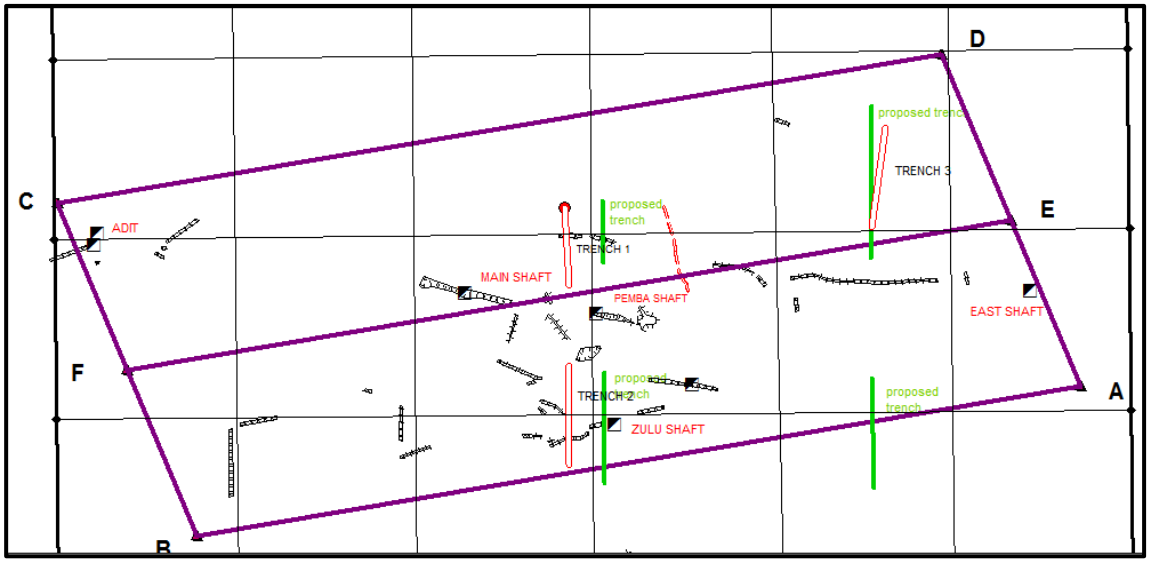

Figure 16: Claim plan showing the proposed trenches (green), the trenches that were dug (red) and outline of all excavations and shafts (black) in the claim.

9.2.1 Sampling

Sampling at 1-metre intervals was carried out on exposed bedrock and the samples sent to Duration assay laboratory. The results were then plotted on a map of the claim and co-related to existing excavations and the geophysical results.

9.2.2 Results and Old Excavations

Below is a synopsis of the trench results and an analysis of how they relate to old excavations.

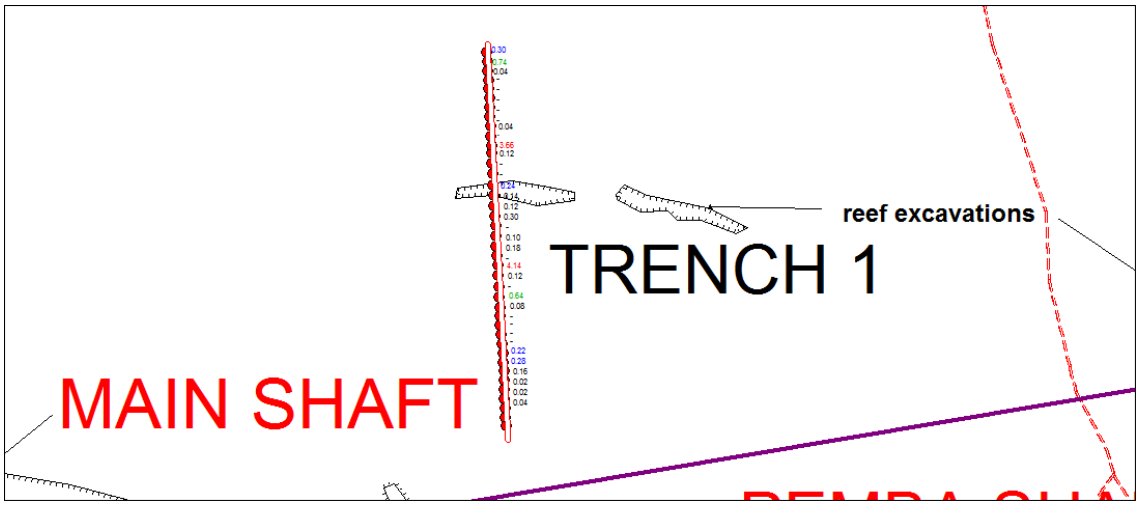

Figure 17 : Trench 1 assays of gold in grammes per tonne (g/t).

- Two values of 3.66 and 4.14 g/t were significant with lower values of 0.74 and 0.64 g/t at discrete points.
- This highlights the mineralization as discrete quartz veins or schist.
- There is no significant halo surrounding the notable values.
- Correlating this with old excavations indicates the lenticular (pinch-and-swell) structure of the reefs.

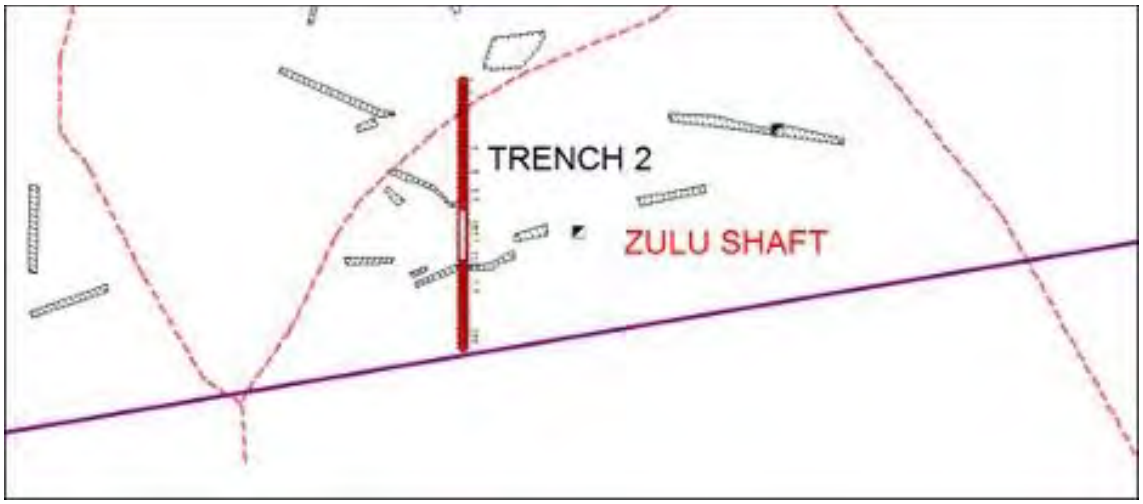

Figure 18 : Sketch map of Trench 2. The maps below show the trench divided in two to show the figures.

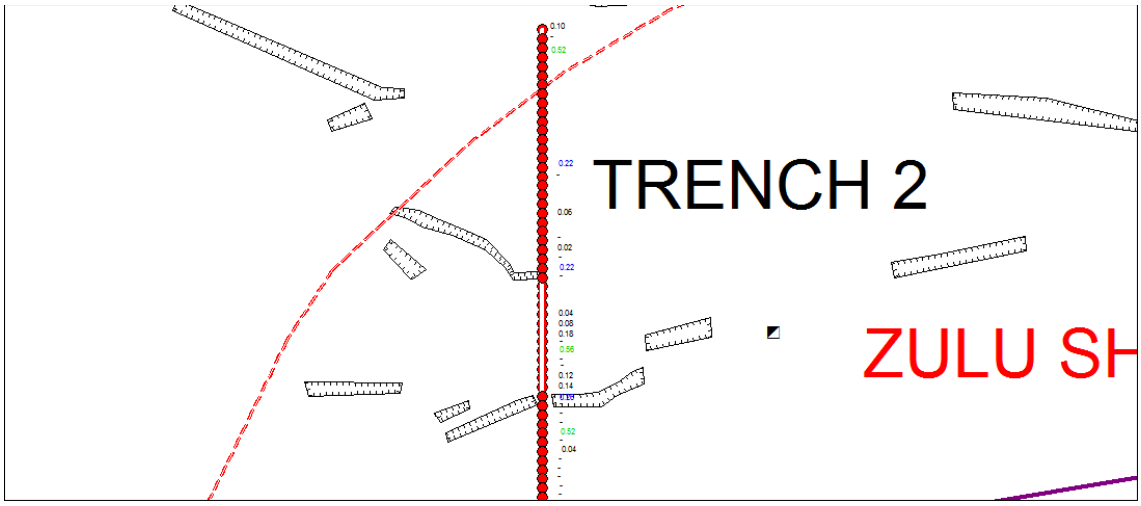

Figure 19 : Trench 2 Northern part

- shows three discrete values of 0.52g/t, indicating the pinched part of reefs when compared with existing old excavations. These could have been the no-pay zones of reef traces.

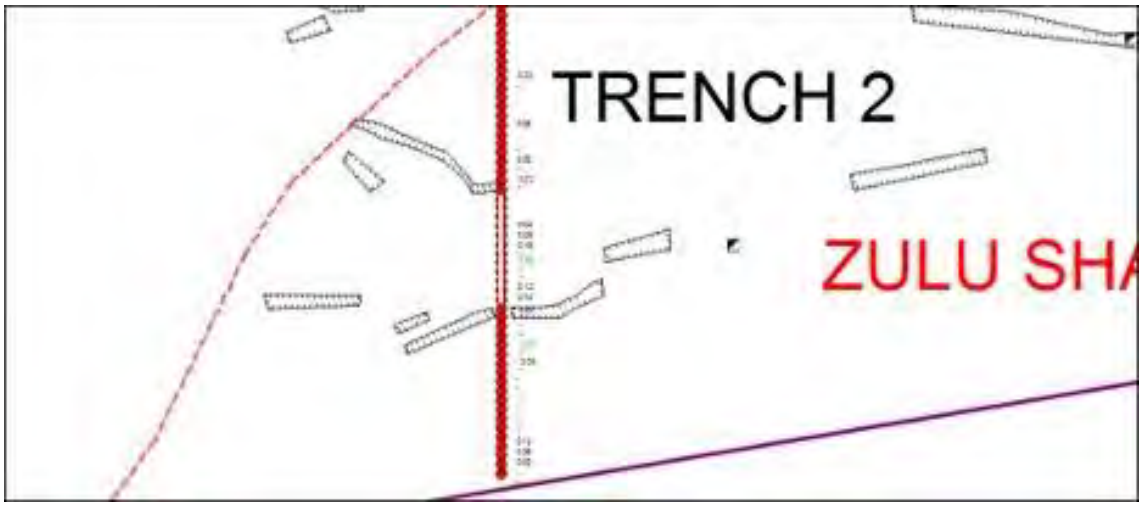

Figure 20 : Trench southern part had no significant values.

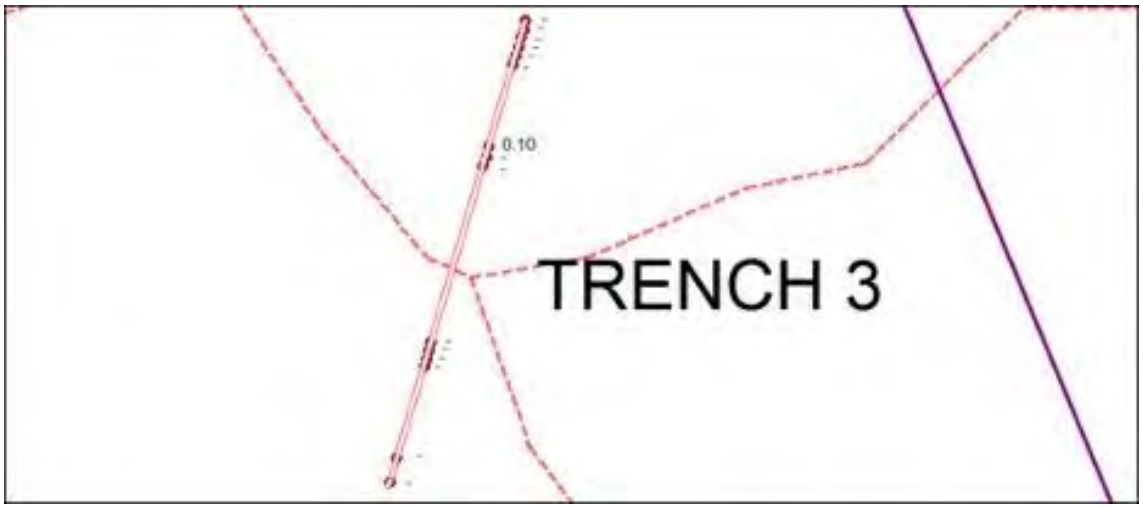

Figure 21 : Trench 3 had no mineralization and was sampled only in weakly altered zones.

- The rock is a highly sheared slaty phyllite which showed no alteration associated with gold mineralization.

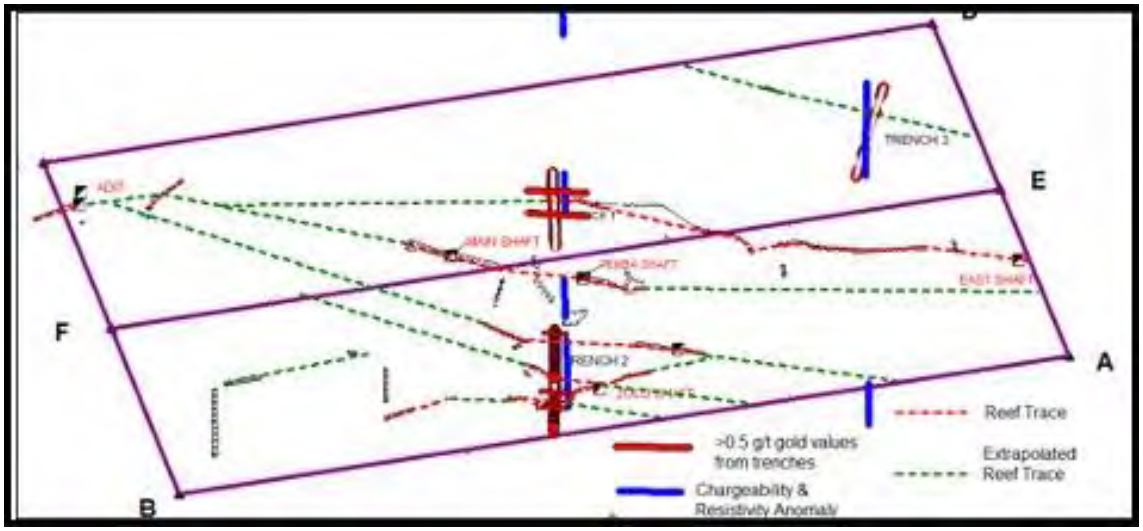

Figure 22 : A map showing significant intersections with respect to reef extrapolations and surface workings.

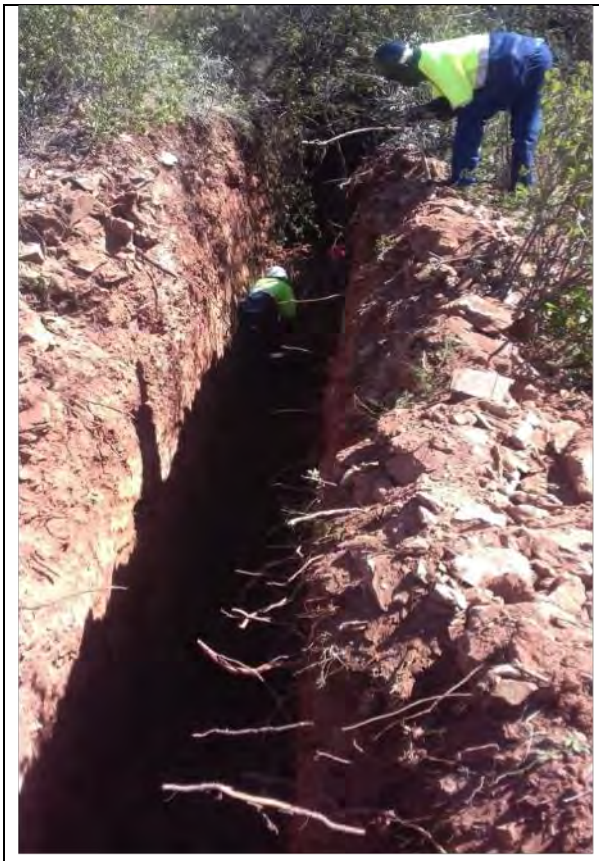	
(A) The sampling of the trenches and	(B) Samples of Reef Material

Photo 5 : Photograph of Trenching and Samples of Reef in Trenches from the sampling programme.

10. DRILLING

Pennine Petroleum Corporation has not conducted any drilling on this property. Neither have any of the previous owners. In the Recommendations Section, a drill programme is proposed to define a resource between the 2 shafts on the Main Reef.

11. SAMPLE PREPARATION, ANALYSES and SECURITY

Pennine Petroleum Corporation has not conducted any sampling on this property. This section will deal with Trench Sampling done by the current owner, TechShed – the company that the Issuer has signed an Earn In Agreement with. The exploration trenches were sampled in 2020 and have not been used to define any mineral resources.

11.1 SAMPLE FIELD PROCEDURES

Trench sampling was carried out by an experience field officer contracted by TechShed, with two assistants. The following describes the procedures.

11.1.1 Sampling set out in the Field

Preparation

- The following items were used: Plastic bags, sampling pick, pick and shovel, poly-woven bags, 30m measuring tape, wooden pegs, marker pens, stapler, notebooks, spray paint.
- the plastic sample bags were prepared by pre-numbering with black marker pen and inserting counter tickets.
- A GPS receiver was used for setting out trenches.
- Trenches were dug by excavator to bedrock and at least 10cm of bedrock was exposed to sample and gravity feed the wall material into the sample bags.
- the sample intervals were set out on the side walls. On the start of the sample line hammer a peg close to the floor into the side wall and mark this with the trench number and details.
- Care was taken to always sample and log all trenches in a consistent direction to avoid confusion.
- At surface was also placed a marker.
- A 50m measuring tape was rolled out in such a way that it covered the full extent of every sample interval.
- Spray paint was used to mark 1-metre intervals on the side walls. Specific lithological contacts encountered were not included in a sample interval but functioned as sample boundaries. This was also applied for suspected areas of mineralization.

- The side walls were cleaned with a wire brush or small shovel as the excavator always leaves a layer of smeared muds on the side walls that contaminates the sample.

11.1.2 Sampling Process

- Before start of the sampling the geologist logged the geology.
- After the geologist had logged the geology, samples were taken at 1m intervals consistently except at lithological contacts or mineralized zones.
- At least 2kg of material was inserted in a sample bag.
- Care was taken not to bias the sample by over-representing quartz veining or obvious mineralisation.
- Also, care was taken not to include too much of a friable rock and neglect to sample more massive rock types in the sample interval.
- Equal amounts of sample were collected from each section of the sampling line.
- Sampling was one on one side of the wall and straight into the plastic bag to avoid contamination associated with first collecting in a tarp as it must be cleaned after every sample.
- the bag was stapled and closed, and the sample number written on a sheet together with the interval and line number on the sample sheet.
- The sample was placed in the middle of the interval left for later collection and after final reconciliation when the trench had been finished.
- The geologist made a final check of samples, examined the cutlines/channels, checked sample numbers with intervals on the sheet.
- The samples were then bagged up polywoven bags and transported to the laboratory.

11.1.3 QAQC Inserts

- No standards and blanks were available as they could not be accessed during the strictest COVIC-19 early lockdown period.
- Duplicates were inserted once every 20 samples and such samples were collected from the same cutline as the original sample.

11.2 LABORATORY PROCEDURES

11.2.1 MetSolutions Laboratory

The laboratory used is MetSolutions in Bulawayo, Zimbabwe. It is a non-certified laboratory used as an in-house laboratory for Duration Gold Zimbabwe, a mining company based in Bulawayo and operating the Vubachikwe Mine. The laboratory is one of two in Bulawayo, that routinely takes in samples from outside its operations and has served small scale mines which lack in-house facilities. Duration Gold also operates a commercial laboratory - ANTECH in Kwekwe, Zimbabwe, a town 230km northeast of Bulawayo. That laboratory has ISO certification and is frequently used to calibrate the MetSolutions lab in Bulawayo.

11.2.2 Sample Analysis

Samples submitted to MetSolutions laboratory were first dried and then coarse crushed to 70% passing -2mm.

A 200g sub-sample is taken from the crushed material and pulverized to 85% passing 200 mesh (75µm)

A 50g aliquot of pulverized material is then assayed for gold by conventional fire assay methods of fusion and cupellation followed by gravimetric finish.

Sample detection limit is 0.01 g/t Au.

11.3 QAQC

Duplicate samples were made every 20 samples (a batch, according as the laboratory processes). The table below lists the three duplicate samples assayed.

Duplicate sample	Au assay (g/t)	Original sample	Au assay (g/t)
HVS038	0.38	HVS001	0.30
HVS039	0.38	HVS018	0.30
HVS040	0.36	HVS033	0.28

Table 6 : Trench Results – QAQC Validation

It is the opinion of the author that that lab could reproduce the results within acceptable limits for an exploration exercise.

The geologist on this project used duplicates to gain some measure of the labs ability to reproduce results and the correlation of assays with observed mineralization or lack of it was spot-on. For indicative purposes associated with the purpose of the trenching this was adequate as there were resource estimates to be made.

No Certified Reference Material (CRM), or standards were used. The timing of the trenching was during the early days of the Covid Pandemic, and as Zimbabwe sources their CRM out of South Africa, the closing of borders prevented this process from being incorporated.

The author recommends that all future sampling complies with QAQC requirements, and CRM are sourced prior to any further sampling campaigns.

12. DATA VERIFICATION

The author of this report visited the site on 7th March 2022 with the geologist that did the 2020 exploration, Moses Banda and the CEO of TechShed. The author can vouch that there are several shafts on the property, three of which are probably accessible with some re-equipping. There is a tailings dump the property. The three main reefs have been worked by artisanal miners and show good continuity of the deposit.

The trenching in 2020, reported in the exploration section is still evident, and in fact there has been some artisanal working of the reef that was exposed in Trench 1, as illustrated in the photo below.

Photo 6: Trench 1 – where Artisanal Miner have opened up the reef

The author validates the positions of the trenches and the fact that mineralised intercepts are in evidence along the strike. The property does have historical evidence of gold mineralisation and mining. The author would recommend a drill programme between the Main and Phenga Shafts to define a small resource for drilling. All QAQC protocols should be observed during this process and a valid resource can be produced under the guidance of the author.

13. MINERAL PROCESSING and METALLURGICAL TESTING

There has been no recorded Metallurgical testwork on this project. However, there is construction of cyanide leach tanks, illustrated below, suggest at least some material has been subjects to cyanide leach process. There is a suggestion by WaZeeva that they would start the operation by re-treating the tailings. Again no testwork or definition of this resource has been done to date.

Photo 7 : Leach tanks on the tailings.

13.1 PREVIOUS TREATMENT

The gold ores have been milled using a 2-3 tonne per hour ball mill with subsequent recovery of liberated gold via gravity concentration methods. The slurry coming out at the end after gold concentration has been passed through static cyanidation in ponds. The solution has been passed through activated carbon and then carbon sent for elution.

Records of production to 2020 are not available.

13.2 CURRENT ACTIVITY

A second similarly sized ball mill has been installed and the two can increase capacity from the present 1,300 tonnes/month capacity to 2,600 tonnes/month.

14. MINERAL RESOURCE ESTIMATES

No mineral resource is available.

15. MINERAL RESERVE ESTIMATES

This section is not applicable to this report.

16. MINING METHODS

Discuss reasonably available information on current mining methods. Where relevant, include

- *geotechnical, hydrological and other parameters relevant to mine or pit designs and plans;*
- *production rates, expected mine life, mining unit dimensions and mining dilution factors used;*
- *requirements for stripping, underground development and backfilling; and*
- *required mining fleet and machinery.*

16.1. Surface Workings

There is an array of excavations which are assumed to be reef thick. In others, workings can be up to 5 metres wide but mostly are only 2 metres wide. They strike WNW to ESE within a predominantly E-W strike of foliation and cleavage.

There are extensive workings on surface. These are mainly strike trenching and open stopes, with several shafts. The workings have been carried out over a long period, with some related to work done within the last few years and some are current. There are very few cross trenches.

Open stoping/strike trenching exposes several different veins, all with a similar strike direction and dip: at least five veins are indicated, depending on the claim's boundaries. About 600 metres of strike along veins are shown. (Hastings, 2020). This work is detailed in the historical exploration – Section 6.

16.2. Shafts

Up to nine shafts are located within the Happy Valley claim with the main shafts being worked being the Main shaft, the Pemba shaft, and the Zulu shaft. From the longest length of the claim the distance is 600 metres.

The depth of workings is 30 metres at the lower end at the Main shaft and 40 metres on the higher Pemba shaft. This line of shallow shafts lies on the western adit to main shaft (shaft 2) to the east shaft (shaft 9) with a strike of 600 metres and makes up the main workings. These shafts have been defined from the work done by Percy Hastings in 2010 and are all outlined below in their purpose.

16.3. Geotechnical and Hydrogeological Work

As noted in the History section, there has been small scale mining without regard to the need for pillars. Mining in the 1963 was often halted due to water incursions. No work as been done on either Geotechnical or Hydrogeological, but both should be addressed as deviations from requirements for both has lead to the cessation of mining activities during historical times.

17. RECOVERY METHODS

Historically, in a report dated 2010, Mr Hastings suggests that 70% of the gold may be available through fine grinding and gravity concentration, the remainder of which should be won through the cyanidation of residues. The has been no testwork to validate this, but it is a fairly common process with small scale workers in Zimbabwe.

18. PROJECT INFRASTRUCTURE

The Happy Valley Mine consists of a few permanent buildings being an office, a mine manager's room, plant operator's quarters, two wooden cabins and two large tents with ablution facilities and a few storerooms. A dump is at the western end of the mills.

The figure below is the siting of works from 2018, submitted and approved by the Ministry of Mines.

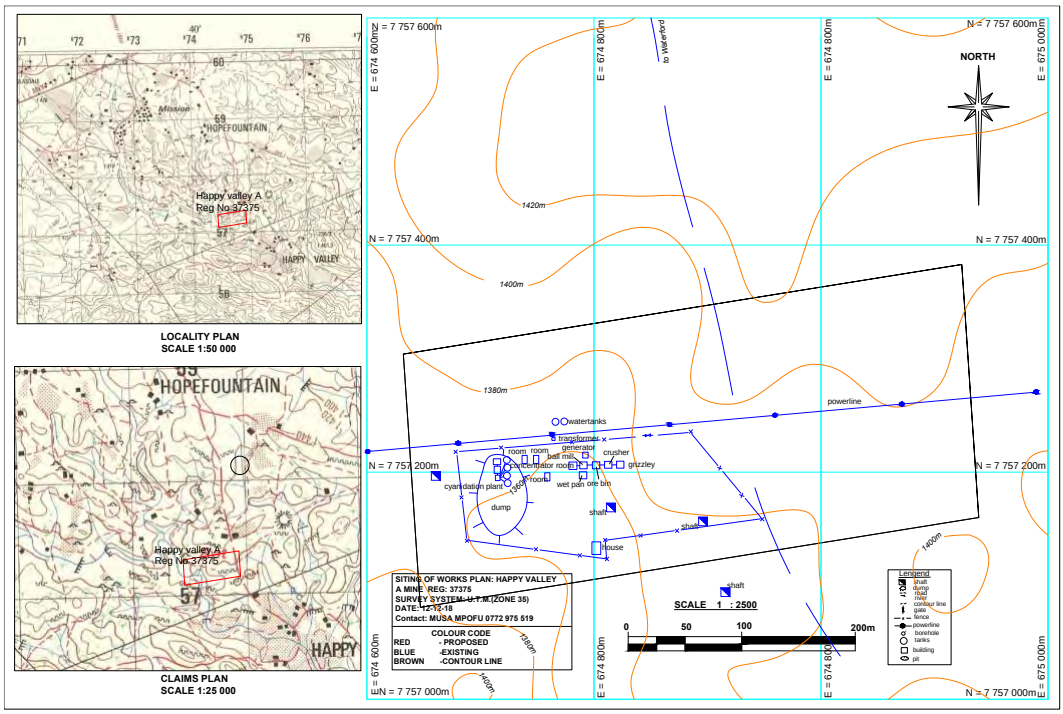

Figure 23 : Siting of works plan as approved by the Ministry of Mines (2018).

18.1 Mining and Processing Equipment

NUMBER	DESCRIPTION
2	ABJ 4x6 Ball Mills
2	3-Part Conveyor System inclusive of Crusher, Ore Bin and Feeder
2	ABJ Concentrator Tanks
1	Air Compressor
1	Lovol Smart Generator

2	Winches (2t & 3t)
2	Headgears
3	Submersible Pumps (Terrier Pumps 1.5HP)
1	Jaw Crusher
2	5000l Jojo Tanks
1	Welding Machine
2	Jack Hammers
1	Airleg
3	Carbon Columns
	Sundry Mining & Building Tools

Table 7 : Mining and Processing Equipment

18.2 Electricity and Water

100k VA line transformer off an 11kV power line that passes by the mine and provides adequate power for mining and milling operations.

5.5 kVA for care and maintenance and pumping only as power back up.

Water has been supplied from underground pumping. A borehole has been drilled. A pre-existing borehole on site dried up but could beresuscitated after the rains to complement existing water supplies.

18.3 Permanent Buildings

Happy Valley mine consists of a few permanent buildings consisting of:

- office
- mine manager's room,
- plant operator's quarters,
- 2 wooden cabins and
- 2 large tents
- ablution facilities.

A north-south road leads from the main Mission Road and cuts across the claim dividing it into two with roughly 1/3 being the eastern portion of the claim. Tracks to shafts are accessible for ore removal to plant. The road is accessible all year round.

18.4 Personnel

A mine manager and a plant manager are on hand full time as they are resident.

A trim labour force has been doing maintenance and plant upgrading and compliance duties.

A security company provides 24-hour armed guard duties.

An Environmental Impact Study is underway currently and is expected to make recommendations.

Infrastructure development is on-going to meet legal and operational requirements as per the mining plan.

	
Installed milling capacity as demonstrated by two parallel ball mills that can process up to 2,600 tonnes of ore per month.	The gold processing room in the foreground and the ball mills in the background at Happy Valley Mine.
	
Installed power upgrades at Happy Valley Mine	Installation of Headgear on the Main Shaft

Photo 8 : Infrastructural Photos taken in 2020.

19. MARKET STUDIES and CONTRACTS

This section is not applicable to this report.

20. ENVIRONMENTAL STUDIES, PERMITTING and SOCIAL or COMMUNITY IMPACT

This section is not applicable to this report.

21. CAPITAL and OPERATING COSTS

This section is not applicable to this report.

22. ECONOMIC ANALYSIS

This section is not applicable to this report.

23. ADJACENT PROPERTIES

The author has been unable to verify the information on the adjacent properties, and therefore the comments below are not necessarily indicative of the continuity of mineralisation. In order to provide verifiable data, there would be a requirement for a Technical Report and this is not available. Therefore the comments below are merely the author's opinion and not verifiable fact.

The illustration below shows the claim Happy Valley A, registration number 37375. The image is not clear, but this is how the Ministry has the claims currently, as there is no cadastral system in Zimbabwe. The author is therefore unable to give exact coordinates information on the adjacent claims. This is the best impression available. There is a faint indication of claims both East and West of the claim, suggesting that the strike extensions may be claimed. This would have to be verified. However, there is a possibility that north and south are open, and if required for mining infrastructure, particularly the north – the ground is probably available. However, in order to validate these statements, it would be required to go the Ministry of Mines and get valid certificates with the co-ordinates of the surrounding claims.

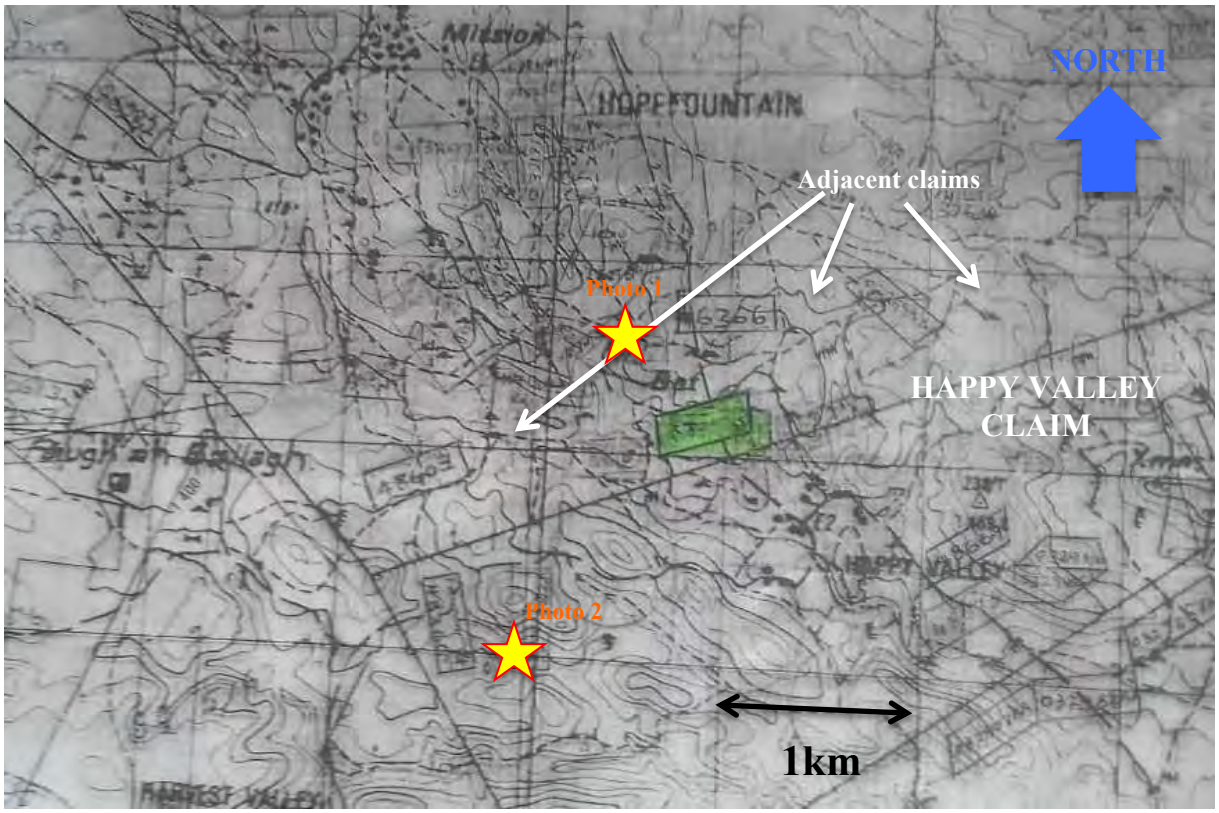

Figure 24 : Ministry of Mines Map of Adjacent claims holders.

Having said all of this, there is strong visual evidence of active small scale mining on the neighbouring claims. In fact the Hope Fountain area has undergone a mini " gold rush" recently, with some large nuggets being found near surface in the general district. Following on is photographs in relation to a May 2021 Google earth image of the neighbouring blocks which are probably less than 1km distant.

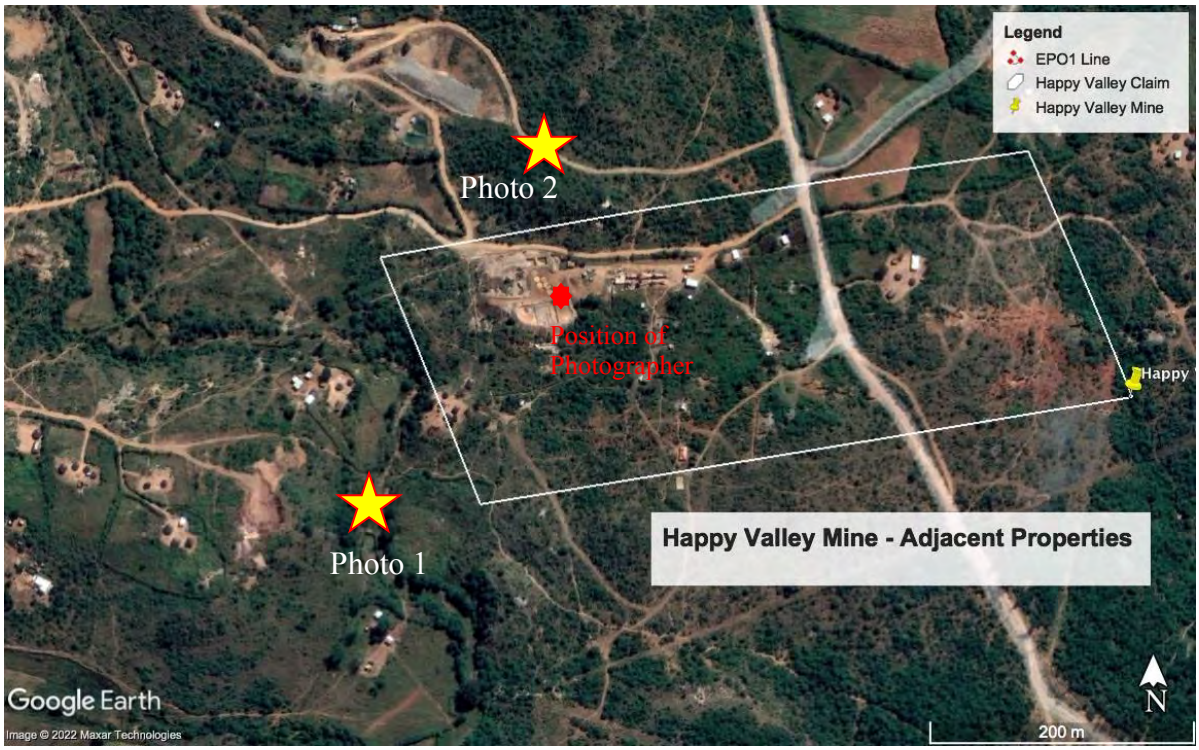

Figure 25 : Google Earth Image May 2021, with adjacent Properties, which are being worked.

	
Photo 1 on Google Earth above – large excation on the hillside	Photo 2 – northern working on hillside, with tailings in foreground

Photo 9 : Photographs of Adjacent properties from the Tailing Dump

24. OTHER RELEVANT DATA and INFORMATION

This report contains the known historical exploration reports.

25. INTERPRETATION and CONCLUSIONS

25.1 SIGNIFICANT RISKS AND UNCERTAINTIES

Historical exploitation has suggested a relatively small scale operation. It is generally believed that the operation has never been sufficiently funded or explored to reach any potential, and there is no history of a single exploration hole on this site. However, if this is viewed from another angle, the risk could be that the mineralisation is patchy and not continuous, and has therefore never attracted the funding that is required to develop the property. This is the inherent geological risk of Archaean of gold mineralisation. The gold reefs may pinch and swell, and so the grade is "lost" along strike. There is always the risk of again "losing" the reef due to faulting. Careful and systematic geological mapping and input should reduce this risk but providing a geological model and predicted faulting that assists in the mining "following" the reef.

However, it is the author's opinion that any prospect should not be written off prior to some type of drilling programme. Exploration data, and particularly the geophysics and the on-seam trenching and excavations does certainly indicate that there is a reef gold deposit worth following up.

25.2 GEOLOGICAL INTERPRETATIONS

A summation of conclusions reached about Happy Valley Mine:

- The continuation of present orebodies as shown by shafts and excavations is evidenced by the RSIP surveys. The coincidence of the RSIP anomalies with old workings and shaft and underground workings is emphatic.
- Lenticular quartz veins on strike and down dip are the primary gold mineralized rock type. (Evidence from old workings shafts, underground workings, geophysics RSIP survey).
- A west-north-westerly trending gold mineralized orebodies have been shown with conjugate directions of mineralization in NW and SW directions not investigated. (Geological mapping, geophysics MAGNETICS and RSIP).
- The maximum depth of the 11+ kilograms of gold that have been extracted is 40 metres. Recent geophysics has shown structures measured down to 250m and open-ended. At depth. (RSIP)
- The lithology variation as indicated by geo-magnetic data is gradational from felsic metavolcanics in the north to mafic lava flows to the south. The trend of rocks is WNW, coincident with themain mineralization trend. The lithological demarcations therefore serve as weaknesses conduits for gold mineralization or may be zones where of weakness where silica-rich fluids would deposit gold and sulphides.
- The nuggety nature of the gold mineralization is highly suspected though not tested. It could prove the difference between mining profitably and would recommend that QAQC be applied rigorously, including laboratory quality testing, on all sampling as well as immediate acquisition of crushing material to prepare own samples and ultimately assay own samples and beyond.

25.3 CONCLUSIONS

The Happy Valley mine is a gold claim that has both historical and current production, proving that there is certainly gold potential on this claim. The surface exploration work that has been completed has verified historical production from the gold reef present on the claim. However, there is clearly the requirement for a drilling campaign to determine the extent and magnitude of the gold mineralisation.

Happy Valley mine has the potential to mobilise gold in the Hope Fountain area. From the study conducted to date it is recommended to follow a path of development and exploration while continuing operations.

The hinterland surrounding the mine is source of ore to feed the two ball mills on site as well as custom milling services supported by an on-site laboratory for quality control.

The proper development of the property will depend on the results of an exploration program.

It is recommended that a staged program of exploration be instituted. Acceptable results in a phase will lead to the nest phase. If acceptable, then further development be undertaken.

26. RECOMMENDATIONS

26.1 WORK PROGRAMME – RESOURCE DRILLING

PHASE 1 :

BUDGET	US$85,000
METERAGE	1,180
OBJECTIVE	Define a 200m strike and 150m down dip resource on a drill grid of 40 x 40m, with one gap of 80m. It is envisaged that the Main and Zulu reef will get some kind of depth definition.
TIME LINE	6 months, starting 1st June 2022 and ending 31st December 2022

Phase 2 will be dependent on results from Phase 1 – assuming positive results, Phase 2 will be budgeted at

PHASE 2 :

BUDGET	US$85,000
METERAGE	1,180
OBJECTIVE	Infill the one line from the above drilling and drill the geophysical anomalies as previously defined. Define East and

	West extensions to the Main and Zulu reefs, and potential define a northern parallel reef.
TIME LINE	6 months, starting 1st May 2023 and ending 31st December 2023 (due to the rainy season at the beginning of the year)

The work programme proposed for this report is an USD$85,000 Reverse Circulation (RC) programme to define a resource over a 200m strike. This is illustrated below with the collars marked in BLACK, and is defined as PHASE 1. The holes are drilled at a 40m line spacing and the down dip intersects are proposed to hit the reef at a vertical depth of 80m and 120m, giving a resource to a depth of 150m. There is one line that has been omitted from this programme, line – 674890. However, this is included in the second drill programme, which drills the geophysical anomalies.

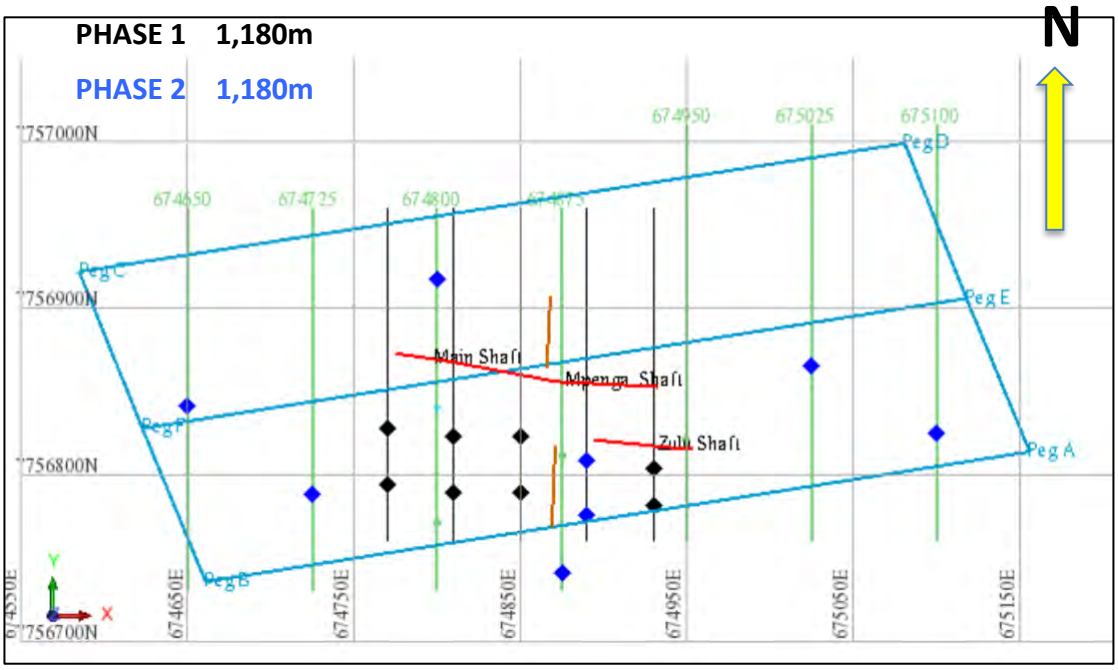

Figure 26 : Proposed Drilling Programmes – Phase 1 and 2

The second phase follows up the strike extensions directly over the geophysical anomalies and infills the missing line on the 40 x 40m resource grid. However, there may be a deviation from this to further follow up the drilled resource.

Hole No	Y Min	X Min	Z Max	3d Len	Azimuth	Dip
HPRC001	7756829	674770	1400	123	0	-60
HPRC002	7756796	674770	1400	172	0	-60
HPRC003	7756824	674810	1400	123	0	-60
HPRC004	7756791	674810	1400	172	0	-60
HPRC005	7756824	674850	1400	123	0	-60

HPRC006	7756791	674850	1400	172	0	-60
HPRC009	7756805	674930	1400	123	0	-60
HPRC010	7756772	674930	1400	172	0	-60

Table 8 : Phase 1 Drilling Programme – 1,180m

After the first phase of drilling, a resource will be calculated and a decision will be made whether to continue the exploration for an economic gold deposit on the Happy Valley claim. The second phase attempts to intersect a north parallel and a the western extension of the Main Reef. There may be reason to expand this programme if the Zulu reef is prospective to the east and west. It may be necessary to do some diamond drilling on the second phase. This would give more information on the mineralogy and the aspect of the gold mineralisation. This decision will only be taken after the completion of Phase 1. This will obviously increase the cost or decrease the meterage of Phase 2.

Hole No	Y Min	X Min	Z Max	3d Len	Azimuth	Dip
HPRC007	7756810	674890	1400	123	0	-60
HPRC008	7756777	674890	1400	172	0	-60
RCD_6	7756842	674650	1400	120	0	-55
RCD_7	7756789	674725	1400	135	0	-55
RCD_10	7756918	674800	1400	90	0	-55
RCD_2	7756742	674875	1400	128	0	-55
RCD_3	7756830	674950	1400	116	0	-55
RCD_4	7756866	675025	1400	171	0	-55
RCD_5	7756825	675100	1400	122	0	-55

Table 9 : Phase 2 Drilling Programme – 1,180m

Above is the original plan of the Phase 2 holes. It should be noted that some of the holes RCD1, RCD8 and RCD9 are redundant, as they would have been drilled as part of Phase 1 programme.

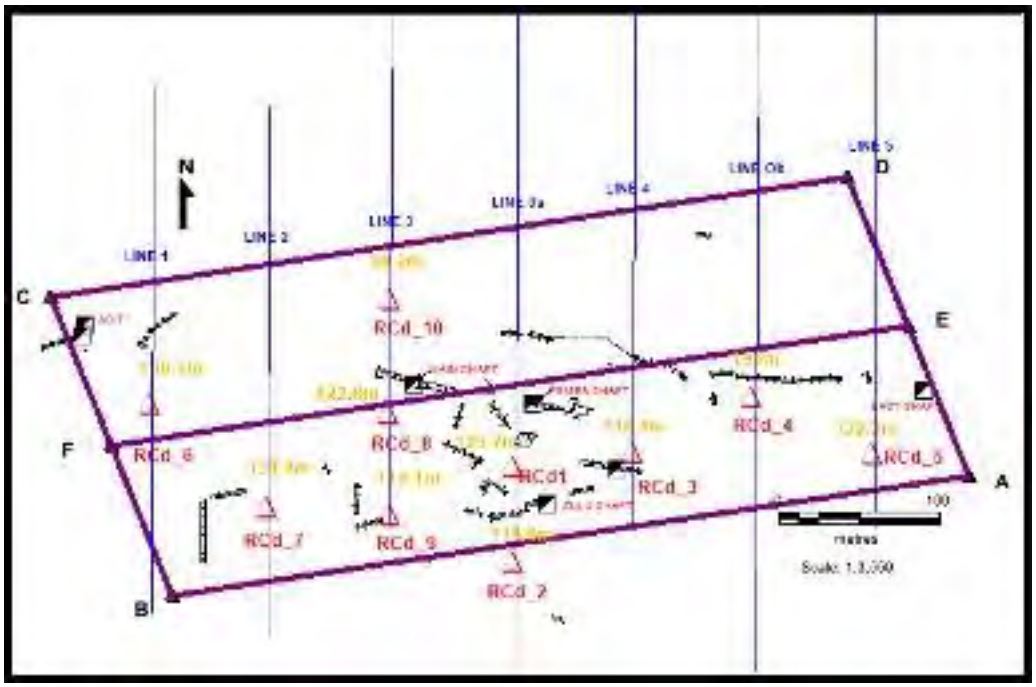

Figure 27 : Original Planned RC drilling plan after geophysical surveys

26.2 WORK PROGRAMME – BUDGET

Each phase has a budget of UD$85,000 which allows for approximately 1,200m of RC drilling. Below is given the summary of the costs. Assays are costed at the local accredited laboratory in Zimbabwe. RC drilling is costed at US$40 per meter. Prices are increasing currently in Zimbabwe and therefore, dependent on the timing of the work, the pricing may vary.

ITEM	COST PER UNIT	NO UNITS	TOTAL
Drilling	40	1,180	47,200
Assays	17	1,180	20,060
Consumables			4,740
Personal			6,000
Consultants			7,000
TOTAL			**85,000**

Table 10 : Budget per Drilling Phase

26.3 SURFACE TRENCHING

There may be reason to include some of the surface on reef trenching in Phases 1 and 2, as this would potentially use the same personal as the drilling but add a small amount to the assay and consumable cost. This would assist in the surface geometry of the reef and assist in defining any offsets on the reef. Mapping and sampling at 1m intervals will provide information required. The risk here is that there is known to be some surface leaching. However, this may assist with the model, as will then prevent the near surface grades being over-estimated by the drilled lower grades.

26.4 METALLURGICAL TESTWORK

Some test work is required. The outlay will be small in terms of overall costs. Material for the test work can be sourced from drill chips or from underground development. This would lead to advice on whether to change to a more cost-effective cyanide circuit, from labour intensive vat-leach to mechanised agitation. Again, this would probably be part of Phase 3, which would concentrate on the opening up of mining operations, when a viable resource has been determined.

26.5 INFRASTRUCTURAL PROGRAMMES

Again, this is outside the scope of the proposed work **programme but** is included for continuity of the programme. There are recommendations, observations and comments on the historical mining infrastructure on site.

26.5.1 Plant

The current plant site appears suitable.

26.5.2 Power

Installed power is 50kvA. The transformer is adequate for current needs but will be too small with additional equipment in place at the mine. At production throughput of between 500 and 1,000 tonnes a month, installed machinery will put power requirements at upwards of 100 kvA.

26.5.3 Water

A borehole has been drilled on site, but additional water may come from underground if this proves inadequate.

26.5.4 Housing

Staff levels will mean between 40 and 50 people needed for a productionof 1,000 tonnes a month. Some thought as to where they will be housed is needed. The property is sufficiently close to Bulawayo that staff could be housed there, with employees brought in by bus. Apart from staff housing, a certain number of buildings will be required on site. These will include workshops, offices, storerooms and buildings housing plant and equipment.

26.5.5 Staffing

Therefore, some degree of orientation and training of employees is called for.

26.56 Roads

Roads and tracks are rather haphazardly sited and not maintained. Some attention is needed.

26.7 EQUIPMENT

Again, this paragraph is based on the decision to mine. However, it is kept as part of the report to allow for the work programme recommendation in the future.

Some suitable equipment is already on site for an operation up to 400 tones per month. Up to that level, the following issues need addressing:

Additional production above 400 tonnes per month will require purchaseof replacement equipment to handle the greater volumes. Up to that level, the following issues need addressing:

- Underground rolling stock
- Hoists and headgears with bin storage facilities
- Transportation units (i.e. tractor and dumper)
- Cyanide plant refurbishment
- Additional jackhammers and accessories
- Additional water storage facilities
- Electrical reticulation
- Air and water reticulation
- Buildings for plant and equipment cover
- Stores room

27. REFERENCES

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2. Hastings P. Scoping Study of Happy Valley: Mining Project for Golden Beetle AB. *Unpublished report.* November 2010. 36p.
3. Campbell, S.D.G. and Pitfield, P.E.J. 1994. Structural Controls of Gold Mineralization in the Zimbabwe Craton – Exploration Guidelines. *Zimbabwe Geological Survey Bulletin No. 101*. 270p
4. Bartholomew, D. S. 1990. Gold Deposits of Zimbabwe. *Zimbabwe Geological Survey Mineral Resources Series No. 23*.
5. Pitfield P.E.J. and Campbell, S.D.G. Significance for gold exploration of structural styles of auriferous deposits in the Archaean Bulawayo-Bubi greenstone belt of Zimbabwe. *Trans.Instn. Min. Metall. (Sect. B: appl. Earth Sci), 105*, January-April 1996.
6. Manda, L. Magnetics and IP Survey Report. *Unpublished report*. September 2019. 17p.
7. Manda, L. Happy Valley Mine Proposed Trenches. *Unpublished report*. October 2019. 6p.
8. Banda, M. Report of Trenching at Happy Valley Mine 2020. *Unpublished report.* 2020. 7p.
9. Manda, L. Infill IP Survey and Proposed Drilling: Happy Valley Mine Report. *Unpublished report*. July 2020. 22p.
10. Foster, R. P. 1983 Exploration models for Archaean gold deposits in Zimbabwe. *Instit. Min. Res., Rep **51**,* Univ. Zimbabwe

28. APPENDICES

APPENDIX A: BRIEF RESUME OF MOSES BANDA, primary author of the report

Moses Banda is a geologist with 30 years' experience in the gold mining industry of Zimbabwe. He graduated with a BSc Honours in Geology from the University of Zimbabwe in 1990. Having worked for major mining houses in Zimbabwe, Moses has spent most of the time on exploration and development projects. Some of the major projects include resource drilling for the underground feasibility of Freda Rebecca mine, the largest gold producer in Zimbabwe. Moses was project geologist for resource drilling for Canister Resources' Dokwe project, a million-ounce gold deposit in western Zimbabwe. He had a two year stint in East Africa, mainly in Uganda and Tanzania. For two He was technical services manager for Duration Gold, then a fast growing gold producer. For the last seven years Moses has worked to develop small scale mines in Zimbabwe as a consulting geologist.

APPENDIX B: Letter from Ministry of Mines verifying ownership

Official communications not to be addressed to individuals

Basch Street/10th Avenue
Bulawayo

Telephone: 263-9-66381-3, 61703

ZIMBABWE

In your reply, please quote the reference:

MINISTRY OF MINES & MINING DEVELOPMENT
OFFICE OF THE PROVINCIAL MINING DIRECTOR
MAT NORTH
P.O. Box 386
Bulawayo
Zimbabwe

17 January 2022

Jon Harris
Pennine Petroleum Corporation 315 39th Avenue S.E
Calgary Alberta
Canada T2G 1X5

RE: CORFIRMATION OF OWNERSHIP OF CLAIM HAPPY VALLEY MINE C REGISTERED NUMBER 37375

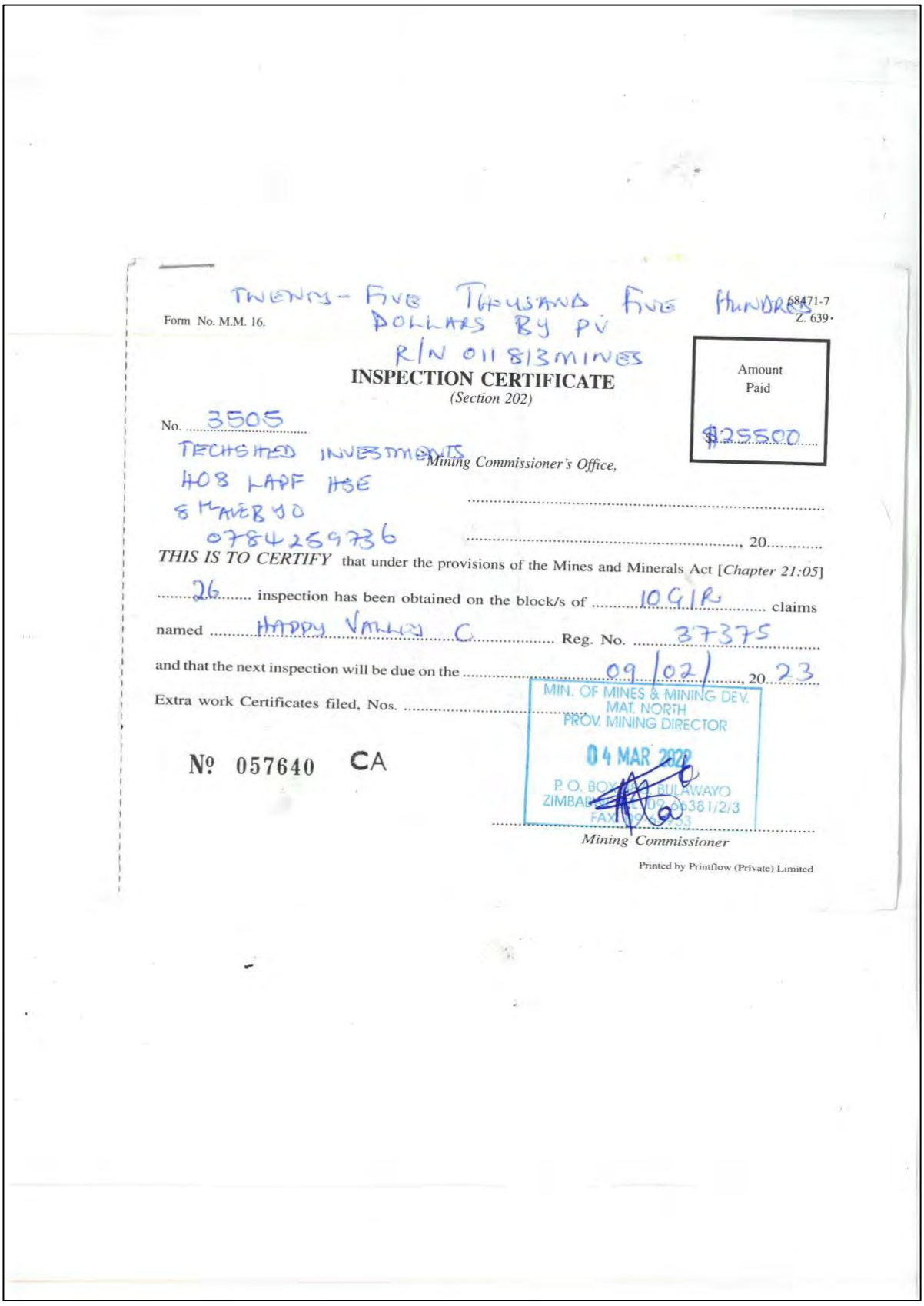
Techshed Investments (Pvt) Ltd company registration 2201/18 is the registered holder of Happy Valley Mine C registered number 37375 and transfer number 36969 as from the 10 September 2021.

MIN. OF MINES & MINING DEV.
PROVINCIAL MINING DIRECTOR
MATABELELAND NORTH
17 JAN 2022
P.O. BOX 386, BULAWAYO
ZIMBABWE

F. Ngulube
PROVINCIAL MINING DIRECTOR-MAT NORTH
For/ SECRETARY FOR MINES AND MINING DEVELOPMENT

Figure 28 : Letter from the Ministry of Mines confirming Claim Ownership

APPENDIX C: CLAIM INSPECTION CERTIFICATE – Valid 2023



TWENTY-FIVE THOUSAND FIVE HUNDRED DOLLARS BY PV R/N 011813 MINES

Form No. M.M. 16. 68471-7 Z. 639.

INSPECTION CERTIFICATE
(Section 202)

Amount Paid $25500

No. 3505

TECHSHED INVESTMENTS
408 LAPF HSE
BULAWAYO
0784259736

Mining Commissioner's Office, ...

....., 20.....

THIS IS TO CERTIFY that under the provisions of the Mines and Minerals Act [*Chapter 21:05*]

26 inspection has been obtained on the block/s of 10 GIRs claims

named HAPPY VALLEY C. Reg. No. 37375

and that the next inspection will be due on the 09/02/ 20 23

Extra work Certificates filed, Nos. .....

MIN. OF MINES & MINING DEV.
MAT. NORTH
PROV. MINING DIRECTOR
04 MAR 2020
P. O. BOX [illegible] BULAWAYO
ZIMBABWE [illegible] 08381/2/3
FAX [illegible]

№ 057640 CA

Mining Commissioner

Printed by Printflow (Private) Limited

Figure 29 : Claim Certificate showing current Inspection

APPENDIX D: RESISTIVITY AND CHARGEABILITY PROFILES

The Resistivity and Chargeability profiles for each line surveyed are giving below. The drilling lines are:

674770, 674810, 674850, 674890 and 674930.

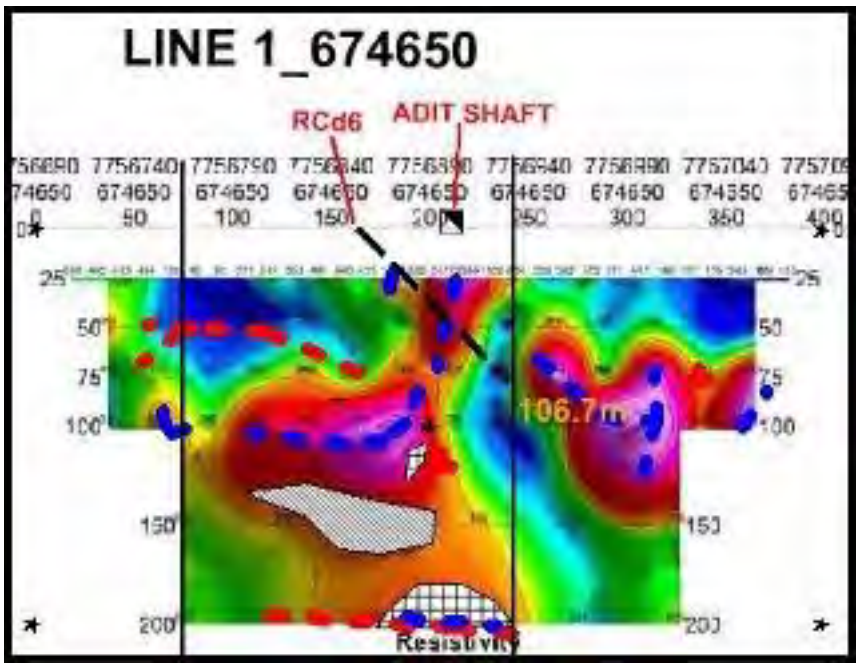


Figure 30 : Line 1 proposed RC drillhole on resistivity section.

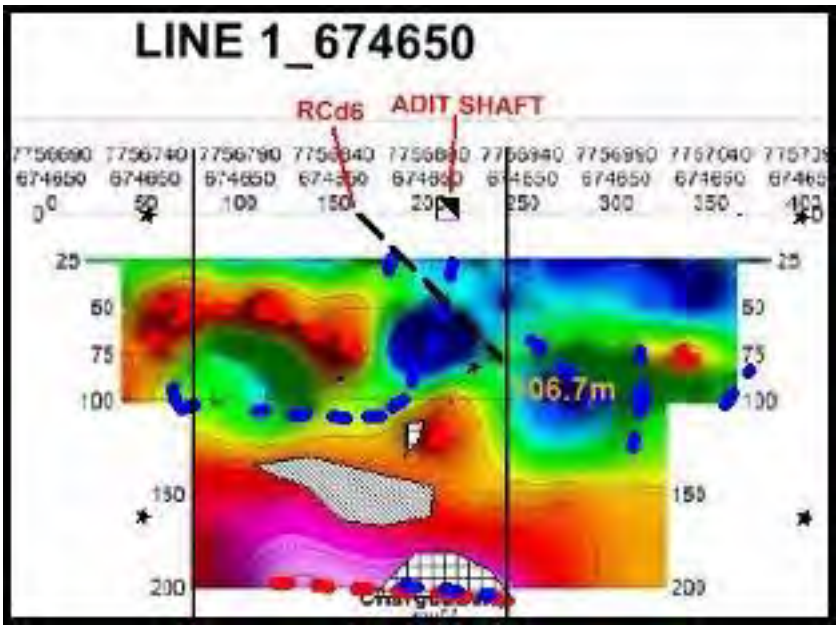


Figure 31 : Line 1 proposed RC drillhole on chargeability section.

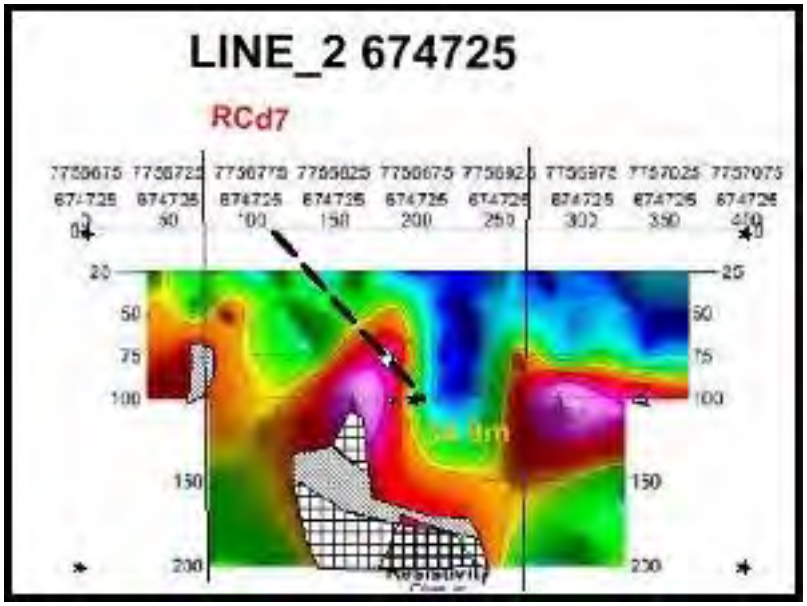


Figure 32 : Line 2 proposed RC drillhole on resistivity section.

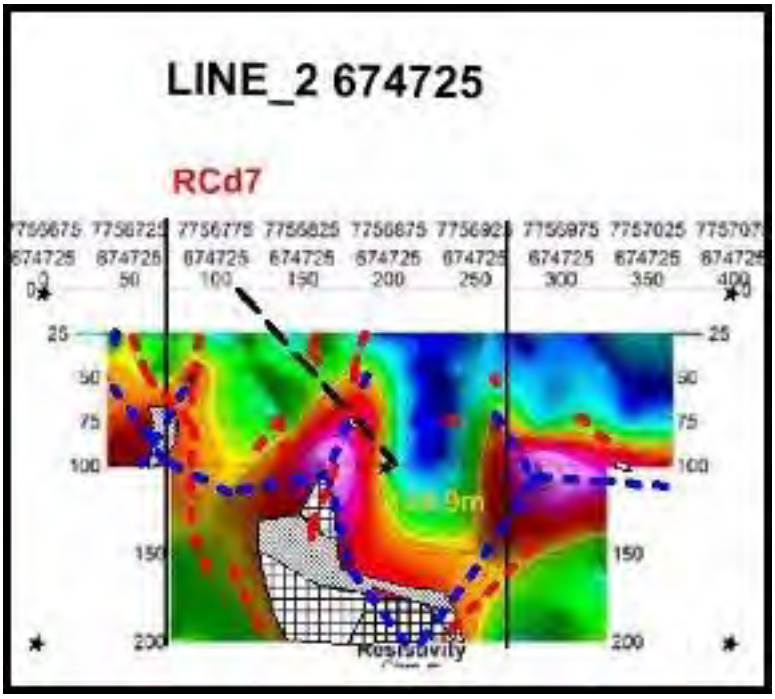


Figure 33 : Line 2 proposed RC drillhole on chargeability section.

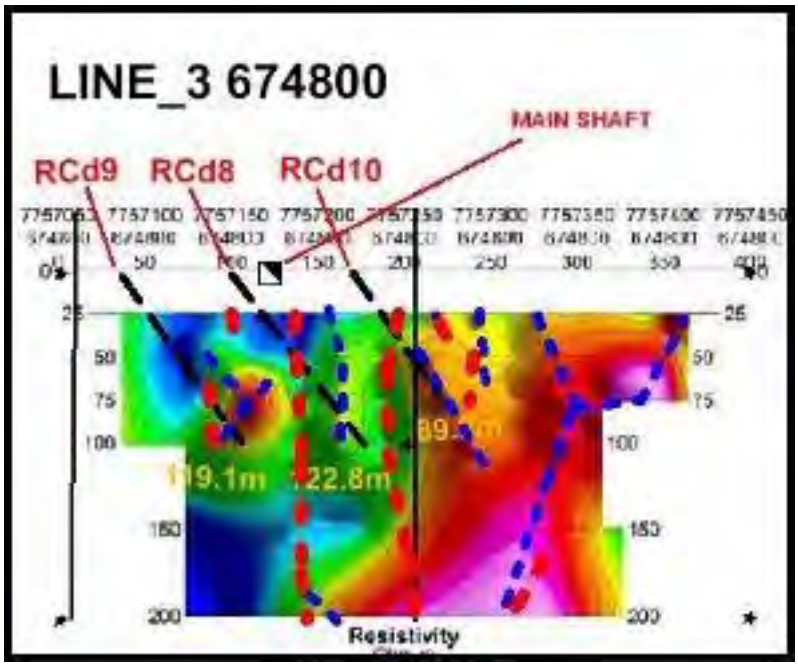


Figure 34 : Line 3 proposed RC drillhole on resistivity section.

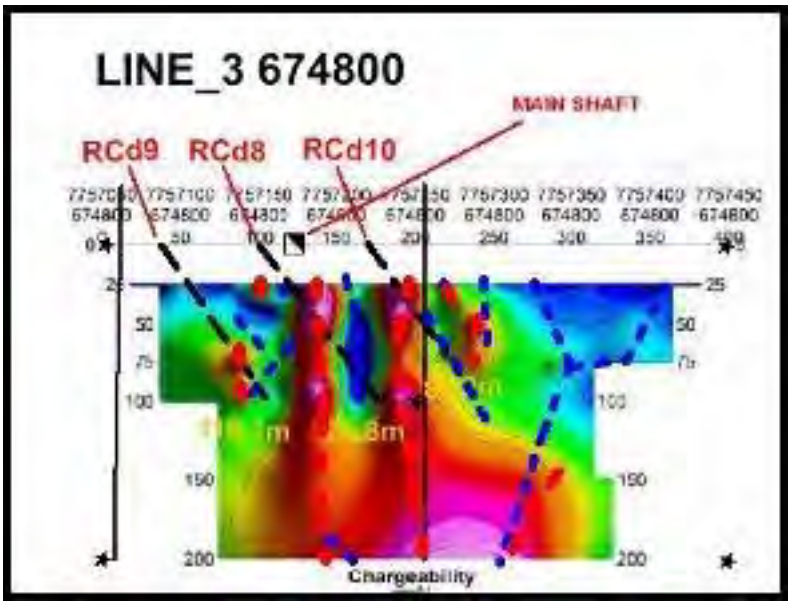


Figure 35 : Line 3 proposed RC drillhole on chargeability section.

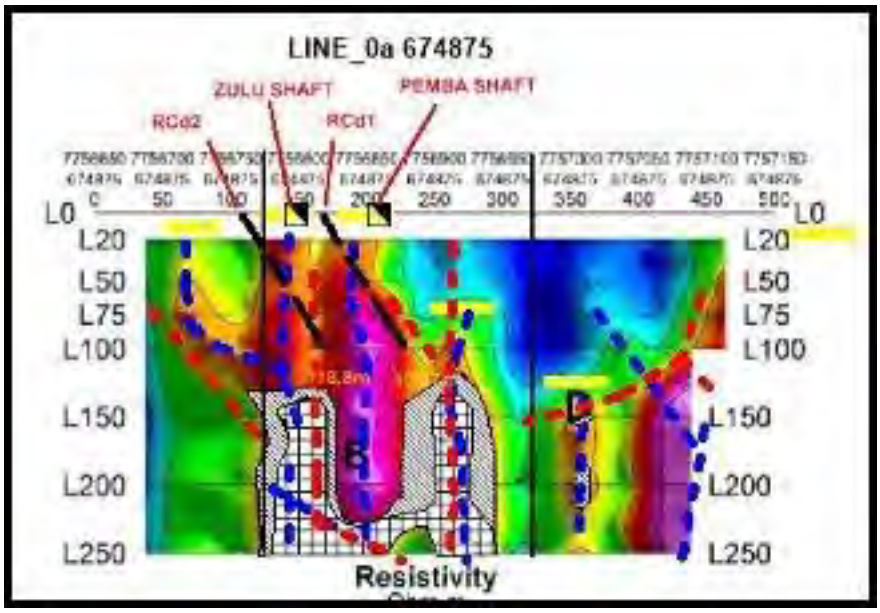


Figure 36 : Line 0a proposed RC drillhole on resistivity section.

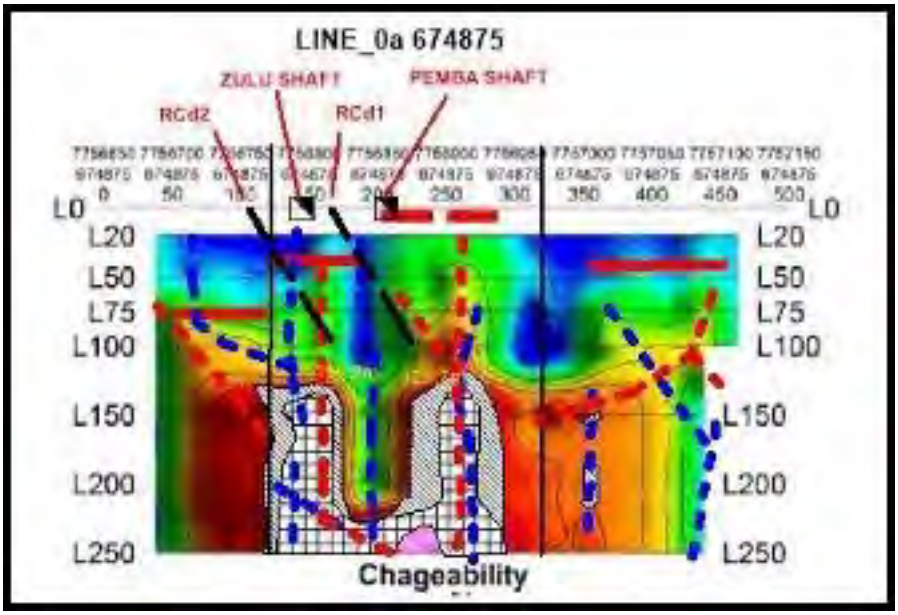


Figure 37 : Line 0a proposed RC drillhole on chargeability section.

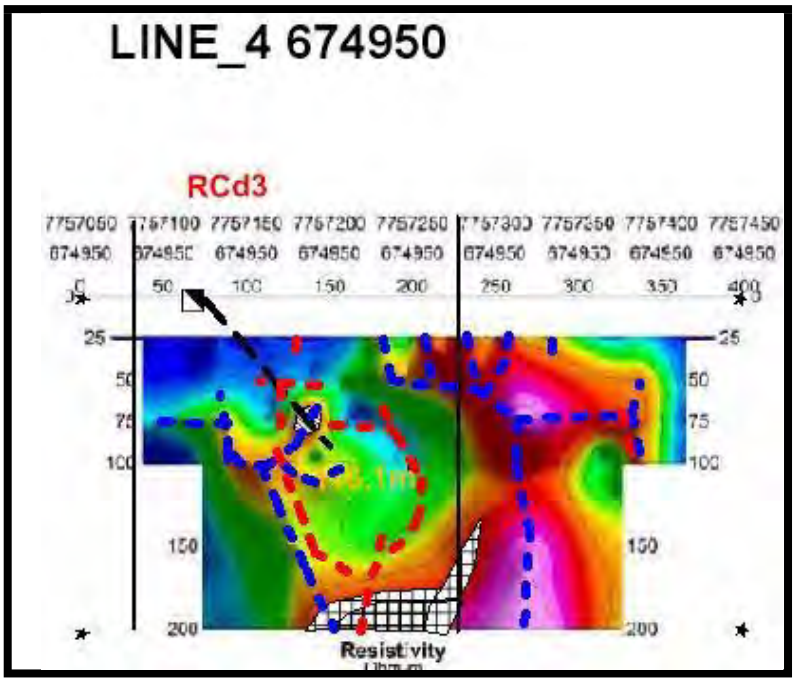


Figure 38 : Line 4 proposed RC drillhole on resistivity section.

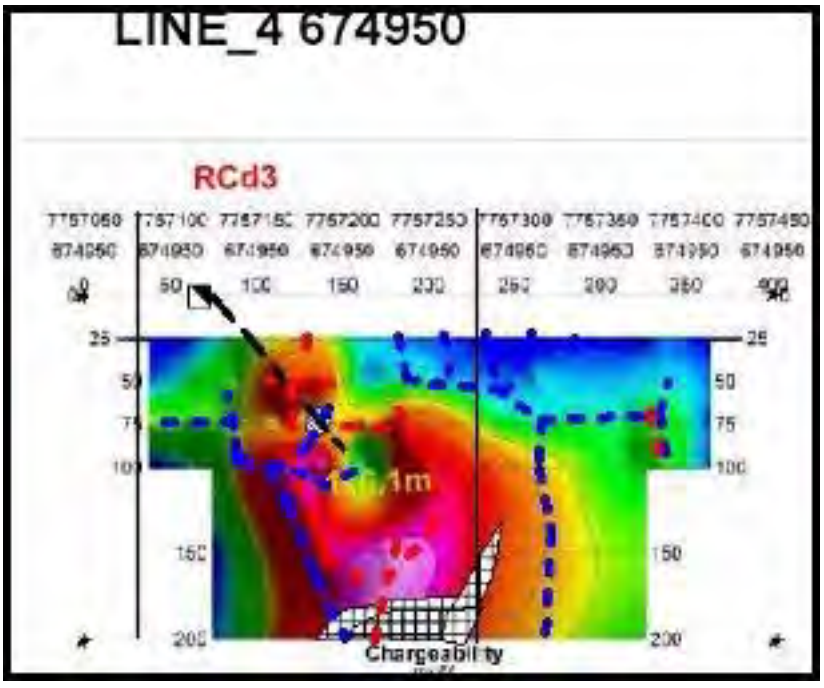


Figure 39 : Line 4 proposed RC drillhole on chargeability section

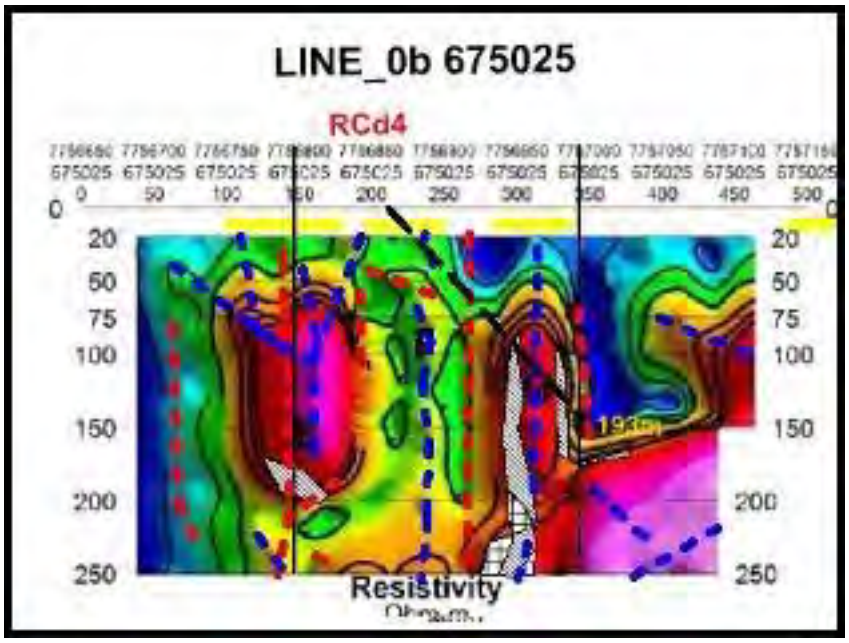


Figure 40 : Line 0b proposed RC drillhole on resistivity section.

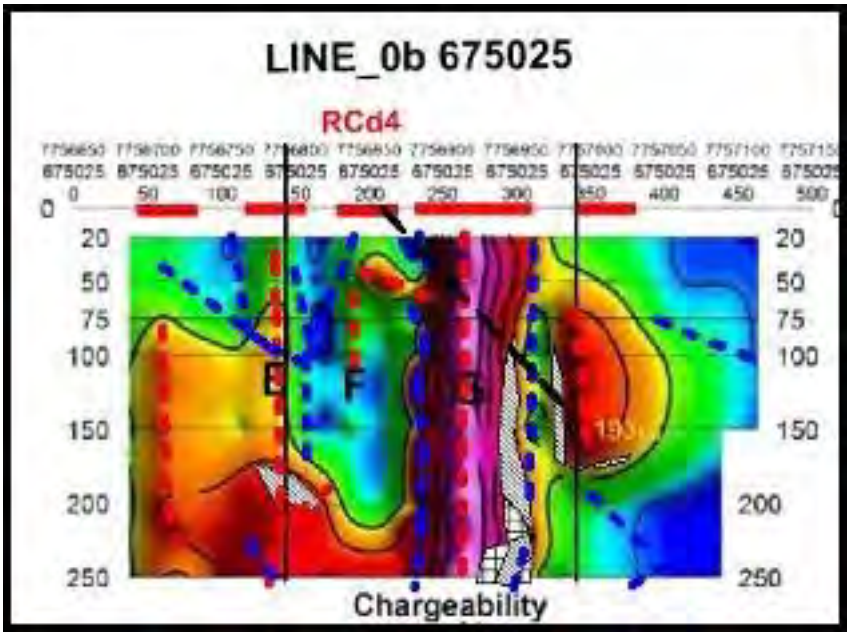


Figure 41 : Line 0b proposed RC drillhole on chargeability section.

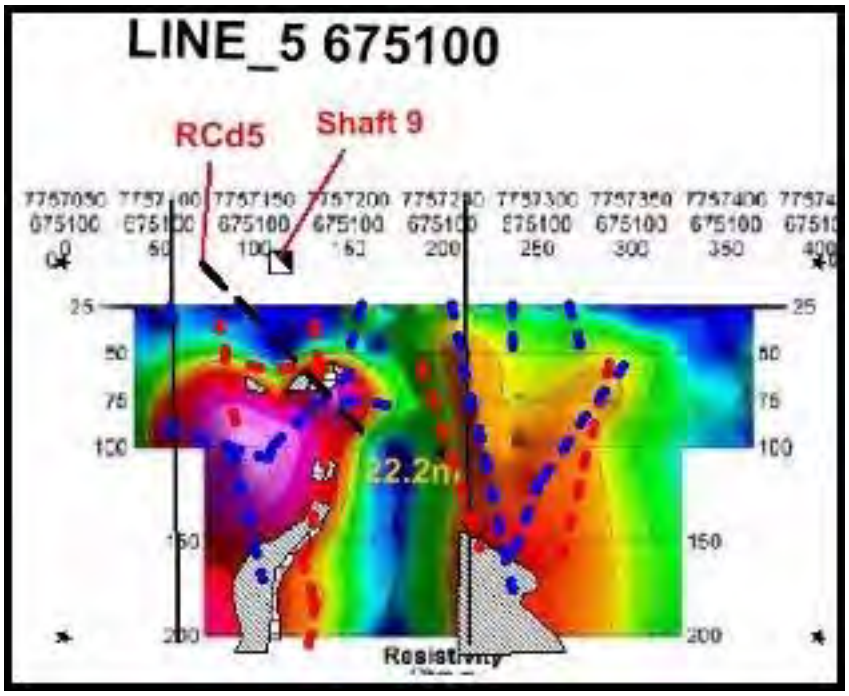


Figure 42 : Line 5 proposed RC drillhole on resistivity section.

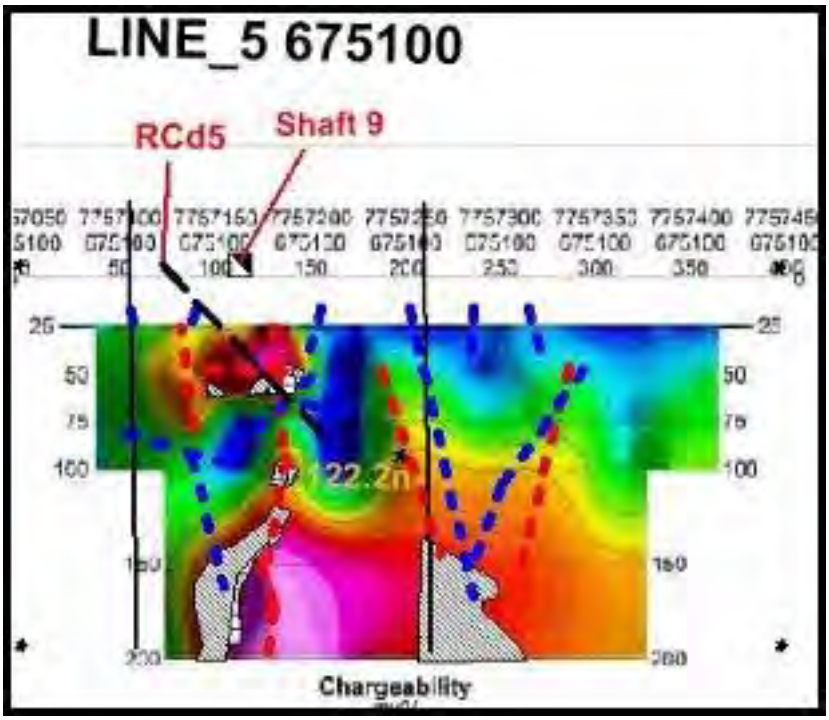


Figure 43 : Line 5 proposed RC drillhole on chargeability section