ASX Code: MTB

mount burgess mining

REPORT FOR THE QUARTER ENDED 31 DECEMBER 2018

Nxuu Zinc, Lead, Silver, Germanium, Vanadium Deposit, Botswana

TEST WORK ON VANADIUM

During the quarter mineralogical and metallurgical test work was conducted specifically for the purpose of determining the host mineral and recoverability of Vanadium. The test work was conducted by ALS Laboratories, Balcatta, Western Australia, on samples from four of the fifteen HQ diamond core holes drilled into the Nxuu Deposit in late 2017.

The mineralogical test work confirmed that the vanadate mineral hosting Vanadium metal and Vanadium Pentoxide is DESCLOIZITE.

The metallurgical test work confirmed that up to 80.7% of Vanadium is recoverable, which the Company believes is very encouraging.

The samples from the four HQ diamond core holes selected were previously confirmed by Intertek Genalysis, Maddington, Western Australia, as containing Vanadium metal assays.

The samples from the four HQ diamond core holes were selected on the basis that their Vanadium metal assays represented, as close as possible, the estimated average Vanadium metal grade, returned from the fifteen holes drilled in 2017.

Details of the four HQ diamond core holes and the samples selected from those holes which contained Vanadium metal assays are as follows:

SAMPLE SUBMISSION NO: MTB7 – 11 - 2018

Drill Hole Number	Easting	Northing	Dip	Azimuth degs	EOH/RL (m)	From (m)	To (m)	Weight (kg)
NXDD029	509,000	7,821,900	-90	0	41.95/1131	38.00	39.58	2.3701
NXDD032	508,900	7,821,800	-90	0	50.95/1131	24.44	28.05	9.0550
						48.00	50.00	4.3539
NXDD034	508,850	7,821,800	-90	0	49.62/1131	12.00	16.00	9.3409
						17.95	20.69	5.7463
						24.80	26.97	5.5606
						29.00	31.00	3.6017
NXDD046	508,950	7,821,950	-90	0	20.95/1131	5.15	9.00	6.0373
						15.00	19.38	7.4328
TOTAL								**53.4986**

The 53.5 kg of samples from the four Nxuu Deposit HQ diamond core holes were composited by ALS Laboratories and crushed to 100% passing 0.212 mm, then dry screened over a 0.075 mm screen for mineralogical and metallurgical test work

MINERALOGICAL TEST WORK

The mineralogical test work conducted by ALS Laboratories on this sub-sample concluded:

- "Descloizite (PbZn(VO4)(OH)) is the dominant (and possibly only) Vanadium-bearing mineral identified in the sample".

This mineralogical test work further concluded:

- "Approximately 65% of descloizite is classified as either "liberated" or "high grade middlings". This descloizite is relatively coarse grained; P80 of "liberated" descloizite is 74μm and P80 of the "high grade middling" descloizite is 54μm".

- "The remaining 35% of the descloizite is less well liberated and also fine grained; P80 of medium grained Descloizite 31μm, P80 of "low grade middlings" 25μm and P80 of "locked" Descloizite 16 μm".

The full Mineralogical Report prepared by ALS is shown as **Appendix 5**

Until receiving mineralogical test work results, the Company had only ever reported Vanadium metal (V) assay results, as received from various assay laboratories.

The Vanadium metal content from the Nxuu Deposit assay results is part of the full mineral suite assayed for, which includes Zinc, Lead, Silver, Germanium and Vanadium.

With DESCLOIZITE confirmed as the Vanadium-bearing mineral, the content of Vanadium Pentoxide (V_2O_5), a marketable product, is also confirmed.

The empirical formula for **DESCLOIZITE** is as confirmed by ALS and previously shown as $PbZn(V0_2)(OH)$.

The table below shows the percentages of the ELEMENT CONTENT of DESCLOIZITE and the COMPONENT HOSTS containing the elements in Descloizite.

With a gram molecular weight of 404.54 grams, the mineral/chemical make-up of Descloizite is as below:

(The gram molecular weight of Vanadium metal = 50.9 and thus is 12.59% of Descloizite.)

DESCLOIZITE

ELEMENT CONTENT	COMPONENT HOST CONTAINING THE ELEMENT
12.59% Vanadium metal (V) hosted within	22.48% Vanadium Pentoxide (V_2O_5)
16.16% Zinc (Zn) metal hosted within	20.12% ZnO
51.22% Lead (Pb) metal hosted within	55.17% PbO
0.25% Hydrogen (H) hosted within	2.23% H_2O
19.77% Oxygen (O)	___
100%	**100%**

The 22.48% Vanadium Pentoxide (V_2O_5) (as shown in the Table as the COMPONENT HOST CONTAINING THE ELEMENT Vanadium metal (V) of 12.50%), should not be construed as being the amount of V_2O_5 that can be recovered.

The recoverability of V_2O_5 from DESCLOIZITE from the Nxuu Deposit is shown under the METALLURGICAL TEST WORK section of this announcement.

For the V_2O_5 content of 22.48% in Descloizite, please refer to the "Mineral Data of Descloizite" as outlined as above (http://webmineral.com/data/Descloizite.shtml#.XAh_sdszbcs).

The calculation below confirms the content of Vanadium and Vanadium Pentoxide when in Descloisite.
Based on the molecular weights of Vanadium (V) = 50.9 and Oxygen (O) = 16 we have:

V_2O_5 = (50.9 x 2) + (16 x 5) = 181.8

Therefore the % of Vanadium (V) in V_2O_5= 50.9 X 2/181.8 = 101.8/181.8 = 56%
i.e. 56% V ≡100% V_2O_5
or 0.56% V ≡1% V_2O_5
and thus 1000ppm V ≡1000 x 1%/0.56% = 1785ppm V_2O_5

This means that when the mass (or percentage) of Vanadium metal (V) is reported as Vanadium Pentoxide (V_2O_5) the equivalent mass (or percentage) of V_2O_5 is increased by a factor of 1.785.

Intertek Genalysis Laboratories has conducted all assaying and re-checking of other laboratory assays in respect of all drilling conducted since 2003 on the Kihabe-Nxuu Deposit in Botswana. On 10 December 2018 Intertek Genalysis confirmed that the conversion factor from V to V_2O_5 would be 1.785.

Intertek Genalysis further confirmed:

- If the mineral is Descloizite, then the vanadium would be present as **V_2O_5** (5+).
- Descloizite is $PbZn(VO_4)(OH)$
- This is the same as $2PbO.2ZnO.V_2O_5$.H2O

Oxide	Number	Mass	%
PbO	2	446.40	55.18
ZnO	2	162.74	20.12
V_2O_5	1	181.88	22.48
H_2O	1	18.00	2.22
		809.02	100.00

METALLURGICAL TEST WORK

As V_2O_5 is a marketable product, metallurgical test work was conducted by ALS in order to determine to what extent **V_2O_5** can be recovered from the Nxuu Deposit.

Preliminary results from metallurgical test work conducted by ALS Laboratories for the recovery of Vanadium from the Nxuu deposit show that:

- Through applying a Direct Flotation process with Hydroxamate, as a collector, **80.4% of Vanadium was recovered** to concentrate from sample crushed to 75µm.

- Through applying the process of Wet Table Gravity Separation on a sample crushed to 150 µm, followed by Flotation of the gravity tail crushed to 75µm, using Hydroxamate, **recovered 80.7% of Vanadium** to concentrate**.**

The preliminary Vanadium beneficiation test work was conducted by ALS Laboratories on the composite sample of 53.5 kg from four of the fifteen HQ diamond core holes drilled into the Nxuu Deposit in October/November 2017, as shown in Sample Submission No. MTB 7-11-2018 on Page 1 of this report.

- Appendix 1 shows the drill hole plan of the Nxuu Deposit, highlighting the location of the four drill holes, NXDD029, NXDD032, NXDD034 and NXDD046, samples from which were selected to make up the composite as shown in Sample Submission No. MTB 7-11-2018.

CALCULATION OF THE NXUU DEPOSIT RECOVERABLE VANADIUM PENTOXIDE (V_2O_5) GRADE

- Through applying the factor of 1.785 to all previous Vanadium metal assay grades reported under both the 2004 and 2012 JORC Codes, the Company has calculated the VANADIUM PENTOXIDE **V_2O_5** grades (as shown in **Appendix 2**, Sections 1, 1A, 2, 3 and 4).

- Based on metallurgical test work recovery results confirmed by ALS Laboratories, the Company has then discounted the **V_2O_5** grades to 80% to show the **V_2O_5 RECOVERABLE** grades (as shown **(in brackets)** in **Appendix 2**, Sections 1, 1A, 2, 3 and 4 and as shown in **Appendix 3**, showing intersection widths and grades of **RECOVERABLE** Zinc/Lead/Silver and Vanadium Pentoxide).

The Vanadium mineral DESCLOIZITE can be treated on site to produce **V_2O_5** which can then be sold as a marketable product

CALCULATION OF THE NXUU DEPOSIT RECOVERABLE ZINC EQUIVALENT GRADE APPLYING A 1% ZINC EQUIVALENT LOW CUT

The Zinc Equivalent Grade for the Nxuu Deposit includes grades of Zinc, Lead and Silver (as shown in **Appendix 4**) calculated by applying the average of five trading days LME closing prices for Zinc and Lead and the five trading days of USA closing prices for Silver from 22 to 26 January 2018. Zinc and Lead grade values were then discounted to 93% to reflect the **RECOVERABLE** value based on metallurgical test work conducted by AMMTEC. The Silver grade values were then discounted to 70% to reflect the **RECOVERABLE** value of Silver as achieved in similar deposits. (See Estimated Silver Recovery below)

- LME average closing Zinc price of US$ 3,464/t, being US$ 34.64 per 1% was reduced to **US$32.21 per 1%** to reflect a recovery of 93% as demonstrated in previous metallurgical test work conducted by AMMTEC.

- LME average closing Lead price of US$ 2,611/t, being US$ 26.11 per 1% was reduced to **US$24.28 per 1 %** to reflect a recovery of 93% as demonstrated in previous metallurgical test work conducted by AMMTEC.

- USA average Day Trade closing Silver price of US$ 17.23/oz, being US$ 0.55/g reduced to **US$0.38/g** to reflect a recovery of 70% based on recovery performance of similar deposits. (Refer to Estimated Silver Recovery below)

Combined total discounted US$ value of each assay including any or all of Zinc, Lead and Silver was then divided by the discounted calculated Zinc price of US$32.21 per 1% to arrive at the **RECOVERABLE** Zinc Equivalent Grade. Only resulting grades of over 1% Zinc Equivalent grade were then applied in determining widths of mineralised intersections reported to ASX.

Zinc Equivalent Recoverable Grade - Calculation Formula

- US$ Zinc price/t divided by 100 = US $ Zinc price per 1% X 93% Recovery X Zinc Grade % = US$A
- US$ Lead price/t divided by 100 = US $ Lead price per 1% X 93% Recovery X Lead Grade % = US$B

  US$ Silver price/oz divided by 31.1 = US $ Silver price per gram X 70% Recovery X Silver Grade g/t = US$C

  US$A + US$B + US$ C divided by US$A = Zinc Equivalent Grade

Metallurgical Recovery Test Work for Zn/Pb from the Nxuu Deposit

Five metres of halved HQ drill core (34m – 39m) from drill hole NXDD003 and eight metres of halved HQ drill core (17m – 25m) from drill hole NXDD005 (Refer to **Appendices 1, 2, 3, and 4**), which holes are 308m apart, were composited and subjected to metallurgical test work conducted by AMMTEC in 2010 and 2011. This showed that at 75 micron grind size 93% Zinc was recovered to solution in 12 hours through tank acid leaching at 25 deg C (ambient Botswana temperature) using 30kg/t acid suitable for solvent extraction/electrowinning (SX/EW), together with a lead compound. Both the lead compound and zinc metal recovered on site can be transported in bulk to a railhead.

This information has previously been released to the market as follows:

11 February 2010. The Company released to the market results from mineralogical test work conducted by AMMTEC. This confirmed that Zinc was contained in the Zinc oxide mineral Smithsonite.

5 March 2010. The Company released to the market results from metallurgical test work conducted by AMMTEC. This confirmed that the Zinc oxide mineral Smithsonite was amenable to on site solvent extraction/electro winning with a recovery rate of 93%.

30 January 2012. The Company released to the market in its December 2011 Quarterly Report results from further test work conducted by AMMTEC. This further confirmed that 93% Zinc was recoverable through on site solvent extraction/electro winning and that a compound containing 93% of the Lead was recoverable from Cerussite which was able to be transported from site in bulk.

12 April 2012. The Company advised that at the request of ASX and in accordance with the JORC Code requirements, further information in respect of metallurgical recoveries was included in the Kihabe–Nxuu Resource Statement (2004 JORC Code). Since that time, when quoting the 2004 JORC Code resource, the following has been included:

- **Nxuu Metal Recoveries**

  In the Nxuu Deposit which is totally oxidised 93% Zn and 93% Pb mineralisation is recovered in 12 hours through acid leach (bench scale test work AMMTEC) with the potential to produce Zn metal on site through SX/EW

Estimated Silver Recovery

The estimated silver recovery at the totally oxidised Nxuu Deposit and the Oxide Zone of the Kihabe Deposit is based on the silver recoveries achieved at the Minera San Christobal Mine's totally oxidised Toldos ore body in Bolivia. In

2016 Joselyn Riquelme PhD, did extensive mineralogical, metallurgical and selective flotation test work on Toldos ore at the University of Queensland, achieving a Silver recovery rate of 83.80%. (University of Queensland, Improved process development for complex silver ores through systematic, advanced mineral characterisation; Jocelyn Andrea Quinteros Riquelme, B. Eng (Mineral Processing) and Metallurgical Engineer, December 2014).

The Company is of the opinion that all the elements included in the RECOVERABLE Zn equivalent calculations for the Nxuu Deposit have reasonable potential to be recovered and sold.

CORPORATE

Funding

During the quarter the Company raised $94,500 through placing 18,900,000 shares at 0.5 of a cent as announced to the market on 5/10/18 and 20/11/18.

Forward Looking Statement:

This report contains forward looking statements in respect of the projects being reported on by the Company. Forward looking statements are based on beliefs, opinions, assessments and estimates based on facts and information available to management and/or professional consultants at the time they are formed or made and are, in the opinion of management and/or consultants, applied as reasonably and responsibly as possible as at the time that they are applied.

Any statements in respect of Ore Reserves, Mineral Resources and zones of mineralisation may also be deemed to be forward looking statements in that they contain estimates that the Company believes have been based on reasonable assumptions with respect to the mineralisation that has been found thus far. Exploration targets are conceptual in nature and are formed from projection of the known resource dimensions along strike. The quantity and grade of an exploration target is insufficient to define a Mineral Resource. Forward looking statements are not statements of historical fact, they are based on reasonable projections and calculations, the ultimate results or outcomes of which may differ materially from those described or incorporated in the forward looking statements. Such differences or changes in circumstances to those described or incorporated in the forward looking statements may arise as a consequence of the variety of risks, uncertainties and other factors relative to the exploration and mining industry and the particular properties in which the Company has an interest.

Such risks, uncertainties and other factors could include but would not necessarily be limited to fluctuations in metals and minerals prices, fluctuations in rates of exchange, changes in government policy and political instability in the countries in which the Company operates.

Other important Information

Purpose of document: This document has been prepared by Mount Burgess Mining NL (MTB). It is intended only for the purpose of providing information on MTB, its project and its proposed operations. This document is neither of an investment advice, a prospectus nor a product disclosure statement. It does not represent an investment disclosure document. It does not purport to contain all the information that a prospective investor may require to make an evaluated investment decision. MTB does not purport to give financial or investment advice.

Professional advice: Recipients of this document should consider seeking appropriate professional advice in reviewing this document and should review any other information relative to MTB in the event of considering any investment decision.

Forward looking statements: This document contains forward looking statements which should be reviewed and considered as part of the overall disclosure relative to this report.

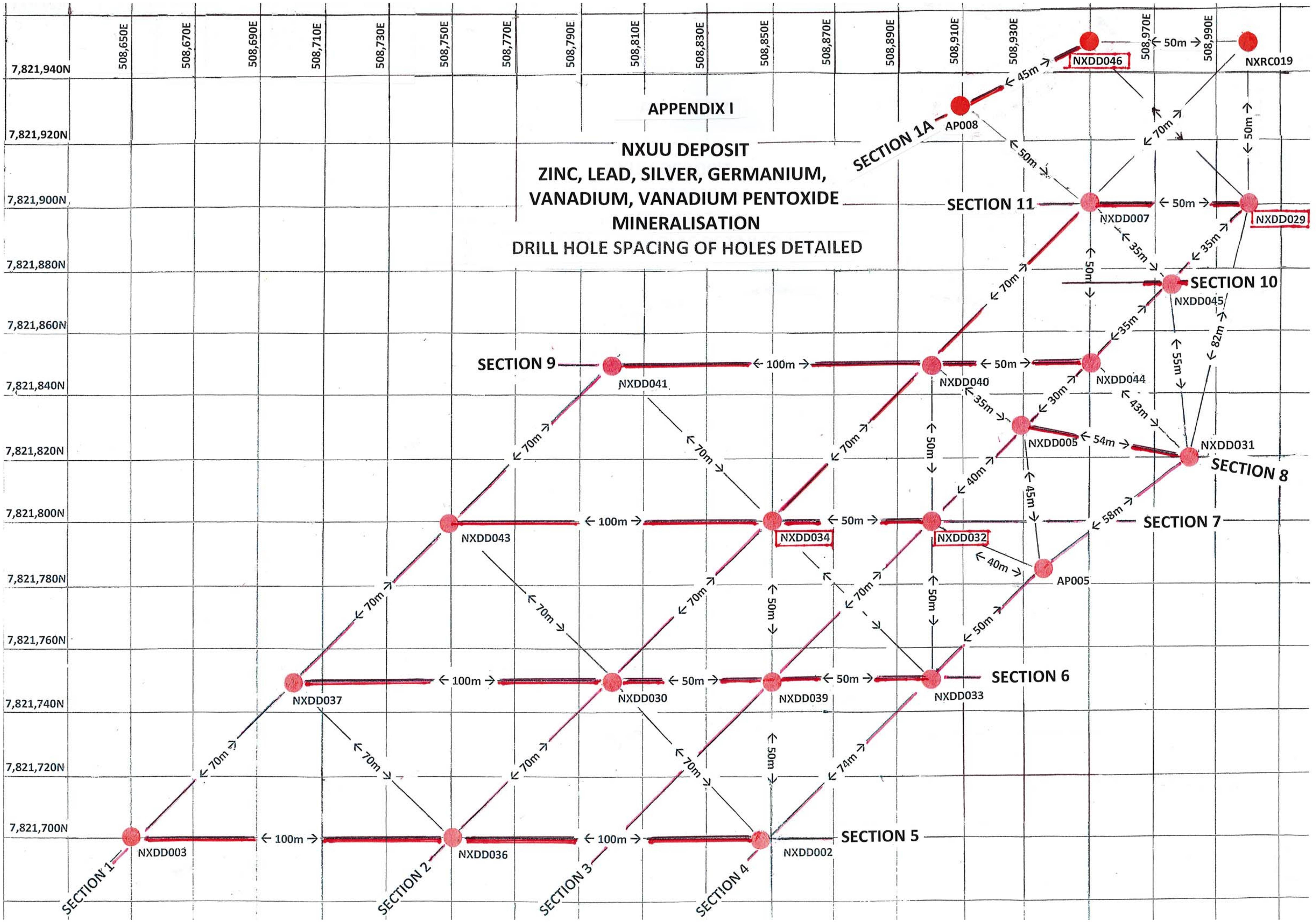
Competent Persons' Statements:

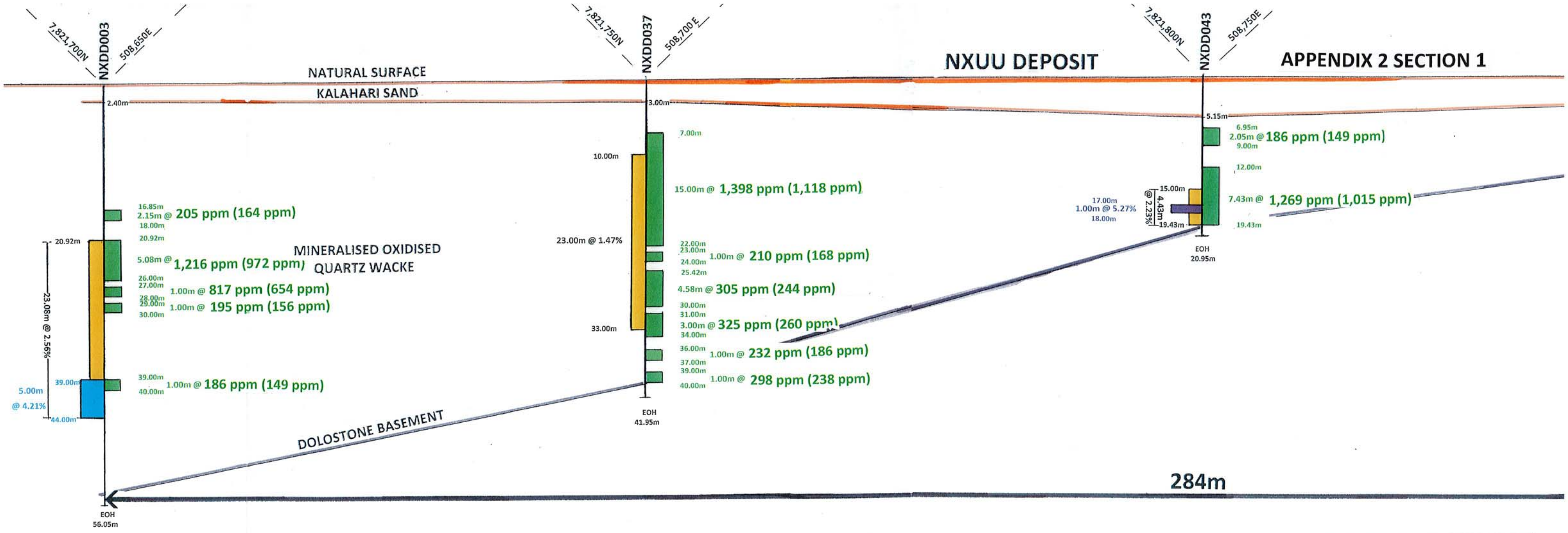
The information in this report that relates to drilling results at the Nxuu Deposit fairly represents information and supporting documentation approved for release by Giles Rodney Dale FRMIT who is a Fellow of the Australasian Institute of Mining & Metallurgy. Mr Dale is engaged as an independent Geological Consultant to the Company. Mr Dale has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Mr Dale consents to the inclusion in this report of the drilling results and the supporting information in the form and context as it appears.

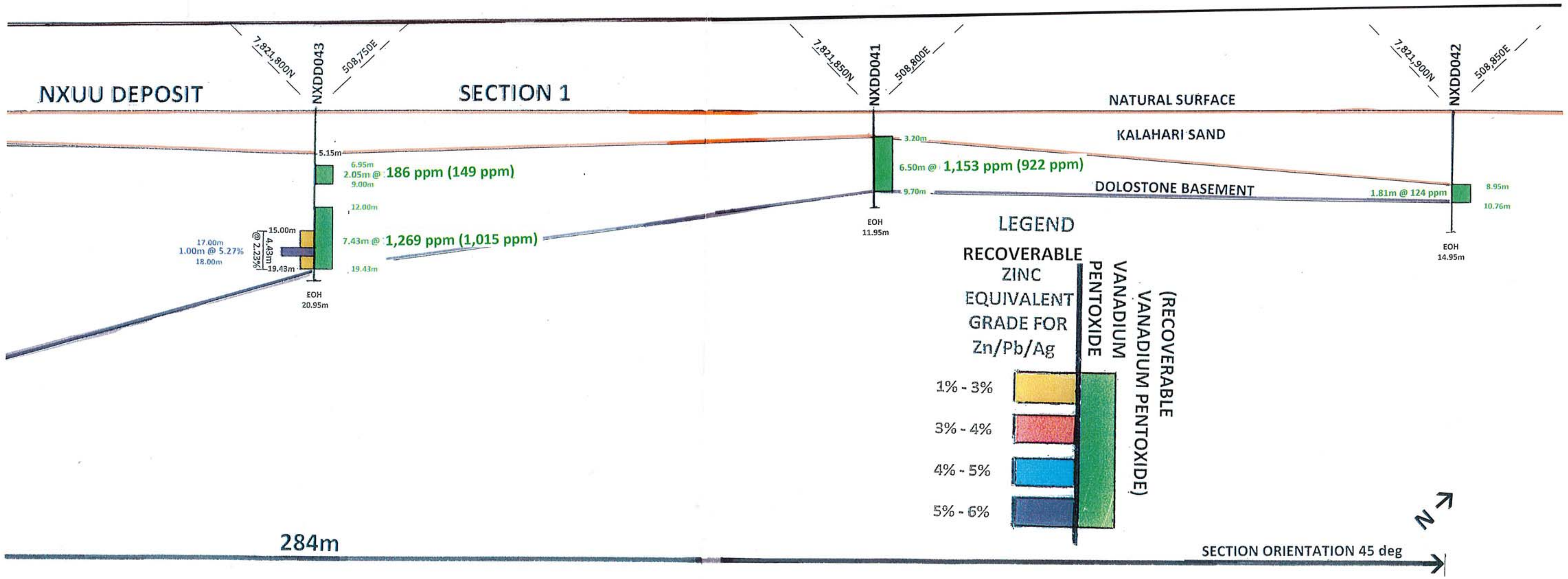
The information in this report that relates to mineralogical and metallurgical test work results conducted on samples from the Nxuu Deposit fairly represents information and supporting documentation approved for release by Mr Chris Campbell-Hicks, Metallurgist, FAusIMM (CP Metallurgy),MMICA, Non-Executive Director of the Company, who reviewed the content of the announcement. Mr Campbell-Hicks has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code and has consented to the inclusion in respect of the matters based on the information in the form and context in which it appears.

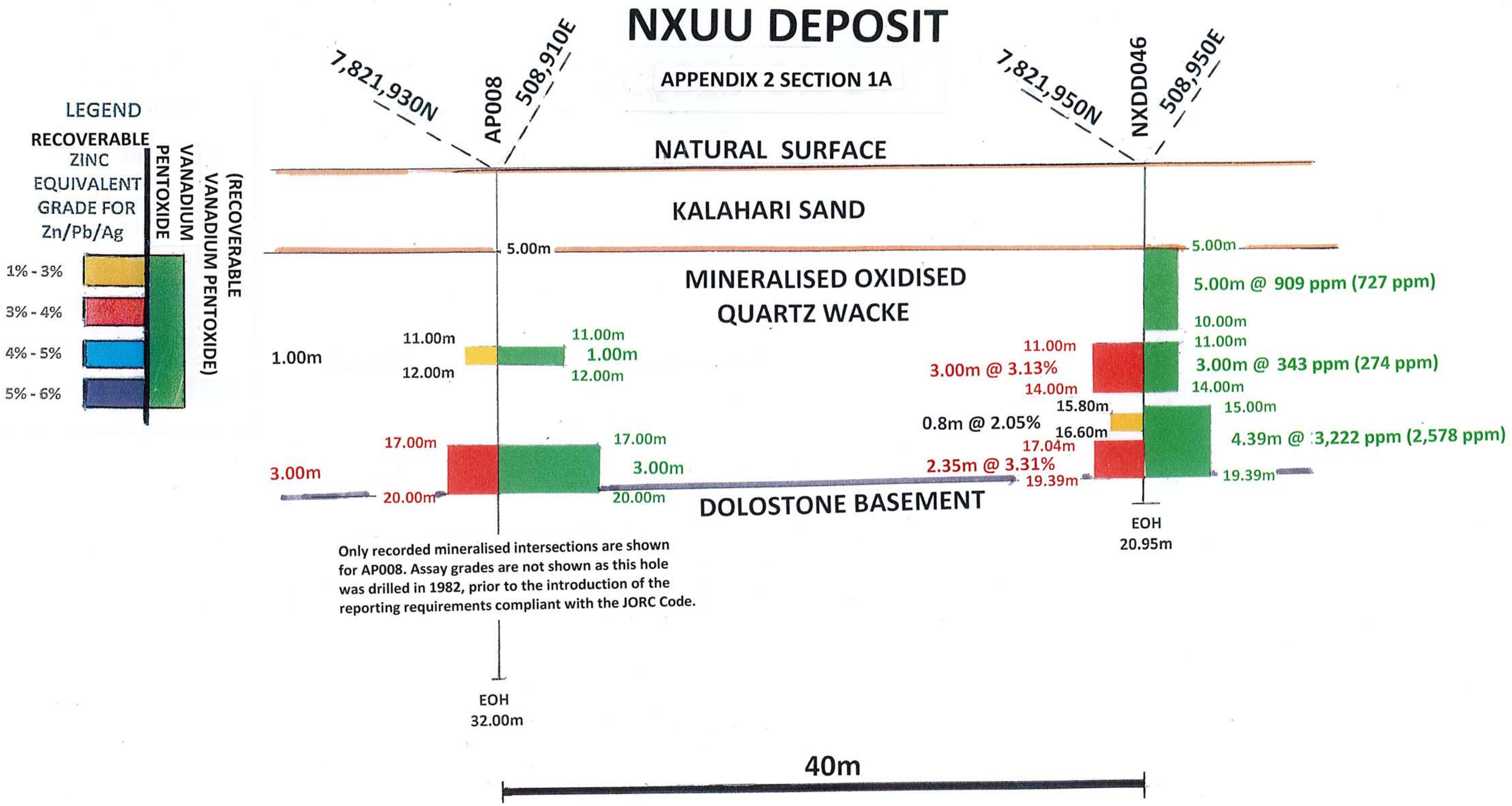
Mr Campbell-Hicks has for a number of years whilst working with Coffey Mining and other consultancies and companies made contributions to numerous Scoping Studies, Pre-feasibility Studies and Feasibility Studies under the 2004 JORC Code, the 2012 JORC Code and the Canadian National Instrument (NI 43-101). As such he qualifies as a Competent Person for reporting on matters pertaining to metallurgy, process engineering and interpretation of test work results and data for the establishment of Design Criteria for such studies.

ACN: 009 067 476
8/800 Albany Hwy, East Victoria Park,
Western Australia 6101
Tel: (61 8) 9355 0123
Fax: (61 8) 9355 1484
mtb@mountburgess.com

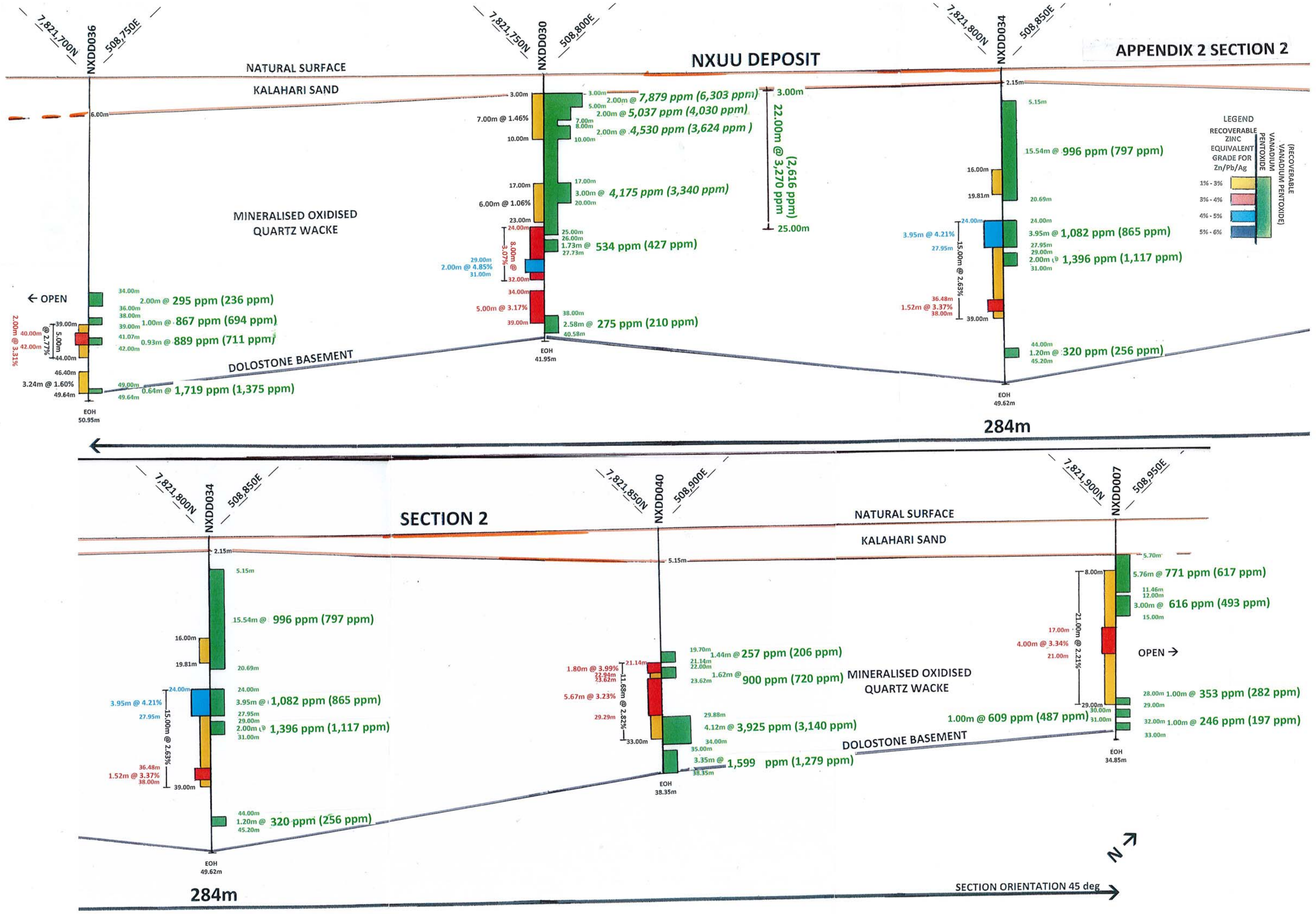

APPENDIX I
NXUU DEPOSIT
ZINC, LEAD, SILVER, GERMANIUM,
VANADIUM, VANADIUM PENTOXIDE
MINERALISATION
DRILL HOLE SPACING OF HOLES DETAILED
508,650E
508,670E
508,690E
508,710E
508,730E
508,750E
508,770E
508,790E
508,810E
508,830E
508,850E
508,870E
508,890E
508,910E
508,930E
508,970E
508,990E
7,821,940N
7,821,920N
7,821,900N
7,821,880N
7,821,860N
7,821,840N
7,821,820N
7,821,800N
7,821,780N
7,821,760N
7,821,740N
7,821,720N
7,821,700N
NXDD046
NXRC019
AP008
SECTION 1A
SECTION 11
NXDD007
NXDD029
SECTION 10
NXDD045
SECTION 9
NXDD041
NXDD040
NXDD044
NXDD005
NXDD031
SECTION 8
NXDD043
NXDD034
NXDD032
SECTION 7
AP005
NXDD037
NXDD030
NXDD039
NXDD033
SECTION 6
NXDD003
NXDD036
NXDD002
SECTION 5
SECTION 1
SECTION 2
SECTION 3
SECTION 4
45m
50m
70m
35m
82m
55m
43m
54m
30m
40m
58m
100m
74m


NXUU DEPOSIT
APPENDIX 2 SECTION 1
NXDD003
7,821,700N
508,650E
NXDD037
7,821,750N
508,700E
NXDD043
7,821,800N
508,750E
NATURAL SURFACE
KALAHARI SAND
2.40m
3.00m
5.15m
16.85m
2.15m @ 205 ppm (164 ppm)
18.00m
20.92m
5.08m @ 1,216 ppm (972 ppm)
26.00m
27.00m
1.00m @ 817 ppm (654 ppm)
28.00m
29.00m
1.00m @ 195 ppm (156 ppm)
30.00m
23.08m @ 2.56%
39.00m
40.00m
1.00m @ 186 ppm (149 ppm)
5.00m
@ 4.21%
44.00m
MINERALISED OXIDISED
QUARTZ WACKE
7.00m
10.00m
15.00m @ 1,398 ppm (1,118 ppm)
23.00m @ 1.47%
22.00m
23.00m
1.00m @ 210 ppm (168 ppm)
24.00m
25.42m
4.58m @ 305 ppm (244 ppm)
30.00m
31.00m
3.00m @ 325 ppm (260 ppm)
34.00m
33.00m
36.00m
1.00m @ 232 ppm (186 ppm)
37.00m
39.00m
1.00m @ 298 ppm (238 ppm)
40.00m
EOH
41.95m
6.95m
2.05m @ 186 ppm (149 ppm)
9.00m
12.00m
15.00m
17.00m
1.00m @ 5.27%
18.00m
4.43m
@ 2.23%
7.43m @ 1,269 ppm (1,015 ppm)
19.43m
EOH
20.95m
DOLOSTONE BASEMENT
284m
EOH
56.05m


NXUU DEPOSIT
SECTION 1
NXDD043
7,821,800N
508,750E
NXDD041
7,821,850N
508,800E
NXDD042
7,821,900N
508,850E
NATURAL SURFACE
KALAHARI SAND
5.15m
6.95m
2.05m @ 186 ppm (149 ppm)
9.00m
12.00m
15.00m
17.00m
1.00m @ 5.27%
18.00m
4.43m
@ 2.23%
7.43m @ 1,269 ppm (1,015 ppm)
19.43m
EOH
20.95m
3.20m
6.50m @ 1,153 ppm (922 ppm)
9.70m
EOH
11.95m
DOLOSTONE BASEMENT
8.95m
1.81m @ 124 ppm
10.76m
EOH
14.95m
LEGEND
RECOVERABLE
ZINC
EQUIVALENT
GRADE FOR
Zn/Pb/Ag
VANADIUM
PENTOXIDE
(RECOVERABLE
VANADIUM PENTOXIDE)
1% - 3%
3% - 4%
4% - 5%
5% - 6%
N
284m
SECTION ORIENTATION 45 deg

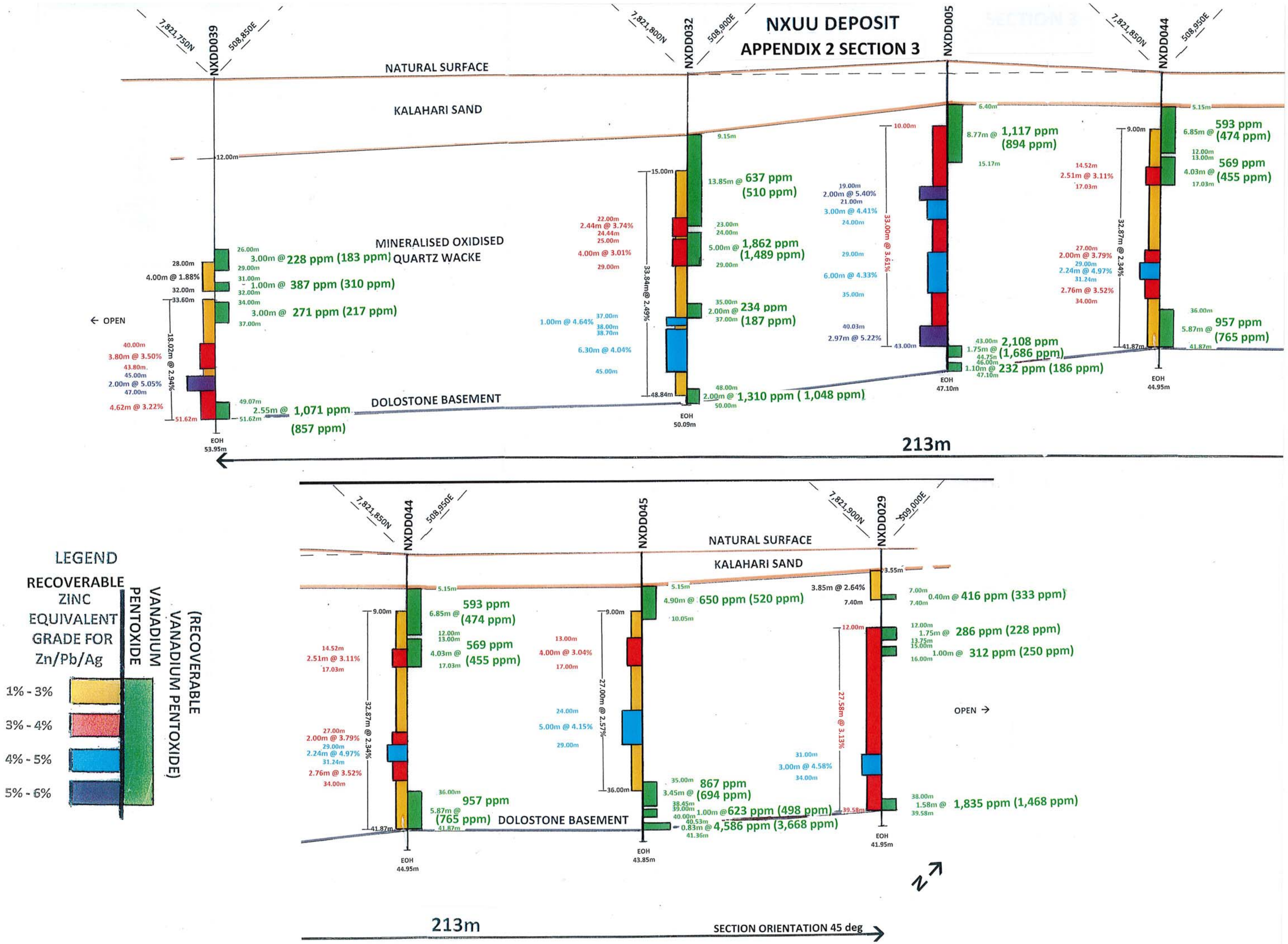


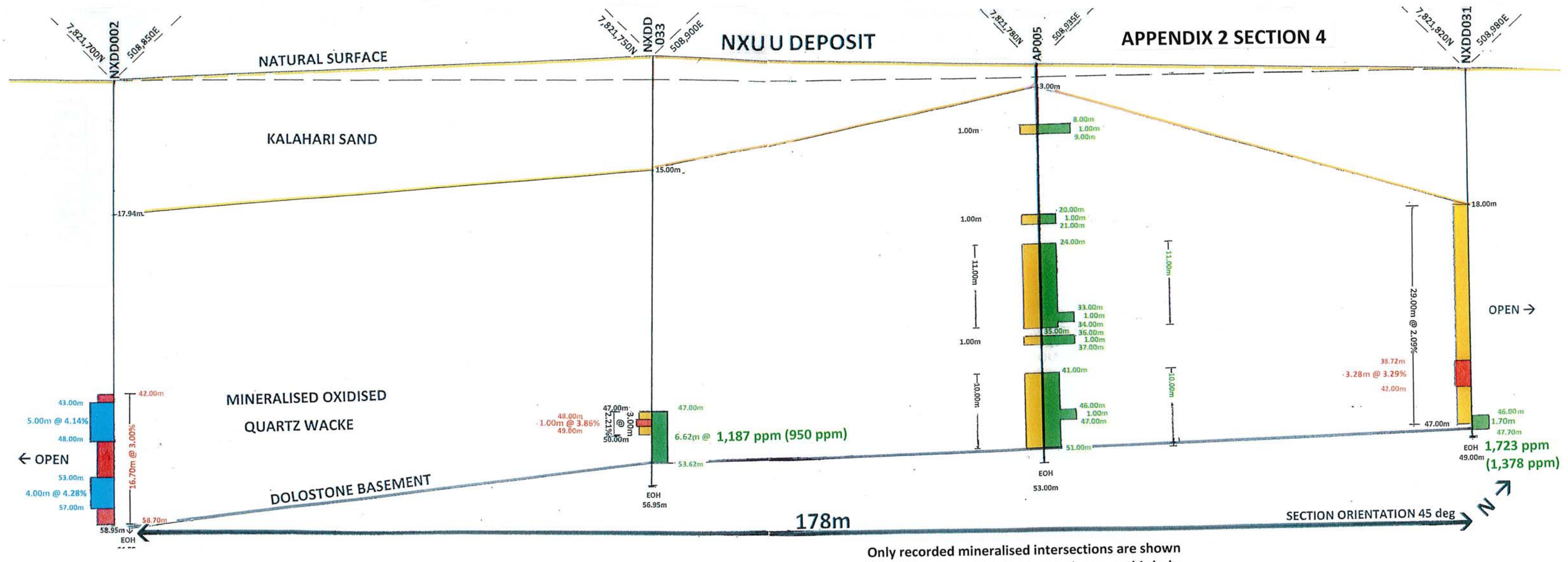
NXUU DEPOSIT
APPENDIX 2 SECTION 1A
LEGEND
RECOVERABLE ZINC EQUIVALENT GRADE FOR Zn/Pb/Ag
1% - 3%
3% - 4%
4% - 5%
5% - 6%
VANADIUM PENTOXIDE
(RECOVERABLE VANADIUM PENTOXIDE)
7,821,930N
AP008
508,910E
7,821,950N
NXDD046
508,950E
NATURAL SURFACE
KALAHARI SAND
5.00m
MINERALISED OXIDISED QUARTZ WACKE
11.00m
12.00m
1.00m
11.00m
1.00m
12.00m
17.00m
3.00m
20.00m
17.00m
3.00m
20.00m
DOLOSTONE BASEMENT
Only recorded mineralised intersections are shown for AP008. Assay grades are not shown as this hole was drilled in 1982, prior to the introduction of the reporting requirements compliant with the JORC Code.
EOH
32.00m
5.00m
5.00m @ 909 ppm (727 ppm)
10.00m
11.00m
11.00m
3.00m @ 3.13%
3.00m @ 343 ppm (274 ppm)
14.00m
14.00m
15.80m
15.00m
0.8m @ 2.05%
16.60m
17.04m
4.39m @ 3,222 ppm (2,578 ppm)
2.35m @ 3.31%
19.39m
19.39m
EOH
20.95m
40m



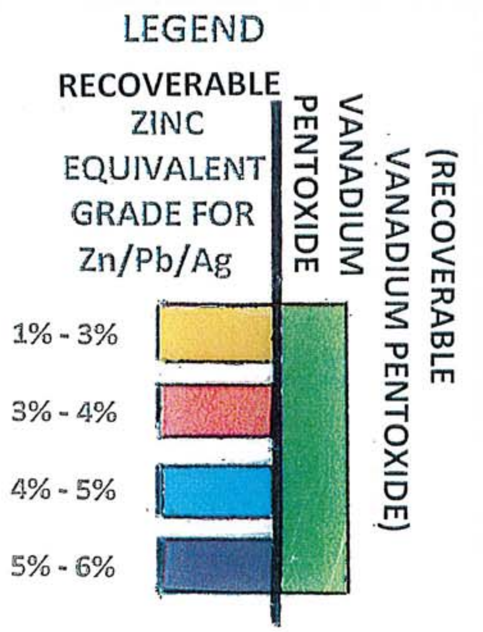
APPENDIX 2 SECTION 2
NXUU DEPOSIT
NATURAL SURFACE
KALAHARI SAND
MINERALISED OXIDISED QUARTZ WACKE
DOLOSTONE BASEMENT
7,821,700N
NXDD036
508,750E
7,821,750N
NXDD030
508,800E
7,821,800N
NXDD034
508,850E
22.00m @ 3,270 ppm (2,616 ppm)
2.00m @ 7,879 ppm (6,303 ppm)
2.00m @ 5,037 ppm (4,030 ppm)
2.00m @ 4,530 ppm (3,624 ppm)
3.00m @ 4,175 ppm (3,340 ppm)
1.73m @ 534 ppm (427 ppm)
2.58m @ 275 ppm (210 ppm)
7.00m @ 1.46%
6.00m @ 1.06%
8.00m @ 3.07%
2.00m @ 4.85%
5.00m @ 3.17%
← OPEN
2.00m @ 295 ppm (236 ppm)
1.00m @ 867 ppm (694 ppm)
0.93m @ 889 ppm (711 ppm)
0.64m @ 1,719 ppm (1,375 ppm)
2.00m @ 3.31%
5.00m @ 2.77%
3.24m @ 1.60%
EOH 50.95m
EOH 41.95m
EOH 49.62m
15.54m @ 996 ppm (797 ppm)
3.95m @ 1,082 ppm (865 ppm)
2.00m @ 1,396 ppm (1,117 ppm)
1.20m @ 320 ppm (256 ppm)
3.95m @ 4.21%
15.00m @ 2.63%
1.52m @ 3.37%
LEGEND
RECOVERABLE ZINC EQUIVALENT GRADE FOR Zn/Pb/Ag
VANADIUM PENTOXIDE
(RECOVERABLE VANADIUM PENTOXIDE)
1% - 3%
3% - 4%
4% - 5%
5% - 6%
284m
SECTION 2
7,821,850N
NXDD040
508,900E
7,821,900N
NXDD007
508,950E
1.44m @ 257 ppm (206 ppm)
1.62m @ 900 ppm (720 ppm)
4.12m @ 3,925 ppm (3,140 ppm)
3.35m @ 1,599 ppm (1,279 ppm)
1.80m @ 3.99%
5.67m @ 3.23%
11.68m @ 2.82%
EOH 38.35m
5.76m @ 771 ppm (617 ppm)
3.00m @ 616 ppm (493 ppm)
4.00m @ 3.34%
21.00m @ 2.21%
OPEN →
1.00m @ 353 ppm (282 ppm)
1.00m @ 609 ppm (487 ppm)
1.00m @ 246 ppm (197 ppm)
EOH 34.85m
N
SECTION ORIENTATION 45 deg

NXUU DEPOSIT
APPENDIX 2 SECTION 3





Only recorded mineralised intersections are shown for AP005. Assay grades are not shown as this hole was drilled in 1982, prior to the introduction of the reporting requirements compliant with the JORC Code.



Appendix 3 – Nxuu Deposit - Drill Hole details showing widths of recoverable Zinc/Lead/Silver and Vanadium Pentoxide Mineralised Zones

SECTION 1

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Recoverable Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	Depth (m)	(m)	ppm	Depth (m)	(m)	%
NXDD003	508,650	7,821,700	-90	0	56.05/1158	00.00-16.85	16.85						
								16.85-18.00	1.15	164			
						18.00-20.92	2.92						
								20.92-26.00	5.08	972	20.92		
								27.00-28.00	1.00	654			
								29.00-30.00	1.00	156		23.08	**2.56**
								39.00-40.00	1.00	149			
											44.00		
										including	39.00-44.00	5.00	**4.21**
NXDD037	508,700	7,821,750	-90	0	41.95/1133	0.00-7.00	7.00						
								7.00-22.00	15.00	1,118			
								23.00-24.00	1.00	168	10.00		
								25.42-30.00	4.58	244		23.00	**1.47**
								31.00-34.00	3.00	260	33.00		
						34.00-36.00	2.00						
								36.00-37.00	1.00	186			
						37.00-39.00	2.00						
								39.00-40.00	1.00	238			
NXDD043	508,750	7,821,800	-90	0	20.95/1132	00.00-6.95	6.95						
								6.95-9.00	2.05	149			
						9.00-12.00	3.00						
								12.00					
											15.00		
									7.43	1,015		4.43	**2.23**
								19.43			19.43		
										including	17.00-18.00	1.00	**5.27**
NXDD041	508,800	7,821,850	-90	0	11.95/1133	00.00-3.20	3.20						
						3.20-9.70		3.20-9.70	6.50	922			

SECTION 1A

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	(m)	(m)	ppm	Depth (m)	(m)	%
NXDD046	508,950	7,821,950	-90	0	20.95/1156	00.00-5.00	34.00						
								5.00-10.00	5.00	727			
						10.00-11.00	1.00						
								11.00-14.00	3.00	274	11.00-14.00	3.00	3.13
						14.00-15.00	1.00						
								15.00			15.80		
									4.39	2,578	16.60	0.80	2.05
											17.04		
								19.39			19.39	2.35	3.31

SECTION 2

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	(m)	(m)	ppm	Depth (m)	(m)	%
NXDD036	508,750	7,821,700	-90	0	50.95/1133	00.00-34.00	34.00						
								34.00-36.00	2.00	236			
						36.00-38.00	2.00						
								38.00-39.00	1.00	694	39.00		
								41.07-42.00	0.93	711		5.00	**2.77**
											44.00		
										including	40.00-42.00	2	**3.31**
						44.00-46.40	2.40						
											46.40		
								49.00-49.64	0.64	1,375	49.64	3.24	**1.60**

SECTION 2 (cont'd)

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	(m)	(m)	ppm	Depth (m)	(m)	%
NXDD030	508,800	7,821,750	-90	0	41.95/1132	00.00-3.00	3.00						
								3.00 25.00	22.00	2,616	3.00-10.00	7.00	**1.46**
											17.00-23.00	6.00	**1.06**
							including	3.00-5.00	2.00	6,303	24.00 32.00	8.00	**3.07**
							and	5.00-7.00	2.00	4,030			
							and	8.00-10.00	2.00	3,624			
							and	17.00-20.00	3.00	3,340			
								26.00-27.73	1.73	427			
										including	29.00-31.00	2.00	**4.85**
						32.00-34.00	2.00						
								38.00 40.58	2.58	210	34.00 39.00	5.00	**3.17**
NXDD034	508,850	7,821,800	-90	0	49.62/1132	00.00-5.15	5.15						
								5.15 20.69	15.54	797	16.00-19.81	3.81	**1.94**
						20.69-24.00	3.31						
								24.00-27.95	3.95	865	24.00 39.00	15.00	**2.63**
								29.00-31.00	2.00	1,117			
										including	24.00-27.95	3.95	**4.21**
										and	36.48-38.00	1.52	**3.37**

SECTION 2 (cont'd)

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	(m)	(m)	ppm	Depth (m)	(m)	%
NXDD040	508,900	7,821,850	-90	0	38.35/1131	00.00-19.70	19.70						
								19.70-21.14	1.44	206	21.14	11.86	**2.82**
								22.00-23.62	1.62	720			
								29.88 34.00	4.12	3,140	33.00		
						34.00-35.00	1.00						
								35.00-38.35	3.35	1,279			
NXDD007	508,950	7,821,900	-90	0	34.85/1156	00.00-5.70	5.70						
								5.70 11.46	5.76	617	8.00	21.00	**2.21**
								12.00-15.00	3.00	493			
								28.00-29.00	1.00	282	29.00		
										Including	17.00-21.00	4.00	**3.34**
						29.00-30.00	1.00						
								30.00-31.00	1.00	487			
						31.00-32.00	1.00						
								32.00-33.00	1.00	197			

SECTION 3

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable VanadiumPentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	(m)	(m)	ppm	Depth (m)	(m)	%
NXDD039	508,850	7,821,750	-90	0	53.95/1132	00.00-26.00	26.00						
								26.00 29.00	3.00	183	28.00 32.00	4.00	**1.88**
								31.00-32.00	1.00	310			
						32.00-33.60	1.60						
								34.00-37.00	3.00	217	33.60 51.62	18.02	**2.94**
								49.07-51.62	2.55	857			
										including	40.00-43.80	3.80	**3.50**
										and	45.00-47.00	2.00	**5.05**
										and	47.00-51.62	4.62	**3.22**
NXDD032	508,900	7,821,800	-90	0	50.95/1132	00.00-9.15	9.15						
								9.15 23.00	13.85	510	15.00 48.84	33.84	**2.49**
								24.00-29.00	5.00	1,489			
								35.00-37.00	2.00	187			
										including	22.00-24.44	2.44	**3.74**
										and	25.00-29.00	4.00	**3.01**
										and	37.00-38.00	1.00	**4.64**
										and	38.70-45.00	6.30	**4.04**
								48.00-50.00	2.00	1,048			

SECTION 3 (Cont'd)

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	Depth (m)	(m)	ppm	Depth (m)	(m)	%
NXDD005	508,926	7,821,829	-90	0	47.70/1157	00.00-6.40	6.40						
								6.40 15.70	8.77	894	10.00 43.00	33.00	**3.61**
										including	19.00-21.00	2.00	**5.40**
										and	21.00-24.00	3.00	**4.41**
										and	29.00-35.00	6.00	**4.33**
										and	40.03-00	2.97	**5.22**
								43.00-44.75	1.75	1,686			
						44.75-46.00	1.25						
								46.00-47.10	1.10	186			
NXDD044	508,950	7,821,850	-90	0	44.95/1131	00.00-5.15	5.15						
								5.15 12.00	6.85	474	9.00 41.87	32.87	**2.34**
								13.00-17.03	4.03	455			
								36.00-41.87	5.87	765			
										including	14.52-17.03	2.51	**3.11**
										and	27.00-29.00	2.00	**3.79**
										and	29.00-31.24	2.24	**4.97**
										and	31.24-34.00	2.76	**3.52**

SECTION 3 (Cont'd)

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc Equivalent Mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	Depth (m)	(m)	ppm	Depth (m)	(m)	%
NXDD045	508,975	7,821,875	-90	0	43.85/1132	00.00-5.15	5.15						
								5.15 10.05	4.90	520	9.00 36.00	27.00	**2.57**
								35.00 38.45	3.45	694			
										including	13.00-17.00	4.00	**3.04**
										and	24.00-29.00	5.00	**4.15**
						38.45-39.00	0.55						
								39.00-40.00	1.00	498			
						40.00-40.53	0.53						
								40.53-41.36	0.83	3,668			
NXDD029	509,000	7,821,900	-90	0	41.95/1131	00.00-3.55	3.55						
											3.55 7.40	3.85	**2.64**
								7.00-7.40	0.40	333			
						7.40-12.00	4.60						
								12.00-13.75	1.75	228	12.00 39.58	27.58	**3.13**
								15.00-16.00	1.00	250			
								38.00-39.58	1.58	1,468			
										including	31.00-34.00	3.00	**4.58**

SECTION 4

HOLE ID	COORDINATES		DIP	AZI-MUTH	EOH/RL	Not Mineralised		Recoverable Vanadium Pentoxide Mineralisation			Zn/Pb/Ag Zinc equiv mineralisation		
	Easting	Northing	Degs.	Degs.	(m)	Depth (m)	(m)	Depth (m)	(m)	ppm	Depth (m)	(m)	%
NXDD002	508,845	7,821,699	-90	0	64.55/1160	00.00-42.00	42.00						
											42.00-58.70	16.70	**3.00**
										including	*43.00-48.00*	*5.00*	***4.14***
										and	*53.00-57.00*	*4.00*	***4.28***
NXDD033	508,900	7,821,750	-90	0	56.95/1132	00.00-47.00	47.00						
								47.00			47.00-50.00	3.00	**2.21**
										including	48.00-49.00	1.00	**3.86**
								53.62	6.62	950			
NXDD031	508,980	7,821,820	-90	0	49.00/1131	00.00-18.00	18.00						
											18.00		
								46.00	1.70	965	47.00	29.00	**2.09**
										including	38.72-42.00	3.28	**3.29**
								47.70					

Assays for Ag, Pb and Zn determining Zn Equiv Grade

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD003	20.92	22.00	1.08	7.0		0.73	0.56	1.20		
NXDD003	22.00	23.00	1.00	8.0		0.96	0.87	1.69		
NXDD003	23.00	24.00	1.00	7.0		0.35	0.73	1.08		
NXDD003	24.00	24.97	0.97	21.0		1.55	1.08	2.49		
NXDD003	24.97	26.00	1.03	17.0		1.19	2.74	3.84		
NXDD003	26.00	27.00	1.00	14.0		0.48	2.36	2.89		
NXDD003	27.00	28.00	1.00	11.0		0.43	1.04	1.49		
NXDD003	28.00	29.00	1.00	7.0		0.43	0.61	1.02		
NXDD003	29.00	29.55	0.55	7.0		0.65	0.40	0.97		
NXDD003	29.55	30.00	0.45	3.0		0.53	0.54	0.98	23.08m @ 2.56%ZnEq	
NXDD003	30.00	31.00	1.00	2.0		0.15	0.69	0.83		
NXDD003	31.00	32.00	1.00	2.0		0.12	0.68	0.79		
NXDD003	32.00	33.00	1.00	2.0		0.13	0.42	0.54		
NXDD003	33.00	34.00	1.00	2.0		0.21	0.58	0.76		
NXDD003	34.00	35.00	1.00	2.0		0.13	1.55	1.67		
NXDD003	35.00	36.00	1.00	6.0		0.52	2.70	3.16		
NXDD003	36.00	37.00	1.00	8.0		0.80	1.19	1.89		
NXDD003	37.00	38.00	1.00	9.0		0.99	0.87	1.73		
NXDD003	38.00	39.00	1.00	7.0		0.77	3.50	4.16		
NXDD003	39.00	40.00	1.00	4.0		0.42	4.98	5.34		
NXDD003	40.00	41.00	1.00	6.0		0.62	2.10	2.64		
NXDD003	41.00	42.00	1.00	13.0		1.35	3.36	4.53		5.00m @ 4.21% ZnEq
NXDD003	42.00	43.00	1.00	10.0		1.01	4.34	5.22		
NXDD003	43.00	44.00	1.00	8.0		0.64	2.76	3.33		
NXDD037	10.00	10.77	0.77	4.0	2	0.86	0.24	0.94		
NXDD037	10.77	12.00	1.23	9.1	2	1.07	0.20	1.12		
NXDD037	12.00	12.83	0.83	13.6	5	0.55	0.07	0.65		
NXDD037	12.83	14.00	1.17	27.8	6	0.96	0.29	1.35		
NXDD037	14.00	15.00	1.00	18.5	4	0.89	1.01	1.90		
NXDD037	15.00	16.00	1.00	14.0	3	0.49	0.53	1.06		
NXDD037	16.00	16.65	0.65	5.4	3	0.77	0.40	1.04		
NXDD037	16.65	17.00	0.35	19.0	5	0.45	0.43	1.00		
NXDD037	17.00	18.00	1.00	15.2	4	1.01	0.80	1.75		
NXDD037	18.00	19.00	1.00	4.3	2	0.26	1.03	1.28		
NXDD037	19.00	20.00	1.00	5.2	2	0.18	0.82	1.01		
NXDD037	20.00	20.57	0.57	5.5	2	0.10	0.75	0.89	23.00m @ 1.47% ZnEq	
NXDD037	20.57	21.00	0.43	7.1	3	0.42	0.81	1.21		
NXDD037	21.00	22.00	1.00	6.3	3	0.45	0.93	1.34		
NXDD037	22.00	23.00	1.00	6.2	2	0.30	0.88	1.18		
NXDD037	23.00	24.00	1.00	4.2	2	0.36	0.72	1.04		
NXDD037	24.00	25.00	1.00	11.2	3	0.68	0.93	1.57		
NXDD037	25.00	25.42	0.42	14.8	4	1.37	2.00	3.21		
NXDD037	25.42	26.00	0.58	14.2	5	0.22	1.83	2.16		
NXDD037	26.00	26.82	0.82	9.1	5	0.22	1.22	1.49		3.00m @ 2.82% ZnEq
NXDD037	26.82	28.00	1.18	19.4	8	1.11	2.87	3.94		
NXDD037	28.00	29.00	1.00	5.4	4	0.22	1.07	1.30		
NXDD037	29.00	30.00	1.00	2.7	4	0.31	0.74	1.01		
NXDD037	30.00	31.00	1.00	9.5	7	0.66	0.95	1.56		
NXDD037	31.00	32.00	1.00	15.0	7	0.72	1.18	1.90		
NXDD037	32.00	33.00	1.00	9.2	6	0.33	0.83	1.19		
NXDD043	15.00	16.00	1.00	7.1	3	0.98	0.43	1.25		
NXDD043	16.00	17.00	1.00	30.5	4	1.03	0.62	1.76		
NXDD043	17.00	18.00	1.00	108.2	6	2.96	1.77	5.27	4.43m @ 2.23% ZnEq	1.00m @ 5.27% ZnEq
NXDD043	18.00	19.00	1.00	10.3	3	0.16	0.74	0.98		
NXDD043	19.00	19.43	0.43	10.1	3	0.86	0.68	1.45		
NXDD036	39.00	40.00	1.00	19.1	4	1.35	1.57	2.82		
NXDD036	40.00	41.07	1.07	53.1	3	3.20	1.27	4.31	5.00m @ 2.77% ZnEq	

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD036	41.07	42.00	0.93	9.9	3	0.54	1.63	2.16		2.00m @ 3.31% ZnEq
NXDD036	42.00	43.00	1.00	8.1	4	0.27	1.76	2.06		
NXDD036	43.00	43.55	0.55	15.8	4	0.79	1.47	2.25		
NXDD036	43.55	44.00	0.45	19.4	5	1.79	0.92	2.50		
NXDD036	46.40	47.50	1.10	33.2	5	1.54	0.09	1.64		
NXDD036	47.50	48.00	0.50	10.8	5	0.99	0.35	1.23	3.24m @ 1.60% ZnEq	
NXDD036	48.00	49.00	1.00	13.9	4	1.15	0.31	1.34		
NXDD036	49.00	49.64	0.64	3.2	4	0.70	1.66	2.23		
NXDD030	3.00	4.00	1.00	5.2	5	1.91	0.39	1.89		
NXDD030	4.00	5.00	1.00	5.5	6	2.06	0.48	2.10		
NXDD030	5.00	6.00	1.00	5.6	5	1.48	0.12	1.30		
NXDD030	6.00	7.00	1.00	2.6	4	1.26	0.15	1.13	7.00m @ 1.46% ZnEq	
NXDD030	7.00	7.45	0.45	1.8	3	1.21	0.24	1.17		
NXDD030	7.45	8.00	0.55	5.4	3	0.97	0.06	0.86		
NXDD030	8.00	9.00	1.00	9.9	5	1.67	0.23	1.61		
NXDD030	9.00	10.00	1.00	9.6	6	1.37	0.06	1.21		
NXDD030	17.00	18.00	1.00	6.1	3	1.28	0.39	1.42		
NXDD030	18.00	19.00	1.00	3.2	3	0.65	0.25	0.78		
NXDD030	19.00	20.00	1.00	4.9	5	1.33	0.39	1.45	6.00m @ 1.06% ZnEq	
NXDD030	20.00	21.00	1.00	4.5	6	0.58	0.22	0.71		
NXDD030	21.00	21.83	0.83	3.0	6	0.88	0.20	0.90		
NXDD030	21.83	23.00	1.17	6.7	5	0.90	0.29	1.05		
NXDD030	24.00	25.00	1.00	15.6	7	1.53	1.52	2.85		2.00m @ 3.67% ZnEq
NXDD030	25.00	26.00	1.00	31.4	6	2.32	2.38	4.50		
NXDD030	26.00	26.35	0.35	11.8	6	0.44	0.16	0.63		
NXDD030	26.35	27.00	0.65	11.1	7	0.56	1.78	2.34		
NXDD030	27.00	27.73	0.73	19.0	6	0.91	0.74	1.65		
NXDD030	27.73	29.00	1.27	37.5	7	1.55	0.79	2.41	8.00m @ 3.07% ZnEq	
NXDD030	29.00	30.00	1.00	35.0	8	1.53	3.07	4.64		
NXDD030	30.00	30.44	0.44	22.8	9	1.29	3.54	4.78		2.00M @ 4.85% ZnEq
NXDD030	30.44	31.00	0.56	27.8	10	1.19	4.05	5.27		
NXDD030	31.00	32.00	1.00	3.9	5	0.06	1.40	1.49		
NXDD030	34.00	35.00	1.00	6.1	3	0.58	1.47	1.98		
NXDD030	35.00	36.09	1.09	19.2	4	0.85	3.14	4.01		
NXDD030	36.09	37.00	0.91	13.3	4	1.28	1.81	2.93		
NXDD030	37.00	37.55	0.55	21.2	4	2.36	1.86	3.89	5.00m @ 3.17% ZnEq	3.00m @ 3.73% ZnEq
NXDD030	37.55	38.00	0.45	23.7	5	1.71	2.88	4.45		
NXDD030	38.00	38.46	0.46	16.6	7	0.45	2.57	3.11		
NXDD030	38.46	39.00	0.54	14.1	5	0.15	2.03	2.30		
NXDD034	16.00	16.45	0.45	4.2	4	0.41	1.39	1.75		
NXDD034	16.45	17.00	0.55	7.4	4	1.16	1.43	2.39		
NXDD034	17.00	17.95	0.95	13.2	4	2.10	1.70	3.44	3.81m @ 1.94% ZnEq	
NXDD034	17.95	19.00	1.05	2.7	4	0.87	0.45	1.14		
NXDD034	19.00	19.81	0.81	4.5	4	0.68	0.47	1.04		
NXDD034	24.00	24.29	0.29	19.8	7	1.54	1.28	2.67		
NXDD034	24.29	24.80	0.51	67.1	10	5.52	3.45	8.40		
NXDD034	24.80	26.00	1.20	29.5	6	4.01	0.57	3.94		
NXDD034	26.00	26.97	0.97	18.1	4	0.53	1.50	2.11		3.66m @ 4.21% ZnEq
NXDD034	26.97	27.95	0.98	52.1	6	3.66	1.05	4.42		
NXDD034	27.95	29.00	1.05	5.6	3	0.37	1.71	2.05		
NXDD034	29.00	30.00	1.00	6.5	4	0.45	1.75	2.17		
NXDD034	30.00	31.00	1.00	6.0	3	0.51	1.23	1.69		
NXDD034	31.00	31.43	0.43	3.9	3	0.04	1.37	1.45		
NXDD034	31.43	32.00	0.57	10.2	3	0.33	1.22	1.59		
NXDD034	32.00	33.00	1.00	2.6	2	0.31	1.11	1.37	15.00m @ 2.63% ZnEq	
NXDD034	33.00	34.00	1.00	4.6	2	0.61	0.98	1.49		
NXDD034	34.00	34.35	0.35	3.0	3	0.38	1.51	1.83		
NXDD034	34.35	35.00	0.65	7.6	2	0.73	1.90	2.54		
NXDD034	35.00	35.42	0.42	7.6	3	0.86	2.17	2.91		
NXDD034	35.42	36.00	0.58	3.8	3	0.35	1.89	2.20		
NXDD034	36.00	36.48	0.48	4.0	3	0.29	2.01	2.28		
NXDD034	36.48	37.00	0.52	5.1	4	0.63	2.49	3.03		1.52m @ 3.37% ZnEq

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD034	37.00	38.00	1.00	5.5	3	0.49	3.11	3.54		
NXDD034	38.00	39.00	1.00	2.9	2	0.17	1.68	1.84		
NXDD040	21.14	22.00	0.86	16.0	6	2.32	3.55	5.49		1.80m @ 3.99% ZnEq
NXDD040	22.00	22.94	0.94	7.6	6	1.05	1.74	2.62		
NXDD040	22.94	23.62	0.68	2.7	7	0.32	0.49	0.76		
NXDD040	23.62	24.00	0.38	11.6	7	1.94	2.14	3.74		
NXDD040	24.00	25.00	1.00	14.2	6	1.62	1.97	3.36		
NXDD040	25.00	26.00	1.00	5.4	6	0.71	1.99	2.59		
NXDD040	26.00	27.00	1.00	6.3	5	0.51	2.44	2.90		5.67m @ 3.23% ZnEq
NXDD040	27.00	28.00	1.00	8.3	6	0.84	2.21	2.94	11.86m @ 2.82% ZnEq	
NXDD040	28.00	29.00	1.00	17.6	7	1.85	3.04	4.64		
NXDD040	29.00	29.29	0.29	13.4	6	1.31	1.52	2.67		
NXDD040	29.29	31.00	1.71	3.7	4	1.47	0.85	2.00		
NXDD040	31.00	31.50	0.50	1.8	3	2.90	0.89	3.10		
NXDD040	31.50	32.00	0.50	6.6	5	1.43	0.21	1.37		
NXDD040	32.00	32.61	0.61	5.8	4	1.06	0.19	1.06		
NXDD040	32.61	33.00	0.39	3.1	2	0.73	0.43	1.02		
NXDD007	8.00	9.00	1.00	6.0		0.45	0.98	1.39		
NXDD007	9.00	10.00	1.00	28.0		2.15	0.99	2.94		
NXDD007	10.00	11.00	1.00	13.0		1.62	0.51	1.89		
NXDD007	11.00	11.46	0.46	29.0		3.03	0.19	2.82		
NXDD007	11.46	12.00	0.54	4.0		0.67	0.06	0.62		
NXDD007	12.00	13.00	1.00	32.0		1.73	0.69	2.37		
NXDD007	13.00	14.00	1.00	8.0		0.78	0.48	1.16		
NXDD007	14.00	15.00	1.00	2.0		0.19	0.07	0.23		
NXDD007	15.00	16.00	1.00	8.0		1.04	0.96	1.84		
NXDD007	16.00	16.62	0.62	5.0		0.77	0.76	1.40		
NXDD007	16.62	17.00	0.38	6.0		0.94	1.65	2.43		
NXDD007	17.00	18.00	1.00	13.0		1.30	1.56	2.70		
NXDD007	18.00	18.87	0.87	11.0		1.63	3.24	4.60	21.00m @ 2.21% ZnEq	
NXDD007	18.87	20.00	1.13	3.0		0.67	2.55	3.08		4.00m @ 3.34% ZnEq
NXDD007	20.00	21.00	1.00	5.0		1.12	2.28	3.19		
NXDD007	21.00	21.70	0.70	7.0		0.94	1.65	2.44		
NXDD007	21.70	22.50	0.80	6.0		1.69	2.43	3.78		
NXDD007	22.50	23.00	0.50	2.0		0.69	1.14	1.68		
NXDD007	23.00	24.00	1.00	2.0		0.30	1.48	1.73		
NXDD007	24.00	25.00	1.00	3.0		0.55	1.18	1.63		
NXDD007	25.00	25.30	0.30	3.0		0.63	1.76	2.27		
NXDD007	25.30	26.00	0.70	2.0		0.65	1.52	2.03		
NXDD007	26.00	27.00	1.00	4.0		1.09	2.75	3.62		
NXDD007	27.00	27.65	0.65	5.0		0.96	0.09	0.88		
NXDD007	27.65	28.00	0.35	6.0		1.30	1.33	2.38		
NXDD007	28.00	29.00	1.00	5.0		0.83	1.06	1.74		
NXDD039	28.00	29.00	1.00	1.8	1	0.15	0.93	1.06		
NXDD039	29.00	30.00	1.00	2.4	2	0.15	1.96	2.11	4.00m @ 1.88% ZnEq	
NXDD039	30.00	31.00	1.00	3.5	2	0.41	1.95	2.31		
NXDD039	31.00	32.00	1.00	4.7	2	1.26	1.03	2.04		
NXDD039	33.60	34.00	0.40	2.3	2	0.14	0.87	1.01		
NXDD039	34.00	35.00	1.00	2.3	2	0.21	1.04	1.22		
NXDD039	35.00	36.00	1.00	1.8		0.73	0.68	1.25		
NXDD039	36.00	37.00	1.00	1.6	1	0.64	0.83	1.34		
NXDD039	37.00	38.00	1.00	2.4	2	0.13	2.66	2.79		
NXDD039	38.00	39.00	1.00	6.5	2	0.88	2.16	2.90		
NXDD039	39.00	40.00	1.00	2.6	2	0.62	1.67	2.16		
NXDD039	40.00	41.00	1.00	7.2	3	1.20	2.37	3.36		
NXDD039	41.00	42.22	1.22	5.1	3	0.89	2.43	3.16	18.02m @ 2.94% ZnEq	
NXDD039	42.22	43.00	0.78	5.9	2	1.33	2.78	3.85		3.80m @ 3.50% ZnEq
NXDD039	43.00	43.80	0.80	5.7	3	1.50	2.66	3.86		
NXDD039	43.80	45.00	1.20	7.6	4	0.74	1.49	2.14		
NXDD039	45.00	46.00	1.00	8.2	4	1.18	4.01	4.99		2.00m @ 5.05% ZnEq
NXDD039	46.00	47.00	1.00	9.4	6	1.83	3.63	5.11		
NXDD039	47.00	47.95	0.95	7.0	3	0.86	2.41	3.15		
NXDD039	47.95	49.07	1.12	8.1	3	1.50	2.21	3.43		4.62m @ 3.22% ZnEq

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD039	49.07	50.00	0.93	3.6	3	0.36	2.43	2.75		
NXDD039	50.00	51.62	1.62	5.9	4	0.46	3.10	3.51		
NXDD032	15.00	16.00	1.00	3.3	2	0.19	1.40	1.55		
NXDD032	16.00	17.00	1.00	2.1	2	0.28	1.27	1.51		
NXDD032	17.00	18.00	1.00	3.0	2	0.17	0.94	1.10		
NXDD032	18.00	19.00	1.00	1.9	2	0.22	0.71	0.90		
NXDD032	19.00	20.00	1.00	2.3	2	0.20	0.88	1.06		
NXDD032	20.00	20.95	0.95	2.8	2	0.23	1.19	1.40		
NXDD032	20.95	21.30	0.35	3.2	3	0.40	1.38	1.72		
NXDD032	21.30	22.00	0.70	2.9	3	0.24	1.67	1.89		
NXDD032	22.00	23.00	1.00	5.7	3	1.20	2.40	3.37		2.44m @ 3.74% ZnEq
NXDD032	23.00	24.00	1.00	9.0	3	1.62	2.79	4.12		
NXDD032	24.00	24.44	0.44	8.8	3	1.21	2.20	3.22		
NXDD032	24.44	25.00	0.56	7.0	4	0.86	0.26	0.99		
NXDD032	25.00	26.00	1.00	9.4	4	2.67	1.08	3.20		
NXDD032	26.00	27.00	1.00	5.8	4	1.03	0.92	1.76		
NXDD032	27.00	28.05	1.05	9.7	4	1.77	2.45	3.90		4.00m @ 3.01% ZnEq
NXDD032	28.05	29.00	0.95	6.7	5	1.39	1.99	3.12		
NXDD032	29.00	29.64	0.64	1.6	2	0.25	1.28	1.49		
NXDD032	29.64	30.12	0.48	1.9	2	0.13	1.11	1.23		
NXDD032	30.12	31.00	0.88	1.9	1	0.20	1.18	1.35	33.84m @ 2.49% ZnEq	
NXDD032	31.00	31.76	0.76	4.4	2	1.33	1.23	2.28		
NXDD032	31.76	32.25	0.49	7.0	3	1.37	1.53	2.65		
NXDD032	32.25	33.00	0.75	8.1	3	0.78	1.68	2.36		
NXDD032	33.00	34.00	1.00	2.6	2	0.10	1.72	1.83		
NXDD032	34.00	35.00	1.00	3.0	3	0.11	2.26	2.38		
NXDD032	35.00	36.00	1.00	3.1	3	0.16	1.43	1.59		
NXDD032	36.00	37.00	1.00	3.9	5	0.08	1.34	1.45		
NXDD032	37.00	38.00	1.00	20.0	5	3.22	1.98	4.64		1.00m @ 4.64% ZnEq
NXDD032	38.00	38.70	0.70	4.6	3	0.53	1.14	1.59		
NXDD032	38.70	39.00	0.30	9.5	4	1.83	2.56	4.05		
NXDD032	39.00	40.00	1.00	8.6	5	1.63	3.13	4.46		
NXDD032	40.00	40.31	0.31	9.6	4	1.54	2.06	3.33		
NXDD032	40.31	41.00	0.69	12.4	6	1.66	3.09	4.49		
NXDD032	41.00	41.62	0.62	13.1	5	1.63	2.69	4.07		6.30m @ 4.04% ZnEq
NXDD032	41.62	42.00	0.38	13.9	5	2.25	2.85	4.71		
NXDD032	42.00	43.00	1.00	8.1	4	1.03	3.11	3.98		
NXDD032	43.00	44.00	1.00	4.1	3	1.05	2.61	3.45		
NXDD032	44.00	45.00	1.00	6.8	3	1.19	2.94	3.92		
NXDD032	45.00	46.00	1.00	2.8	3	0.76	1.33	1.94		
NXDD032	46.00	47.00	1.00	1.8	2	0.32	1.90	2.16		
NXDD032	47.00	48.00	1.00	7.4	2	1.51	0.69	1.92		
NXDD032	48.00	48.84	0.84	4.1	3	0.22	1.24	1.45		
NXDD005	10.00	11.00	1.00	5.0		1.80	3.00	4.42		
NXDD005	11.00	12.00	1.00	9.0		0.42	0.53	0.96		
NXDD005	12.00	13.00	1.00	7.0		0.41	0.73	1.12		
NXDD005	13.00	14.00	1.00	22.0		0.36	1.51	2.04		
NXDD005	14.00	15.17	1.17	5.0		1.64	2.28	3.58		
NXDD005	15.17	16.00	0.83	7.0		0.91	2.42	3.19		
NXDD005	16.00	17.00	1.00	5.0		0.60	2.67	3.18		
NXDD005	17.00	18.00	1.00	15.0		1.68	2.25	3.69		
NXDD005	18.00	19.00	1.00	13.0		1.22	2.25	3.32		
NXDD005	19.00	20.00	1.00	10.0		1.99	3.73	5.34		2.00m @ 5.4% ZnEq
NXDD005	20.00	21.00	1.00	17.0		1.83	3.87	5.45		
NXDD005	21.00	22.00	1.00	15.0		1.69	1.86	3.31		
NXDD005	22.00	23.00	1.00	15.0		1.81	3.32	4.86		3.00m @ 4.41% ZnEq
NXDD005	23.00	24.00	1.00	11.0		1.65	3.67	5.05		
NXDD005	24.00	24.87	0.87	7.0		1.07	3.60	4.49		
NXDD005	24.87	26.00	1.13	6.0		0.57	0.82	1.32		
NXDD005	26.00	26.51	0.51	2.0		1.31	1.66	2.67	33.00m @ 3.61% ZnEq	
NXDD005	26.51	27.00	0.49	3.0		0.80	1.08	1.71		
NXDD005	27.00	28.00	1.00	4.0		0.70	1.34	1.91		
NXDD005	28.00	28.60	0.60	1.0		0.26	1.08	1.29		
NXDD005	28.60	29.00	0.40	13.0		1.55	1.65	2.98		

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)	Intercept	Sub-intercept
NXDD005	29.00	30.00	1.00	13.0		1.79	3.12	4.62		
NXDD005	30.00	31.00	1.00	12.0		1.23	2.51	3.58		
NXDD005	31.00	32.00	1.00	14.0		1.80	4.20	5.72		6.00m @ 4.33% ZnEq
NXDD005	32.00	33.00	1.00	7.0		1.10	4.04	4.95		
NXDD005	33.00	34.38	1.38	6.0		1.40	2.25	3.37		
NXDD005	34.38	35.00	0.62	5.0		1.90	2.52	4.01		
NXDD005	35.00	35.85	0.85	8.0		2.06	2.89	4.54		
NXDD005	35.85	37.00	1.15	7.0		1.28	1.44	2.49		
NXDD005	37.00	38.00	1.00	10.0		1.48	1.97	3.20		
NXDD005	38.00	38.85	0.85	15.0		2.06	2.24	3.98		
NXDD005	38.85	39.33	0.48	4.0		0.79	1.89	2.54		
NXDD005	39.33	40.03	0.70	7.0		1.34	2.08	3.17		
NXDD005	40.03	41.00	0.97	7.0		1.08	3.61	4.50		
NXDD005	41.00	42.00	1.00	13.0		2.30	3.87	5.75		2.97m @ 5.22% ZnEq
NXDD005	42.00	43.00	1.00	16.0		2.66	3.19	5.38		
NXDD044	9.00	10.00	1.00	2.0	2	0.22	0.89	1.08		
NXDD044	10.00	11.00	1.00	1.4	2	0.97	2.09	2.84		
NXDD044	11.00	12.00	1.00	0.9	1	0.72	1.19	1.74		
NXDD044	12.00	13.00	1.00	1.0	2	0.46	1.02	1.38		
NXDD044	13.00	13.71	0.71	2.1	1	0.74	0.88	1.46		
NXDD044	13.71	14.33	0.62	2.7	3	0.95	1.68	2.43		
NXDD044	14.33	14.52	0.19	1.9	3	0.94	0.99	1.72		
NXDD044	14.52	15.00	0.48	2.2	3	0.88	2.08	2.77		
NXDD044	15.00	16.00	1.00	2.4	3	0.86	2.81	3.49		2.51m @ 3.11% ZnEq
NXDD044	16.00	17.03	1.03	5.5	3	1.27	1.87	2.89		
NXDD044	17.03	18.00	0.97	2.7	2	0.23	1.11	1.32		
NXDD044	18.00	18.88	0.88	2.5	2	0.43	1.14	1.49		
NXDD044	18.88	20.00	1.12	1.9	1	0.32	1.29	1.55		
NXDD044	20.00	21.00	1.00	3.0	2	0.57	1.31	1.78		
NXDD044	21.00	22.00	1.00	2.5	2	0.49	1.43	1.83		
NXDD044	22.00	23.00	1.00	2.1	1	0.27	1.03	1.26		
NXDD044	23.00	24.00	1.00	2.3	3	0.42	1.60	1.94		
NXDD044	24.00	25.00	1.00	3.2	2	1.12	1.47	2.35		
NXDD044	25.00	26.00	1.00	3.0	2	0.53	1.20	1.63	32.87m @ 2.34% ZnEq	
NXDD044	26.00	27.00	1.00	3.8	4	0.79	2.00	2.64		
NXDD044	27.00	28.00	1.00	7.8	4	1.93	2.17	3.72		
NXDD044	28.00	28.70	0.70	4.7	4	1.21	2.58	3.55		2.00m @ 3.79% ZnEq
NXDD044	28.70	29.00	0.30	8.4	4	1.93	3.05	4.60		
NXDD044	29.00	30.00	1.00	12.2	5	2.63	3.92	6.05		2.24m @ 4.97% ZnEq
NXDD044	30.00	31.24	1.24	9.3	4	1.78	2.65	4.10		
NXDD044	31.24	32.00	0.76	4.7	5	1.07	2.75	3.61		
NXDD044	32.00	32.41	0.41	6.9	4	1.12	4.16	5.09		
NXDD044	32.41	32.76	0.35	9.7	4	1.56	2.00	3.29		2.76m @ 3.52% ZnEq
NXDD044	32.76	34.00	1.24	7.0	4	1.27	1.97	3.01		
NXDD044	34.00	35.00	1.00	5.8	2	0.75	1.21	1.84		
NXDD044	35.00	36.00	1.00	9.3	5	1.39	0.84	2.00		
NXDD044	36.00	37.00	1.00	6.2	4	0.34	0.94	1.27		
NXDD044	37.00	38.00	1.00	5.3	3	0.12	2.07	2.22		
NXDD044	38.00	39.00	1.00	4.6	3	0.28	1.09	1.36		
NXDD044	39.00	40.00	1.00	3.4	3	0.28	1.29	1.54		
NXDD044	40.00	41.00	1.00	3.4	3	0.20	1.43	1.62		
NXDD044	41.00	41.87	0.87	3.1	3	0.53	0.77	1.21		
NXDD045	9.00	10.05	1.05	8.9	2	0.26	0.80	1.10		
NXDD045	10.05	11.00	0.95	6.6	3	1.00	1.29	2.12		
NXDD045	11.00	12.00	1.00	5.1	2	0.44	1.83	2.22		
NXDD045	12.00	13.00	1.00	7.1	3	0.95	2.16	2.96		
NXDD045	13.00	14.00	1.00	7.1	3	0.73	2.48	3.11		
NXDD045	14.00	15.00	1.00	5.7	2	0.79	2.04	2.70		
NXDD045	15.00	16.00	1.00	8.0	4	0.91	2.24	3.02		4.00m @ 3.04% ZnEq
NXDD045	16.00	17.00	1.00	9.8	3	1.42	2.13	3.32		
NXDD045	17.00	18.00	1.00	8.8	3	0.59	2.14	2.69		
NXDD045	18.00	19.00	1.00	3.5	2	0.38	1.80	2.13	27.00m @ 2.57% ZnEq	
NXDD045	19.00	20.00	1.00	2.1	2	0.27	1.48	1.71		
NXDD045	20.00	21.00	1.00	1.5	2	0.26	1.51	1.72		

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD045	21.00	22.00	1.00	3.2	2	0.49	1.10	1.51		
NXDD045	22.00	23.00	1.00	5.0	2	0.72	1.70	2.30		
NXDD045	23.00	24.00	1.00	3.4	3	0.53	1.83	2.27		
NXDD045	24.00	24.41	0.41	8.6	3	1.09	2.06	2.98		
NXDD045	24.41	25.00	0.59	20.6	4	2.28	2.55	4.51		
NXDD045	25.00	26.00	1.00	22.1	4	2.08	2.40	4.23		5.00m @ 4.15% ZnEq
NXDD045	26.00	27.21	1.21	31.7	4	3.87	2.27	5.56		
NXDD045	27.21	28.00	0.79	4.4	3	0.47	3.17	3.58		
NXDD045	28.00	29.00	1.00	5.0	2	0.35	2.76	3.08		
NXDD045	29.00	30.00	1.00	4.8	3	0.56	1.12	1.60		
NXDD045	30.00	31.00	1.00	4.1	2	0.45	2.41	2.80		
NXDD045	31.00	32.00	1.00	2.4	2	0.27	2.30	2.53		
NXDD045	32.00	33.00	1.00	5.7	2	1.43	0.99	2.14		
NXDD045	33.00	34.00	1.00	6.4	2	1.10	1.20	2.10		
NXDD045	34.00	35.00	1.00	2.8	1	0.42	1.08	1.43		
NXDD045	35.00	36.00	1.00	3.3	2	0.22	1.00	1.20		
NXDD029	3.55	5.00	1.45	8.5	4	0.74	2.53	3.19		
NXDD029	5.00	6.00	1.00	14.4	3	1.16	1.16	2.20		
NXDD029	6.00	7.00	1.00	13.0	4	1.86	0.97	2.53	3.85m @ 2.64% ZnEq	
NXDD029	7.00	7.40	0.40	19.4	5	1.67	0.54	2.03		
NXDD029	12.00	13.00	1.00	10.9	5	0.94	1.59	2.43		
NXDD029	13.00	13.75	0.75	9.4	7	1.38	1.15	2.30		
NXDD029	13.75	15.00	1.25	17.1	10	1.58	1.26	2.65		
NXDD029	15.00	16.00	1.00	9.4	4	0.65	3.99	4.59		
NXDD029	16.00	17.00	1.00	8.0	3	0.34	2.88	3.23		4.00m @ 3.83% ZnEq
NXDD029	17.00	18.00	1.00	12.6	5	1.32	2.36	3.50		
NXDD029	18.00	19.00	1.00	15.4	6	1.32	2.82	4.00		
NXDD029	19.00	20.00	1.00	7.7	2	0.87	1.87	2.62		
NXDD029	20.00	21.00	1.00	3.9	2	0.50	0.88	1.30		
NXDD029	21.00	21.28	0.28	3.9	2	0.54	1.61	2.06		
NXDD029	21.28	23.00	1.72	3.3	3	0.31	1.94	2.21		
NXDD029	23.00	24.00	1.00	4.5	3	0.58	1.92	2.41		
NXDD029	24.00	25.00	1.00	7.2	3	0.87	2.03	2.77		
NXDD029	25.00	26.00	1.00	8.7	4	0.74	2.87	3.53	27.58m @ 3.13% ZnEq	
NXDD029	26.00	27.00	1.00	9.9	5	1.00	3.18	4.05		
NXDD029	27.00	28.00	1.00	5.2	5	0.60	1.86	2.37		
NXDD029	28.00	29.24	1.24	8.4	4	1.39	2.80	3.95		
NXDD029	29.24	30.00	0.76	4.5	4	0.22	2.35	2.57		
NXDD029	30.00	31.00	1.00	7.6	5	0.81	3.07	3.77		
NXDD029	31.00	32.00	1.00	8.6	6	1.17	3.13	4.11		
NXDD029	32.00	33.00	1.00	19.0	6	2.36	3.09	5.09		3.00m @ 4.58% ZnEq
NXDD029	33.00	34.00	1.00	15.4	5	1.30	3.37	4.53		
NXDD029	34.00	35.00	1.00	5.2	3	0.97	1.94	2.73		
NXDD029	35.00	36.00	1.00	6.8	4	1.05	2.08	2.95		
NXDD029	36.00	37.00	1.00	9.0	5	1.97	1.74	3.33		
NXDD029	37.00	38.00	1.00	5.7	4	0.34	2.46	2.78		
NXDD029	38.00	39.00	1.00	14.3	4	1.61	1.19	2.57		
NXDD029	39.00	39.58	0.58	4.7	3	1.28	1.49	2.51		
NXDD002	42.00	43.00	1.00	2.0		0.20	1.47	1.64		
NXDD002	43.00	44.00	1.00	2.0		0.69	3.58	4.12		
NXDD002	44.00	45.00	1.00	5.0		0.61	3.74	4.26		
NXDD002	45.00	46.00	1.00	6.0		0.96	3.31	4.10		5.00m @ 4.14% ZnEq
NXDD002	46.00	47.00	1.00	10.0		1.62	3.42	4.76		
NXDD002	47.00	48.00	1.00	15.0		2.02	1.74	3.44		
NXDD002	48.00	49.00	1.00	9.0		1.30	0.85	1.94		
NXDD002	49.00	50.15	1.15	9.0		0.94	0.25	1.06		
NXDD002	50.15	51.00	0.85	4.0		0.24	0.77	0.99	16.70m @ 2.99% ZnEq	
NXDD002	51.00	52.00	1.00	3.0		0.45	0.66	1.03		
NXDD002	52.00	53.00	1.00	2.0		0.47	0.80	1.18		
NXDD002	53.00	54.00	1.00	7.0		0.67	4.29	4.87		
NXDD002	54.00	55.00	1.00	6.0		0.72	3.68	4.30		
NXDD002	55.00	56.00	1.00	13.0		3.00	2.07	4.49		4.00m @ 4.28% ZnEq
NXDD002	56.00	57.00	1.00	9.0		2.20	1.72	3.48		
NXDD002	57.00	58.00	1.00	10.0		1.01	1.74	2.62		

Hole ID	From (m)	To (m)	Interval (m)	Ag (g/t)	Ge (g/t)	Pb (%)	Zn (%)	ZnEq (%)		
NXDD002	58.00	58.70	0.70	4.0		0.14	2.30	2.45		
NXDD033	47.00	47.58	0.58	1.8	2	0.29	0.85	1.09		
NXDD033	47.58	48.00	0.42	7.4	5	0.64	0.58	1.15	3.00m @ 2.21% ZnEq	
NXDD033	48.00	49.00	1.00	15.9	7	2.94	1.46	3.86		1.00m @ 3.86% ZnEq
NXDD033	49.00	50.00	1.00	4.0	5	0.42	1.30	1.66		
NXDD031	18.00	19.00	1.00	3.6	2	0.34	0.99	1.29		
NXDD031	19.00	20.00	1.00	3.8	2	0.27	0.80	1.05		
NXDD031	20.00	21.00	1.00	3.6	2	0.31	1.41	1.69		
NXDD031	21.00	22.00	1.00	3.9	2	0.08	1.10	1.21		
NXDD031	22.00	23.04	1.04	3.8	2	0.12	0.89	1.03		
NXDD031	23.04	23.96	0.92	3.4	2	0.26	0.86	1.10		
NXDD031	23.96	25.00	1.04	5.5	3	0.25	1.17	1.42		
NXDD031	25.00	26.00	1.00	2.8	3	0.74	1.63	2.22		
NXDD031	26.00	27.00	1.00	3.8	2	0.44	1.48	1.86		
NXDD031	27.00	27.80	0.80	25.7	2	0.25	2.55	3.04		4.00m @ 2.33% ZnEq
NXDD031	27.80	29.00	1.20	6.2	2	1.02	1.49	2.33		
NXDD031	29.00	30.00	1.00	3.4	2	0.09	1.43	1.54		
NXDD031	30.00	30.97	0.97	2.6	2	0.09	1.60	1.70		
NXDD031	30.97	32.00	1.03	2.5	2	0.03	2.27	2.32		
NXDD031	32.00	33.00	1.00	3.3	2	0.08	2.12	2.22		
NXDD031	33.00	34.00	1.00	3.7	2	0.07	2.65	2.75	29.00m @ 2.09% ZnEq	
NXDD031	34.00	35.00	1.00	3.8	3	0.15	2.47	2.63		
NXDD031	35.00	35.50	0.50	3.8	3	0.34	3.42	3.72		7.75m @ 2.47% ZnEq
NXDD031	35.50	36.00	0.50	8.7	3	1.38	1.58	2.72		
NXDD031	36.00	37.00	1.00	7.1	3	1.00	1.43	2.27		
NXDD031	37.00	38.00	1.00	11.8	3	0.86	1.21	2.00		
NXDD031	38.00	38.72	0.72	16.1	2	1.15	1.21	2.27		
NXDD031	38.72	40.00	1.28	8.3	2	2.18	1.28	3.02		
NXDD031	40.00	40.83	0.83	10.6	3	1.91	1.54	3.10		3.28m @ 3.29% ZnEq
NXDD031	40.83	42.00	1.17	15.8	6	1.19	2.62	3.70		
NXDD031	42.00	43.00	1.00	6.4	4	0.41	1.84	2.22		
NXDD031	43.00	44.00	1.00	10.4	3	0.44	1.38	1.83		
NXDD031	44.00	44.38	0.38	2.7	3	0.37	2.04	2.35		1.00m @ 2.73% ZnEq
NXDD031	44.38	45.00	0.62	10.8	2	2.36	1.05	2.96		
NXDD031	45.00	46.00	1.00	5.6	2	0.49	1.05	1.49		
NXDD031	46.00	47.00	1.00	6.6	2	0.60	0.79	1.32		
NXDD046	11.00	12.00	1.00	4.3	2	0.30	0.75	1.03		
NXDD046	12.00	13.00	1.00	191.5	2	0.57	0.94	3.63	3.40m @ 3.31% ZnEq	
NXDD046	13.00	14.40	1.40	3.8	2	5.61	1.20	5.47		
NXDD046	15.80	16.60	0.80	15.8	5	1.44	0.78	2.05	0.8m @ 2.05% ZnEq	
NXDD046	17.04	18.00	0.96	6.0	4	1.55	1.21	2.45		
NXDD046	18.00	19.00	1.00	2.3	3	0.82	0.80	1.45	2.34m @ 2.25%ZnEq	
NXDD046	19.00	19.38	0.38	2.6	4	1.46	2.75	3.88		
NXDD047	49.96	51.00	1.04	1.8	5	0.10	1.70	1.79		
NXDD047	51.00	52.00	1.00	2.5	5	0.17	1.29	1.45	2.04m @ 1.62% ZnEq	
NXDD048	60.00	61.00	1.00	1.4	1	0.10	1.21	1.30		
NXDD048	61.00	61.74	0.74	7.1	2	0.46	2.18	2.61	3.00m @ 1.38% ZnEq	
NXDD048	61.74	63.00	1.26	6.9	3	0.31	0.40	0.72		
NXDD049	19.00	19.74	0.74	2.0	3	0.29	1.29	1.53		
NXDD049	19.74	20.22	0.48	2.6	3	0.09	1.55	1.64		
NXDD049	20.22	21.00	0.78	13.2	5	1.79	3.58	5.09	4.3m @ 2.30% ZnEq	
NXDD049	21.00	22.00	1.00	3.6	4	0.25	1.55	1.78		
NXDD049	22.00	22.82	0.82	5.1	3	1.10	0.60	1.49		
NXDD049	22.82	23.30	0.48	2.5	2	0.57	1.64	2.10		
NXDD049	32.85	33.20	0.35	2.9	2	0.29	0.90	1.15	1.15m @ 1.07% ZnEq	
NXDD049	33.20	34.00	0.80	2.1	2	0.25	0.82	1.03		

- Blank fields = result below detection limit

Quantitative Automated Mineralogical Analysis

conducted on a sample of

NXDD Comp

for

Mt Burgess Mining NL

A19449

MIN3533

Preliminary data only (revised report)

December 2018

The results contained in this report relate only to the sample(s) submitted for testing.

ALS Metallurgy accepts no responsibility for the representativeness of the sample(s) submitted.

SUMMARY

Two size fractions of a sample labelled NXDD Comp were submitted for mineralogical analysis. Sample NXDD Comp is a composite of the samples shown on the 'Sample details' page. A sub-sample of NXDD Comp was crushed to 100% passing 0.212 mm and then dry screened over a 0.075 mm screen.

Descloizite (($PbZn(VO_4)(OH)$) is the dominant (and possibly only) vanadium-bearing mineral identified in the sample.

Approximately 65 % of the descloizite is classified as either 'liberated' or 'high grade middlings'. This descloizite is relatively coarse grained; P_{80} of 'liberated' descloizite is 74 µm and P_{80} of the high grade middling descloizite 54 µm.

The remaining 35 % of the descloizite is less well liberated and also finer-grained; P_{80} of medium grade descloizite 31 µm, P_{80} of 'low grade middlings' 25 µm and P_{80} of 'locked' descloizite 16 µm.

INTRODUCTION

Samples received

Two size fractions of a sample labelled NXDD Comp were submitted for mineralogical analysis. Sample NXDD Comp is a composite of the samples shown on the 'Sample details' page. A sub-sample of NXDD Comp was crushed to 100% passing 0.212 mm and then dry screened over a 0.075 mm screen. The table below includes assay data (ALS Assay Laboratory Balcatta) and key QEMSCAN analysis parameters are shown in the table below.

Sample	Fraction	Fraction weight %	QEMSCAN analysis mode	QEMSCAN analysis point spacing (µm)	QEMSCAN analysis time (hours)	Mineralogy block number
NXDD Comp	-0.212/+0.075 mm	60.3	Field Scan	6.0	3.0	MIN3533A1A
	-0.075 mm	39.7	PMA	2.5	3.0	MIN3533A2A

Sample preparation

The samples were riffle split to produce sub-samples of suitable size for making a QEMSCAN polished sections. The sub-samples were mixed with size-graded, high purity graphite to ensure particle separation and discourage density segregation. The sample-graphite mixtures were then set into a mould using a two-part epoxy resin, producing a representative sub-samples of randomly orientated particles. After curing, the resin blocks were cut back to expose fresh surfaces and progressively ground and fine-polished. Passing QA/QC checks, the sections were then carbon coated for electron beam conductivity and presented to the QEMSCAN for analysis.

Methods of analysis

QEMSCAN FieldScan

The QEMSCAN Field Scan (FS) mode was performed at an analysis point spacing of 6 µm for the polished block of the -0.212/+0.075 mm fraction.

QEMSCAN Particle Mineral Analysis

The QEMSCAN Particle Mineral Analysis (PMA) mode was performed at an analysis point spacing 2.5 µm for the polished block of the -0.075 mm fraction.

XRD

The samples were analysed using the X-ray diffraction technique in order to assist with mineral characterisation.

Semi-quantitative SEM-EDS analyses

Selected particles were analysed using manual SEM-EDS analyses. The data were used to assist with mineral characterisation.

Report prepared for

Greg Jones **(Senior Project Coordinator)**
ALS Metallurgy

Reported by

Dorrit de Nooy **(Principal Metallurugist)**
ALS Metallurgy

Approved by

Hamid Sheriff (**Group General Manager – Metallurgy Services)**

SAMPLE DETAILS

Sample submission sheet received from client

SAMPLE SUBMISSION N0: MTB7 – 11 - 2018

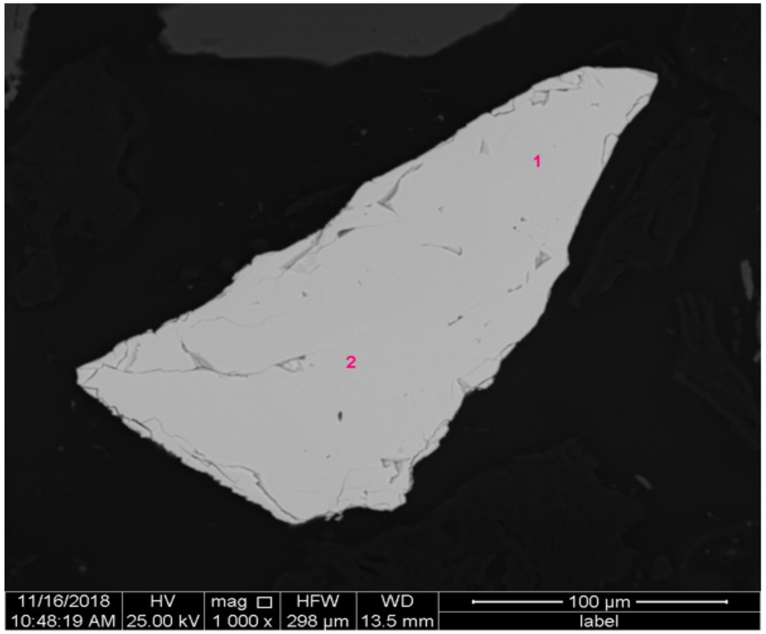
DRILL HOLE NUMBER	EASTING	NORTHING	DIP	AZIMUTH	EOH/RL (m)	FROM (m)	TO (m)	KG
NXDDO29	509,000	7,821,900	-90	0	41.95/1131	38.00.	39.58	2.3701
NXDD032	508,900	7,821,800	-90	0	50.95/1131	24.44	28.05	9.0550
						48.00	50.00	4.3539
NXDD034	508,850	7,821,800	-90	0	49.62/1131	12.00	16.00	9.3409
						17.95	20.69	5.7463
						24.80	26.97	5.5606
						29.00	31.00	3.6017
NXDD046	508,950	7,821,950	-90	0	20.95/1131	5.15	9.00	6.0373
						15.00	19.38	7.4328
TOTAL								53.4986

Sample inventory

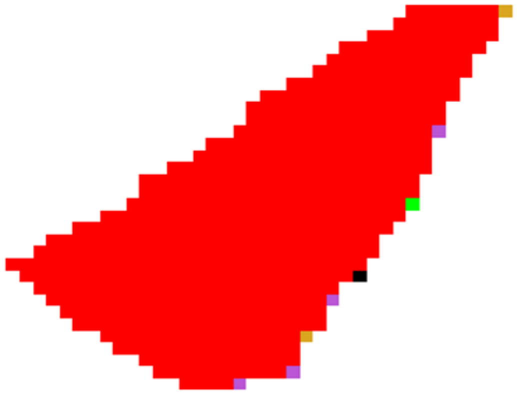
Sample inventory	
Sample ID	**Weight**
NXDD 29	
NXDD029-572	1590.0
NXDD029-573	889.8
NXDD 32	
NXDD032-264	1300.6
NXDD032-265	2508.5
NXDD032-266	2748.1
NXDD032-267	2991.5
NXDD032-293	1980.0
NXDD032-294	379.7
NXDD032-295	2150.2
NXDD 34	
NXDD034-351	2268.4
NXDD034-352	1847.9
NXDD034-353	3259.6
NXDD034-354	2795.7
NXDD034-358	1533.2
NXDD034-359	2091.7
NXDD034-360	2223.7
NXDD034-366	2906.9
NXDD034-367	3100.2
NXDD034-370	2621.8
NXDD034-371	2249.8
NXDD 46	
NXDD046-574	1318.4
NXDD046-575	530.7
NXDD046-576	710.7
NXDD046-577	1894.8
NXDD046-578	1858.6
NXDD046-579	1314.9
NXDD046-586	1507.9
NXDD046-587	1811.2
NXDD046-588	960.2
NXDD046-589	921.0
NXDD046-590	2430.5
NXDD046-591	442.4
Total mass	**59138.6**

EXAMPLE SEM IMAGES AND DATA

Example image 1



Min3533-Particle-01



Mineral Name

- Background
- Descloizite
- Galena/other Pb
- Sphalerite
- Other sulphides
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (+/- Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Limonite/goethite
- Other minerals

'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-01- 1	58.4		18.3	18.1								5.1	**100.0**
Particle-01- 2	58.8		17.9	18.3								5.0	**100.0**

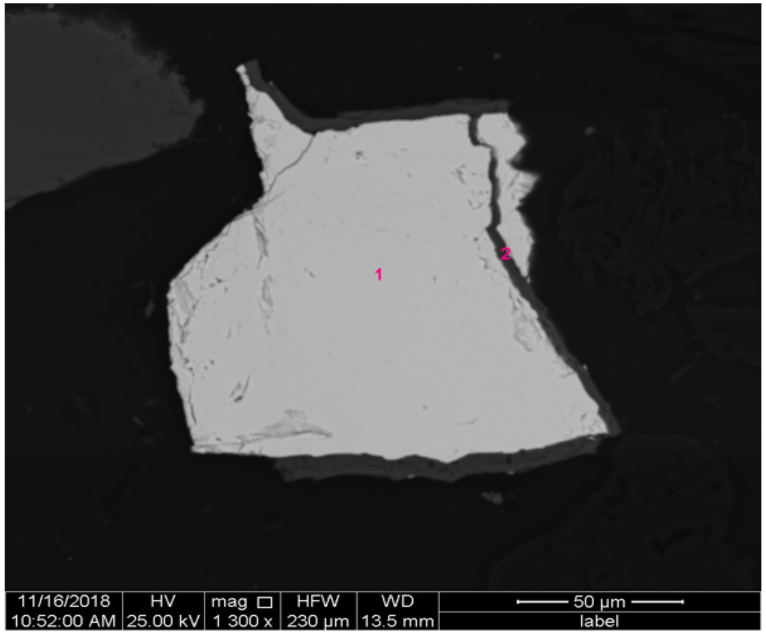
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

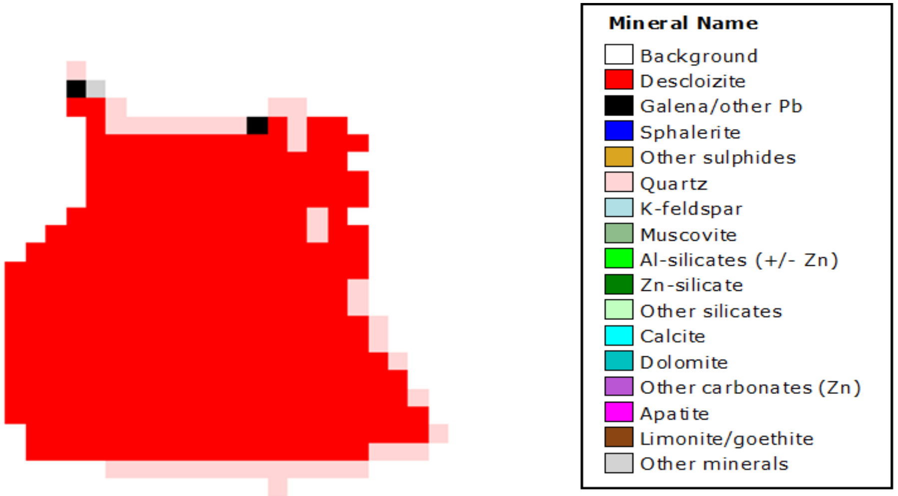
The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

Example image 2



Min3533-Particle-03



'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-03- 1	57.9	0.0	19.3	15.9	0.0							6.8	**100.0**
Particle-03- 2								55.7				44.3	**100.0**

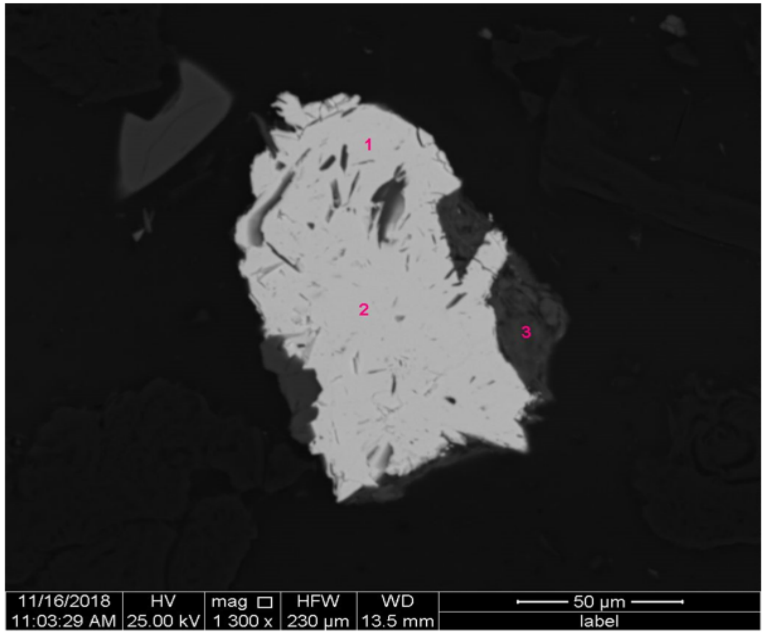
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

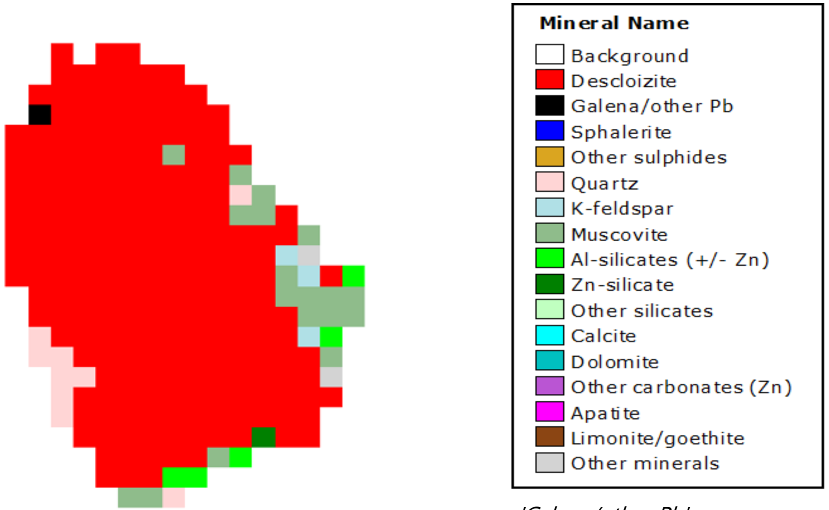
The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

Example image 3



Min3533-Particle-06



'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-06- 1	58.5		17.8	17.2								6.5	**100.0**
Particle-06- 2	58.1		17.8	17.9								6.3	**100.0**
Particle-06- 3			1.7		8.9		18.6	25.8	3.5		0.7	40.8	**100.0**

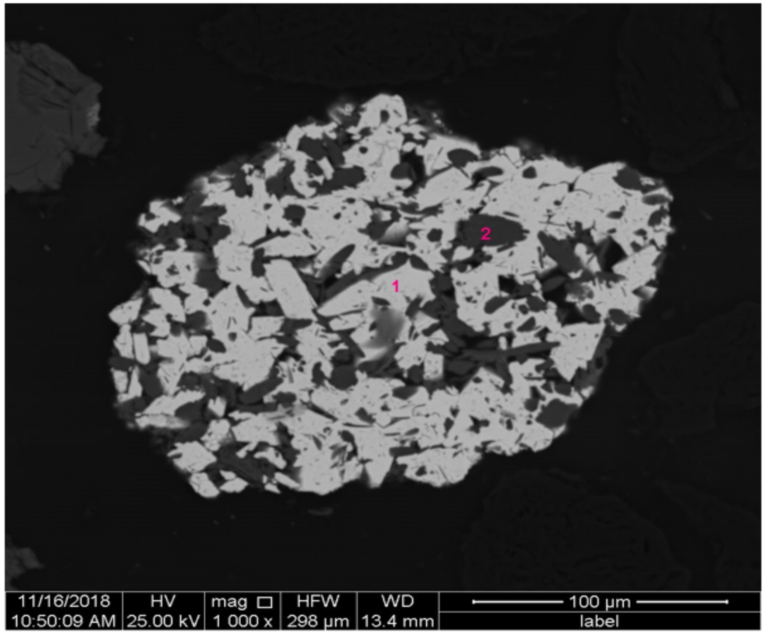
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

Oxygen, the lightest element, is significantly underestimated.

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 4



Min3533-Particle-02

Mineral Name

- Background
- Descloizite
- Galena/other Pb
- Sphalerite
- Other sulphides
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (+/- Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Limonite/goethite
- Other minerals

'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-02- 1	58.2	4.1	14.6	18.0								5.1	**100.0**
Particle-02- 2								56.0				44.0	**100.0**

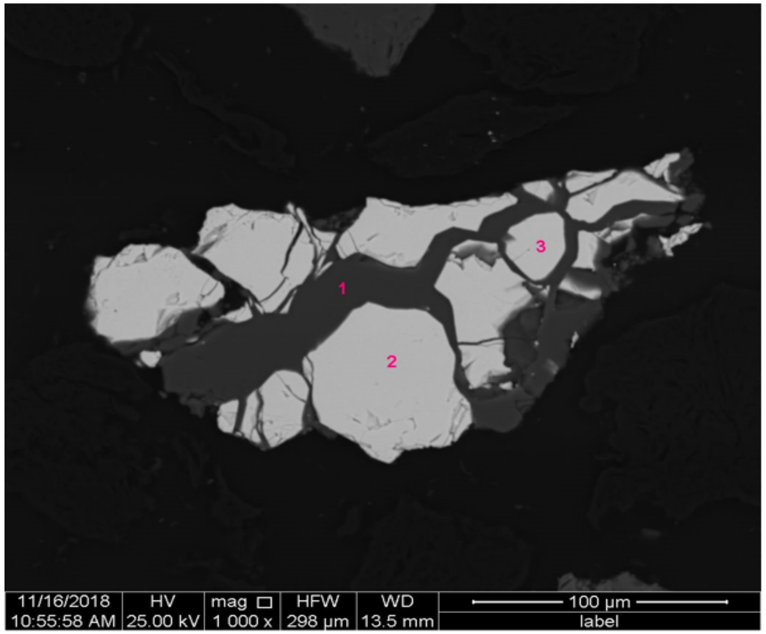
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

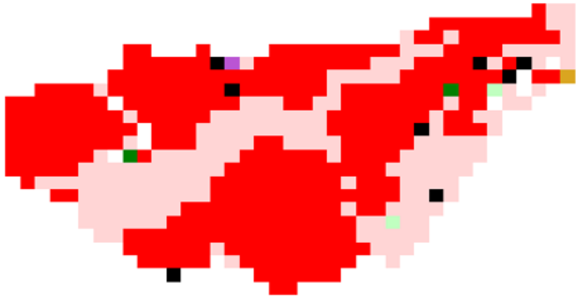
The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

Example image 5



Min3533-Particle-04



Mineral Name

- Background
- Descloizite
- Galena/other Pb
- Sphalerite
- Other sulphides
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (+/- Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Limonite/goethite
- Other minerals

'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-04- 1								55.3				44.7	100.0
Particle-04- 2	58.4		19.0	17.4								5.2	100.0
Particle-04- 3	54.2		19.2	20.8								5.9	100.0

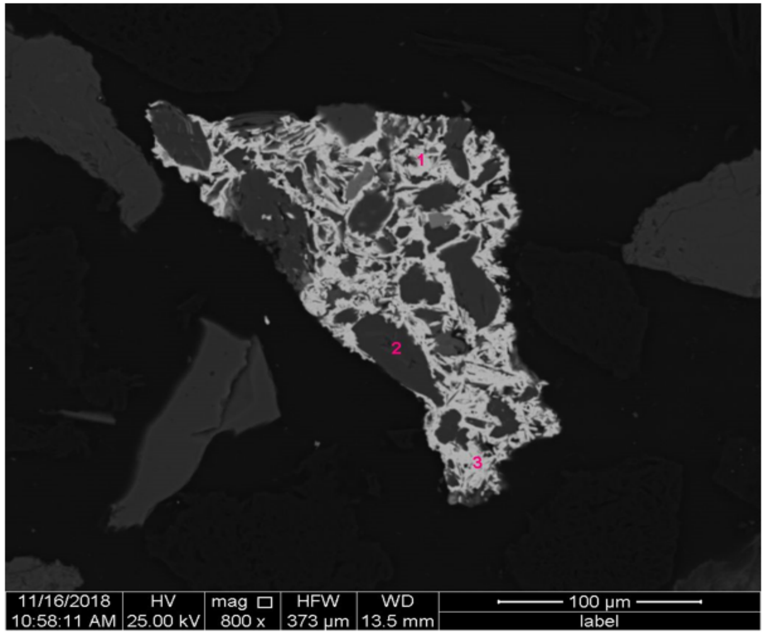
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

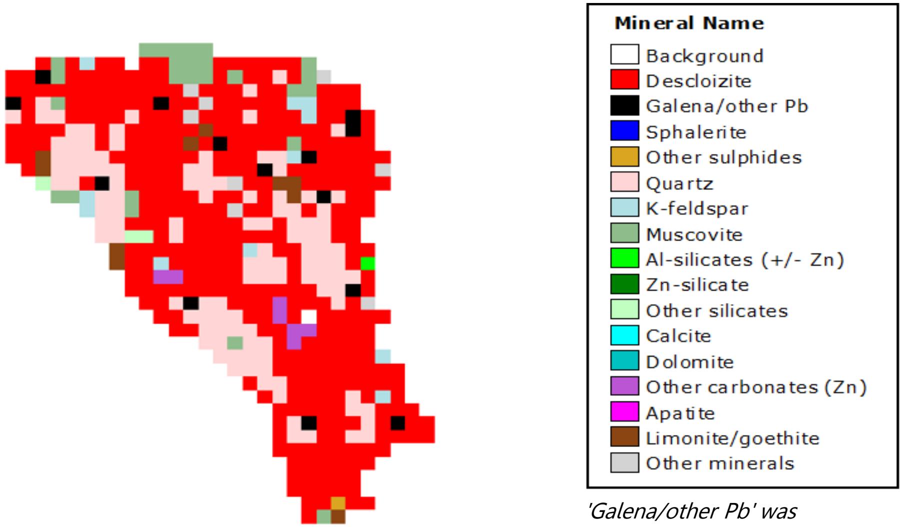
Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 6



Min3533-Particle-05



'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-05- 1	56.1		18.5	17.8	1.4							6.4	100.0
Particle-05- 2							17.7	31.2	9.6			41.4	100.0
Particle-05- 3	57.0		17.3	18.3	1.4							6.0	100.0

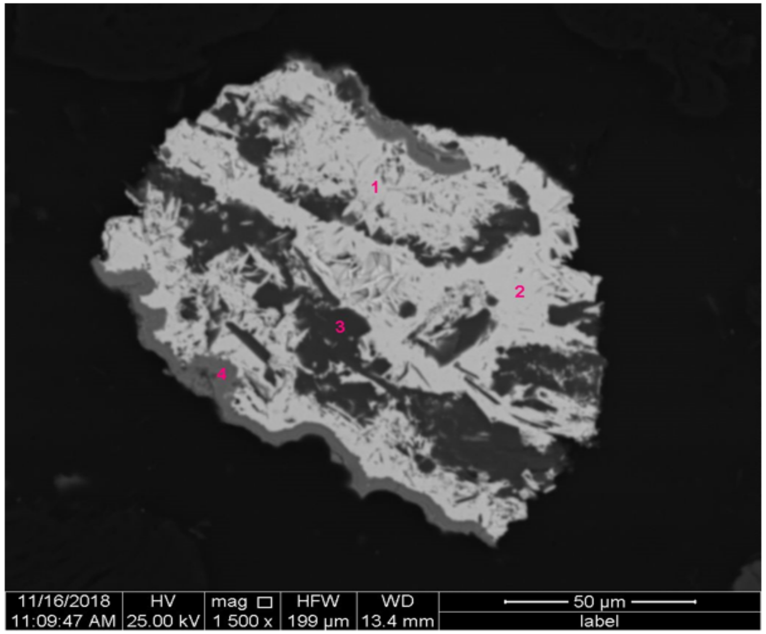
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

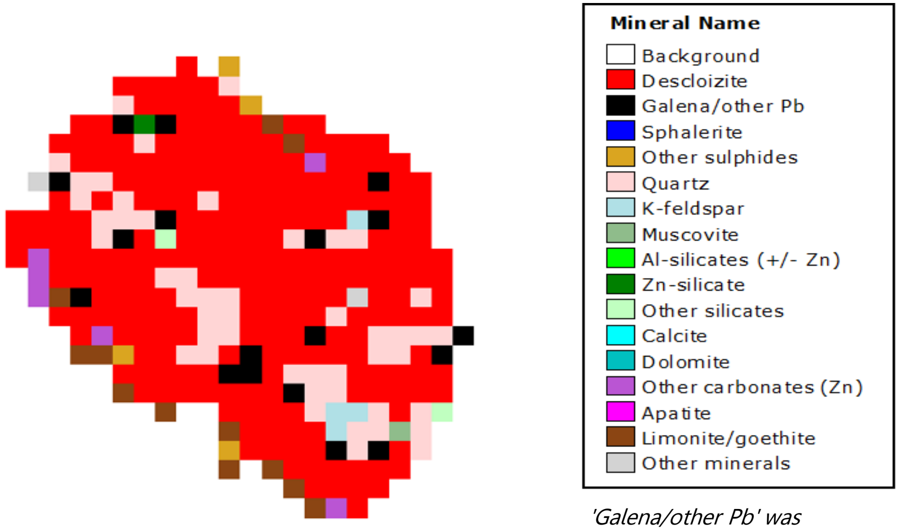
Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 7



Min3533-Particle-07



'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-07- 1	58.3		17.1	17.2	1.1							6.3	100.0
Particle-07- 2	58.2		17.6	17.9	0.0							6.3	100.0
Particle-07- 3								54.7				45.3	100.0
Particle-07- 4	1.7		2.9	0.5	72.0		0.7	1.1				21.1	100.0

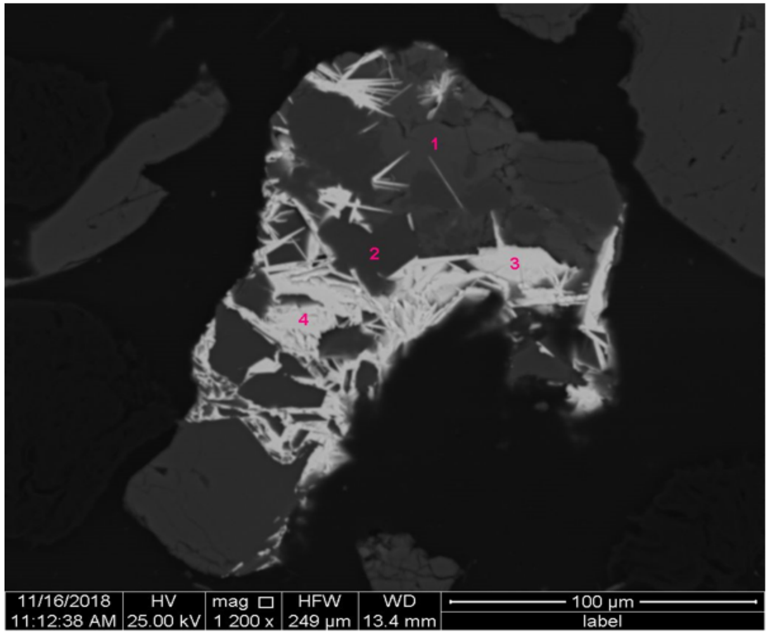
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

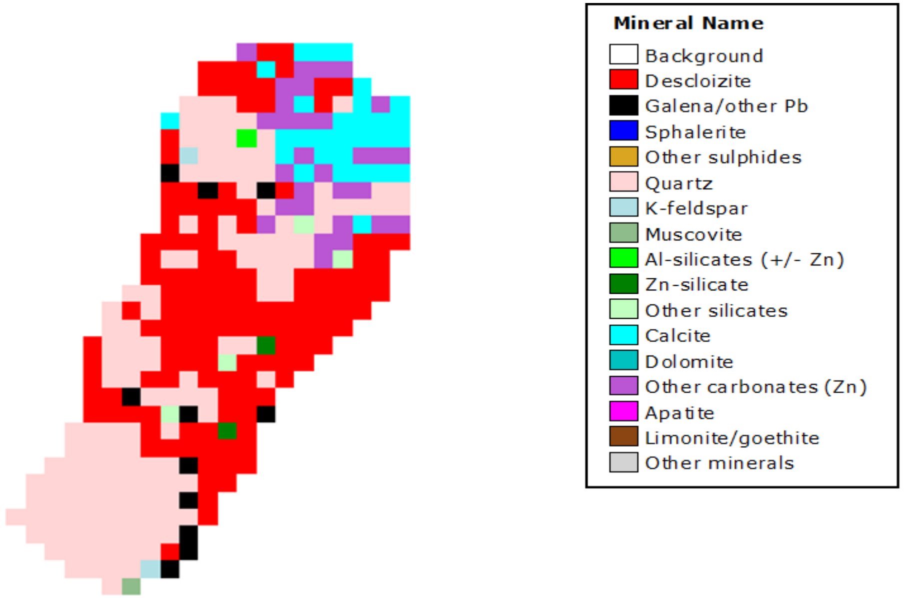
Oxygen, the lightest element, is significantly underestimated.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 8





Min3533-Particle-08

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-08- 1										55.9		44.1	**100.0**
Particle-08- 2								48.8				51.2	**100.0**
Particle-08- 3	57.0		18.6	17.5								7.0	**100.0**
Particle-08- 4	57.7		19.8	17.7								4.9	**100.0**

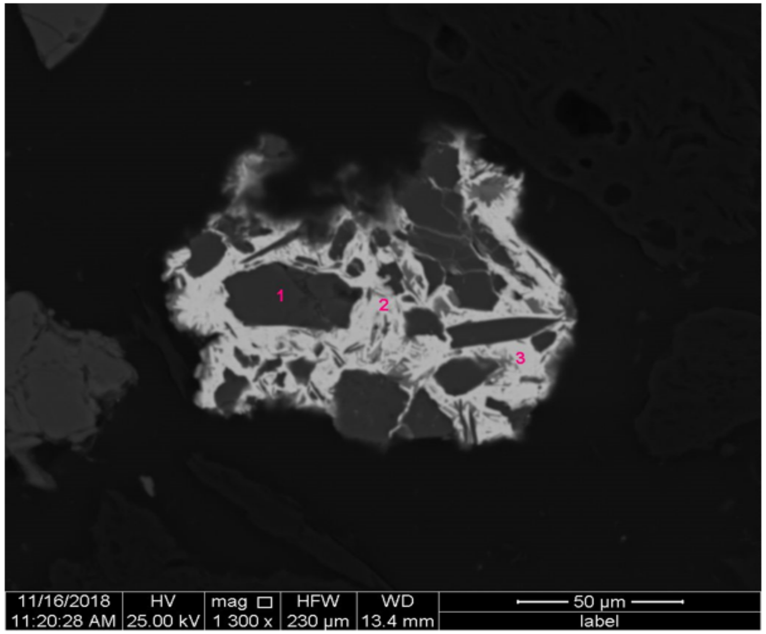
Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

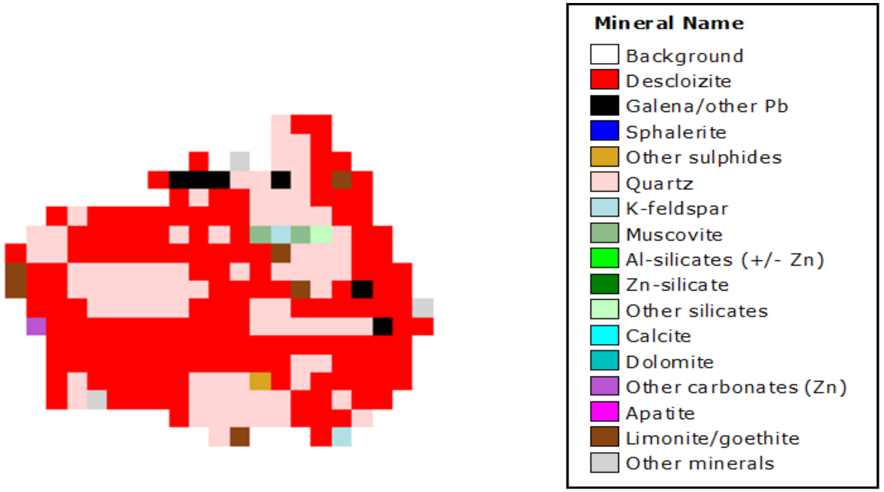
Oxygen, the lightest element, is significantly underestimated.

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 9



Min3533-Particle-09



'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-09- 1								56.2				43.8	**100.0**
Particle-09- 2	56.7		18.2	19.1	1.2							4.9	**100.0**
Particle-09- 3	55.7		18.4	18.9	2.3							4.8	**100.0**

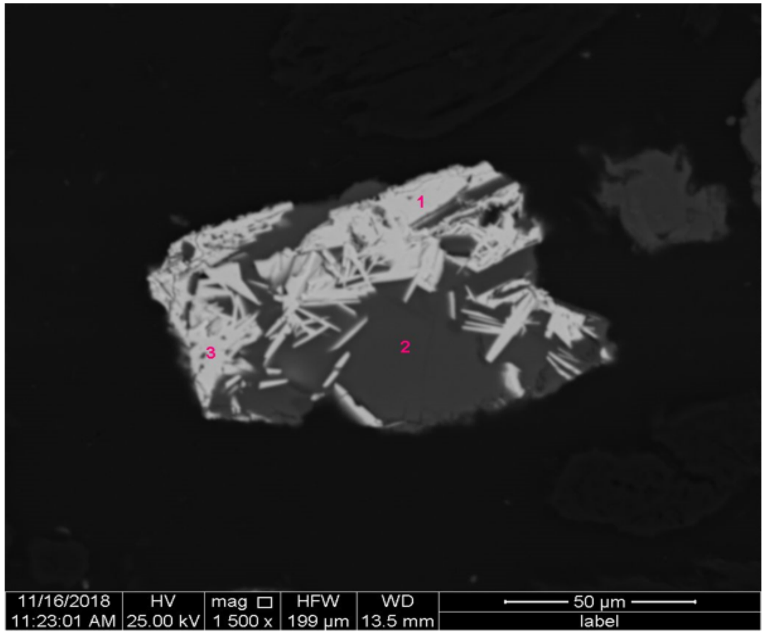
The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

Element	Pb	Cu	Zn	V	Fe	O	H	Total
Average of all descloizite analyses (original)	57.4	0.2	18.1	17.9	0.6	5.7		100.0
Average of all descloizite analyses (O adjusted to 20 %)	48.7	0.2	15.4	15.2	0.5	20.0		100.0
Descloizite (typical composition from www.webmineral.com)	51.2		16.2	12.6		19.8	0.3	100.0

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

Example image 10



Min3533-Particle-10

Mineral Name
- Background
- Descloizite
- Galena/other Pb
- Sphalerite
- Other sulphides
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (+/- Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Limonite/goethite
- Other minerals

'Galena/other Pb' was found to be mainly cerussite.

Spectrum	Pb	Cu	Zn	V	Fe	Mg	Al	Si	K	Ca	Ti	O	Total
Particle-10- 1	56.5		19.0	17.9	0.7							5.9	**100.0**
Particle-10- 2						0.6				56.7		42.7	**100.0**
Particle-10- 3	58.0		18.0	17.1	2.9							4.0	**100.0**

The composition data shown here is based on a normalized, standardless, semi-quantitative measurement.

Oxygen, the lightest element, is significantly underestimated.

The second table shows the average composition of the descloizite after oxygen is adjusted to 20%.

MINERAL GROUPS

Mineral groups	Description
Descloizite	Dominated by descloizite ((PbZn(VO_4)(OH), see 'Example BSE images and comments' tab for more information.
Cerussite	Mainly cerussite ($PbCO_3$) but probably including other Pb phases. Requires further characterisation
Sphalerite	Assumed to by mainly sphalerite (ZnS) but may include other Zn-rich phases. Requires further characterisation.
Other sulphides	Other trace sulphides.
Quartz	SiO_2
K-feldspar	Mainly K-feldspar ($KAlSi_3O_8$)). Overlaps with muscovite to some extent.
Muscovite	Mainly K-Al-mica ($KAl_3Si_3O_{10}(OH,F)_2$) assumed to be muscovite. Overlaps with K-feldspar to some extent.
Al-silicates (no or low Zn)	Poorly characterised Al-silicates probably dominated by kaolinite and similar clay minerals some of which may have low Zn contents.
Al-silicate (higher Zn)	Poorly characterised Al-silicates probably dominated clay minerals having relatively high Zn contents.
Zn-silicate	A Zn-rich silicate assumed to be hemaimorphite ($Zn_4(Si_2O_7)(OH)_2 \cdot H_2O$. Requires further characterisation.
Other silicates	Trace amounts of other silicate minerals.
Calcite	Mainly calcite ($CaCO_3$).
Dolomite	Mainly dolomite-ankerite ($CaMg(CO_3)_2$).
Other carbonates (Zn)	Other carbonates minerals which include Zn-carbonates having variable Zn contents and probably including some of the Zn-rich carbonate smithsonite ($ZnCO_3$).
Apatite	Mainly apatite ($Ca_5(PO_4)_3(OH,F,Cl)$). Also includes trace Al-and Fe-phosphates
Hematite/goethite/limonite	Mainly limonite ($FeO(OH) \bullet nH_2O$) and goethite (FeO(OH)). This group may also include Fe-oxides such as hematite (Fe_2O_3)
Steel	Fe-Cr-Ni alloy most likely a contaminant from comminution.
Rutile/anatase	Mainly rutile or anatase (TiO_2) but may include other Ti-bearing minerals such as ilmenite ($FeTiO_3$) and titanite (sphene, $CaTiSiO_5$), Also includes the fine intergrowth between Ti minerals with other minerals.
Other minerals	All other minerals not included in the list above.

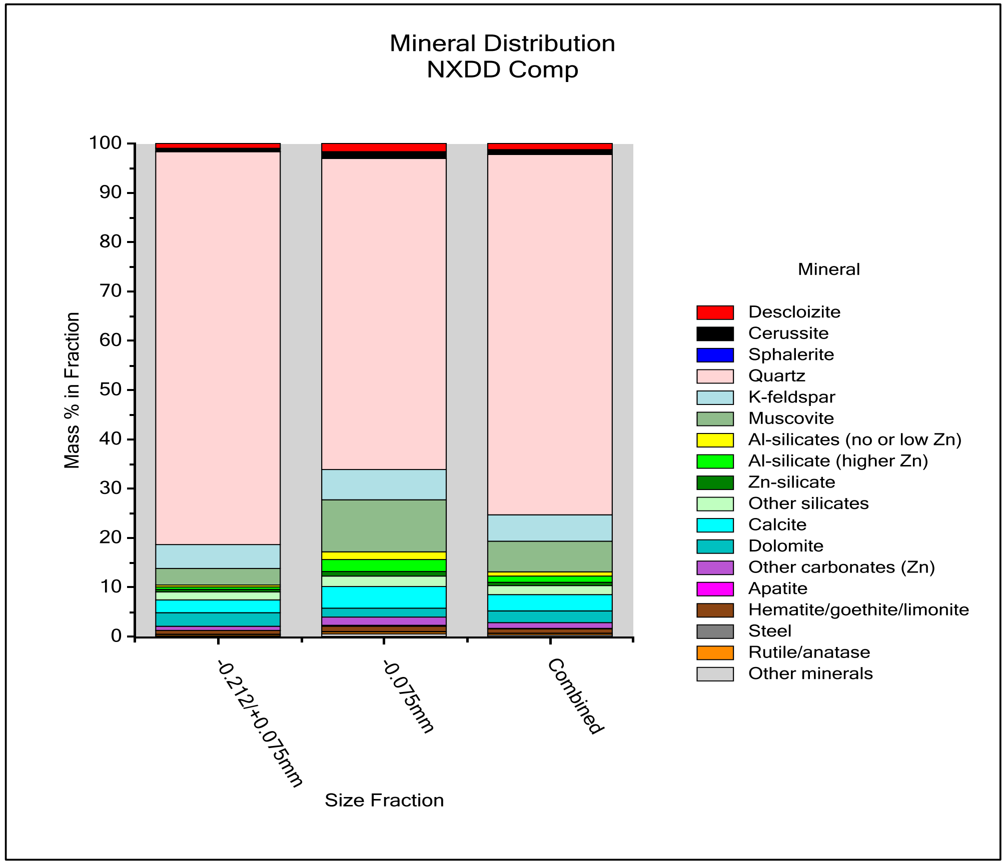
Mineral Name

- Background
- Descloizite
- Cerussite
- Sphalerite
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (no or low Zn)
- Al-silicate (higher Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Hematite/goethite/limonite
- Steel
- Rutile/anatase
- Other minerals

MINERAL ABUNDANCE

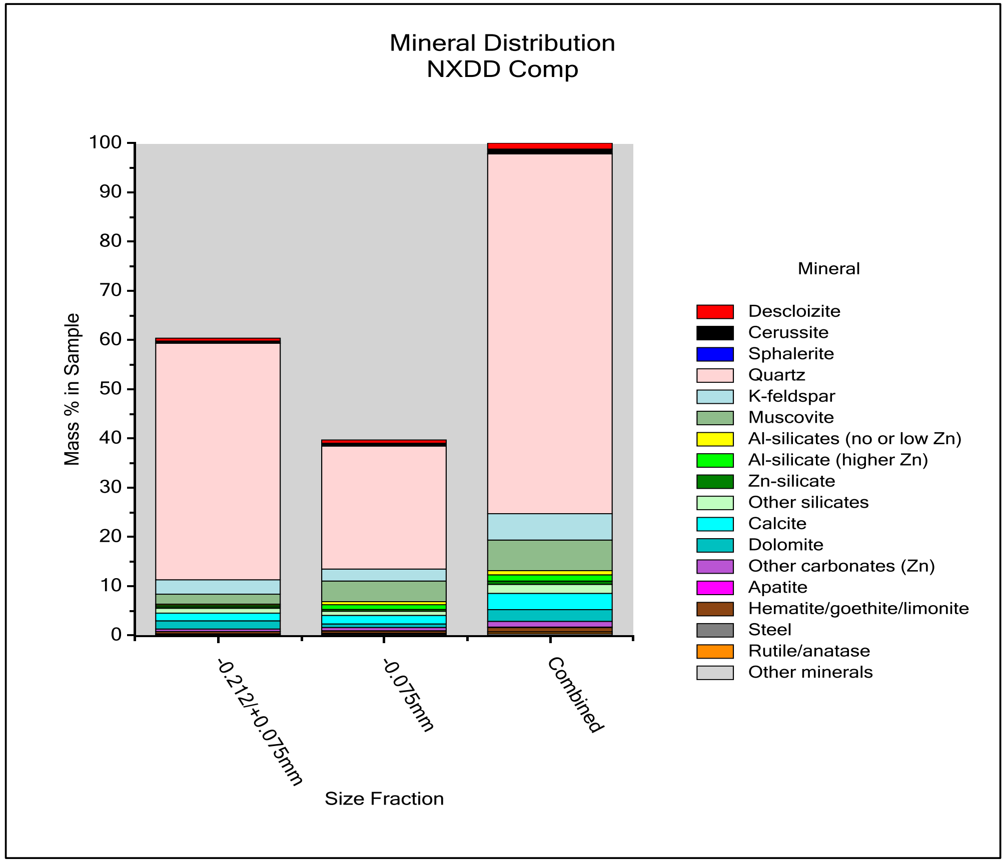
Mineral abundance (distribution in fractions)

Mineral group	NXDD Comp		
	-0.212/ +0.075mm	-0.075mm	Combined
	Mass% in fraction		
Descloizite	1.0	1.7	**1.2**
Cerussite	0.7	1.4	**1.0**
Sphalerite	0.0	0.0	**0.0**
Quartz	79.7	63.1	**73.1**
K-feldspar	4.8	6.1	**5.4**
Muscovite	3.4	10.6	**6.2**
Al-silicates (no or low Zn)	0.4	1.6	**0.9**
Al-silicate (higher Zn)	0.5	2.4	**1.3**
Zn-silicate	0.5	0.9	**0.7**
Other silicates	1.6	2.1	**1.8**
Calcite	2.6	4.4	**3.3**
Dolomite	2.8	1.8	**2.4**
Other carbonates (Zn)	0.8	1.7	**1.2**
Apatite	0.0	0.2	**0.1**
Hematite/goethite/limonite	0.8	1.1	**0.9**
Steel	0.0	0.1	**0.0**
Rutile/anatase	0.3	0.4	**0.3**
Other minerals	0.1	0.5	**0.3**
Total	**100**	**100**	**100**



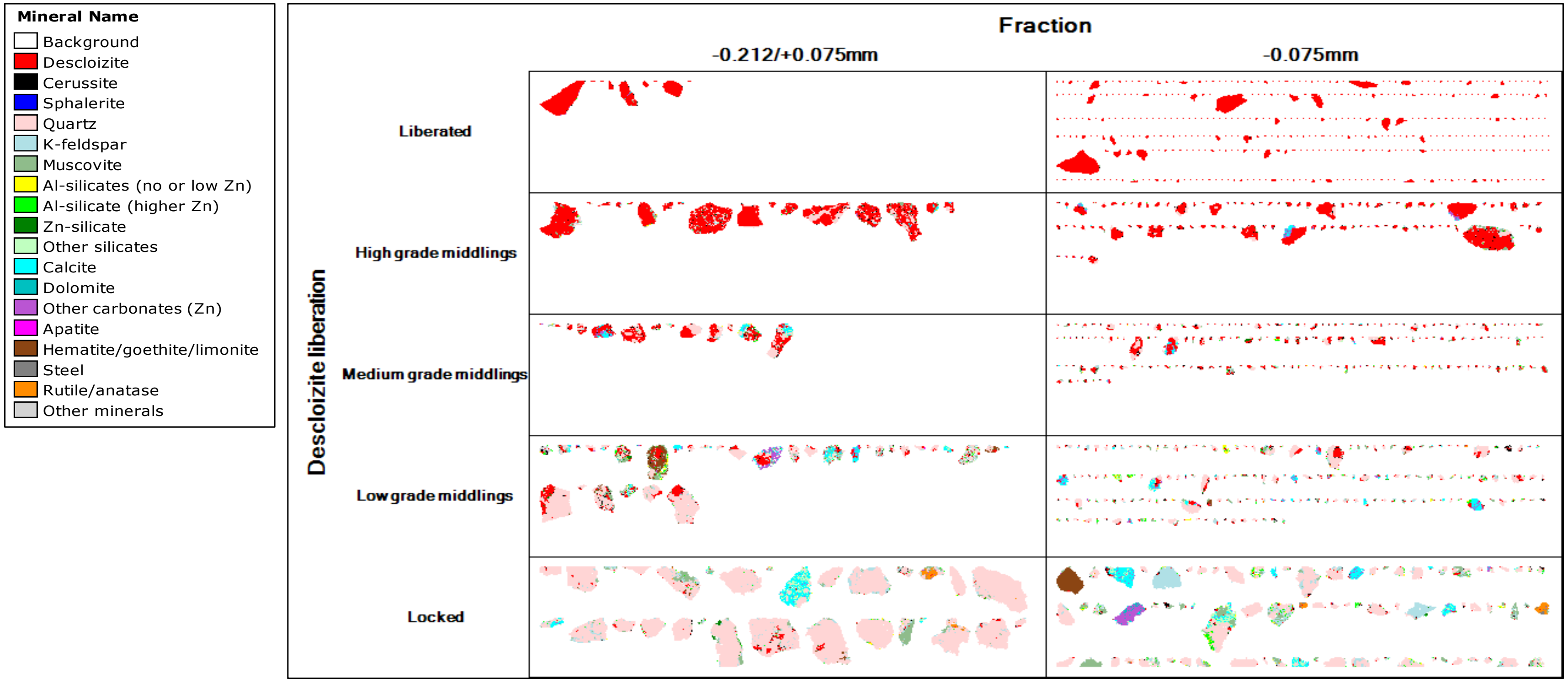
Mineral abundance (distribution in sample)

Mineral group	Nxuu Comp		
	-0.212/ +0.075mm	-0.075mm	Combined
	Mass% in sample		
Desclozite	0.6	0.7	1.2
Cerussite	0.4	0.5	1.0
Sphalerite	0.0	0.0	0.0
Quartz	48.1	25.0	73.1
K-feldspar	2.9	2.4	5.4
Muscovite	2.0	4.2	6.2
Al-silicates (no or low Zn)	0.2	0.6	0.9
Al-silicate (higher Zn)	0.3	1.0	1.3
Zn-silicate	0.3	0.4	0.7
Other silicates	1.0	0.8	1.8
Calcite	1.6	1.7	3.3
Dolomite	1.7	0.7	2.4
Other carbonates (Zn)	0.5	0.7	1.2
Apatite	0.0	0.1	0.1
Hematite/goethite/limonite	0.5	0.4	0.9
Steel	0.0	0.0	0.0
Rutile/anatase	0.2	0.2	0.3
Other minerals	0.1	0.2	0.3
Total	60.3	39.7	100.0
Weight % of size fraction	60.3	39.7	100.0



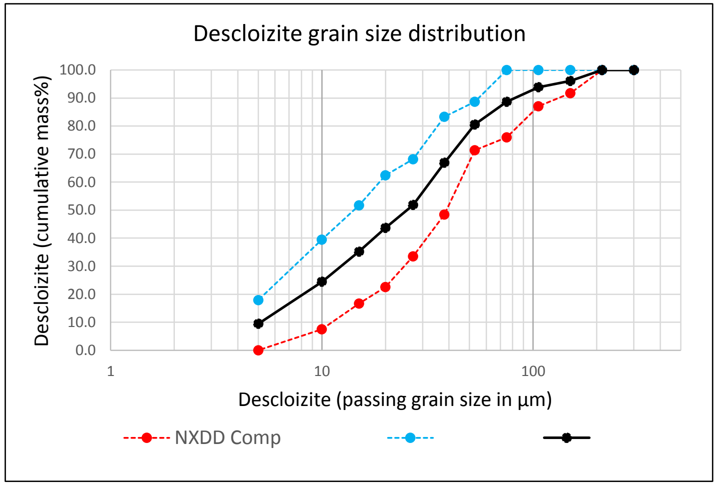
DESCLOIZITE LIBERATION

Liberation class (based on descloizite area%)		NXDD Comp -0.212/ +0.075mm	-0.075mm	Combined
		Descloizite (mass%)		
Liberated	**>90**	14.4	37.8	**26.8**
High grade middlings	**60-90**	44.1	33.4	**38.4**
Medium grade middlings	**30-60**	11.0	11.8	**11.4**
Low grade middlings	**10-30**	10.6	7.5	**9.0**
Locked	**<10**	20.0	9.5	**14.5**
Total		**100.0**	**100.0**	**100.0**



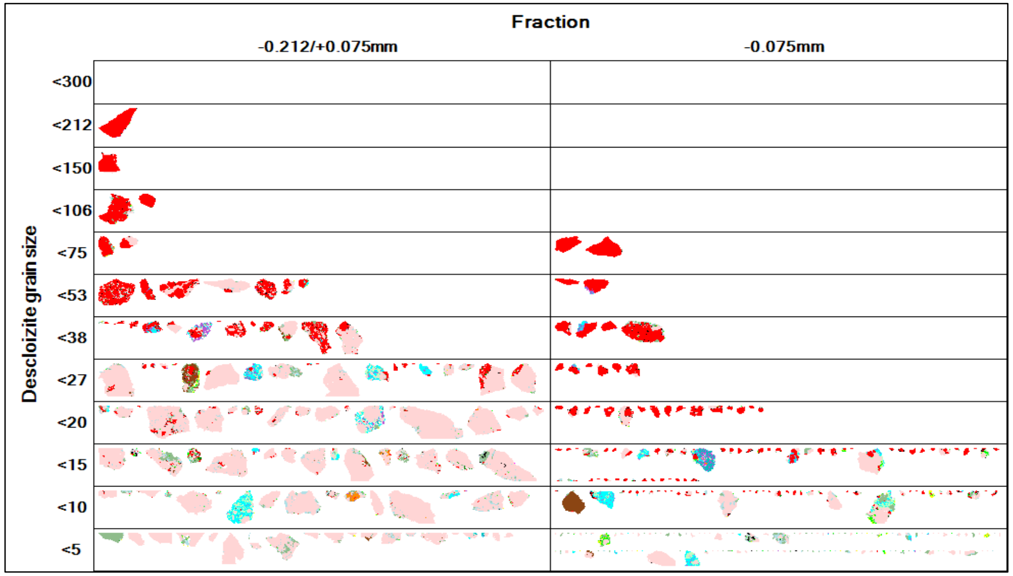
GRAIN SIZE DISTRIBUTION

Grain size (passing size in µm)		NXDD Comp		
		-0.212/ +0.075mm	-0.075mm	Combined
		Descloizite (mass%)		
<300	300	100.0	100.0	**100.0**
<212	212	100.0	100.0	**100.0**
<150	150	91.8	100.0	**96.1**
<106	106	87.0	100.0	**93.9**
<75	75	75.9	100.0	**88.7**
<53	53	71.4	88.7	**80.6**
<38	38	48.4	83.3	**66.9**
<27	27	33.5	68.2	**51.8**
<20	20	22.6	62.4	**43.7**
<15	15	16.7	51.7	**35.2**
<10	10	7.5	39.5	**24.4**
<5	5	0.0	17.9	**9.5**
P_{80}		**86**	**36**	**52**
P_{50}		**39**	**14**	**25**
P_{20}		**18**	**5**	**9**



Mineral Name

- Background
- Descloizite
- Cerussite
- Sphalerite
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (no or low Zn)
- Al-silicate (higher Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Hematite/goethite/limonite
- Steel
- Rutile/anatase
- Other minerals

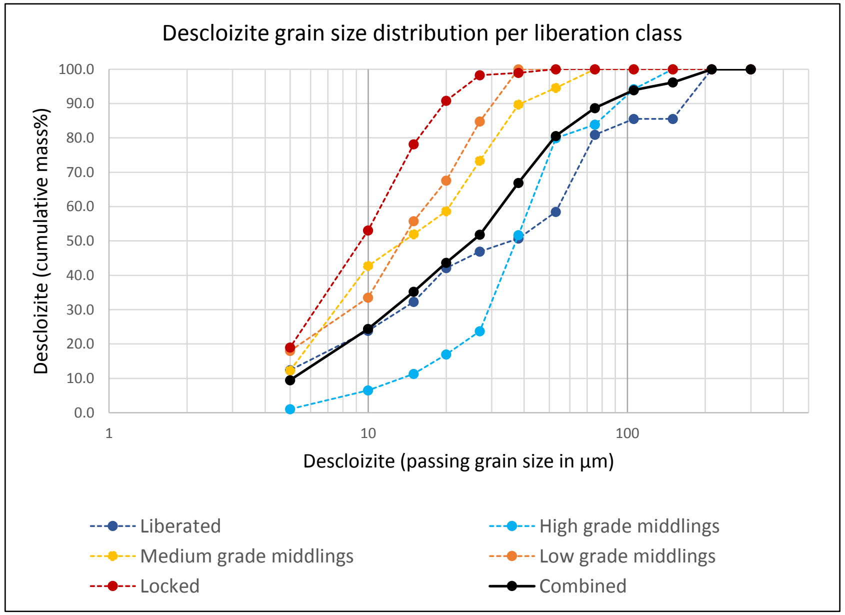


GRAIN SIZE DISTRIBUTION BY LIBERATION CLASS

Grain size (passing size in µm)		Liberated	High grade middlings	Medium grade middlings	Low grade middlings	Locked	Combined
		Descloizite (mass%)					
<300	**300**	100.0	100.0	100.0	100.0	100.0	**100.0**
<212	**212**	100.0	100.0	100.0	100.0	100.0	**100.0**
<150	**150**	85.5	100.0	100.0	100.0	100.0	**96.1**
<106	**106**	85.5	94.2	100.0	100.0	100.0	**93.9**
<75	**75**	80.9	83.8	100.0	100.0	100.0	**88.7**
<53	**53**	58.5	79.9	94.6	100.0	100.0	**80.6**
<38	**38**	50.7	51.7	89.7	100.0	98.9	**66.9**
<27	**27**	46.9	23.7	73.4	84.8	98.3	**51.8**
<20	**20**	42.1	16.9	58.6	67.6	90.8	**43.7**
<15	**15**	32.3	11.3	51.9	55.8	78.2	**35.2**
<10	**10**	23.9	6.5	42.7	33.5	53.0	**24.4**
<5	**5**	12.4	1.0	12.3	18.0	19.0	**9.5**
P_{80}		**74**	**54**	**31**	**25**	**16**	**52**
P_{50}		**36**	**37**	**14**	**14**	**10**	**25**
P_{20}		**8**	**23**	**6**	**6**	**5**	**9**

Mineral Name

- Background
- Descloizite
- Galena/other Pb
- Sphalerite
- Other sulphides
- Quartz
- K-feldspar
- Muscovite
- Al-silicates (+/- Zn)
- Zn-silicate
- Other silicates
- Calcite
- Dolomite
- Other carbonates (Zn)
- Apatite
- Limonite/goethite
- Other minerals



GLOSSARY OF TERMS

Assay Reconciliation

Assay reconciliation uses chemical assay data and compares them with QEMSCAN calculated elemental values.This approach is limited in its accuracy due to the fact that standardised or average densities and compositions are used for the mineral phases found, that might not correspond to the actual density and chemical composition of the phases present.

QEMSCAN elemental data should be considered indicative only as it is furthermore affected by:

(i) Low elemental values in the mineral lattice - these elements may fall below the QEMSCAN elemental peak detection limit and/or below EDS limits of detection and not be detected.

(ii) Elements found in low abundance minerals have higher error (function of particle statistics).

(iii) Elemental data collected from coarse particles generally has a higher degree of error (function of particle statistics and representativity).

Association

Mineral Association is a measure of spatial relationships in terms of shared grain boundaries and is essentially a measure of adjacency. The data represent normalised pixel transition numbers (grain contacts) created during the particle scans. A high association with background indicates significant surface exposure and/or liberation.

Back scattered electron (BSE) image

The backscattered electron images (BSE) represent a series of grey-scales varying from black to white with increasing average mineral density.

Bulk Mineral Analysis (BMA)

Bulk Mineral Analysis (BMA) is a one dimensional line scan method. Each block is scanned in the X direction, with the Y direction line spacing being set such that each particle is intersected approximately once. The entire block is scanned producing an extremely high statistical population with the random alignment of the particles ensuring appropriate sampling. This is a good analysis method for low grade species, as the intercept statistics are higher , but will only provide mineral abundance information with some accuracy.

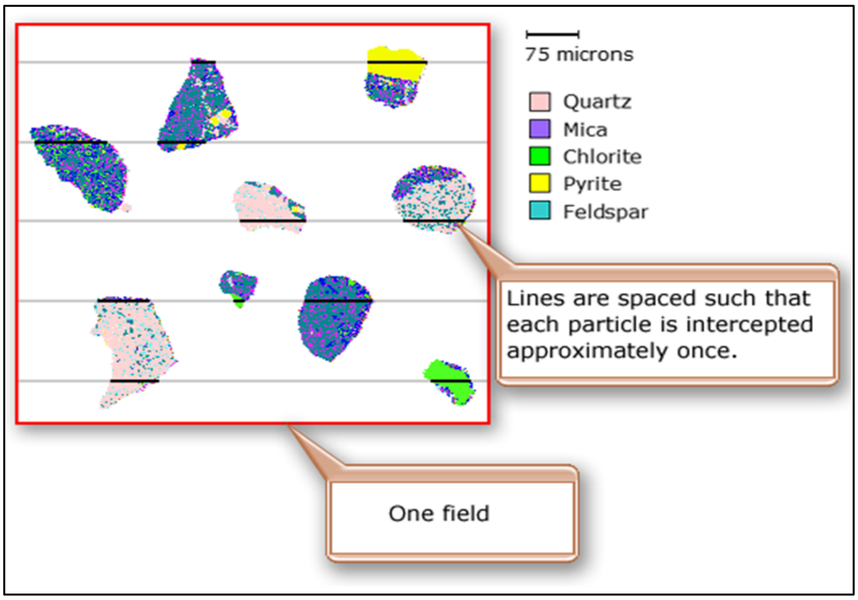


Figure 1 The line scan method used in BMA

Calculated Average Particle and Grain Size

Average particle and mineral grain size data are estimated from QEMSCAN image analysis based on the premise that the area of a grain in a two dimensional plane section is representative of the volume of that grain (Delesse's Principle, see **Stereology**). Grain size is calculated by using the diameter of a sphere (ESD) with the same surface-area as the measured grain. Although the data is based on a large number of random cross-sections through randomly oriented particles, both particle and grain sizes will be underestimated to some extent as illustrated in the figure below. Line A-B represents the polished surface in side view. The red lines represent the maximum diameter of the spheres. A random section through grains is much more likely to intersect grains at a point other than the maximum (red), thus resulting in an underestimation of the average grain sizes. The resolution is limited by the beam size and pixel spacing used to measure the samples. Results should be considered indicative only.

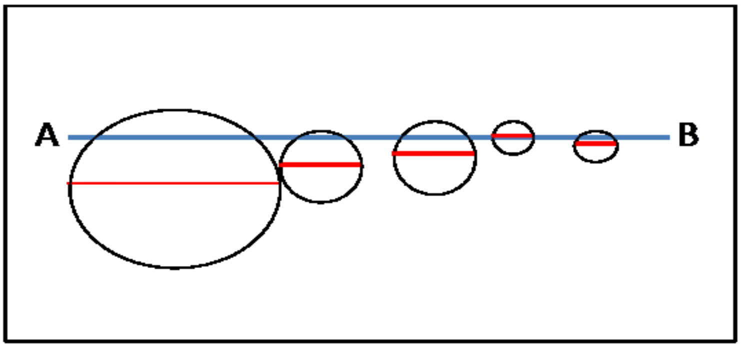


Figure 2 Line of section A-B through spherical grains showing there is a high probability of intersecting a cross section of a diameter less than the maximum (shown in red)

Calculated Grain Size Distribution

The calculated grain size distribution is presented as cumulative curves. The cumulative weight percentage of grains less than a given grain size for each size fraction is plotted against the logarithm of the particle size. The shape of each curve illustrates the distribution of grain sizes within each fraction. The relative position of each curve illustrates the relative grain size between samples with grain size decreasing towards the uppermost curves as shown by the hollow arrow in the figure below. For example the uppermost, black curve in the graph below shows that 80 mass % (P80) of the sample is less than 66 μm. The lowermost, blue curve in the graph below shows that 80 mass % (P80) of the sample is less than 313 μm.

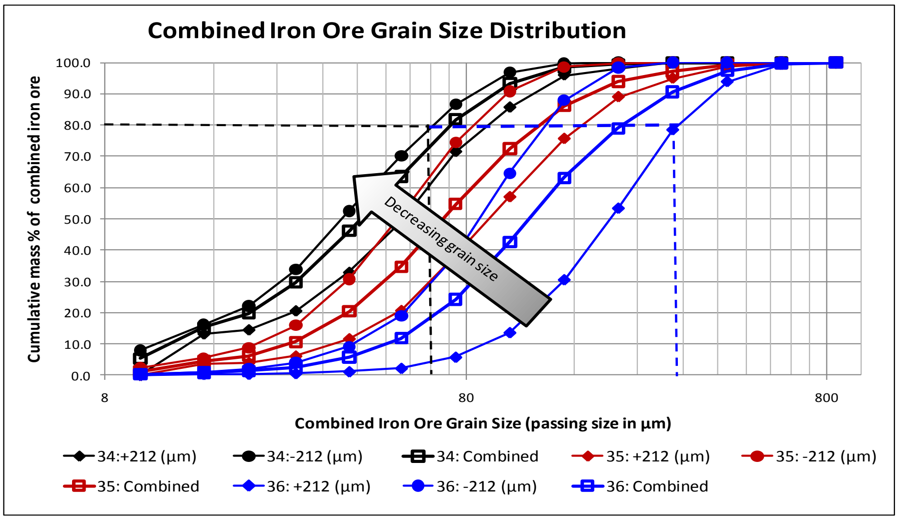


Figure 3 Cumulative grain size distribution curve

Deportment

Elemental deportment data quantify the average distribution of specific elements among minerals. Average chemical compositions and densities are assigned to each mineral phase to calculate deportment from image analysis area measurements. Data should be considered indicative only owing to Energy Dispersive Spectrometry (EDS) detection limits; phase variability; intricate textures; instrument resolution limits and non-stoichiometric mineral compositions. A larger uncertainty is present for elements with low abundance .

Exposure

Exposure data quantify the proportion of specific minerals that are in contact with resin (i.e. exposed at the particle surface). The measured particles have been subdivided according to the definitions below.

Exposure Class	Definitions
Exposed	>90 % of the target mineral is exposed at the surface of the particle
60 % - 90 % Exp	Between 61 % and 90 % of the target mineral is exposed
31 % - 60 % Exp	Between 31 % and 60 % of the target mineral is exposed
1 % - 30 % Exp	Between 1 % and 30 % of the target mineral is exposed
Encapsulated	The target mineral shows zero exposure

Field Scan (FS) Mode

The Field Scan mode allows full mapping of particles larger than the field of view (FOV) of the microscope at the given magnification. The sample surface is split into a series of grids, each representing a FOV. Every point in each field is then mapped at a user-defined pixel spacing to produce a full image of the field. Each field is measured with a minor overlap to facilitate digital stitching into a single composite image. This image may then be 'granulated' to separate particles from resin, if necessary.

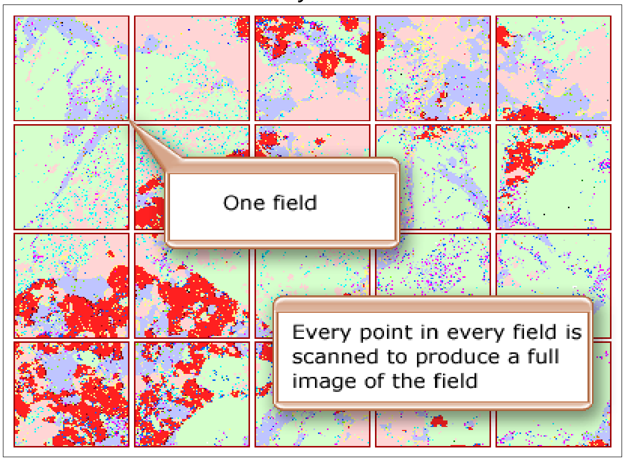


Figure 4 Field Scan (FS) Mode of analysis

Grain

Refers to an individual mineral ***grain***, as opposed to a ***particle*** which is an aggregate of mineral grains.

According to the QEMSCAN data, the "size" of the **particle** below is about 800 µm. It is made up of a large number of **grains** which are individually much smaller than the combined particle. For example, the QEMSCAN data indicates that the average (grain) size of the quartz in this particle is about 38 µm.

The calculated average size of the "ilmenite" in this particle is 34 µm but this dimension is fairly meaningless since the division between the "ilmenite " and "altered ilmenite" is arbitrary. When combined, the size of the "Ti-Fe-oxides" (in this case mainly "ilmenite" and "altered ilmenite") is 70 µm and the size of the combined silicates is about 160 µm.

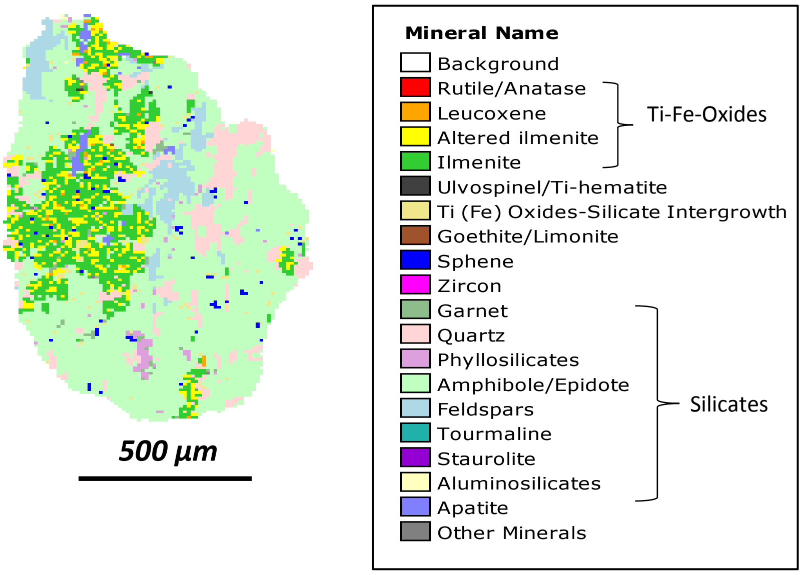


Figure 5 Mineral map of a 'particle', an aggregate of mineral 'grains'

Grain size

See **Grain** and **Calculated Average Particle and Grain Size**

Liberation

Mineral liberation examines the mineral composition on a particle by particle basis. It quantifies the degree of liberation (i.e. free versus composite particles) of the mineral of interest, calculated according to one of two methods, using area % or surface area % that the target mineral occupies within the particle.

Liberation data from 2D image analysis has an inherent **stereological** bias. The figure below illustrates the stereological bias for a two-phase system. A section through a composite particle with simple texture has a finite probability of sampling only one phase, leading to a systematic overestimation of mineral liberation. The extent of stereological bias depends on the texture of the ore.Samples containing mineral grains of a size comparable to the particle show the most bias. The schematic below demonstrates a variety of mineralogical textures. When many of the particles are composite and the texture is simple (as shown below), stereological bias is an important consideration.

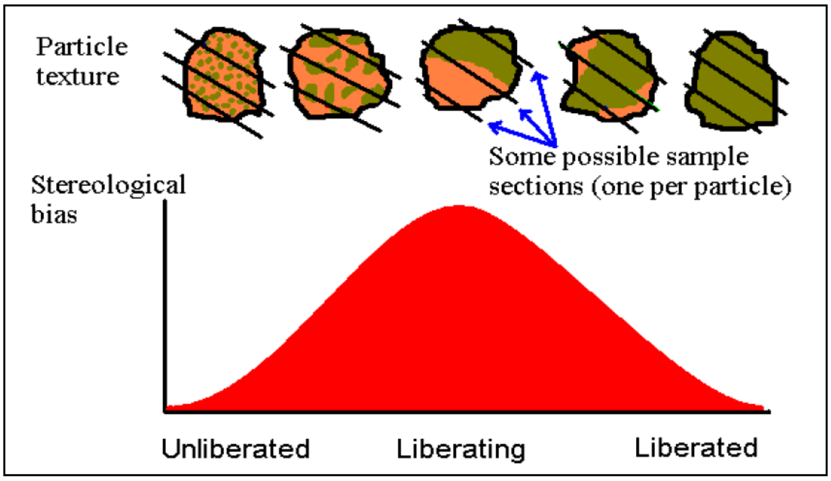


Figure 5 Schematic of stereological error in grade estimation by single sectioning of particles. The magnitude of stereological bias is shown as a function of particle texture, with sections (straight lines) through liberated and composite particles of similar size.

Locking

Locking characteristics describe the associations of minerals (not necessarily adjacent minerals) within a particle.

Liberation Class	Definition
Fully liberation	Target mineral comprises 100 % (by [area% OR surface area%]) of the particle
Well liberated	Target mineral comprises between 90 and 100 % (by [area% OR surface area%]) of the particle
High grade middlings	Target mineral comprises between 60 and 90 % (by [area% OR surface area%]) of the particle
Low grade middlings	Target mineral comprises between 30 and 60 % (by [area% OR surface area%]) of the particle
Very low grade middlings	Target mineral comprises between 10 and 30 % (by [area% OR surface area%]) of the particle
Locked	Target mineral makes up less than 10% (by [area% OR surface area%]) of the particle

Mineral Abundance

Mineral provides the weight % of each mineral within the sample analysed. It is calculated from area measurements and uses average mineral densities that have been assigned to each of the minerals in the database.

Mineral Groupings

QEMSCAN analysis generates an extensive list of mineral species. This is simplified using X-ray diffraction and semi-quantitative EDS microanalyses.

Mode of Measurement

Five different modes of measurement are available on the QEMSCAN:

1. The Particle Mineralogical Analysis mode (PMA)
2. Field Scan (FS)
3. Specific Mineral Search (SMS)/Trace Mineral Search (TMS)
4. Bulk MIneral Analysis mode (BMA)

Particle

An aggregate of mineral **grains**.

Particle Images

False colour images of mapped mineral distributions.
A random selection of particles have been presented, ordered by size.
Please note different size fractions have been analysed at different magnifications. Please refer to scale bars.

Particle Mineralogical Analysis mode (PMA)

PMA is a two dimensional analysis methodology in which the entire area of every particle falling within the measurement constraints is analysed. This allows for detailed characterisation of samples with particle size up to about 1 mm. During a PMA, the instrument conducts a Back Scatter Electron (BSE) scan to detect particles in the field. Detected particles are then measured.This mode of measurement produces particle images. A statistically robust, randomly selected sub-population of usually more than 3000 particles is analysed during a standard PMA.

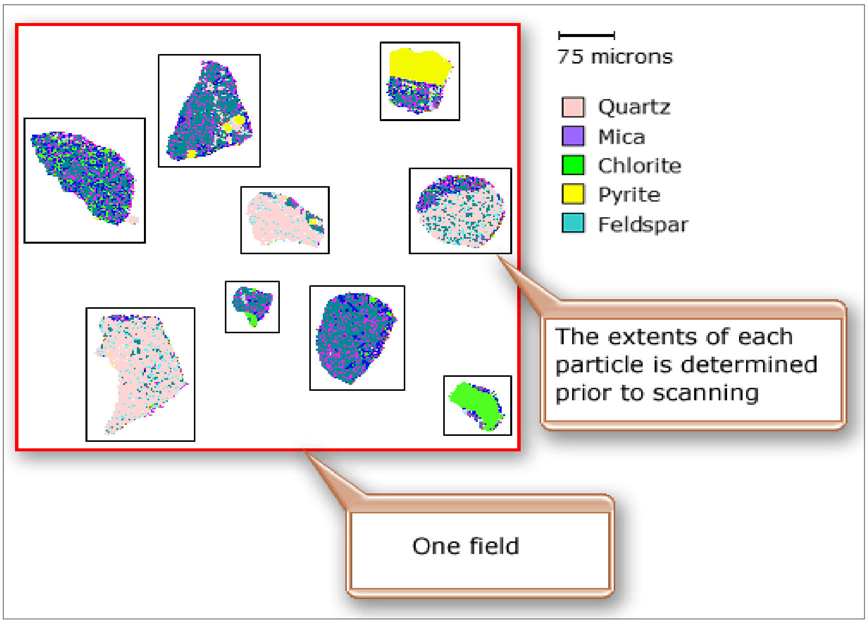


Figure 6 Particle Mineralogical Analysis (PMA) mode

QEMSCAN

History

QEMSCAN evolved from QEM*SEM, which is the Quantitative Evaluation of Materials using a SEM (Scanning Electron Microscope). It was developed by CSIRO in 1979. QEMSCAN® is the fully automated QEM*SEM based analysis system developed in the 1990s QEMSCAN is the fastest and most productive microbeam analysis system in the world. QEMSCAN instruments are capable of achieving 200,000 counts/ second, utilising digital pulse processors and light element x-ray EDS (Energy Dispersive Spectrum) detectors.

Measurement

QEMSCAN measures particles or sections by collecting individual EDX spectra (chemical information) and BSE value (average atomic number contrast) at every point (pixel) on a grid. Each point is then characterised as a mineral phase by referencing to a mineral compositional database **(Species Identification Protocol or SIP)**. 100 – 200 individual points can be measured per second. The length of time for a full measurement will depend on the data quality required and the spatial resolution that the measurement is performed at.

Greyscale BSE images provide qualitative compositional maps, **particle images**, which together with the chemical information is used. By QEMSCAN to positively identify the mineral/ phase present and to accurately determine grain and particle boundaries

QEMSCAN uses both the backscattered electron and energy dispersive X-ray signals to create digital images where each pixel corresponds to a mineral species.

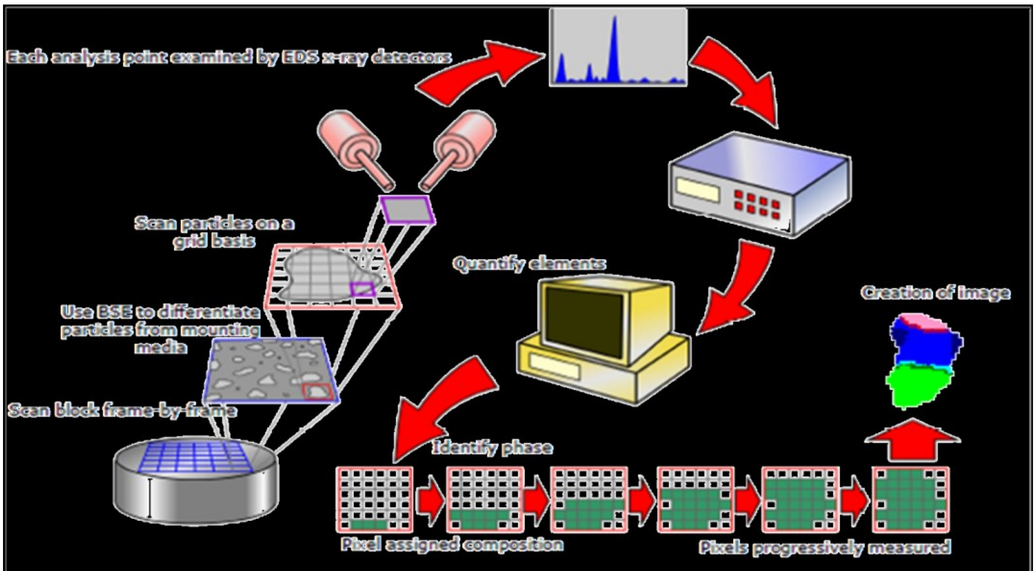


Figure 7 QEMSCAN component configuration

SIP (Species Identification Protocol)

A Species Identification Protocol, or SIP, is an extensive list of minerals the QEMSCAN refers to when analysing particles. There are a number of SIPs, each tailored towards specific mineral groupings or deposits. A SIP needs to be present before measurements can be made. The selected SIP should be suited to the samples being analysed. Where the optimal SIP is uncertain, one developed for samples of a similar nature will be used and adapted. Data reduction involves the classification of the particle analysis into various user specified mineral/chemical categories and size intervals. The classification categories are defined based on elemental X-ray intensities (X-ray counts), intensity ratios and stoichiometric criteria.

Size by Size Chemical Assay

Chemical assay results supplied to Mineralogy. Assay reconciliation is presented below comparing the QEMSCAN calculated elemental assay (black text) with the measured chemical assay (grey text).

Specific Mineral Search (SMS) / Trace Mineral Search (TMS)

Specific Mineral Search/ Trace Mineral Search is based on the PMA measurement mode, but only analyses a pre-set sub-population of the particles present. It is based on the premise that the phases of primary interest (i.e. target phases) have a specific backscatter electron intensity (BSE brightness). This enables each block to be scanned for particles containing phases with the selected BSE brightness range,, and only those of interest are fully analysed. As the entire block is scanned, this also produces the highest possible statistical population for a trace phase. The information obtained from a SMS/TMS measurement is similar to that from PMA measurement, but relates only to the sub-population analysed. This is a particularly good analysis method for determining losses of sulphides and precious metal phases to silicate-rich tails.

This mode is recommended for good statistics on the phases of interest in low/trace grade samples. It is faster than a PMA scan when grade is low and only target particles are of interest.

When a SMS is conducted, a BSE image of the field is created, this image is analysed to locate particles containing particles of BSE brightness in the range selected – other particles are ignored. The entire target particle is mapped, with x-rays being collected from each pixel on the particle - the resulting map identifies host minerals as well as the target minerals.

When only trace amounts of target minerals are present, creating BSE images of every field can be time consuming and fruitless as many fields will not contain the target phase. A TMS, or Trace Mineral Search, utilizes special hardware which continuously monitors BSE intensity and compares that signal to a preset BSE intensity threshold. If the target phase BSE is greater than the threshold, the location of the target phase within the field is recorded. After the BSE scan, fields containing the target phase are subjected to a Specific Mineral Search, while the remaining fields are ignored.

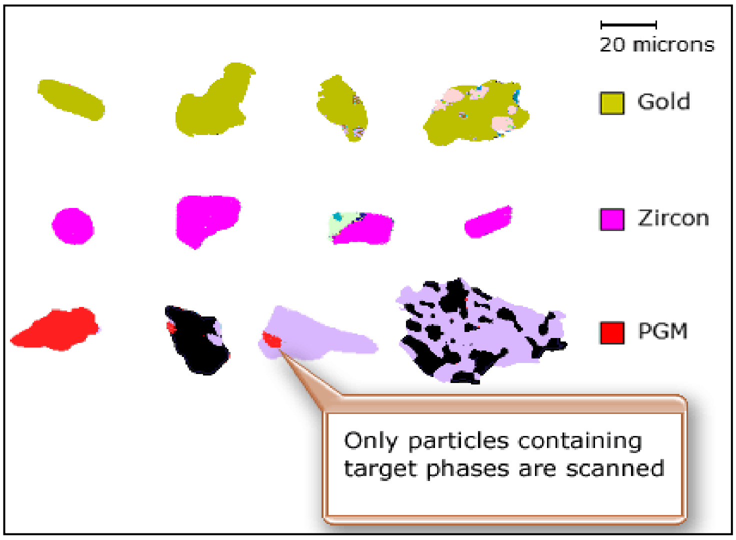


Figure 8 SMS (Specific Mineral Search)/ TMS (Trace Mineral Search) mode

Stereology

Stereology is based on Delesse's principle that the area of a mineral in a plane section provides an estimate of its volume percentage, assuming a set of randomly oriented grains in a homogenous sample. The shapes of minerals seen in a microscope image are planar sections of individual solid grains and the three dimensional extent of each grain cannot be directly measured. Stereology allows the extrapolation of quantitative 2D information from microscope images to an estimate of its percentage of volume in the solid. Stereology is the cornerstone of Automated Mineral Analysis (AMA) using QEMSCAN. The correct application of stereological principles and three dimensional sampling is vital to producing statistically valid data that is representative of the sample being analysed.

Trace Mineral Search (TMS)

Theoretical Grade Recovery

Theoretical Grade Recovery Curves are essentially a measure of particle liberation and dilution from which idealised maximum grade and recovery values have been calculated, for the submitted crush size.

Recovery increases as liberation decreases (i.e. the particles become binary and ternary particles) and the grade decreases (particles become diluted). The curves show the theoretical (i.e. uppermost) grade and recovery that could be expected in a perfect world if mineral liberation was the only factor affecting particle recovery (i.e. a perfect separation).

Although the curves are useful for comparing ores, it is important to understand that the mineralogical limiting grade and recovery values presented are unlikely to be reached during a real separation. The practical achievable grade and recovery will normally sit below the theoretical curves because numerous metallurgical, mineralogical and chemical factors interact during the separation in addition to liberation.

X-ray diffraction (XRD)

The three-dimensional structure of non-amorphous materials, such as minerals, is defined by regular, repeating planes of atoms that form a crystal lattice. When a focused X-ray beam interacts with these planes of atoms, part of the beam is transmitted, part is absorbed by the sample, part is refracted and scattered, and part is diffracted. Diffraction of an X-ray beam by a crystalline solid is analogous to diffraction of light by droplets of water, producing the familiar rainbow. X-rays are diffracted by each mineral differently, depending on what atoms make up the crystal lattice and how these atoms are arranged. An XRD pattern of a sample is the summation of diffraction patterns from each phase in that sample. This allows the identification of phases in the sample from their XRD patterns.

Because each crystalline material has a characteristic atomic structure, it will diffract X-rays in a unique characteristic pattern. The set of peaks produced for a particular phase can be used as a 'fingerprint' to identify it. A phase is a specific form of a particular mineral or other pure, crystalline material. Multiple phases can exist in the one sample simultaneously. The amount of each phase in a mixture will relate to how strong its signal is in the final pattern and this allows the quantification of phases in mixtures.

Peaks found on the spectra must have a high enough signal to be discriminated from the background noise. In addition, it is necessary to have secondary peaks that are used to confirm the primary peak as belonging to the particular mineral species in question. As a result, there are practical limitations to the minimum detectability of minerals in the sample. Some minerals may simply be reported as having trace amounts.

XRD provides a fast and reliable tool for routine mineral identification. XRD is particularly useful for identifying fine-grained minerals and mixtures or intergrowths of minerals, which may not lend themselves to analysis by other techniques.

The important result is which minerals are present, with less emphasis on quantity of each mineral. If the sample is a mixture, XRD data can be analyzed to determine the proportion of the different minerals present. Other information obtained can include the degree of crystallinity of the minerals present, possible deviations of the minerals from their ideal compositions (presence of element substitutions and solid solutions), the structural state of the minerals (which can be used to deduce temperatures and pressures of formation), and the degree of hydration for minerals that contain water in their structure.

APPENDIX 6

The following extract from the JORC Code 2012 Table 1 is provided for compliance with the Code requirements for the reporting of drilling results.

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections).

Criteria	JORC code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	**Mount Burgess Mining Diamond Core Holes** HQ Diamond Core was marked and collected in sample trays, visually logged and cut in half. Samples were collected as nominal 1m intervals but based on visible geology with minimum samples of 0.3m and maximum samples of 1.3m. Half of each core was retained on site in core trays and the other half was double bagged and sent to Intertek Genalysis Randburg, South Africa where they were crushed. A portion of each intersection sample was then pulverised to p80 75um and sent to Intertek Genalysis for assaying via ICPMS/OES for Ag/Co/Cu/Ga/Ge/In/Pb/V/Zn. **Mount Burgess Mining Diamond Core Used for Mineralogical and Metallurgical Test Work** The remainder of the crushed samples were then sent from Intertek Genalysis Randburg to Intertek Genalysis Maddington, Western Australia where they were then collected by the Company for storage. Samples from various intersections of four drill holes NXDD029, NXDD032, NXDD034, and NXDD046 as shown on Page 1 of the Quarterly Report (SAMPLE SUBMISSION MTB7 – 11 – 18) were selected by the Company for submission to ALS Laboratories, Western Australia for mineralogical and metallurgical test work. These samples were chosen as being representative of the estimated Vanadium grades known to date of the Nxuu Deposit. The composite sample as shown Page 1 of the Quarterly Report (SAMPLE SUBMISSION MTB7 – 11 – 18) was crushed by ALS Laboratories to 100% passing 0.212 mm and then dry screened over a 0.075 mm screen. It was then subjected to mineralogical and metallurgical test work. The results of the Mineralogical Test work are outlined under the heading MINERALOGICAL TEST WORK, as shown on Pages 2 & 3 of the Quarterly Report. The specific aim of the Mineralogical Test Work was to determine the host mineral for Vanadium from the composite sample. The host mineral was confirmed as DESCLOIZITE Results of the Metallurgical Test Work are outlined under the heading METALLURGICAL TEST WORK on Page 4 of the Quarterly Report, which summarised recoveries as follows: • Through applying a Direct Flotation process with Hydroxamate, as a collector, **80.4% of Vanadium was recovered** to concentrate from sample crushed to 75 µm. • Through applying the process of Wet Table Gravity Separation on a sample crushed to 150 µm, followed by Flotation of the gravity tail crushed to 75 µm, using Hydroxamate, **recovered 80.7% of Vanadium** to concentrate**.** The specific aim of the Metallurgical Test Work was to test for the recovery of Vanadium and Vanadium

		Pentoxide from the host Vanadate mineral DESCLOIZITE.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	**Mount Burgess Mining Diamond Core Holes** HQ diameter triple tube was used for diamond core drilling. As all holes drilled into the Nxuu deposit were vertical holes the diamond core was not orientated.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material	**Mount Burgess Mining Diamond Core Holes** Sample recoveries were in general high and no unusual measures were taken to maximise sample recovery other than the use of triple tube core. Mount Burgess believes there is no evidence of sample bias due to preferential loss/gain of fine/coarse material.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	**Mount Burgess Mining Diamond Core Holes** Holes were logged in the field by qualified Geologists on the Company's log sheet template and of sufficient detail to support future mineral resource estimation: Qualitative observations covered Lithology, grain size, colour, alteration, mineralisation, structure. Quantitative logging included vein percent. SG calculations at ~5m intervals were taken in the DD holes. All holes were logged for the entire length of hole. Logs are entered into MTBs GIS database managed by MTB in Perth.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled	**Mount Burgess Mining Diamond Holes** HQ Core was sawn in half on site. Half of each core was retained on site in core trays and the other half was double bagged and labelled noting Hole# and interval both within the bag and on the bag. Sample bags were then placed in larger bags of ~40 individual samples and the larger bag also labelled describing the contents. Field duplicates were inserted at regular intervals. All samples currently being reported on and submitted for assaying were pulverised to p80 75um and assayed via ICPMS/OES. All samples currently being reported on were assayed for Ag/Co/Cu/Ga/Ge/In/Pb/V/Zn.
Quality of assay data and laboratory tests	•The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total •For geophysical tools, spectrometers, hand-held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc. • nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	**All Mount Burgess Samples** All samples were sent to Intertek Genalysis Perth, for assaying according to the following standard techniques: (a) Ore grade digest followed by ICP – OES finish for Silver, Lead, Vanadium & Zinc (b) Nitric acid/hydrofluoric acid specific digest for Germanium and Indium (c) Also 4 acid digest for silver, lead, zinc, germanium and gallium followed by AAS Mount Burgess quality control procedures include following standard procedures when sampling, including sampling on geological intervals, and reviews of sampling techniques in the field. The current laboratory procedures applied to the Mount Burgess sample preparation include the use of cleaning lab equip. w/ compressed air between samples, quartz flushes between high grade samples, insertion of crusher

		duplicate QAQC samples, periodic pulverised sample particle size (QAQC) testing and insertion of laboratory pulp duplicates QAQC samples according to Intertek protocols. Intertek inserts QA/QC samples (duplicates, blanks and standards) into the sample series at a rate of approx. 1 in 20. These are tracked and reported on by Mount Burgess for each batch. When issues are noted the laboratory is informed and investigation conducted defining the nature of the discrepancy and whether further check assays are required. The laboratory completes its own QA/QC procedures and these are also tracked and reported on by Mount Burgess. Acceptable overall levels of analytical precision and accuracy are evident from analyses of the routine QAQC data
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	**All Mount Burgess Samples** Assay results for samples were received electronically from Intertek Genalysis and uploaded into MTB's database managed by MTB at its Perth Office. Analytical results for Vanadium (V) from diamond core holes being reported on have now been converted to V2O5 (Vanadium Pentoxide) by multiplying the Vanadium grades by 1.785.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	**All Mount Burgess Holes** Drill hole collar locations were recorded at the completion of each hole by hand held Garmin 62S GPS with horizontal accuracy of approx. 5 metres • Positional data was recorded in projection WGS84 UTM Zone 34S. The accuracy provided by the system employed is sufficient for the nature of the exploratory program. Downhole surveys were not conducted.
Data spacing and distribution	Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	**All Mount Burgess Holes** Mount Burgess drilling campaigns were undertaken to validate historical drilling as well as to acquire further data for future resource estimation.. The data spacing and distribution is currently insufficient to establish the degree of geological and grade continuity appropriate for the estimation of Mineral Resources compliant with the 2012 JORC Code. Additional drilling is planned to determine the extent of mineralisation and estimate a Mineral Resource compliant with the JORC Code. Sample compositing was conducted on four Nxuu deposit drill holes, following receipt of assays from Intertek Genalysis, for the purpose of mineralogical and metallurgical test work.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	**All Mount Burgess Holes** Mineralisation was typically intersected at -90 degrees at the Nxuu Deposit and the Company believes that unbiased sampling was achieved.
Sample security	The measures taken to ensure sample security.	**All Mount Burgess Holes** Samples were taken by vehicle on the day of collection to MTB's permanent field camp, and stored there until transported by MTB personnel to Maun from where they were transported via regular courier service to laboratories in South Africa.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	**All Mount Burgess Holes**

		An independent Geologist was engaged to review sampling and logging methods on site at the commencement of the program.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Kihabe-Nxuu Project is located in north-western Botswana, adjacent to the border with Namibia. The Project is made up of one granted prospecting licence - PL 43/2016. This licence is 100% owned and operated by Mount Burgess. The title is current at the time of release of this report, with a renewal granted to 31 December 2020 with a right to apply for a further two year renewal to 31 December 2022. PL 43/2016 is in an area designated as Communal Grazing Area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The licence is in good standing and no impediments to operating are currently known to exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Geological Survey of Botswana undertook a program of soil geochemical sampling in 1982. As a result of this program, Billiton was invited to undertake exploration and drilling activities in and around the project area. Mount Burgess first took ownership of the project in 2003 and has undertaken exploration activities on a continual basis since then.
Geology	Deposit type, geological setting and style of mineralisation.	The Kihabe-Nxuu Project lies in the NW part of Botswana at the southern margin of the Congo craton The Gossan Anomaly is centred on an exposed gossan within the project. To the north of the project are granitoids, ironstones, quartzites and mica schists of the Tsodilo Hills Group covered by extensive recent Cainozoic sediments of the Kalahari Group. Below the extensive Kalahari sediments are siliciclastic sediments and igneous rocks of the Karoo Supergroup in fault bounded blocks.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole	Information material to the understanding of the exploration results reported by Mount Burgess is provided in the text of the public announcements released to the ASX. No material information has been excluded from the announcements.

Criteria	JORC Code Explanation	Commentary
	down hole length and interception depth hole length If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	**All Mount Burgess Holes** No data aggregation methods have been used. Vanadium results are reported without a top cut but the Company has used 100 ppm as a bottom cut. Vanadium Pentoxide results are reported by multiplying the Vanadium results by 1.785.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	**All Mount Burgess Holes** The geometry of the mineralisation with respect to the drill hole angle is typically at -90 degrees at the Nxuu Deposit which is considered representative from a geological modelling perspective.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	**Billiton Percussion Holes pre-fixed AP** The Company has no available information for these holes other than collar and survey data and assay results **All Mount Burgess Holes** Appropriate maps, sections and mineralised drill intersection details are provided in public announcements released to the ASX. Refer to Appendix 2 and the Company's website www.mountburgess.com.

Criteria	JORC Code Explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration results reported in Mount Burgess public announcements and this report are comprehensively reported in a balanced manner.
Other Substantive Exploration Data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment, metallurgical test results, bulk density, ground water, geotechnical and rock characteristics, potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further works planned at the Project include additional drilling and surface mapping at the Kihabe-Nxuu Zinc/Lead/Silver/Germanium and Vanadium Project.

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

MOUNT BURGESS MINING N.L.

ABN	**Quarter ended ("current quarter")**
31009067476	31 December 2018

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (6 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(9)	5
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(23)	(34)
	(e) administration and corporate costs	(32)	(73)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(64)**	**(102)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (6 months) $A'000**
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**-**	**-**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of shares	60	95
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	40
3.6	Repayment of borrowings	(5)	(7)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**55**	**128**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	61	26
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(64)	(102)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	55	128
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**52**	**52**

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	52	61
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**52**	**61**

6.	**Payments to directors of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to these parties included in item 1.2	-
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

n/a

7.	**Payments to related entities of the entity and their associates**	**Current quarter $A'000**
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

n/a

8.	**Financing facilities available** *Add notes as necessary for an understanding of the position*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	10	3
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

n/a

9.	**Estimated cash outflows for next quarter**	**$A'000**
9.1	Exploration and evaluation	-*
9.2	Development	-
9.3	Production	-
9.4	Staff costs	17
9.5	Administration and corporate costs	20
9.6	Other (provide details if material)	-
9.7	**Total estimated cash outflows**	**37**

*Subject to funding

10.	**Changes in tenements (items 2.1(b) and 2.2(b) above)**	**Tenement reference and location**	**Nature of interest**	**Interest at beginning of quarter**	**Interest at end of quarter**
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Sign here: Serene Chau Date: 21 January 2019
(~~Director~~/Company secretary)

Print name: Serene Chau

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.