mount burgess mining

Report for the Quarter to 31 March 2023

On 13 April 2023, the Company released a revised announcement containing Indicated and Inferred Mineral Resource Estimates for the Nxuu and Kihabe polymetallic Zn/Pb/Ag/Cu/V2O5/Ge/Ga Deposits, based on Zn equivalent low-cut grades of 0.5%, 1.0% and 1.5%. To review this announcement, refer to the Company's website www.mountburgess.com. The Mineral Resource Estimate details will be included in the Quarterly Report to 30 June 2023. However, to review the **metal content** of the Mineral Resource Estimates, refer to the table below.

TABLE 1 Nxuu and Kihabe In-ground Metal Content

Metal	Nxuu Oxide	Kihabe Oxide Transitional	Total Oxide Transitional	Kihabe Sulphide	Total Nxuu & Kihabe
	0.5% ZnEq Low Cut				
Zinc	64,000t	85,000t	149,000t	237,000t	386,000t
Lead	32,000t	44,000t	76,000t	110,000t	186,000t
Silver	1,040,000oz	1,700,000oz	2,740,000oz	3,800,000oz	6,540,000oz
V_2O_5	2,600t	4,000t	6,600t	5,000t	11,600t
Germanium	19,200kg	Not assayed	19,200kg	Not assayed	19,200 kg
Gallium	86,500kg	Not assayed	86,500kg	Not assayed	86,500 kg
	1.0% ZnEq Low Cut				
Zinc	55,000t	77,000t	132,000t	230,000t	362,000t
Lead	30,000t	39,000t	69,000t	108,000t	177,000t
Silver	930,000oz	1,500,000oz	2,430,000oz	3,600,000oz	6,030,000oz
V_2O_5	2,200t	4,000t	6,200t	5,000t	11,200t
Germanium	16,200kg	Not assayed	16,200kg	Not assayed	16,200kg
Gallium	44,000kg	Not assayed	44,000kg	Not assayed	44,000kg
	1.5% ZnEq Low Cut				
Zinc	47,000t	59,000t	106,000t	203,000t	309,000t
Lead	25,000t	30,000t	55,000t	96,000t	151,000t
Silver	750,000oz	1,200,000oz	1,950,000oz	3,200,000oz	5,150,000oz
V_2O_5	1,400t	2,000t	3,400t	4,000t	7,400t
Germanium	13,200kg	Not assayed	13,200kg	Not assayed	13,200kg
Gallium	54,500kg	Not assayed	54,500kg	Not assayed	54,500kg

During the quarter the Company released the following information:

- Appointment of two new Directors to the Board of Mount Burgess Mining.
- Mineralised composition of the shallow basin shaped, totally oxidised, weathered Nxuu Deposit.
- The contribution of Gallium to regional targets of the Kihabe-Nxuu polymetallic Zn/Pb/Ag/Cu/V205/Ge/Ga project.

Appointment of two new Directors to the Board of Mount Burgess Mining

During the quarter, the Company engaged appropriately qualified local participants to enhance development of the Kihabe-Nxuu project, as follows:-

Jacob Thamage

Jacob, Mining Engineer, a Motswana national, was previously appointed a Director of the Company's wholly owned subsidiary, Mount Burgess (Botswana) Pty Ltd.

Jacob, was previously engaged as the Deputy Permanent Secretary to the Ministry of Minerals, Energy and Water resources. He is now the CEO of Botswana's Diamond Hub. In 2022, Jacob was appointed as the International Chairman of the Kimberly Process.

Ian Barclay McGeorge

Ian, a British national resident in Botswana, is a Fellow of the Geological Society of London and a chartered geologist. He is Principal Consultant and co-owner of iQuest Geology, a geological consultancy based in Gaborone, Botswana.

Ian has previously been involved in supervising exploration and resource development on the Company's Kihabe-Nxuu project.

Mineralised composition of the shallow basin-shaped, totally oxidised, weathered Nxuu Deposit

Prior to release of the independent Mineral Resource Estimates on 12 April 2023 the Company had conducted an in-house assessment of the Nxuu Deposit which concluded the following.

Based on 47 holes drilled into the NW and NE areas of the Nxuu Deposit:

- **Average depth to base of mineralisation is 42.74m per hole,** (Ref: Table 2)
- **Average length of mineralised intersections above low-cut grades is 28m, ie. 65.5% per hole,** (Ref: Table 2)
- **Average depth of Kalahari sand cover is 6.12m, ie. 14.3% per hole,** which can be removed with bulldozers or scrapers without requiring drilling and blasting. Only deeper zones in four of the 47 holes (NXDD002, NXDD039, NXDD033 and NXDD031 – ref Figure 1) may need light blasting where calcrete is encountered.
- **Average depth to commencement of mineralisation within quartz wacke immediately below Kalahari sand cover is 7.18m, ie. 16.8% per hole**, (Ref: Table 2) ranging from:

  (a) **3m to 7m**, are holes shown within the continuous black line area (Figure 1)
  (b) **7m to 14m** are holes shown within the dotted black line area (Figure 1).
  (c) **Below 14m,** are holes shown outside the continuous or dotted black lined areas (Figure 1)**.**
  Note: To increase productivity, a light blast may be required to loosen the totally oxidised weathered mineralised quartz wacke.
- **Average length of intersections below low-cut grades within quartz wacke is 1.44m, ie. 3.4% per hole,** (Ref Table 2).
- **The low-cut grades applied were:**
  1% for Zinc, which gave a total of **547.94m @ 1.96%, for 47 holes assayed** (Ref: Table 3).
  1% for Lead, which gave a total of **312.46m @ 1.42%, for 47 holes assayed** (Ref: Table 3
  10g/t for Silver, which gave a total of **164.42m @ 20.54g/t**, **for 47 holes assayed** (Ref: Table 3)

300ppm for Vanadium Pentoxide, which gave a total of **423.30m @ 1,152ppm, for 43 holes assayed** (Ref: Table 3).
3g/t for Germanium, which gave a total of **272.57m @ 4.67g/t, for 40 holes assayed** (Ref Table 3).
10g/t for Gallium, which gave **1,004m @ 11.07g/t for 40 holes assayed** (Ref: Table 3).

To determine the extent of weathering within the oxidised quartz wacke, refer to drill core photos from NXDD030 (Figure 2) which was drilled in the centre of the deposit, highlighted with a red star on Figure 1 and Figure 3.

Typical drill and blast costs in sulphide deposits are in the region of 30% of total mining costs. **Mining and processing weathered oxidised quartz wacke is expected to provide significant cost savings.**

In conclusion, the totally oxidised, weathered, shallow basin shaped Nxuu Deposit, containing Zn/Pb/Ag/V2O5/Ge/Ga mineralisation, presents as a low risk, low-cost operation.

Table 2 Nxuu Deposit Drill Hole Data

Drill Hole	Section	Kalahari Cover	BQ/W	DCM	Metal @ DCM	I.B. Q/W	DBM
		(m)	(m)	(m)		(m)	(m)
NXDD048	11	4.00	6.00	10.00	Ga	-	64.00
NXRC027	11	4.00	22.00	26.00	Zn(***)	-	31.00
NXDD003	11A	2.40	18.60	21.00	V (**)	6.00	44.00
NXDD104	11A	6.00	8.00	14.00	V	2.00	33.93
NXDD038	12	1.25	17.75	19.00	Ga	-	56.00
NXDD091A	12	7.44	11.56	19.00	Ga	2.00	58.68
NXDD066A	12	9.75	4.25	14.00	Ga	-	50.41
NXDD036	13	6.00	10.00	16.00	Ga	-	49.64
NXDD092	13	6.30	20.70	27.00	Ga	-	49.73
NXDD037	13	3.00	3.00	6.00	Ga	-	40.00
NXDD105	13	6.20	-	6.20	Ga/V	-	30.59
NXDD047	14	3.00	26.00	29.00	Ga	-	53.00
NXDD073	14	6.00	12.00	18.00	Ga	-	52.33
NXDD094	14	6.00	18.00	24.00	Ga	3.00	46.61
NXDD002	15	17.94	24.06	42.00	Zn(***)	4.00	59.00
NXDD074	15	7.03	11.97	19.00	V	-	50.09
NXDD030	15	3.00	-	3.00	Ga/V	-	40.58
NXDD095	15	6.58	4.42	11.00	Ga/Zn	-	28.08
NXDD043	15	5.15	5.85	11.00	Ga	-	19.41
NXDD035	16	2.85	5.15	8.00	Ga	-	52.20
NXDD078	16	7.34	9.66	17.00	Ga	13.00	54.00
NXDD039	16	12.00	-	12.00	Ga	-	51.62
NXDD097	16	6.42	5.58	12.00	V	-	46.54
NXDD096	16	4.20	-	4.20	V	-	33.93
NXDD054	17	2.85	19.15	22.00	Ga	-	48.00
NXDD106A	17	9.79	9.21	19.00	Ga	-	52.62
NXDD033	17	15.00	-	15.00	Ga	-	53.62
NXDD079A	17	4.28	-	4.28	V	-	51.60
NXDD034	17	2.15	3.00	5.15	V	3.31	45.00
NXDD075A	17	5.43	-	5.43	V	-	28.95
NXDD041	17	3.20	-	3.20	Ga/Ge/V		9.70
NXDD032	18	9.00	-	9.00	Ga/V	-	50.00
NXDD098	18	6.00	-	6.00	V	-	42.00

Drill Hole	Section	Kalahari Cover	BQ/W	DCM	Metal @ DCM	I.B. Q/W	DBM
		(m)	(m)	(m)		(m)	(m)
NXDD083	19	6.00	-	6.00	Ge/V	11.00	50.21
NXDD102	19	6.00	-	6.00	Ga/V	-	50.32
NXDD005	19	6.40	-	6.40	V(**)	1.26	47.10
NXDD040	19	5.15	8.85	14.00	Ge/Zn/Pb	-	38.35
NXDD042	19	3.20	5.75	8.95	Ga/V	-	10.76
NXDD031	20	18.00	-	18.00	Ga	-	47.70
NXDD044	20	5.00	-	5.00	V	-	41.87
NXDD053	20	5.00	9.00	14.00	Ga	-	28.50
NXDD021	20A	3.00	38.00	41.00	Zn(***)	-	48.00
NXDD045	21	5.00	-	5.00	Ga	-	41.36
NXDD007	21	5,70	-	5.70	V(**)	2.00	33.00
NXDD029	22	3.50	-	3.50	Zn	-	39.58
NXDD046	22	5.15	-	5.15	V	-	19.38
NXRC019	23	9,00	-	9.00	Zn(***)	21.00	36.00
Total		287.65	337.51	625.16		68.57	2,008.99
47 Hole Average		6.12	7.18	13.30	28.00m	1.44	42.74
Average %		**14.3%**	**16.8%**		**65.5%**	**3.4%**	**100.00%**

BQ/W = Barren Quartz Wacke to commencement of Mineralisation.
DBM = Depth to Bottom of Mineralisation.
DCM = Depth to Commencement of Mineralisation.
(***) = Not assayed for V/Ge/Ga.
(**) = Not assayed for Ge/Ga.
I.B.Q/W = Internal Barren Quartz Wacke within the mineralised domains.

Table 3 - Nxuu Deposit Drill Hole Sample Analytical Data

Drill Hole	**Section**	**Zn**	**Pb**	**Ag**	**V_2O_5**	**Ge**	**Ga**
		%	**%**	**g/t**	**ppm**	**g/t**	**g/t**
NXDD048	11	3.0m@1.38	3.0m@1.11	-	3.0m@243	-	54.0m@11.3
NXRC027	11	4.0m@1.20	-	2.0m@25.0	No assay	No assay	No assay
NXDD003	11A	14.0m@2.57	4.0m@1.29	4.0m@16.8	6.0m@1,207	No assay	N assay
NXDD104	11A	9.0m@1.20	2.0m@1.40	4.0m@14.8	11.9m@879	4.0m@4.9	14.93m@11.1
NXDD038	12	-	-	-	-	-	37.0m@11.6
NXDD091A	12	10.1m@2.50	5.0m@1.30	12.68m@11.33	5.68m@721	21.0m@3.3	37.68m@12.3
NXDD066A	12	12.0m@1.78	8.0m@1.29	8.03m@18.21	19.0m@1,098	15.0m@4.2	33.41m@14.6
NXDD036	13	5.0m@1.48	6.0m@1.50	4.0m@31.90	3.0m@735	-	33.64m@11.2
NXDD092	13	8.73m@2.87	13.0m@1.28	11.0m@20.26	3.73m@864	14.0m@6.2	21.73m@12.1
NXDD037	13	6.0m@1.50	2.0m@1.10	7.0m@17.7	9.0m@2,044	8.0m@6.3	34.0m@12.2
NXDD105	13	1.0m@1.00	-	2.0m@11.1	22.37m@612	10.0m@3.3	18.37m@12.8
NXDD047	14	2.0m@1.50	-	-	2.0m@635	3.0m@5.0	21.0m@10.8
NXDD073	14	-	-	-	0.33m@2,262	2.0m@3.0	34.33m@11.4
NXDD094	14	9.61m@1.40	3.0m@1.57	6.61m@17.51	1.63m@3,297	9.61m@5.1	19.61m@12.1
NXDD002	15	11.0m@3.04	8.0m@1.48	5.0m@11.42	No assay	No assay	No assay
NXDD074	15	30.09m@2.30	28.9m@1.09	11.0m@17.65	5.0m@ 891	6.0m@5.3	17.9m@12.4
NXDD030	15	10.0m@2.33	17.0m@1.53	10.0m@25.57	25.9m@2,834	21.0m@6.2	32.58m@7.4
NXDD095	15	2.0m@1.10	3.0m@1.40	3.0m@17.80	15.08m@889	-	11.08m@11.2
NXDD043	15	1.0m@1.77	2.0m@2.00	2.0m@69.35	4.0m@1,834	5.0m@4.0	8.41m@10.5

Drill Hole	Section	Zn	Pb	Ag	V_2O_5	Ge	Ga
		%	%	g/t	ppm	g/t	g/t
NXDD035	16	-	-	-	-	-	44.2m@9.8
NXDD078	16	6.0m@2.10	3.0m@1.33	-	5.0m@393	-	18.0m@10.7
NXDD039	16	19.62m@2.14	10.0m@1.23	-	9.62m@592	4.62m@5.4	39.62m@10.3
NXDD097	16	30.54m@1.90	12.54m@1.7	11.0m@24.06	8.54m@1,106	-	27.54m@12.4
NXDD096	16	13.93m@1.75	4.0m@2.41	5.0m@37.32	24.89m@821	4.0m@9.5	14.0m@11.6
NXDD054	17	-	-	-	3.0m@290	-	26.0m@11.0
NXDD106A	17	-	-	-	2.85m@540	-	33.62m@10.7
NXDD033	17	2.0m@1.38	1.0m@2.94	1.0m@15.90	6.62m@1,187	2.0m@6.0	37.0m@10.3
NXDD079A	17	20.0m@1.71	16.0m@1.20	4.0m@11.70	32.72m@986	15.0m@4.1	17.6m@11.8
NXDD034	17	17.0m@1.60	5.0m@2.92	5.0m@31.57	21.5m@1,049	5.0m@5.46	17.0m@12.5
NXDD075A	17	8.0m@1.50	5.0m@1.70	3.0m@19.80	14.57m@605	2.0m@7.6	12.95m@10.4
NXDD041	17	-	-	-	6.5m@1,228	2.8m@5.0	5.8m@6.9
NXDD032	18	30.84m@1.81	16.0m@1.56	2.0m@16.75	21.0m@946	7.0m@4.9	41.0m@11.1
NXDD098	18	22.0m@1.82	10.0m@1.32	1.0m@16.90	23.0m@1,492	34.0m@3.6	9.10m@11.3
NXDD083	19	26.21m@2.40	17.2m@1.52	5.0m@15.48	2.97m@1,727	14.7m@3.7	26.0m@10.5
NXDD102	19	33.0m@1.40	2.0m@1.60	3.0m@12.10	23.32m@913	17.0m@3.5	44.32m@10.5
NXDD005	19	33.0m@2.50	34.87m@1.1	-	10.3m@1,307	No assay	No assay
NXDD040	19	9.86m@2.04	6.8m@1.69	-	6.5m@3,419	7.86m@6.0	13.0m@9.8
NXDD042	19	-	-	-	1.81m@249	-	1.81m@10.7
NXDD031	20	24.0m@1.64	6.2m@1.56	5.0m@12.37	1.0m@2,331	3.0m@4.75	29.7m@12.4
NXDD044	20	31.0m@1.61	10.0m@1.23	-	16.87m@919	11.0m@4.1	24.87m@9.6
NXDD053	20	-	-	-	6.0m@296	-	14.58m@9.3
NXDD021	20A	6.0m@3.60	6.0m@1.90	5.0m@16.0	No assay	No assay	No assay
NXDD045	21	26.0m@1.87	8.36m@1.48	4.0m@19.91	9.2m@1.182	-	36.36m@11.0
NXDD007	21	11.0m@1.92	13.0m@1.50	4.0m@21.50	11.8m@1,097	No assay	No assay
NXDD029	22	31.03m@2.20	16.6m@1.34	13.0m@14.73	4.08m@1,035	24.0m@5.3	27.58m@10.6
NXDD046	22	3.38m@1.27	1.0m@5.61	1.0m@191.58	12.1m@1,402	-	13.38m@8.6
NXRC019	23	5.0m@1.41	3.0m@1.11	-	No assay	No assay	No assay
Total		**547.94m @1.96%**	**312.46m @1.42%**	**164.42m @20.54g/t**	**423.30m @1,152ppm**	**272.57m @4.67g/t**	**1,004.7m @11.07g/t**

Test work conducted to date by the Company has shown that:

- 93% Zinc can be recovered on site through solvent extraction and electro-winning.
- Lead carbonate (Cerussite) can be recovered by gravity followed by flotation which will also recover silver minerals and inclusions within cerussite.
- Operations in Australia, USSR and the USA have been successful in developing processing circuits within concentrators in maximizing silver recovery.
- 82% Vanadium Pentoxide (V2O5) can be recovered on site through gravity separation, followed by subjecting the tail to flotation, using a hydroximate acid for recovery.
- Both Gallium and Germanium are hosted in micas which are responsive to flotation, the main process in producing a high mica recovery / removal. Metallurgical test work has still to be conducted to determine on site recoveries.

Figure 1, shows the depths of Kalahari sand cover, the depths to commencement of mineralisation and the depths to the base of mineralisation.

Figure 2, shows the totally oxidized, weathered drill core of NXDD030 from commencement to the base of mineralisation.

Figure 3, shows the grades of the various intersections of the Nxuu Deposit drill holes.

Figure 4, the Nxuu Drill Hole Map, shows the location of the various drill holes of the Nxuu Deposit.

Uses of V_2O_5/Ge/Ga

VANADIUM PENTOXIDE (V_2O_5)

V_2O_5 is a key component for future clean energy and energy storage requirements. Given a recent push to replace petrol and diesel with electric power, V_2O_5 has an exceptionally important part in power storage requirements.

Vanadium redox flow (VRF) batteries, incorporating V_2O_5, can store huge amounts of power, generated from wind and solar, for long periods of time. VRF batteries can be subject to radical changes in power storage levels within short spaces of time with little impact on battery deterioration. Power storage in Li-ion batteries must be maintained at constant levels to avoid battery deterioration.

GERMANIUM

Germanium is used in fibre optics, infra-red optics, high brightness LEDs used in automobile head lights and in semi-conductors for transistors in thousands of electronic applications. Recently declared as a strategic metal by the US Government, it is also used for night vision and night targeting.

Germanium is now the most efficient energy generator in solar panels which can convert more than 40% of sunlight into electricity. Silicon base solar cells have a maximum capacity of 20%.

GALLIUM

Gallium, a soft metallic element, is currently used for semi-conductors, blue ray technology, light emitting diodes (LEDs), pressure sensors for touch switches, as an additive to produce low melting-point alloys and in mobile phones.

The recent upgrade of cellular networks to 5^{th} generation (5G) has created high volumes of international data transmission. These increased volumes generate extremely high temperatures which can be effectively controlled through the use of Gallium computer chips that are more efficient at higher temperatures than traditional silicon-based chips.

The Fraunhofer Institute System and Innovation Research, expects that by 2030, the worldwide demand for Gallium will be six times higher than the current production rate of around 720 tonnes per annum.

Recently an international team of scientists led by Professor Konrosh Kalantar-Zadeh at the University of New South Wales, School of Chemical Engineering in Australia, has developed a reactor that uses Gallium and nano-sized silver rods to break down CO_2 into constituent elements.

Quote "Our liquid metal technology offers an unprecedent(ed) process for capturing and converting CO_2 at an exceptionally competitive cost" said Kalantar-Zadeh. "We are very hopeful that this technology will emerge as the cornerstone of processes that will be internationally employed for mitigating the impact of greenhouse emissions". (Metal Tech News 27/09/22).

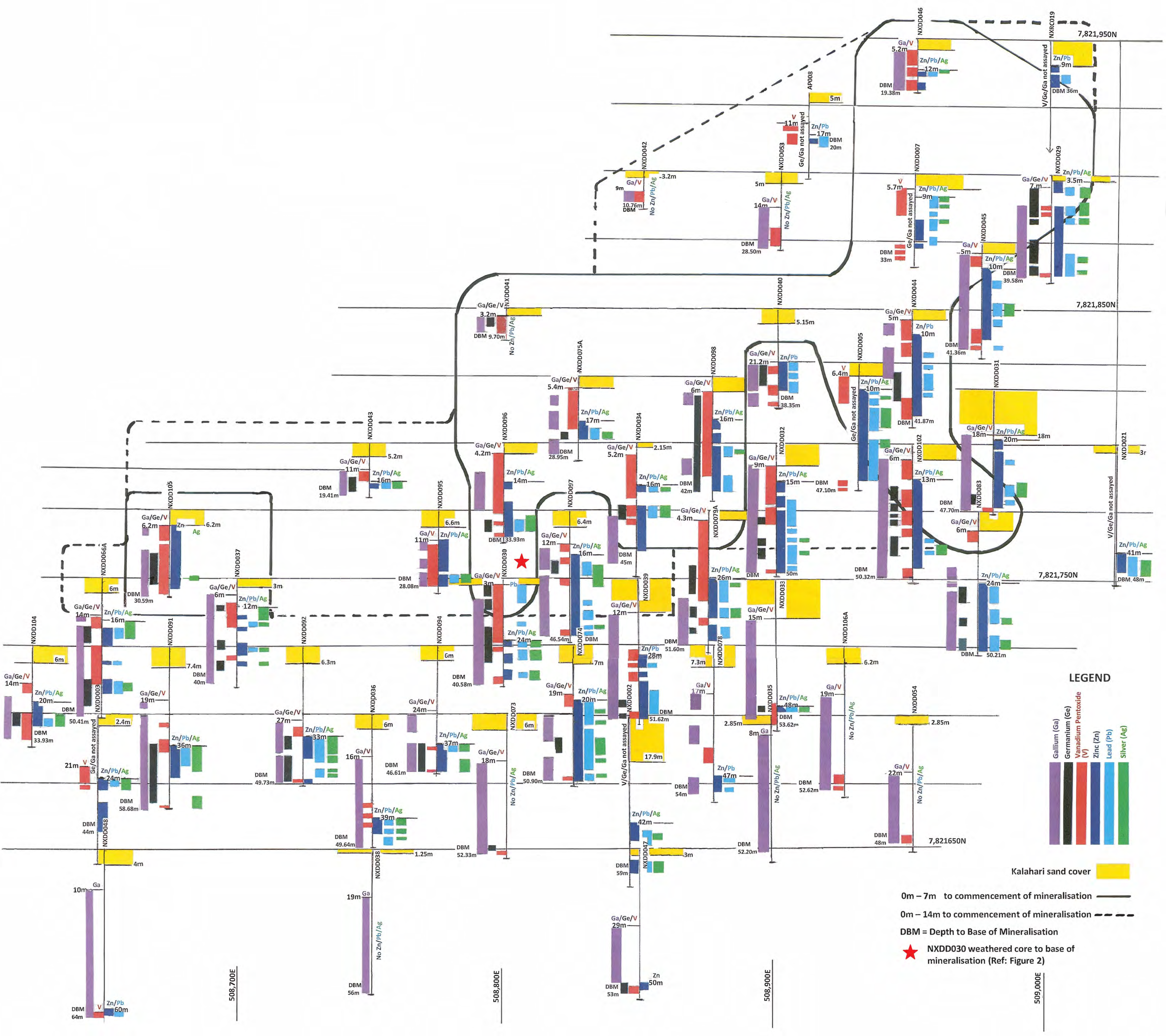
The Contribution of Gallium to regional targets of the Kihabe-Nxuu polymetallic Zn/Pb/Ag/Cu/V2O5/Ge/Ga project

Regional targets generated through geochemical soil sampling for Zn (summarised on Figure 5), have only been subject to limited exploration drilling and include Target 52 (Figures 6 to 12), Wanchu West anomaly (Figure 13) Wanchu Anomaly (Figure 14) and Tswee Tswee anomaly - not yet assayed for Gallium (Figure 15)

Significant lengths of up to 72m of continuous Ga mineralisation (Refer Figure 10 – Target 52, Drill Line 4) were intersected in drill hole T52RC013, when re-assayed for Ga.

FIGURE 1

NXUU DEPOSIT
DEPTH TO COMMENCEMENT OF MINERALISATION



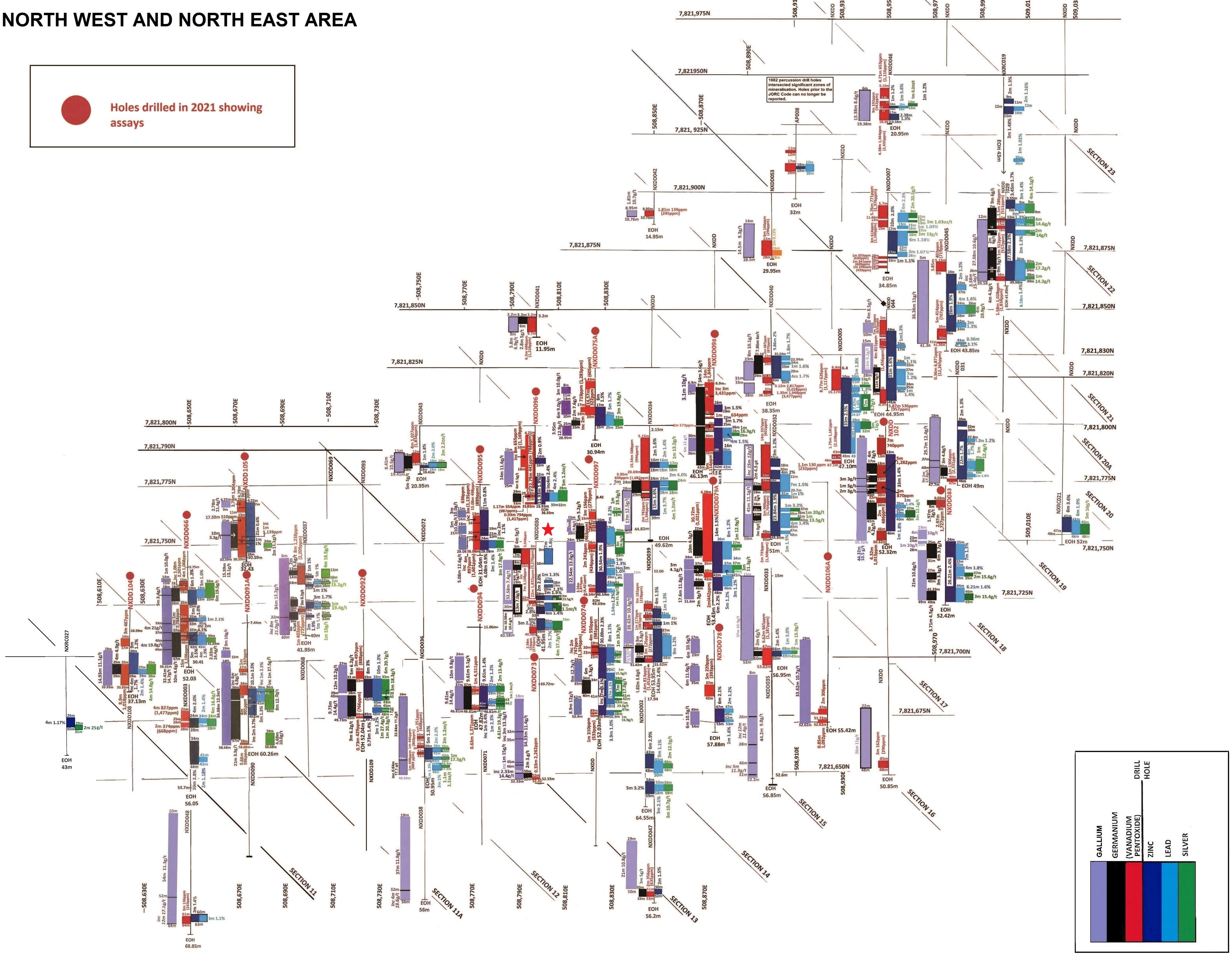
NXDD030 DRILL CORE 0m - 40.58m

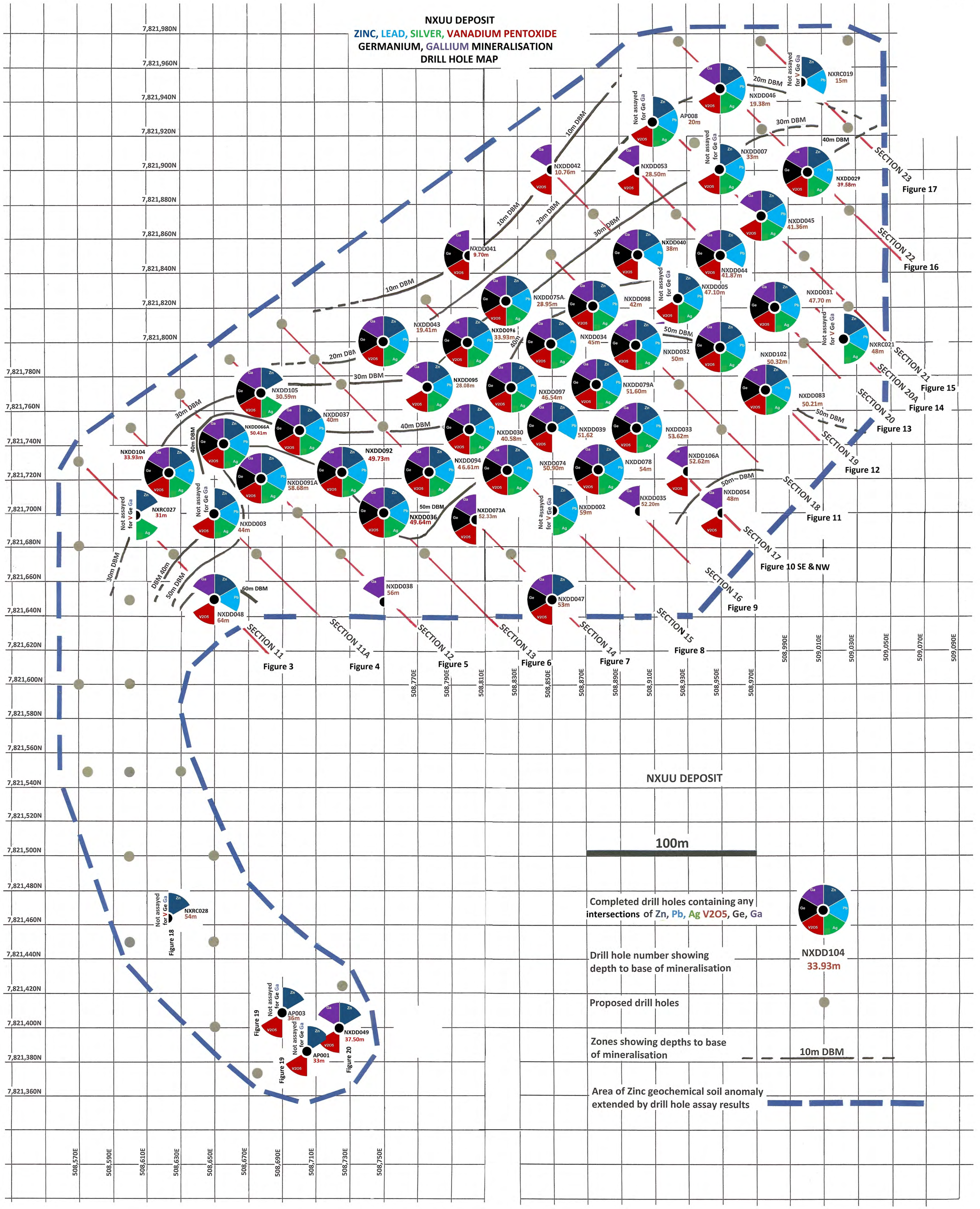
FIGURE 2

FIGURE 3

NXUU DEPOSIT DRILL HOLE MAP

NORTH WEST AND NORTH EAST AREA




NXUU DEPOSIT
ZINC, LEAD, SILVER, VANADIUM PENTOXIDE
GERMANIUM, GALLIUM MINERALISATION
DRILL HOLE MAP
7,821,980N
7,821,960N
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
7,821,680N
7,821,660N
7,821,640N
7,821,620N
7,821,600N
7,821,580N
7,821,560N
7,821,540N
7,821,520N
7,821,500N
7,821,480N
7,821,460N
7,821,440N
7,821,420N
7,821,400N
7,821,380N
7,821,360N
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508,610E
508,630E
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
508,950E
508,970E
508,990E
509,010E
509,030E
509,050E
509,070E
509,090E
NXRC019 15m
NXDD046 19.38m
AP008 20m
NXDD007 33m
NXDD029 39.58m
NXDD042 10.76m
NXDD053 28.50m
NXDD045 41.36m
NXDD041 9.70m
NXDD040 38m
NXDD044 41.87m
NXDD005 47.10m
NXDD031 47.70 m
NXDD075A 28.95m
NXDD098 42m
NXDD043 19.41m
NXDD096 33.93m
NXDD034 45m
NXDD032 50m
NXDD102 50.32m
NXRC021 48m
NXDD105 30.59m
NXDD095 28.08m
NXDD097 46.54m
NXDD079A 51.60m
NXDD083 50.21m
NXDD037 40m
NXDD066A 50.41m
NXDD030 40.58m
NXDD039 51.62
NXDD033 53.62m
NXDD104 33.93m
NXDD092 49.73m
NXDD094 46.61m
NXDD074 50.90m
NXDD078 54m
NXDD106A 52.62m
NXDD091A 58.68m
NXRC027 31m
NXDD003 44m
NXDD036 49.64m
NXDD073A 52.33m
NXDD002 59m
NXDD035 52.20m
NXDD054 48m
NXDD038 56m
NXDD048 64m
NXDD047 53m
NXRC028 54m
AP003 36m
NXDD049 37.50m
AP001 33m
Not assayed for Ge Ga
Not assayed for V Ge Ga
10m DBM
20m DBM
30m DBM
40m DBM
50m DBM
60m DBM
SECTION 11
SECTION 11A
SECTION 12
SECTION 13
SECTION 14
SECTION 15
SECTION 16
SECTION 17
SECTION 18
SECTION 19
SECTION 20
SECTION 20A
SECTION 21
SECTION 22
SECTION 23
Figure 3
Figure 4
Figure 5
Figure 6
Figure 7
Figure 8
Figure 9
Figure 10 SE & NW
Figure 11
Figure 12
Figure 13
Figure 14
Figure 15
Figure 16
Figure 17
Figure 18
Figure 19
Figure 20
NXUU DEPOSIT
100m
Completed drill holes containing any intersections of Zn, Pb, Ag V2O5, Ge, Ga
Drill hole number showing depth to base of mineralisation
NXDD104
33.93m
Proposed drill holes
Zones showing depths to base of mineralisation
10m DBM
Area of Zinc geochemical soil anomaly extended by drill hole assay results

FIGURE 5

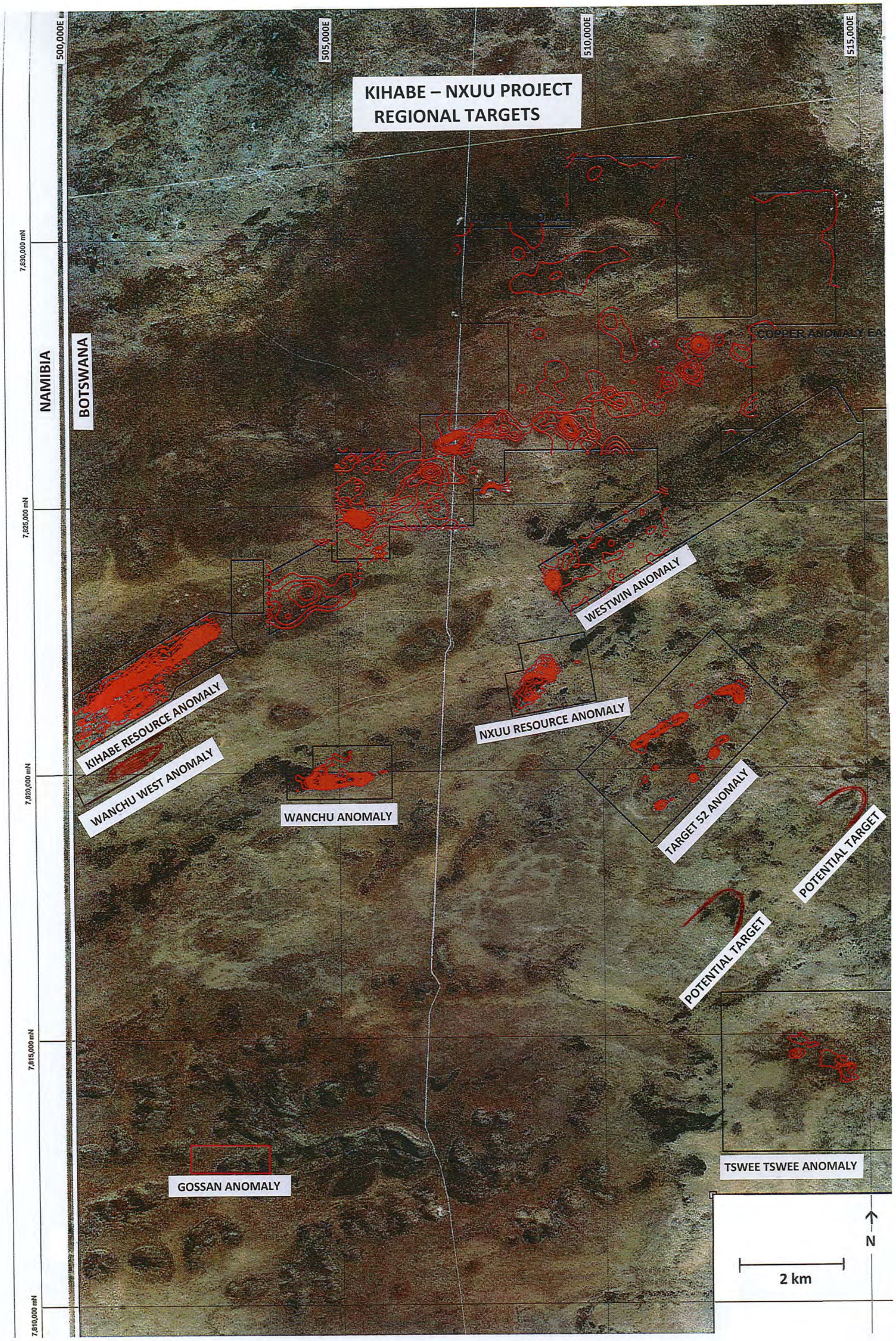
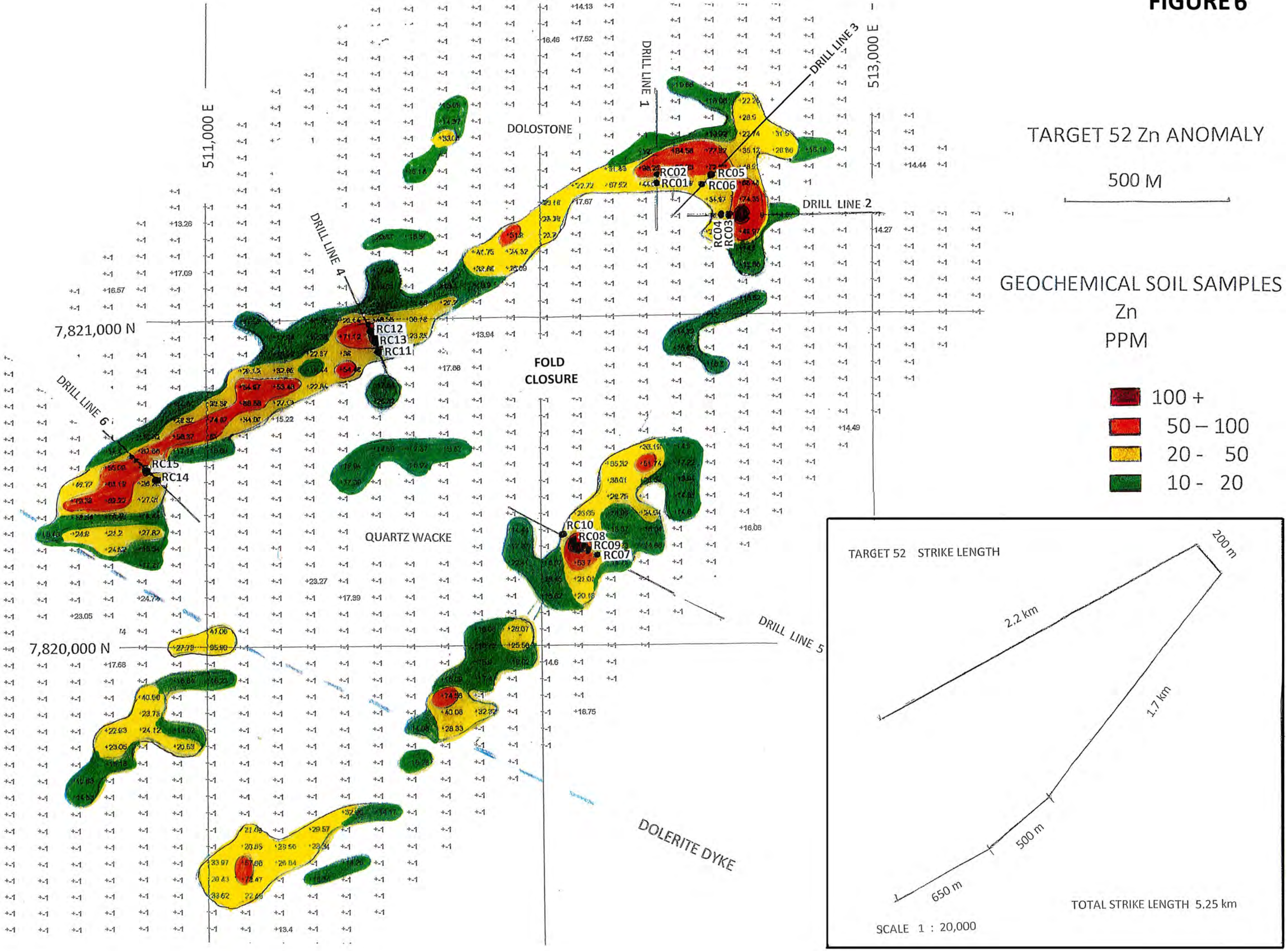

KIHABE – NXUU PROJECT
REGIONAL TARGETS
500,000E
505,000E
510,000E
515,000E
7,830,000 mN
7,825,000 mN
7,820,000 mN
7,815,000 mN
7,810,000 mN
NAMIBIA
BOTSWANA
WESTWIN ANOMALY
KIHABE RESOURCE ANOMALY
WANCHU WEST ANOMALY
WANCHU ANOMALY
NXUU RESOURCE ANOMALY
TARGET 52 ANOMALY
POTENTIAL TARGET
POTENTIAL TARGET
TSWEE TSWEE ANOMALY
GOSSAN ANOMALY
N
2 km

FIGURE 6



TARGET 52 Zn ANOMALY
500 M
GEOCHEMICAL SOIL SAMPLES
Zn
PPM
100 +
50 – 100
20 - 50
10 - 20
511,000 E
513,000 E
7,821,000 N
7,820,000 N
DOLOSTONE
FOLD CLOSURE
QUARTZ WACKE
DOLERITE DYKE
DRILL LINE 1
DRILL LINE 2
DRILL LINE 3
DRILL LINE 4
DRILL LINE 5
DRILL LINE 6
RC01
RC02
RC03
RC04
RC05
RC06
RC07
RC08
RC09
RC10
RC11
RC12
RC13
RC14
RC15
TARGET 52 STRIKE LENGTH
200 m
2.2 km
1.7 km
500 m
650 m
TOTAL STRIKE LENGTH 5.25 km
SCALE 1 : 20,000

TARGET 52

DRILL LINE 1

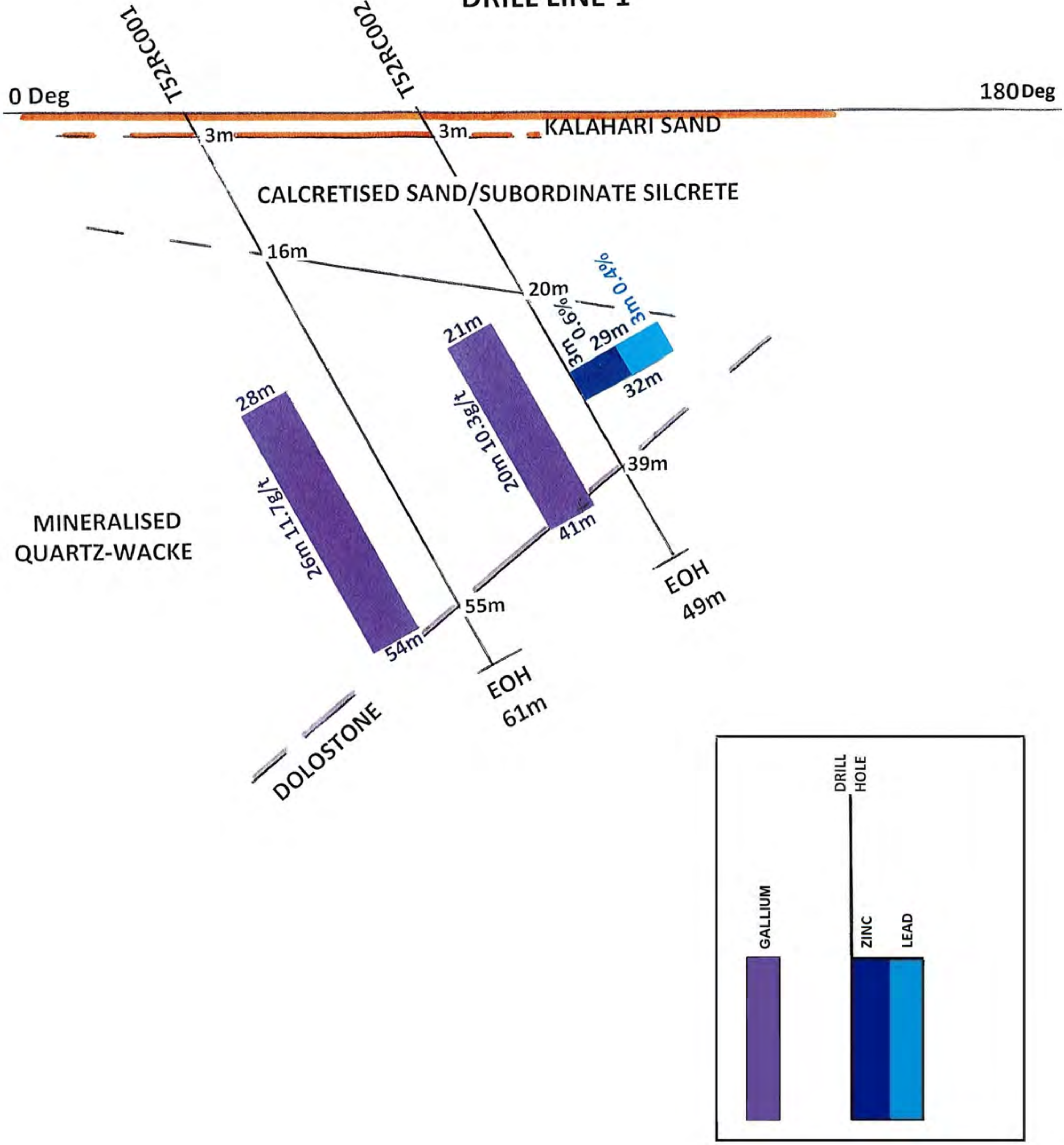
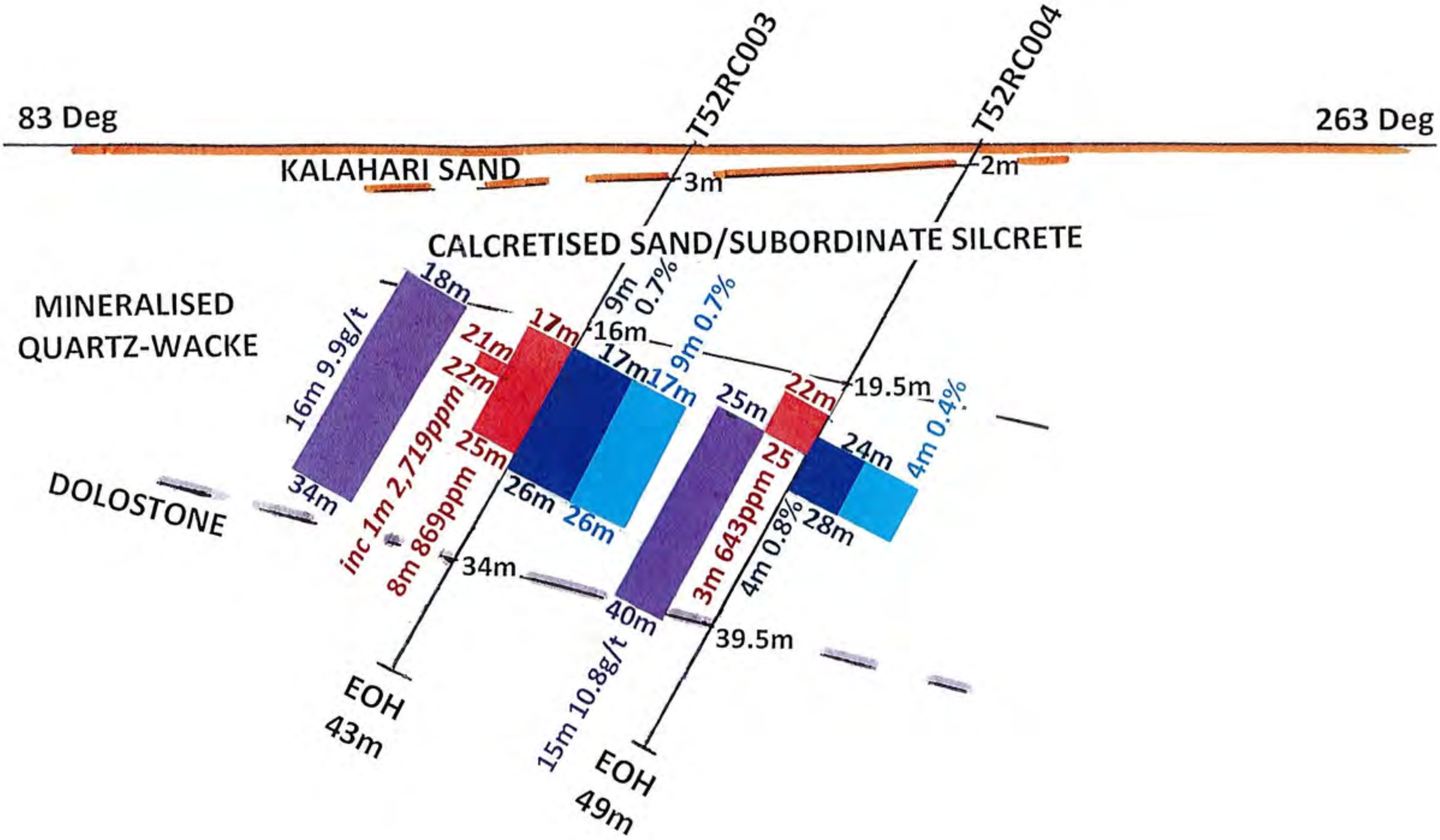


FIGURE 8

TARGET 52
DRILL LINE 2



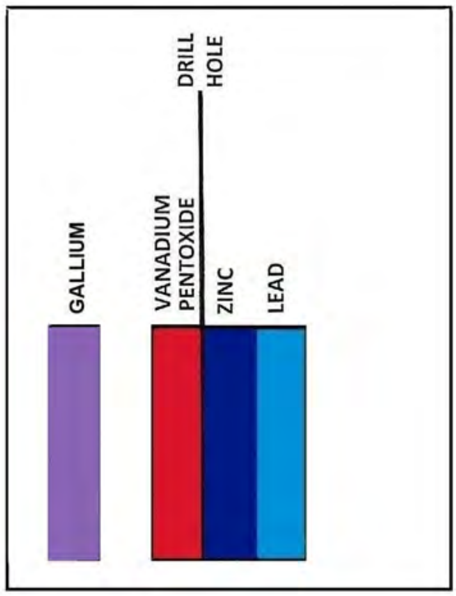


FIGURE 9

TARGET 52
DRILL LINE 3

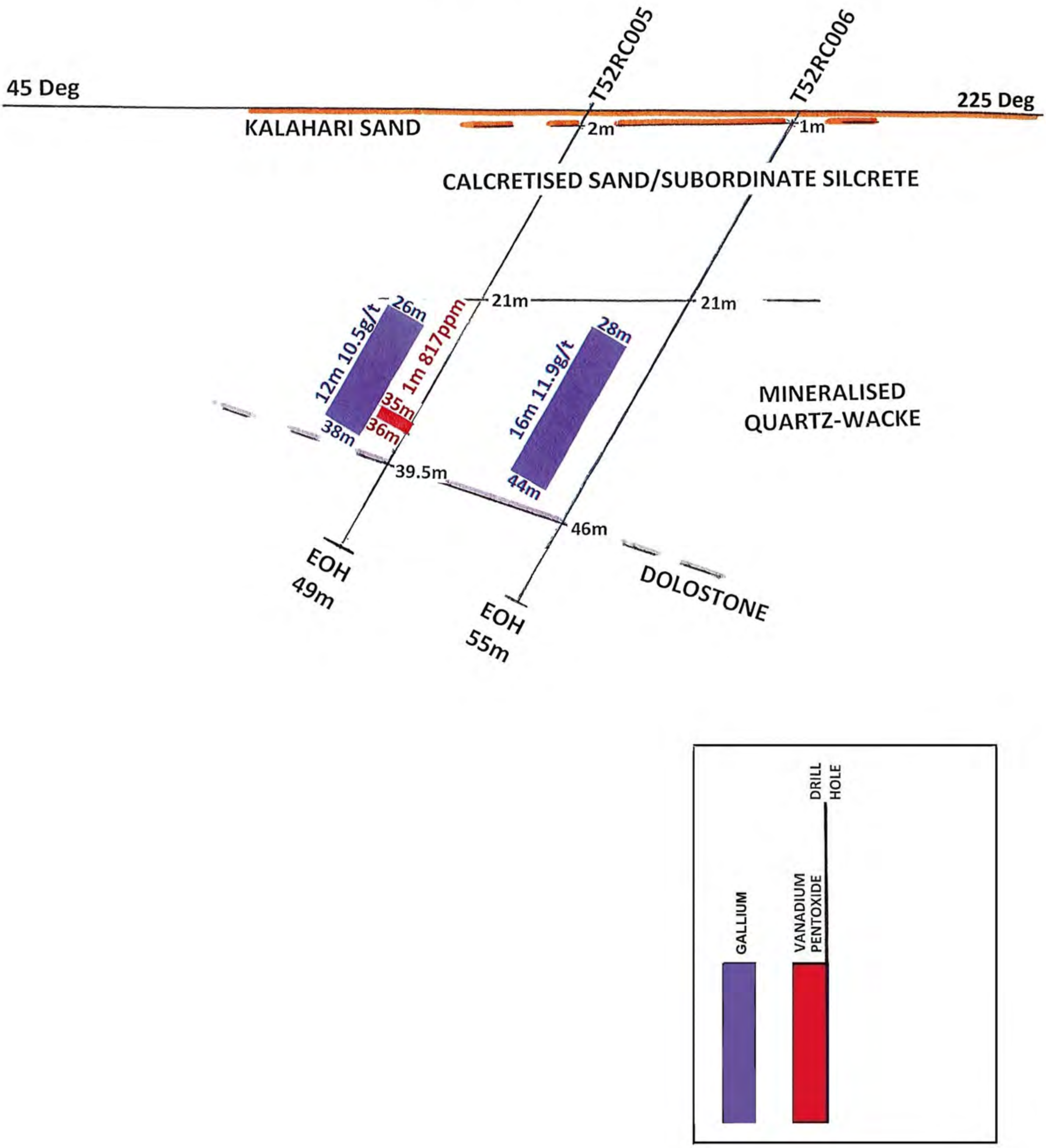


FIGURE 10

TARGET 52
DRILL LINE 4

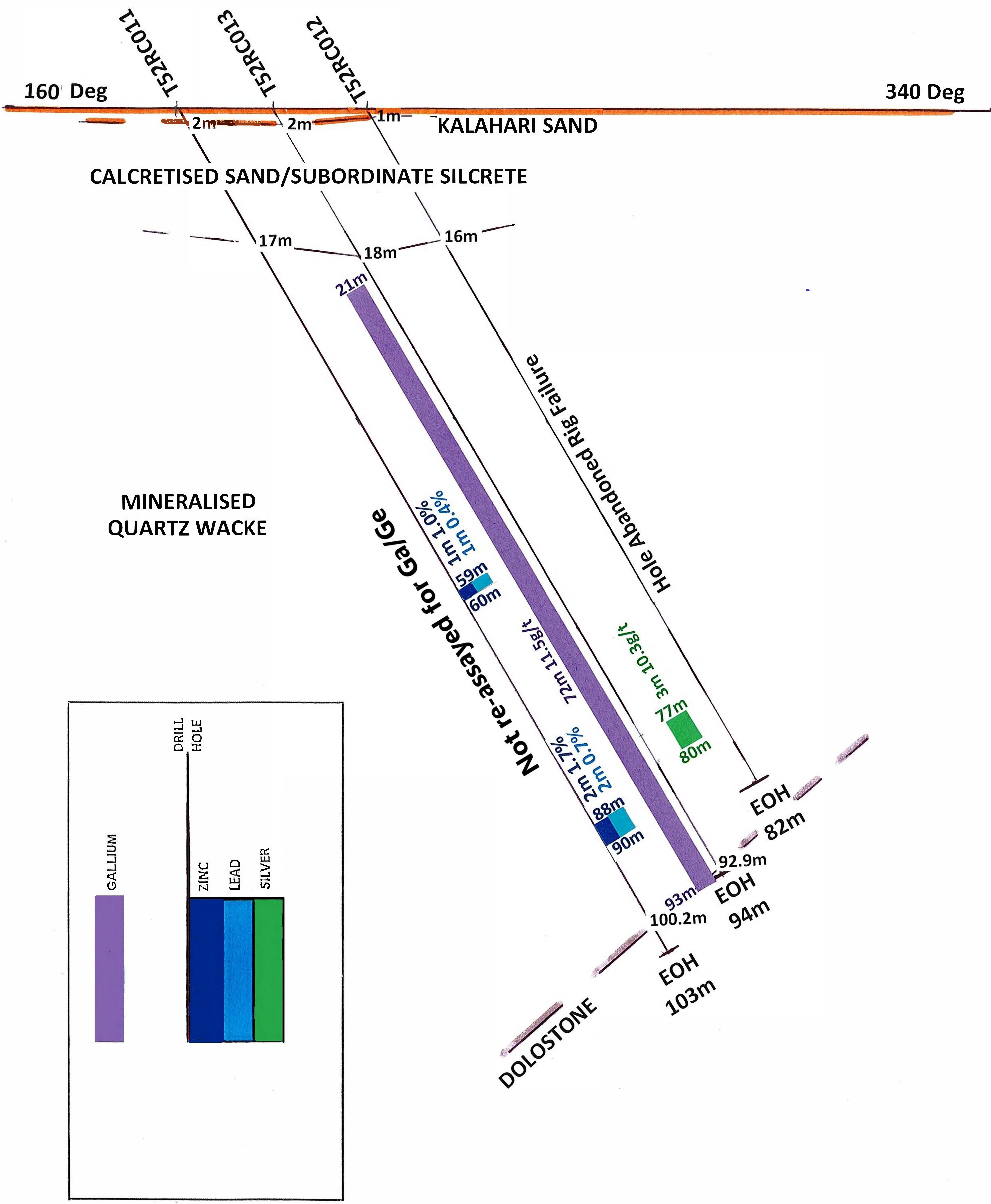


FIGURE 11

TARGET 52
DRILL LINE 5

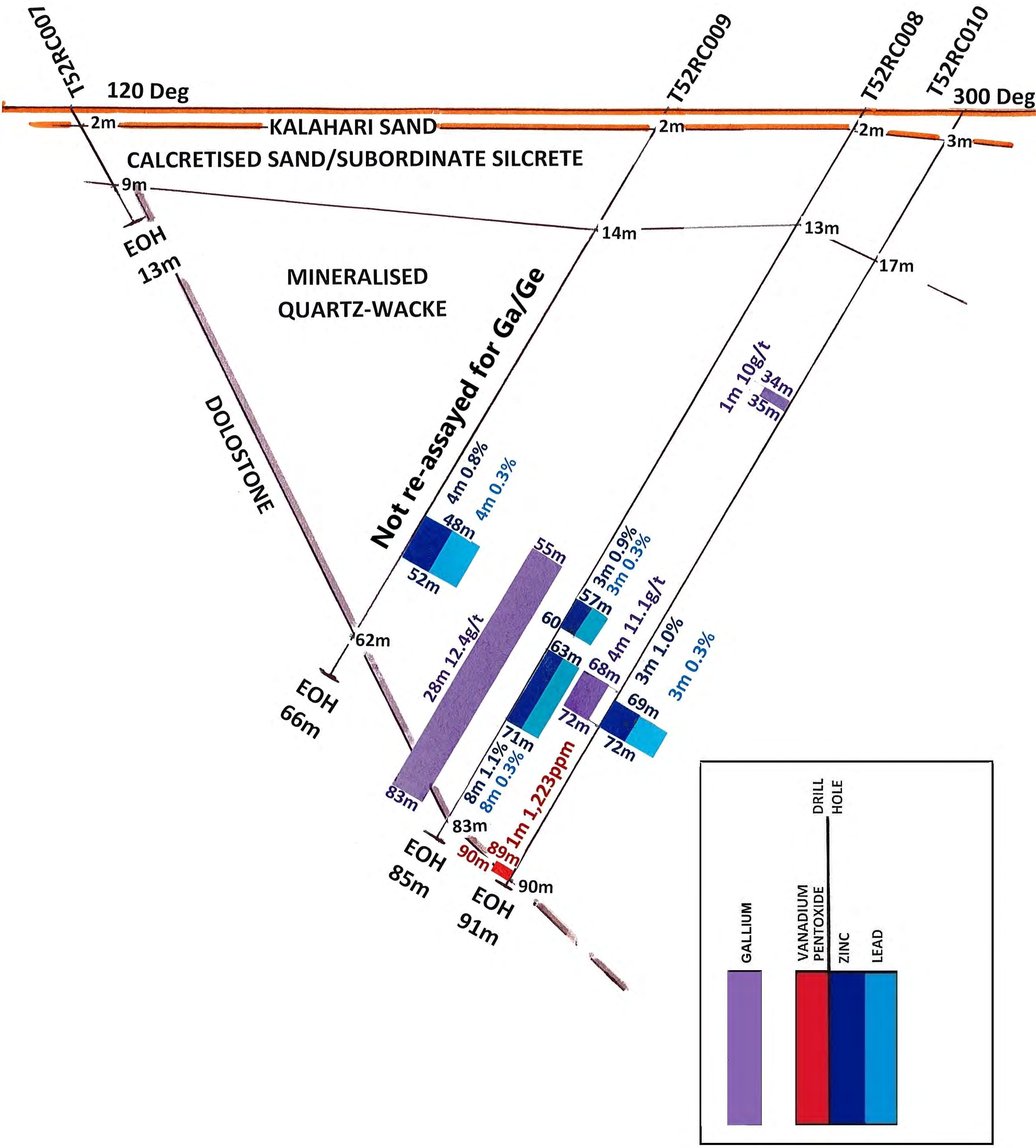
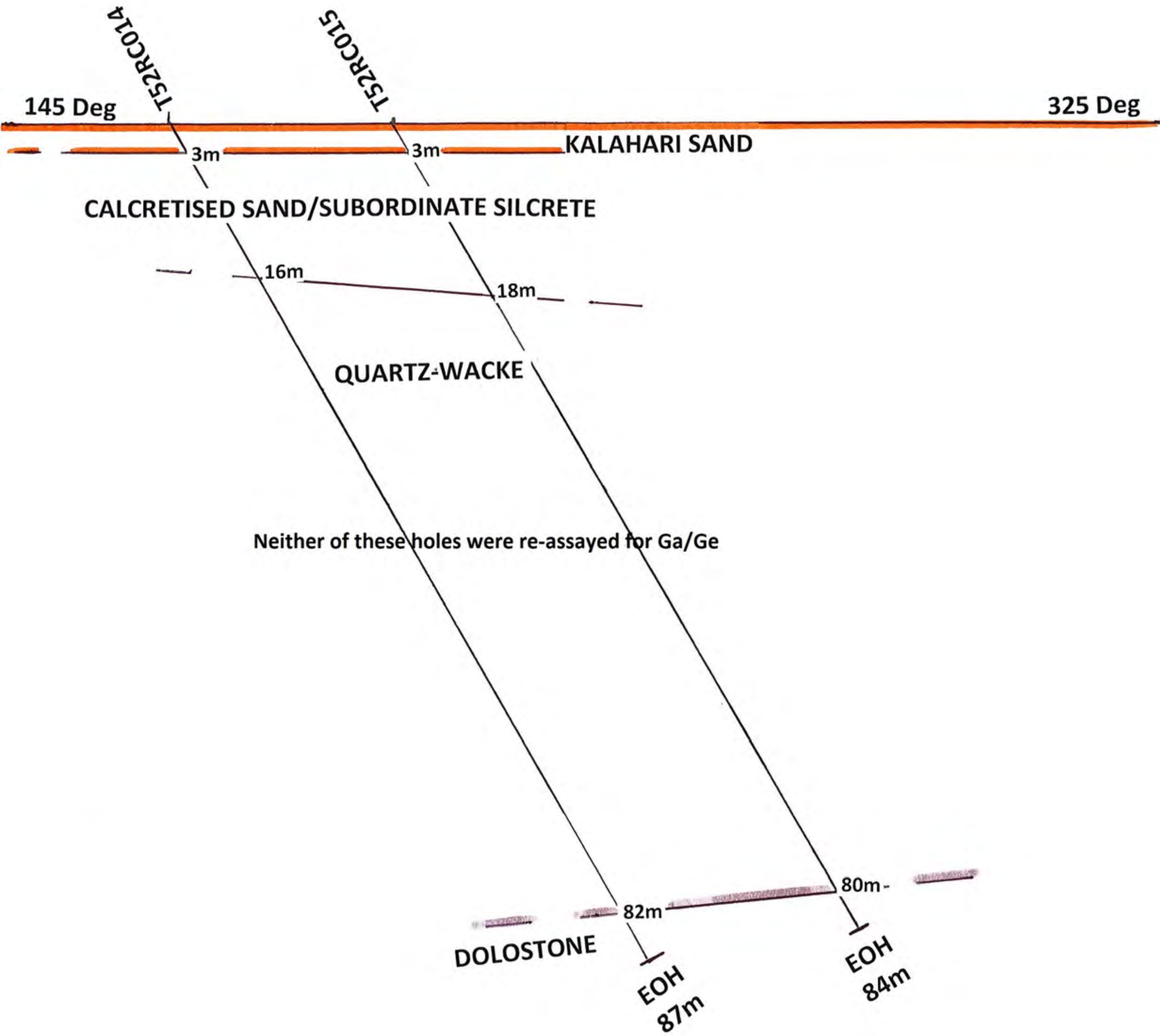


FIGURE 12

TARGET 52
DRILL LINE 6



WANCHU WEST


135 Deg
315 Deg
WWRC004
500,771E
7,820,128N
WWRC003
500,730E
7,820,167N
WWRC002
500,701E
7,820,203N
WWRC001
500,677E
7,820,232N
KALAHARI SAND
CALCRETE
MINERALISED QUARTZ WACKE
DOLOSTONE
5m
7m
13m
22m
57m
51m
4m 10.5g/t
22m
26m
2m 10.8g/t
27m
29m
33m
13m 11.7g/t
35m
46m
49m
12m 13.5g/t
61m
22m 11.2g/t
57m
3m 10.2g/t
26m
29m
6m 11.4g/t
45m
51m
5m 0.3%
5m 0.5%
13m
18m
7m 975ppm
20m
22m
25m
26m
2m 325ppm
3m 693ppm
30m
4m 302ppm
3m 1,756ppm
37m
40m
42m
34m
42m
2m 671ppm
8m 0.5%
8m 0.3%
EOH 19m
EOH 57m
EOH 61m
EOH 85m
GALLIUM
VANADIUM PENTOXIDE
ZINC
LEAD
DRILL HOLE

FIGURE 14

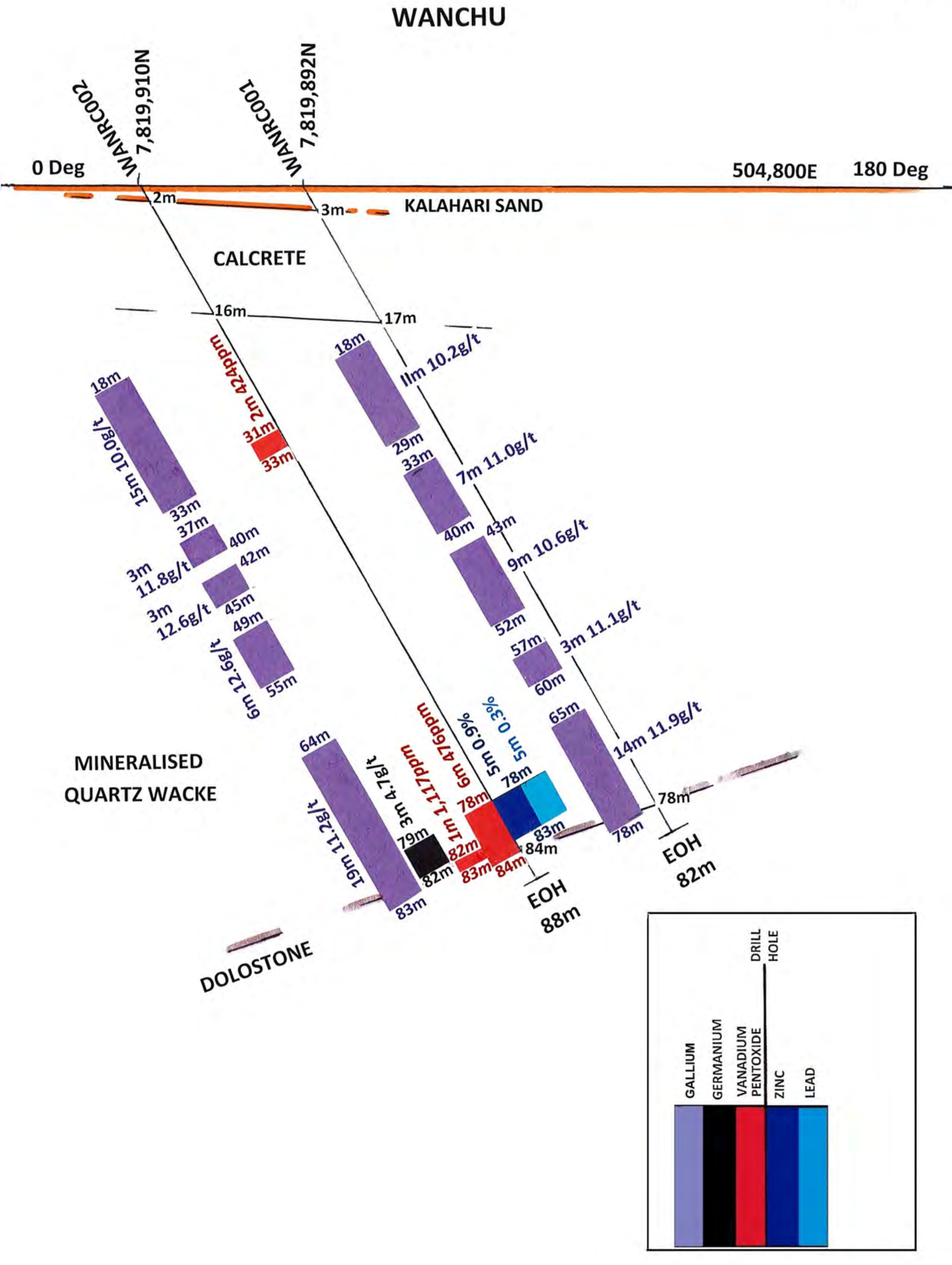
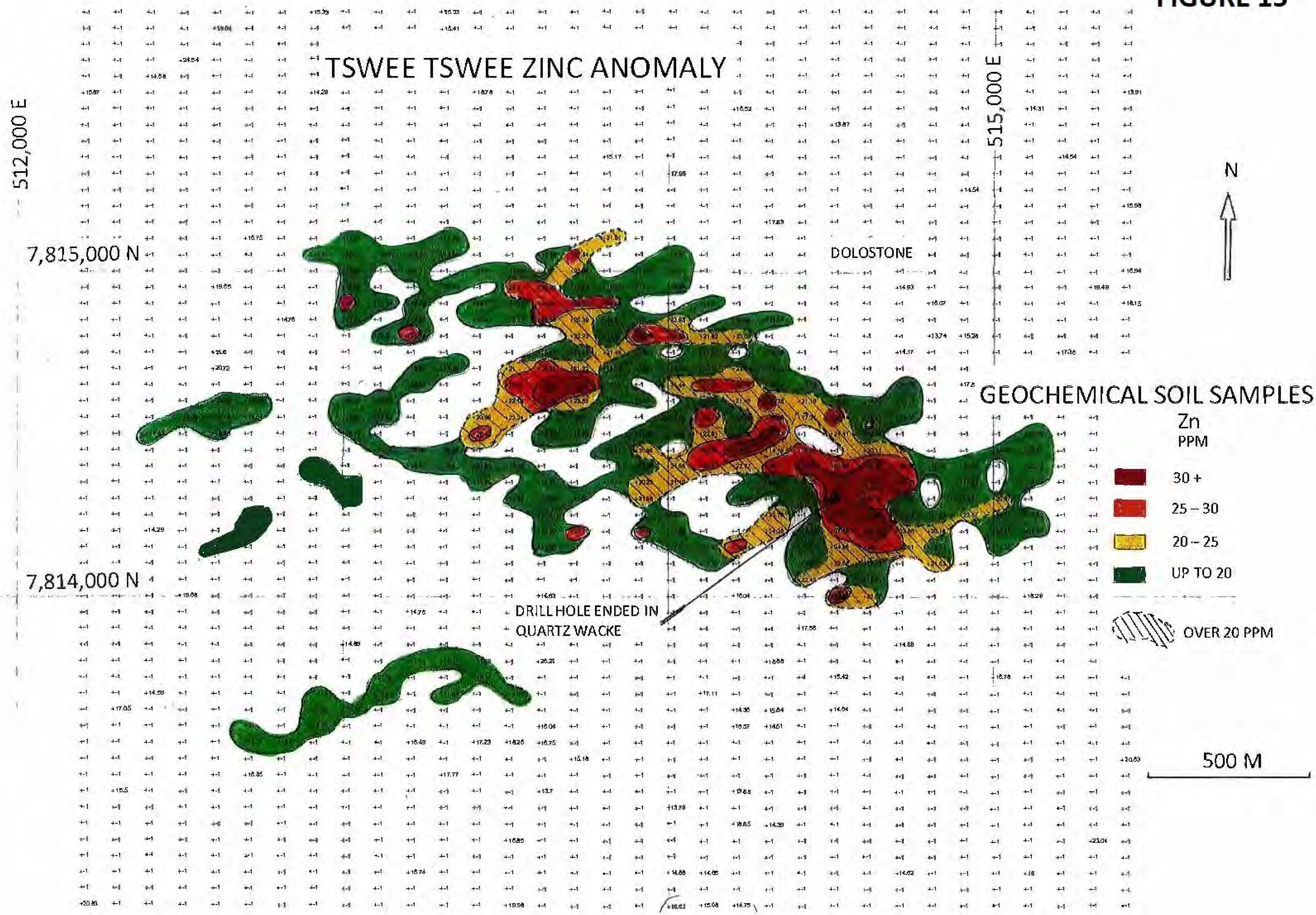

WANCHU
WANRC002
7,819,910N
WANRC001
7,819,892N
0 Deg
504,800E
180 Deg
2m
3m
KALAHARI SAND
CALCRETE
16m
17m
18m
15m 10.0g/t
33m
37m
40m
3m 11.8g/t
42m
3m 12.6g/t
45m
49m
6m 12.6g/t
55m
31m 2m 424ppm
33m
18m
11m 10.2g/t
29m
33m
7m 11.0g/t
40m
43m
9m 10.6g/t
52m
57m
3m 11.1g/t
60m
65m
14m 11.9g/t
78m
78m
EOH 82m
64m
19m 11.2g/t
83m
3m 4.7g/t
79m
82m
1m 1,117ppm
82m
83m
6m 476ppm
78m
84m
5m 0.9%
5m 0.3%
78m
83m
84m
EOH 88m
MINERALISED QUARTZ WACKE
DOLOSTONE
DRILL HOLE
GALLIUM
GERMANIUM
VANADIUM PENTOXIDE
ZINC
LEAD

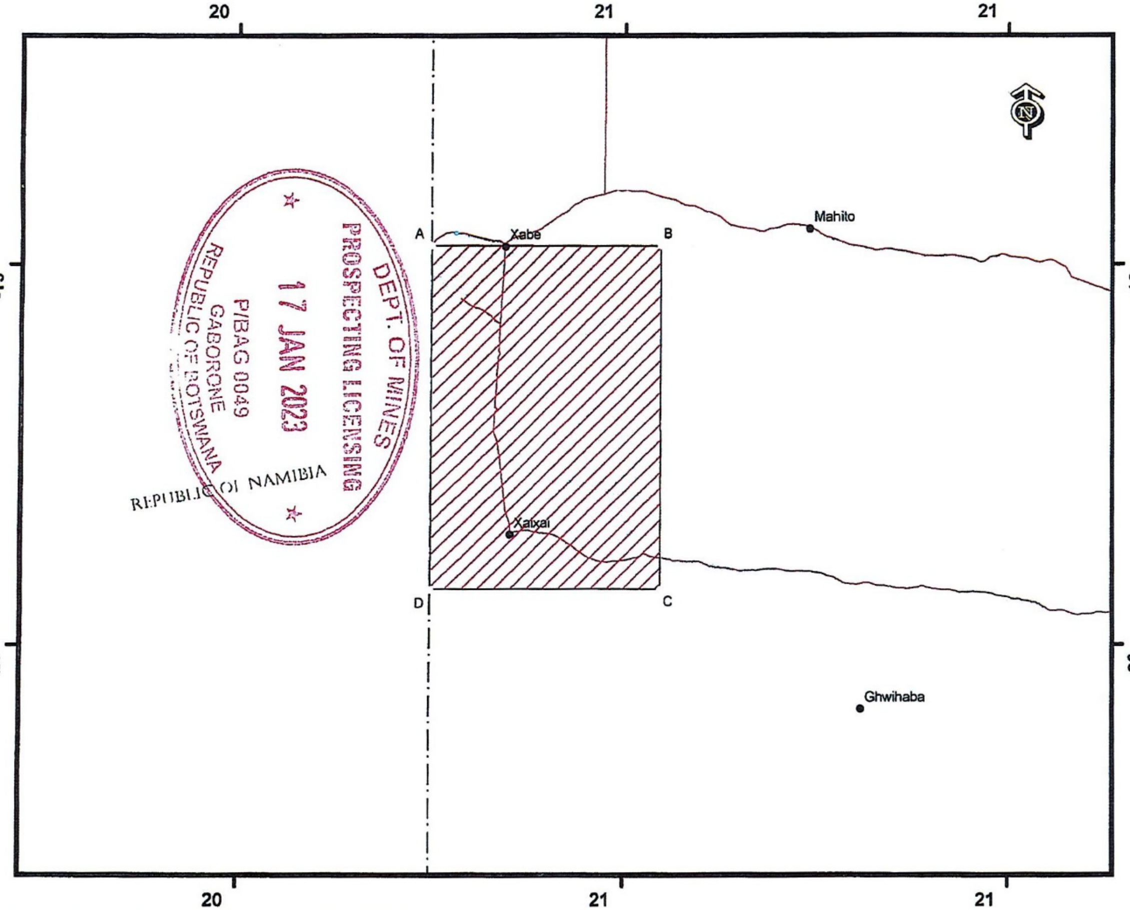
FIGURE 15


TSWEE TSWEE ZINC ANOMALY
512,000 E
515,000 E
7,815,000 N
7,814,000 N
N
DOLOSTONE
DRILL HOLE ENDED IN
QUARTZ WACKE
GEOCHEMICAL SOIL SAMPLES
Zn
PPM
30 +
25 – 30
20 – 25
UP TO 20
OVER 20 PPM
500 M

MOUNT BURGESS (BOTSWANA) (PTY) LTD

Prospecting Licence No.043/2016

REPUBLIC OF BOTSWANA



The licence area is nine hundred and ninty five point nine square kilometers (995.9Km2) defined by boundary lines in the North West District, which shall be straight unless otherwise stated, joining successive points at the following coordinates.

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

POINT	LONGITUDE	LATITUDE
A	20.999710	-19.580740
B	21.237820	-19.580820
C	21.238060	-19.941390
D	20.999700	-19.941390

Total Area =995.9 Km2

Legend
- Settlements
— Road

Points
Licence Area
International Boundary
Water Body

1:750,000

0 15 30 60 Kilometers

Drawn on the 11/01/2023
By Kelvin Ketshabile.............
Checked By P. Matlotse..........
Department of Mines

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.

Disclaimer: Neither MTB nor any of its officers, employees or advisors make any warranty (express or implied) as to the accuracy, reliability and completeness of the information contained in this document. Nothing in this document can be relied upon as a promise, representation or warranty.

Proprietary information: This document and the information contained therein is proprietary to MTB.

Competent Person's 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/metallurgical test work results conducted on samples from the Nxuu Deposit fairly represents information and supporting documentation approved for release by Mr R Brougham (FAusIMM). Mr Brougham, non-executive Director of the Company, is a qualified person and has sufficient experience relevant to the process recovery under consideration and to the laboratory activity to which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Mr Brougham consents to the inclusion in the report of the matters, based on the information in the form and context in which it appears.

The information in this release that relates to Mineral Resources is based on information compiled by Mr Shaun Searle who is a Member of the Australasian Institute of Geoscientists. Mr Searle is an employee of Ashmore Advisory Pty Ltd and independent consultant to Mount Burgess Mining Limited. Mr Searle has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

JORC Table 1

Section 1 Sampling Techniques and Data

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.*	• HQ and PQ 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 in Perth for assaying via ICPMS/OES for Ag/Pb/Zn/V/Ge/Ga. • Individual meters of RC drill chips were bagged from the cyclone. These were then riffle split for storage in smaller bags, with selected drill chips being stored in drill chip trays. A trowel was used to select drill chip samples from sample bags to be packaged and sent to Intertek Genalysis, Randburg, South Africa where they were crushed. A portion of each intersection's sample was then pulverised to P80 75um and sent to Intertek Genalysis in Perth for assaying via ICP/OES for Ag/Co/Cu/Pb/Zn. • The remainder of the crushed samples were then sent from Intertek Genalysis Randburg to Intertek Genalysis in Perth where they were then collected by the Company for storage. Samples from various intersections from drill holes were selected by the Company for submission for metallurgical test work. • Based on the distribution of mineralisation the core sample size is considered adequate for representative sampling.
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).*	• HQ and PQ diameter triple tube was generally used for diamond core drilling at Nxuu and Kihabe. • RC chips were collected over 1m intervals, and two-stage riffle split to produce a sample for dispatch to the assay laboratory. The remainder of the sample was bagged and kept on site for access pending assay results; with washed chip samples for each metre also collected in chip trays for logging and later reference.
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.*	• Sample recoveries have in general been good and no unusual measures were taken to maximise sample recovery other than the use of triple tube for diamond core drilling. In the event of unacceptable core loss MTB drills twin holes. MTB believes there is no evidence of sample bias due to preferential loss/gain of fine/coarse material for holes being reported on.
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.*	• Holes were logged in the field by qualified geologists on MTB's log sheet template and of sufficient detail to support Mineral Resource estimation: qualitative observations covered lithology, grain size, colour, alteration, mineralisation, structure. Quantitative logging included vein percent. SG measurements were obtained at approximately 5m intervals on DD holes. • All core is photographed wet and dry. • All drill holes are logged in full.
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-*	• HQ and PQ 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 number 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. • RC chips were collected over 1m intervals, and two-stage riffle split to produce a sample for dispatch to the assay

Criteria	JORC Code explanation	Commentary
	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.*	laboratory. The remainder of the sample was bagged and kept on site for access pending assay results; with washed chip samples for each metre also collected in chip trays for logging and later reference. • All samples currently being reported on were assayed for Ag/Pb/Zn/V/Ge/Ga/Cu/Co.
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, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples prior to 2008 were dispatched to the Ongopolo Laboratory situated in Tsumeb, Namibia. Check samples were also sent to Genalysis in Perth. • Samples since 2008, when originally assayed, were sent to Intertek Genalysis Perth, for assaying according to the following standard techniques. • Diamond core samples were analysed for: (a) Ore grade digest followed by ICPMD – OES finish for Silver, Lead,Zinc,Copper,Cobalt,Vanadium/Germanium/Gallium; (b) Also 4 acid digest for silver, lead, zinc followed by AAS. • RC samples were analysed with Ore grade digest followed by ICP-OES for Ag/Co/Cu/Pb/Zn/Cu/Co. • MTB 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 MTB sample preparation include the use of cleaning lab equipment with 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 MTB 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 MTB. 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.*	• A selection of the original digital assay files from MTB has been checked and verified against the supplied database. • Numerous twin, and close spaced holes have been drilled. Results show close spatial and grade correlation. • All drilling logs were validated by the supervising geologist. • Adjustments to assay data included converting assays recorded in ppm to percent for Zn, Pb, Cu and V; the conversion of V to V2O5 and the conversion of negative or below detection limit values to half detection limit.
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 drill hole collars were surveyed using DGPS equipment in WGS84 UTM Zone 34S coordinates. • Drill holes were routinely down hole surveyed using Eastman single shot magnetic survey instruments, with the dip and azimuth monitored by the driller and site geologist to ensure the hole remained on track within the stipulated guidelines. Readings were obtained at approximately 25m intervals down hole. • Topographic control was derived from collar surveys. The Nxuu area is overlain by Kalahari Sand cover and is predominantly flat.
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*	• Data spacing (drill holes) is variable and appropriate to the geology. Sections are spaced at 30m intervals, with hole spacings predominantly 30m on section. • The spacing is considered sufficient to establish geological

Criteria	JORC Code explanation	Commentary
	Resource and Ore Reserve estimation procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	and grade continuity appropriate for a Mineral Resource estimation. • Samples were composited to 1m intervals prior to estimation.
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.*	• Mineralisation at the Nxuu Deposit is sub-horizontal, therefore holes were drilled vertically. Mineralisation at the Kihabe Deposit is sub vertical. Holes were drilled at minus 60º , at 150º or 330º Azimuth. • The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation. • Reported intersections are down-hole intervals and are generally representative of true widths.
Sample security	• *The measures taken to ensure sample security.*	• 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.*	• MTB's exploration geologists continually reviewed sampling and logging methods on site throughout the drilling programs.

Section 2 Reporting of Exploration Results

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• 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, which covers an area of 1000 sq km. This licence is 100% owned and operated by MTB. The title is current to 31 December 2024 • PL 43/2016 is in an area designated as Communal Grazing Area. • The Tenement is current and in good standing.
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. MTB 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 north-western 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. • The Nxuu deposit mineralisation occurs in a flat-lying quartz wacke unit situated on the contact of a barren dolomite basement unit. The deposit is weathered, with base metal and associated V/Ge/Ga mineralisation occurring as a series of sub-horizontal units overlying the barren dolomite unit. • The Kihabe Deposit mineralisation occurs in a quartz wacke situated on the contact of a steeply dipping barren dolostone unit. The deposit is variably weathered with base metal and associated V/Ge/Ga mineralisation occurring as a series of steeply dipping to sub vertical units in the hanging wall of the barren dolostone.
Drill hole information	• *A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes:*	• Exploration results are not being reported. • All information has been included in the appendices. No drill hole information has been excluded.

Criteria	JORC Code explanation	Commentary
	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* *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 (e.g. 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.*	• Exploration results are not being reported. • Not applicable as a Mineral Resource is being reported. • For the Nxuu Deposit ZnEq=Zinc equivalent grade, which is estimated based on Kitco prices as of 21st October 2022 and calculated with the formula: • ZnEq = [(Zn% x 3,000) + (Pb% x 2,000) + (Ag g/t x (20.0/31.1035)) + (V2O5% x 16,000)] / (3,000). • For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: ZnEq = {(Zn% x 3,410) + (Pb% x 1,955) +Ag g/t x (20.7/31.1035)} + V_2O_5% x20,720)}/(3,410) • MTB is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold.
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 (e.g. 'down hole length, true width not known').*	• Mineralisation at Nxuu is sub-horizontal. Holes are drilled vertically. • Reported hole intersections generally represent true width. • Mineralisation at Kihabe is steeply dipping to sub vertical. Holes are drilled at approximately -60 deg towards azimuths 150 deg and 330 deg.
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.*	• Figures 1 & 2 being, being drill hole maps for Nxuu and Kihabe have been included to show areas covered in the Mineral Resource Estimates.
Balanced Reporting	• *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.* • *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.*	• Figures 1 & 2 being, being drill hole maps for Nxuu and Kihabe have been included to show areas covered in the Mineral Resource Estimates. • Exploration results are not being reported.
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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Results were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised contact positions. • Geological observations are included in the report.
Further work	• *The nature and scale of planned further work (e.g. 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.*	• Follow up drilling will be undertaken to improve confidence. • Drill spacing is currently considered adequate for the current level of interrogation of the Project.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The database has been systematically audited by MTB geologists. • The database used for estimation was cross checked with original records where available. • Ashmore performed initial data audits in Surpac. Ashmore checked collar coordinates, hole depths, hole dips, assay data overlaps and duplicate records.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Ashmore has not undertaken a site visit to the Relevant Assets by the CP as at the date of this report. Ashmore notes that it plans to conduct a site visit as part of the future works and upgrade of the Mineral Resource to higher categories.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation is considered to be good and is based on visual confirmation within drill hole intersections. • Geochemistry and geological logging have been used to assist identification of lithology and mineralisation. • The Nxuu deposit consists of sub-horizontal units. Alternative interpretations are highly unlikely. • The Kihabe Deposit consists of steeply dipping to sub vertical units. Alternative interpretations are highly unlikely. • Infill and extensional drilling has supported and refined the model and the current interpretation is considered robust. • Observations from the host rocks; as well as infill drilling, confirm the geometry of the mineralisation. • Infill drilling has confirmed geological and grade continuity.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Nxuu Mineral Resource area extends over an northeast strike length of 730m, has a maximum width in plan view of 265m and includes the 80m vertical interval from 1,155mRL to 1,075mRL. • The Kihabe mineral resource area extends over an east-southeast strike length of 2,440m. It has a maximum width in plan view of 80m and includes the 220m vertical interval from 1,190m RL to 970mRL. Overall the mineral resource extends from 500,500mE to 502,600mE
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and*	• Using parameters derived from modelled variograms, Ordinary Kriging (OK) was used to estimate average block grades in three passes using Surpac software. Linear grade estimation was deemed suitable for the Nxuu and Kihabe Mineral Resources due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 30m along strike and down-dip for Nxuu and 100m along strike and down dip for Kihabe. This was equal to the drill hole spacing in these regions of the Project. Maximum extrapolation was generally half to one drill hole spacing. • Zn (%), Pb (%), Ag (ppm), Cu (%), V_2O_5 (%), Ga (ppm) and Ge (ppm) were all interpolated. • Reconciliation could not be conducted as no mining has occurred. • It is assumed that Zn, Pb and Ag can be recovered in a Zn concentrate and V_2O_5 can be recovered in a V_2O_5 concentrate. In addition, Ga and Ge may be recovered as by-products. • It is assumed that there are no deleterious elements when considering the proposed processing methodology for the Nxuu and Kihabe mineralisation. • At Nxuu he parent block dimensions used were 15m EW by 15m NS by 5m vertical with sub-cells of 3.75 by 3.75m by 1.25m. The model was rotated to align with the strike of the deposit of 045°. At Kihabe the

Criteria	JORC Code explanation	Commentary
	use of reconciliation data if available.	parent block dimensions used 12.5m EW by 5m NS, by 5m vertical with sub cells of 3.125 x 1.25m x 1.25m was selected on the results obtained from Kriging Neighbourhood Analysis that suggested this was the optimal block size for the dataset. • An orientated 'ellipsoid' search was used to select data and adjusted to account for the variations in lode orientations, however all other parameters were taken from the variography. Up to three passes were used for each domain. The first pass had a range of 50m for Nxuu and 80m for Kihabe, with a minimum of 8 samples for Nxuu and 10 samples for Kihabe. For the second pass, the range was extended to 100m for Nxuu and 150m for Kihabe with a minimum of 4 samples for Nxuu and 6 samples for Kihabe. For the final pass, the range was extended to 150m for Nxuu and 250m for Kihabe with a minimum of 2 samples. A maximum of 20 samples was used for all three passes for Nxuu with a maximum of 24 samples being used for all three passes at Kihabe. • No assumptions were made on selective mining units. • Zn and Pb, as well as Pb and Ag had moderate positive correlations. Zn and Ag had a moderate positive correlation. • The mineralisation was constrained by Mineral Resource outlines created in Surpac software, based on logged geology and mineralisation envelopes prepared using a nominal 0.5% combined Zn and Pb cut-off grade with a minimum down-hole length of 2m for Nxuu and 3m for Kihabe. The wireframes were applied as hard boundaries in the estimate. • After review of the project statistics, it was determined that high grade cuts were required for Ag and V_2O_5 within some domains of Nxuu together with copper domains for Kihabe. • Validation of the model included detailed comparison of composite grades and block grades by strike panel and elevation. Validation plots showed good correlation between the composite grades and the block model grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• ZnEq cut-off grades of 0.5%, 1.0% and 1.5% for Nxuu and Kihabe were utilised for reporting purposes, assuming an open pit mining method. The Statement of Mineral Resources has been constrained by the mineralisation solids and reported above Zn equivalent ("ZnEq") cut-off grades of 0.5%, 1.0% and 1.5%. For Nxuu Zinc equivalent cut-off grades are estimated based on LME Zn/Pb prices, Kitco Silver Price for Ag, Live Vanadium Price for V2O5, Kitco Strategic Metals Prices for Ge/Ga, as at 21 October 2022. The ZnEq formula is shown below: • ZnEq = 100 x *[(Zn% x 3,000) + (Pb% x 2,000) + (Ag g/t x (20.0/31.1035)) + (V2O5% x 16,000)] / (3,000).* • For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: ZnEq = {(Zn% x 3,410) + (Pb% x 1,955) +Ag g/t x (20.7/31.1035)} + V_2O_5% x20,720)}/(3,410)
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction*	• Ashmore has assumed that the Nxuu deposit could potentially be mined using open pit techniques. No assumptions have been made for mining dilution or mining widths. It is assumed that mining dilution and ore loss will be incorporated into any Ore Reserve

Criteria	JORC Code explanation	Commentary
	to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	estimated from a future Mineral Resource with higher levels of confidence.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Both the Nxuu and Kihabe mineralisation was initially determined to be a zinc and lead sulphide deposit. Metallurgical test work involved the recovery of the zinc / lead by flotation. Initial results gave low zinc recoveries (67.5%), with low sulphur in the tails. • Mineralogical evaluation of the tailings determined that the zinc was in an oxide form of smithsonite at Nxuu and baileychlore at the Kihabe Oxide zone and the lead as a carbonate (cerussite) at Nxuu and in Galena at Kihabe. Further flotation tests were conducted, and the tailings subjected to leaching with sulphuric acid at 40 deg C for a zinc extraction rate of 89.5%. • Recovery of zinc concentrate by floatation and leaching of the zinc oxides (baileychlore) in the tailings resulted in a zinc extraction of 89.5% giving an overall access availability to 94% of zinc within the ore. Additional testwork is recommended.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No assumptions have been made regarding environmental factors. MTB will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A total of 513 bulk density measurements were taken on core samples collected from diamond holes drilled at the Nxuu deposit using the water immersion technique. A total of 4258 Bulk density measurements were taken on core samples from the Kihabe Deposit. Bulk densities for the transitional mineralisation at both Nxuu and Kihabe were assigned in the block model based on a density and Zn regression equation. Average densities for weathered mineralisation were applied (2.40t/m^3 for oxide) at Nxuu and 2.46t/m^3 for oxide and 2.58t/m^3 for transitional at Kihabe. Average waste densities were assigned based on lithology and weathering. • It is assumed that the bulk density will have some variation within the mineralised material types due to the host rock lithology and sulphide minerals present. Therefore, a regression equation for Zn and density was used to calculate density in the Nxuu transitional material.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource estimates are reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The Mineral Resources were classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resources were defined within areas of close spaced drilling of less than 30m by 30m for the Nxuu Deposit

Criteria	JORC Code explanation	Commentary
		and 50m x 50m for Kihabe and where the continuity and predictability of the mineralised units was reasonable. The Inferred Mineral Resources were assigned to areas where drill hole spacing was greater than 30m by 30m for Nxuu and greater than 50m x 30m for Kihabe and less than 60m by 60m for Nxuu and 200m x 40m for Kihabe or where small, isolated pods of mineralisation occur outside the main mineralised zones. • The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. • The Mineral Resource estimates appropriately reflect the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The geometry and continuity have been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. • The Mineral Resource statement relates to global estimates of tonnes and grade. • No historical mining has occurred; therefore, reconciliation could not be conducted.

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Mount Burgess Mining NL

ABN	Quarter ended ("current quarter")
31 009 067 476	**31 March 2023**

	Consolidated statement of cash flows	**Current quarter $A'000**	**Year to date (9 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(14)	(41)
	(e) administration and corporate costs	(94)	(199)
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	Government grants and tax incentives	16	16
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(92)**	**(224)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(25)	(94)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) 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) – R&D	41	41
2.6	**Net cash from / (used in) investing activities**	**16**	**(53)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(33)	(82)
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**	**(33)**	**(82)**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	203	453
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(92)	(224)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	16	(53)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(33)	(82)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**94**	**94**

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	94	203
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)**	**94**	**203**

6.	**Payments to related parties of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to related parties and their associates included in item 1	-
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	10	2
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	10	2

7.5	**Unused financing facilities available at quarter end**	8
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	
	N/A	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(92)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(25)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(117)
8.4	Cash and cash equivalents at quarter end (item 4.6)	94
8.5	Unused finance facilities available at quarter end (item 7.5)	8
8.6	Total available funding (item 8.4 + item 8.5)	102
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	0.87

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes

8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

The Company has the ability to raise further funds by way of share placements through the issue of up to 220,792,780 shares as follows:

- 132,475,668 shares are available under Section 7.1 (the 15% rule)
- 88,317,112 shares are available under Section 7.1A (the 10% rule) as approved at the Company's AGM on 30/11/2022.

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

The Directors believe the Company will continue its operations and to meet its business objectives for the following reasons:

- The Company has continued financial support from the Directors, former Directors and their associated entities, in that they have confirmed in writing that they will not call upon their loans to be repaid within the next 12 months, unless sufficient funds are available to do so without affecting the Company's going concern.
- The Company has the ability to raise funds through equity issues. In relation to additional funding via capital raisings.
- In addition, the Directors have also embarked on a strategy to reduce costs in line with the funds available to the Consolidated Entity.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

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.

Date: 26 April 2023

Authorised by: By the Board (Unaudited cashflow)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow 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 cash flow 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.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.