



31 July 2023

ASX CODE: MTB

Quarterly Report to 30 June 2023

During the Quarter the Company assessed the potential of Gallium and Germanium at the Kihabe Nxuu Polymetallic Project, in Western Ngamiland, Botswana.

Assay results for Gallium (Ga) and Germanium (Ge) from the Kihabe and Nxuu deposits have shown that Ga and Ge could represent significant credits for potential additional revenue. In addition, by confirming the recoverability of Ga and Ge, waste to ore ratios could be significantly reduced.

HIGHLIGHTS

Ga potential

Kihabe Deposit Significant Ga Exploration Target Estimate

A Ga Exploration Target was independently estimated to contain:

- A lower range of 75 million tonnes @ 9ppm (g/t) Ga
- An upper range of 100 million tonnes @ 12ppm (g/t) Ga

Kihabe Deposit – Average for 18 holes drilled over 2.4km strike length, assayed for Ga (14 holes spread over 670m in southwest area – Figure 2, and 4 holes spread over 520m in northeast area - Figure 3)

- 6.93m Kalahari sand cover
- 115.4m to base of Zn/Pb/Ag/V₂O₅/Ge/Ga mineralised Quartz Wacke
- 65.5% of drill hole lengths within the 115.4m contain Ga
- Average grade 12.1g/t Ga

Nxuu Deposit – Average for 40 of 47 holes drilled into the main zone, assayed for Ga

- 5.94m Kalahari sand cover
- 37.22m to base of Zn/Pb/Ag/ V₂O₅/Ge/Ga mineralised Quartz Wacke
- 67.5% of drill hole lengths within the 37.22m contain Ga
- Average grade 11.1g/t Ga

The average 65.5% and 67.5% of drill hole lengths below Kalahari sand cover containing Ga at Kihabe and Nxuu deposits, when combined with Zn/Pb/Ag/ V₂O₅/Ge show the potential to significantly reduce waste to ore ratios to less than 1 to 1.

Calculating Ga Grade Ranges

A low-cut grade of 10 g/t was applied in calculating the 65.5% and 67.5% for the Kihabe and Nxuu deposits Ga drill hole lengths. Higher grade intersections include:

Kihabe Deposit

- KDD118 (Figure 4) 102m – 113m = 11m @ 24.6g/t Ga
129m – 132m = 3m @ 22.3g/t Ga
150m – 154m = 4m @ 23.8g/t Ga
within 110m of continuous Ga mineralisation
- KDD111 (Figure 21) 110m – 116m = 6m @ 26.7g/t Ga
within 116m of continuous Ga mineralisation
- KDD112 (Figure 25) 137m – 140m = 3m @ 20.7g/t Ga

Nxuu Deposit

- NXDD066A (Figure 32) 33m – 37m = 4m @ 21.0g/t Ga
- NXDD037 (Figure 33) 32m – 40m = 8m @ 20.0g/t Ga
Refer Figure 31 to view Nxuu Deposit Drill Hole Map

Germanium (Ge) Potential

Kihabe Deposit

Only seven holes in the Kihabe Deposit have been assayed for Ge. For Ge intersections and grades refer to Figures 4 and 5.

Nxuu Deposit

For results from holes assayed for Ge and Ga at the Nxuu Deposit, please refer to release to ASX on 28 July 2023.

Metallurgical Testwork for Ga and Ge

Core from Kihabe and Nxuu has now been received in Australia in preparation for compositing for further metallurgical testwork.

Gallium and Germanium - Strategic Metals

Gallium

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

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

Gallium Nitride (GaN) energy saving chips, available at globally competitive costs in the future will allow for:

- Wireless charging of electric vehicles with energy efficiency levels of 96%, compared to current levels, at best, of 93%. The increase of 3% will achieve a reduction of CO₂ emissions of around 1.7 mega-tonnes per annum by 2030. This is equivalent to annual CO₂ emissions from 1 million cars with internal combustion engines.

- Low loss and smooth connection of solar energy to grid storage systems.
- Rapid expansion of cost effective fifth generation (5G) networks requiring Gallium computer chips, being more efficient at higher temperatures than traditional silicon-based chips.

Recently, an international team of scientists led by Professor Konrosh-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 CO₂ into constituent elements.

Quote “Our liquid metal technology offers an unprecedented(ed) process for capturing and converting CO₂ 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 recent upgrade of cellular networks to 5th 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.

Gallium is on the United States Geological Survey list of Critical Minerals. The United States’ Energy Act of 2020 defines a Critical Mineral as a non-fuel mineral or mineral material essential to the economic or national security of the U.S. and which has a supply chain vulnerable to disruption. Critical Minerals are also characterised as serving an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economy or national security.

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%.

Metal Prices

• Zinc	\$2,485/t	LME	28 July 2023
• Lead	\$2,157/t	LME	28 July 2023
• Silver	\$24.41/oz	Kitco Silver	28 July 2023
• Vanadium Pentoxide	\$16.76/kg	Vanadium Price	25 July 2023
• Gallium	\$582/kg	Kitco Strategic Metals	27 July 2023
• Germanium	\$2,566/kg	Kitco Strategic Metals	27 July 2023

Kihabe Deposit Significant Ga Exploration Target Estimate

In addition to the Kihabe Mineral Resource Estimate (Refer to Tables 2,8,9,10 and 11) an **Exploration Target** estimated by Ashmore Advisory Pty Ltd is reported for the deposit in relation to Gallium.

Table 1 – Kihabe Gallium July 2023 Exploration Target

Range	Tonnage (Mt)	Gallium Grade (ppm)
Lower	75	9
Upper	100	12

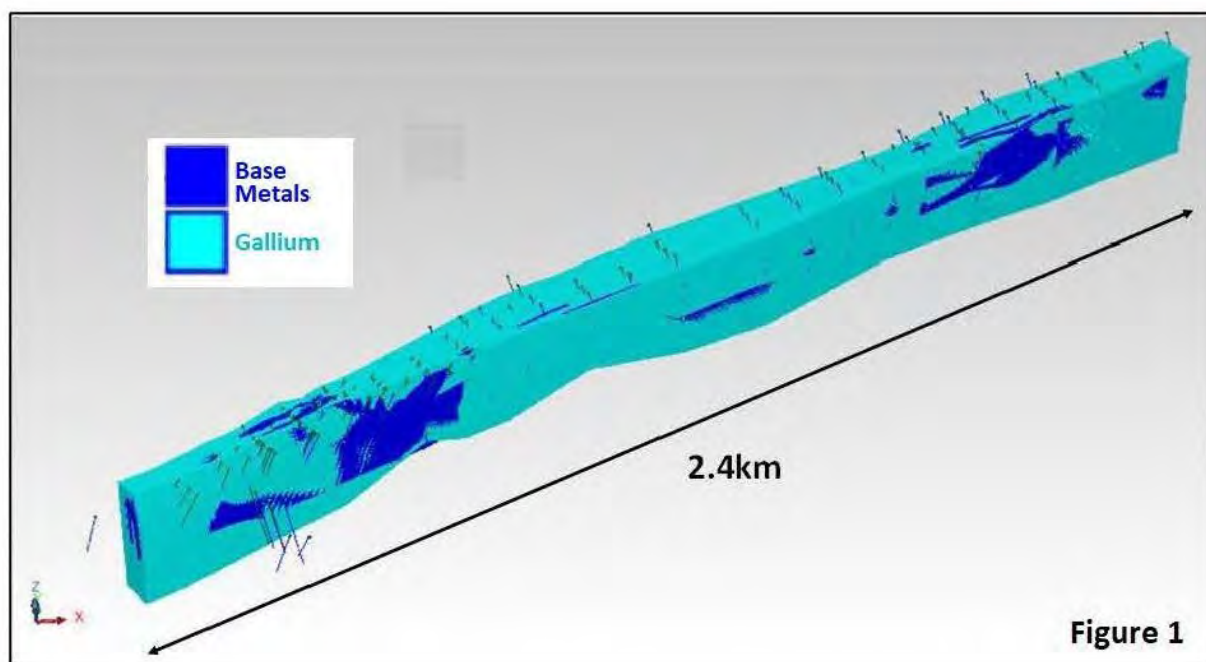
Mt = million tonnes

ppm = parts per million (g/t)

Cautionary Statement:

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource for all target areas reported. It is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

The Exploration Target is based on the results of exploration activities undertaken to date and references an extensive dataset of historical drilling, geological and geophysical information, which includes recent exploration data obtained by the Company. The quartz wacke host geology wireframe (refer to Figure 1) forms the basis for grade ranges and tonnage factors for the Exploration Target, as Gallium occurs at consistent grades across the breadth of this geological unit.



The Company plans to re-assay existing samples within the deposit area for gallium and germanium, as well as additional drill testing if conditions permit over the next two to three years.

Potential Gallium Contribution to the Kihabe Polymetallic Deposit

Because Gallium mineralisation occurs as extensions above, within and below the Zn/Pb/Ag/Cu/V₂O₅/Ge mineralised domains, it would be extracted in any potential mining operation to access these other mineral domains.

With the consistency of its grade and occurrence, averaging 12.1ppm Ga(g/t) over an average of 65.5% of drill hole lengths of all holes assayed for Gallium to date, across the breadth of the Kihabe Deposit, it has the potential to represent a significant contributory credit for the Project.

Gallium's Association with Zn/Pb/Ag/Cu/V₂O₅/Ge in the Kihabe Deposit

In answer to queries raised relative to Gallium's association with other metals/minerals in the Kihabe Deposit the Company has compiled a set of plans and cross-sections (refer to Figures 2 to 30).

Figure 2 is the Kihabe Southwest area Drill Hole Map, showing holes assayed for Gallium

Figure 3 is the Kihabe Northeast area Drill Hole Map showing holes assayed for Gallium

Figures 4 to 30 show the drill sections with drill holes containing Zn/Pb/Ag/Cu/V₂O₅/Ge and their association with holes containing Gallium mineralisation in the Kihabe Southwest area.

Mineralogical Association Test Work Conducted on Kihabe Deposit Gallium

Following the release of the Mineral Resource Estimate, which **did not include** any credits for Gallium, Germanium or Copper, the Company completed an in-depth review of Gallium assay results in both the Oxide and Sulphide Zones at Kihabe.

On 3 March 2022, the Company released an announcement to ASX confirming results of the mineralogical work carried out by the University of Tasmania on samples containing Gallium and Germanium from the Kihabe Deposit

The work identified that both Gallium (Ga) and Germanium (Ge) were primarily hosted within muscovite (mica). Ga is possibly hosted in Al and K mica and Ge is likely hosted in Fe mica, both not directly associated with zinc mineralisation. Mica in the form of flakes is amenable to flotation, which generally results in a high recovery as a concentrate.

Core samples from holes in the Kihabe Deposit are in Australia awaiting further test work to determine how Gallium and Germanium can be recovered on site.

Table 2

Kihabe Polymetallic Deposit
July 2022 Mineral Resource Estimate (0.5% ZnEq Cut-off)

Type	Indicated Mineral Resource										
	Tonnage Mt	ZnEq* %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	ZnEq* kt	Zn kt	Pb kt	Ag Moz	V ₂ O ₅ kt
Oxide	1.1	1.6	0.9	0.8	8.8	0.04	18	10	8	0.3	1
Transitional	3.1	1.8	1.4	0.7	9.0	0.01	57	43	20	0.9	1
Fresh	7.5	2.1	1.6	0.8	8.9	0.01	160	122	57	2.1	2
Total	11.7	2.0	1.5	0.7	8.9	0.01	234	176	86	3.3	5

Type	Inferred Mineral Resource										
	Tonnage Mt	ZnEq* %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	ZnEq* kt	Zn kt	Pb kt	Ag Moz	V ₂ O ₅ kt
Oxide	0.8	1.4	0.9	0.6	6.0	0.04	11	7	4	0.1	1
Transitional	1.9	1.7	1.3	0.6	5.4	0.02	33	25	11	0.3	1
Fresh	6.6	2.3	1.7	0.8	7.7	0.01	151	114	53	1.6	3
Total	9.3	2.1	1.6	0.7	7.1	0.02	194	146	68	2.1	5

Type	Total Mineral Resource										
	Tonnage Mt	ZnEq* %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	ZnEq* kt	Zn kt	Pb kt	Ag Moz	V ₂ O ₅ kt
Oxide	1.9	1.5	0.9	0.7	7.7	0.04	28	17	13	0.5	2
Transitional	5.0	1.8	1.4	0.6	7.6	0.01	90	68	31	1.2	2
Fresh	14.1	2.2	1.7	0.8	8.3	0.01	310	237	110	3.8	5
Total	21.0	2.0	1.5	0.7	8.1	0.01	429	321	154	5.4	10

The Mineral Resource has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

All Mineral Resources figures reported in the table above represent estimates at 10th August 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition). "Zinc equivalent grades are estimated based on LME closing prices as at 30th June 2022 and calculated with the formula:

*ZnEq = [(Zn% x 3,410) + (Pb% x 1,955) + (Ag g/t x (20.7/31.1035)) + (V₂O₅% x 20,720)] / (3,410).

Mount Burgess is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold.

Nxuu Mineral Resource Estimates are shown on:

- Table 3, summarising the tonnes, grades and metal content for the Zn equivalent cut-off grades for 0.5%, 1.0% and 1.5%.
- Table 4, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 0.5%.
- Table 5, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 1.0%.
- Table 6, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 1.5%.
- Table 7, summarising the tonnes, grades and metal content of the Inferred Mineral Resource Estimate for the Peripheral Germanium and Gallium mineralisation which surrounds the main mineralised domain summarised in Tables 4, 5 and 6.

Kihabe Mineral Resource Estimates are shown on:

- Table 8, summarising the tonnes, grades and metal content for the Zn equivalent cut-off grades for 0.5%, 1.0% and 1.5%.
- Table 9, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 0.5%.
- Table 10, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 1.0%.
- Table 11, summarising the tonnes, grades and metal content of the Indicated, Inferred and Total Mineral Resource Estimate for the Zn equivalent cut-off grade of 1.5%.

Combined Nxuu and Kihabe In-Ground Metal Content is shown on Table 12, summarising:

- The metal content within the **oxide and transitional zones** in both the Nxuu and Kihabe Mineral Resource Estimates, for the Zn equivalent cut-off grades of 0.5%, 1.0% and 1.5%
- The metal content within the **sulphide zone** in the Kihabe Mineral Resource Estimate, for the Zn equivalent cut-off grades of 0.5%, 1.0% and 1.5%.
- The overall metal content within the **oxide transitional and sulphide zones** in the Nxuu and Kihabe Mineral Resource Estimates, for the Zn equivalent cut-off grades of 0.5%, 1.0% and 1.5%.

TABLE 3 Nxuu Mineral Resource Estimate

Total Indicated, Inferred Mineral Resource Estimate @ 0.5%, 1.0% & 1.5% ZnEq Low Cut

Low Cut	Volume Tonnage Mt	Grade							Metal Content					
		ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag MOz	V ₂ O ₅ kt	Ge kg	Ga kg
0.5%	6.0	1.8	1.1	0.5	5.4	0.04	2.7	10.2	64	32	1,040	2.6	16,000	61,000
1.0%	4.2	2.2	1.3	0.7	6.8	0.05	3.1	10.3	55	30	933	2.2	13,000	44,000
1.5%	2.8	2.7	1.7	0.9	8.3	0.05	3.5	10.3	47	25	752	1.4	10,000	29,000

TABLE 4 Nxuu Mineral Resource Estimate (0.5% ZnEq Cut-off Grade)

Domain	Indicated Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	2.7	2.3	1.4	0.7	7.2	0.04	3.1	10.4	38	20	630	1.2	9,000	28,000
Total	2.7	2.3	1.4	0.7	7.2	0.04	3.1	10.4	38	20	630	1.2	9,000	28,000

Domain	Inferred Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	2.9	1.4	0.9	0.4	4.0	0.03	2.3	10.3	25	10	370	0.9	7,000	30,000
Vanadium	0.4	1.5	0.3	0.5	3.7	0.15	2.6	8.7	1	2	40	0.6	1,000	3,000
Total	3.2	1.4	0.8	0.4	3.9	0.04	2.3	10.1	26	12	410	1.4	8,000	33,000

Domain	Total Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	5.6	1.8	1.1	0.5	5.5	0.04	2.7	10.3	63	30	990	2.0	15,000	58,000
Vanadium	0.4	1.5	0.3	0.5	3.7	0.15	2.6	8.7	1	2	40	0.6	1,000	3,000
Total	6.0	1.8	1.1	0.5	5.4	0.04	2.7	10.2	64	32	1,040	2.6	16,000	61,000

TABLE 5 Nxuu Mineral Resource Estimate (1.0% ZnEq Cut-off Grade)

Domain	Indicated Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	2.5	2.4	1.5	0.8	7.7	0.04	3.3	10.4	37	19	610	1.1	8,000	26,000
Total	2.5	2.4	1.5	0.8	7.7	0.04	3.3	10.4	37	19	610	1.1	8,000	26,000

Domain	Inferred Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	1.5	1.9	1.2	0.6	6.1	0.04	2.8	10.4	17	8	290	0.5	4,000	15,000
Vanadium	0.3	1.6	0.3	0.5	3.9	0.17	2.7	9.0	1	2	40	0.5	1,000	3,000
Total	1.8	1.9	1.0	0.6	5.7	0.06	2.6	10.1	18	10	330	1.1	5,000	18,000

Domain	Total Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	3.9	2.2	1.4	0.7	7.1	0.04	3.1	10.4	54	28	890	1.6	12,000	41,000
Vanadium	0.3	1.6	0.3	0.5	3.9	0.17	2.7	9.0	1	2	40	0.5	1,000	3,000
Total	4.2	2.2	1.3	0.7	6.8	0.05	3.1	10.3	55	30	930	2.2	13,000	44,000

TABLE 6 Nxuu Mineral Resource Estimate (1.5% ZnEq Cut-off Grade)

Domain	Indicated Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	1.9	2.8	1.7	0.9	8.6	0.04	3.6	10.4	33	18	520	0.8	7,000	20,000
Total	1.9	2.8	1.7	0.9	8.6	0.04	3.6	10.4	33	17	520	0.8	7,000	20,000

Domain	Inferred Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	0.8	2.6	1.7	0.8	8.1	0.04	3.3	10.6	13	6	200	0.3	3,000	8,000
Vanadium	0.1	2.1	0.3	0.7	5.3	0.24	3.1	6.7	0.4	1	20	0.3	400	1,000
Total	0.9	2.5	1.5	0.8	7.7	0.07	3.3	10.0	13	7	230	0.6	3,000	9,000

Domain	Total Mineral Resource													
	Tonnage Mt	ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag kOz	V ₂ O ₅ kt	Ge kg	Ga kg
Base Metal	2.7	2.7	1.7	0.9	8.4	0.04	3.5	10.5	46	24	730	1.0	9,000	28,000
Vanadium	0.1	2.1	0.3	0.7	5.3	0.24	3.1	6.7	0.4	1	20	0.3	400	1,000
Total	2.8	2.7	1.7	0.9	8.3	0.05	3.5	10.3	47	25	750	1.4	10,000	29,000

Although Ga and Ge are shown separately in Nxuu Resource Tables 1-6, Ge/Ga are NOT included in the Zinc Equiv Grade calculation.

TABLE 7 Nxuu Inferred Mineral Resource Estimate (10g/t Ga Cut-off Grade)

Domain	Inferred Mineral Resource				
	Tonnage Mt	Ge g/t	Ga g/t	Ge kg	Ga kg
Peripheral	2.3	1.4	11.3	3,200	25,500

The Peripheral Mineral Resource surrounds the Base Metal and Vanadium Resource and, as such, is in addition to the Base Metal and Vanadium Mineral Resource above.

Note:

The Mineral Resource has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

All Mineral Resources figures reported in the table above represent estimates in November 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).

Zinc Equivalent grades are estimated based on LME Zn/Pb prices, Kitco silver price for Ag, Live Vanadium Price for V₂O₅, as at 21 October 2022 and calculated with the formula:

$$\text{ZnEq} = 100 \times \{(\text{Zn}\% \times 3,000) + (\text{Pb}\% \times 2,000) + (\text{Ag g/t} \times (20/31.1035)) + (\text{V}_2\text{O}_5\% \times 16,000)\} / (3,000)$$

TABLE 8 Kihabe Mineral Resource Estimate

Total Indicated, Inferred Mineral Resource Estimate @ 0.5%, 1.0% & 1.5% ZnEq Low Cut

Low Cut	Volume Tonnage Mt	Grade							Metal Content					
		ZnEq %	Zn %	Pb %	Ag g/t	V ₂ O ₅ %	Ge g/t	Ga g/t	Zn kt	Pb kt	Ag MOz	V ₂ O ₅ kt	Ge kg	Ga kg
0.5%	21.0	2.0	1.5	0.7	8.1	0.01	Not assayed		321	154	5.4	10	Not assayed	
1.0%	18.4	2.2	1.7	0.8	8.8	0.0	Not assayed		306	147	5.2	8.7	Not assayed	
1.5%	13.6	2.6	1.9	0.9	10.1	0.02	Not assayed		262	127	4.4	6.6	Not assayed	

TABLE 9 Kihabe Mineral Resource Estimate (0.5% ZnEq Cut-off Grade)

Type	Indicated Mineral Resource										
	Tonnage	ZnEq*	Zn	Pb	Ag	V ₂ O ₅	ZnEq*	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	1.1	1.6	0.9	0.8	8.8	0.04	18	10	8	0.3	1
Transitional	3.1	1.8	1.4	0.7	9.0	0.01	57	43	20	0.9	1
Fresh	7.5	2.1	1.6	0.8	8.9	0.01	160	122	57	2.1	2
Total	11.7	2.0	1.5	0.7	8.9	0.01	234	176	86	3.3	5

Type	Inferred Mineral Resource										
	Tonnage	ZnEq*	Zn	Pb	Ag	V ₂ O ₅	ZnEq*	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.8	1.4	0.9	0.6	6.0	0.04	11	7	4	0.1	1
Transitional	1.9	1.7	1.3	0.6	5.4	0.02	33	25	11	0.3	1
Fresh	6.6	2.3	1.7	0.8	7.7	0.01	151	114	53	1.6	3
Total	9.3	2.1	1.6	0.7	7.1	0.02	194	146	68	2.1	5

Type	Total Mineral Resource										
	Tonnage	ZnEq*	Zn	Pb	Ag	V ₂ O ₅	ZnEq*	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	1.9	1.5	0.9	0.7	7.7	0.04	28	17	13	0.5	2
Transitional	5.0	1.8	1.4	0.6	7.6	0.01	90	68	31	1.2	2
Fresh	14.1	2.2	1.7	0.8	8.3	0.01	310	237	110	3.8	5
Total	21.0	2.0	1.5	0.7	8.1	0.01	429	321	154	5.4	10

TABLE 10 Kihabe Mineral Resource Estimate (1.0% ZnEq Cut-off Grade)

Type	Indicated Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.8	1.9	1.1	0.9	10.6	0.04	15	9	7	0.3	1
Transitional	2.5	2.1	1.6	0.7	10.0	0.01	52	39	18	0.8	1
Fresh	7.1	2.2	1.7	0.8	9.2	0.01	156	119	56	2.1	2
Total	10.4	2.2	1.6	0.8	9.5	0.01	223	168	82	3.2	4

Type	Inferred Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.5	1.7	1.0	0.7	7.8	0.04	9	6	4	0.1	1
Transitional	1.5	2.0	1.5	0.7	6.5	0.01	29	22	10	0.3	1
Fresh	6.0	2.5	1.9	0.9	8.1	0.01	146	111	52	1.5	3
Total	8.0	2.3	1.7	0.8	7.8	0.02	184	139	65	2.0	4

Type	Total Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	1.4	1.8	1.1	0.8	9.4	0.04	25	15	11	0.4	2
Transitional	4.0	2.1	1.6	0.7	8.7	0.01	81	62	28	1.1	2
Fresh	13.0	2.3	1.8	0.8	8.7	0.01	302	230	108	3.6	5
Total	18.4	2.2	1.7	0.8	8.8	0.01	408	306	147	5.2	9

TABLE 11 Kihabe Mineral Resource Estimate (1.5% ZnEq Cut-off Grade)

Type	Indicated Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.6	2.2	1.3	1.1	12.4	0.04	12	7	6	0.2	1
Transitional	1.6	2.6	2.0	0.9	12.5	0.01	40	31	14	0.6	1
Fresh	5.4	2.5	1.9	0.9	10.5	0.01	135	103	49	1.8	2
Total	7.5	2.5	1.9	0.9	11.1	0.01	187	141	69	2.7	3

Type	Inferred Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.3	2.1	1.2	1.0	10.3	0.05	7	4	3	0.1	1
Transitional	0.9	2.5	1.9	0.9	8.2	0.01	22	17	8	0.2	0.4
Fresh	4.8	2.7	2.1	1.0	9.0	0.02	132	100	47	1.4	2
Total	6.1	2.7	2.0	1.0	8.9	0.02	161	121	58	1.7	3

Type	Total Mineral Resource										
	Tonnage	ZnEq	Zn	Pb	Ag	V ₂ O ₅	ZnEq	Zn	Pb	Ag	V ₂ O ₅
	Mt	%	%	%	g/t	%	kt	kt	kt	Moz	kt
Oxide	0.9	2.1	1.3	1.0	11.6	0.05	19	11	9	0.3	1
Transitional	2.5	2.5	2.0	0.9	10.9	0.01	63	48	21	0.9	1
Fresh	10.2	2.6	2.0	0.9	9.8	0.01	266	203	96	3.2	4
Total	13.6	2.6	1.9	0.9	10.1	0.02	348	262	127	4.4	7

Note:

The Mineral Resource has been compiled under the supervision of Mr. Shaun Searle who is a director of Ashmore Advisory Pty Ltd and a Registered Member of the Australian Institute of Geoscientists. Mr. Searle has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code.

All Mineral Resources figures reported in the table above represent estimates in November 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.

Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition). Zinc equivalent grades are estimated based on LME closing prices as at 30th June 2022 and calculated with the formula: $*ZnEq = [(Zn\% \times 3,410) + (Pb\% \times 1,955) + (Ag \text{ g/t} \times (20.7/31.1035)) + (V_2O_5\% \times 20,720)] / (3,410)$.

TABLE 12 Nxuu and Kihabe In-ground Metal Content

Metal	Nxuu Oxide Tables 4,5,6,7	Kihabe Oxide Transitional Table 9,10,11	Total Oxide Transitional	Kihabe Sulphide Table 9,10,11	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 ₂ O 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	5,940,000oz
V ₂ O ₅	2,200t	4,000t	6,200t	5,000t	11,200t
Germanium	16,200kg	Not assayed	16,200kg	Not assayed	16,200kg
Gallium	69,500kg	Not assayed	69,500kg	Not assayed	69,500kg
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 ₂ O 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

Note:

Mt = Million tonnes

g/t = grammes per tonne

kt = Thousand tonnes

MOz = Million ounces

Geology and Geological Interpretation

- 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.

Sampling and Sub-sampling Techniques and Sample Analysis

- 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.
- 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 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.

Drilling Techniques

- 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.

Classification Criteria/Estimation Methodology

- 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 (%), V₂O₅ (%), 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 V₂O₅ can be recovered in a V₂O₅ 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 the 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 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 V₂O₅ 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.

Cut-off Parameters

- 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:
- $$\text{ZnEq} = 100 \times [(Zn\% \times 3,000) + (Pb\% \times 2,000) + (Ag \text{ g/t} \times (20.0/31.1035)) + (V_2O_5\% \times 16,000)] / (3,000).$$
- For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula:
$$\text{ZnEq} = \{(Zn\% \times 3,410) + (Pb\% \times 1,955) + Ag \text{ g/t} \times (20.7/31.1035)\} + V_2O_5\% \times 20,720 / (3,410)$$

Mining and Metallurgical Methods and Parameters

It is assumed that both the Nxuu and Kihabe deposits 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 estimated from a future Mineral Resource with higher levels of confidence.

Gallium and Germanium

Only 18 holes drilled into the Kihabe Deposit were completely assayed for Gallium mineralisation and only seven holes were completely assayed for Germanium mineralisation. All holes contained significant intersections of Gallium and/or Germanium indicating there could be significant credits for both Gallium and Germanium.

However, neither Gallium nor Germanium have been included in the Kihabe Mineral Resource Estimate which was based on 118 drill holes covering a strike length of 2.4km. Further drilling and assaying will be required to include Gallium and Germanium in the resource estimate.

Copper

Significant zones of copper have been intersected in the north-east area of the Kihabe Deposit (refer to ASX Announcement 10 August 2022 www.mountburgess.com) that have not been included in the Kihabe Mineral Resource Estimate.

Corporate

Expiry of Options

On 24 May 2023, the Company informed ASX that on 30 May 2023, 34,666,666 listed options exercisable at \$0.015 (1.5 cents) would expire.

Subsequent Event – Capital Raising

On 26 July 2023, the Company informed ASX that it had received commitments for a placement to raise \$530,000 through the issue of 132,475,668 shares under Section 7.1, at an issue price of \$0.004 (0.4 of a cent).

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.

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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.

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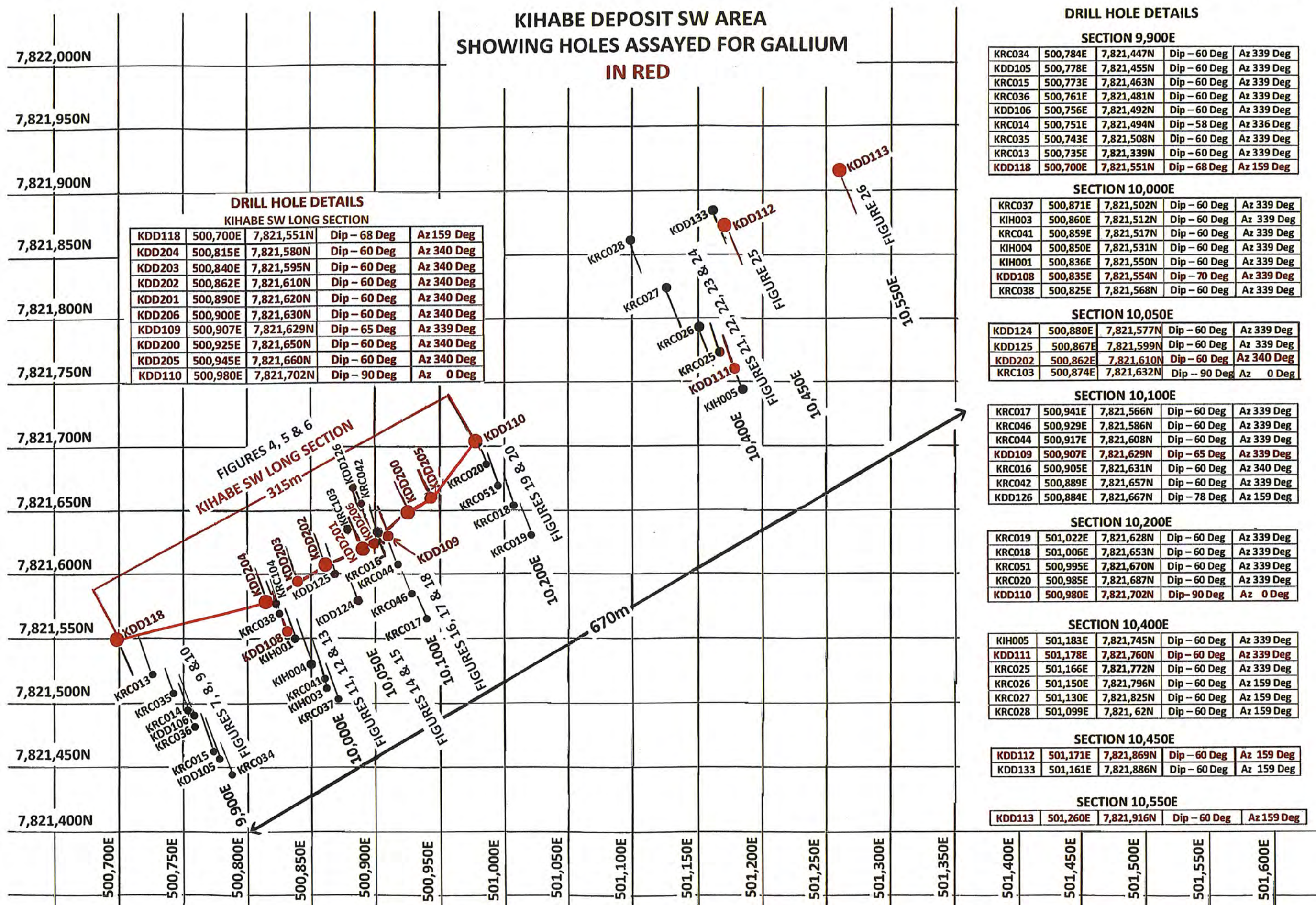
Competent Person's Statements

The information in this report that relates to drilling results at the Nxuu and Kihabe Deposits 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 and Kihabe Deposits 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 and Exploration Targets 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.

FIGURE 2



KIHABE DEPOSIT NE AREA
SHOWING HOLES ASSAYED FOR GALLIUM
IN RED

FIGURE 3

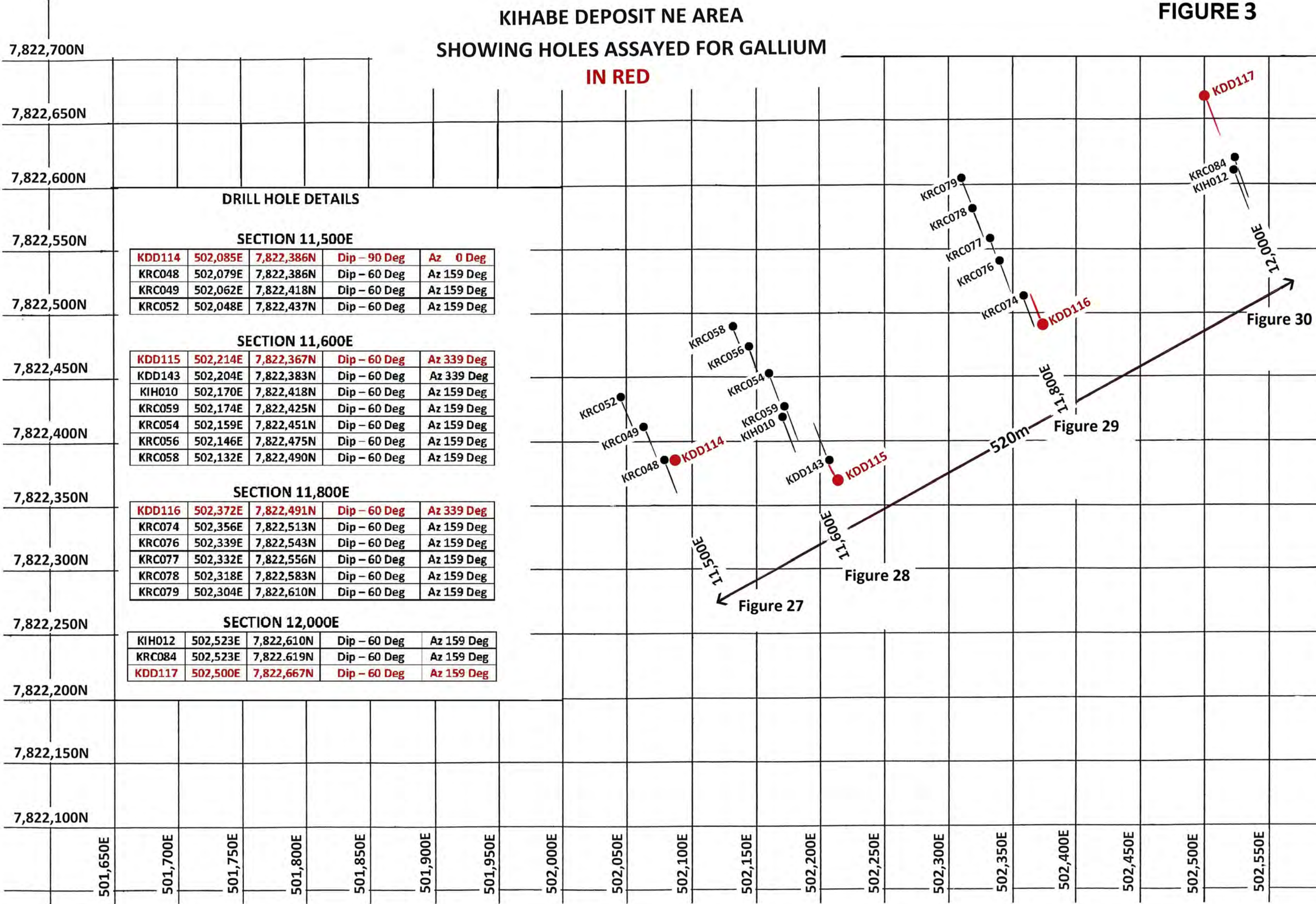
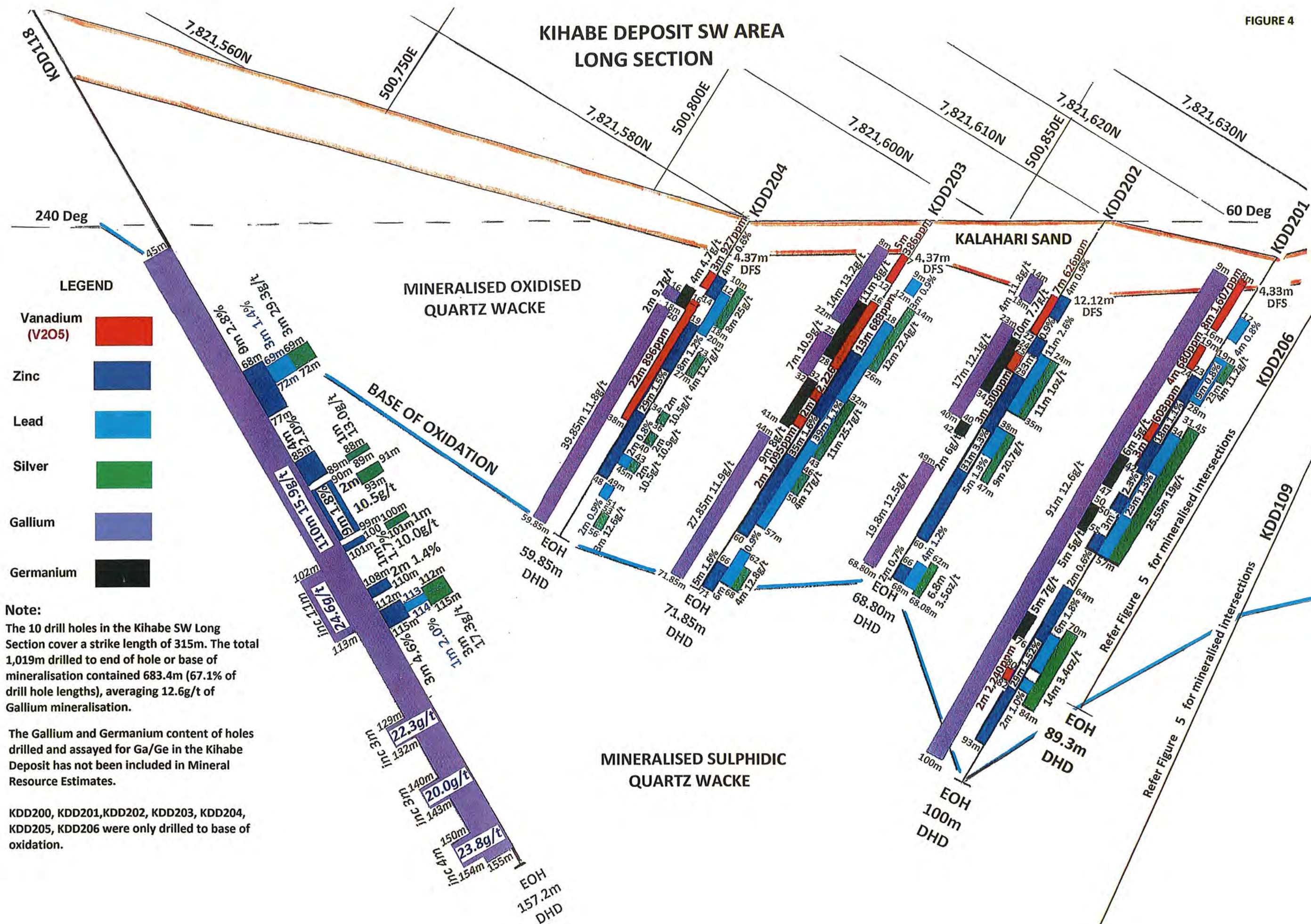
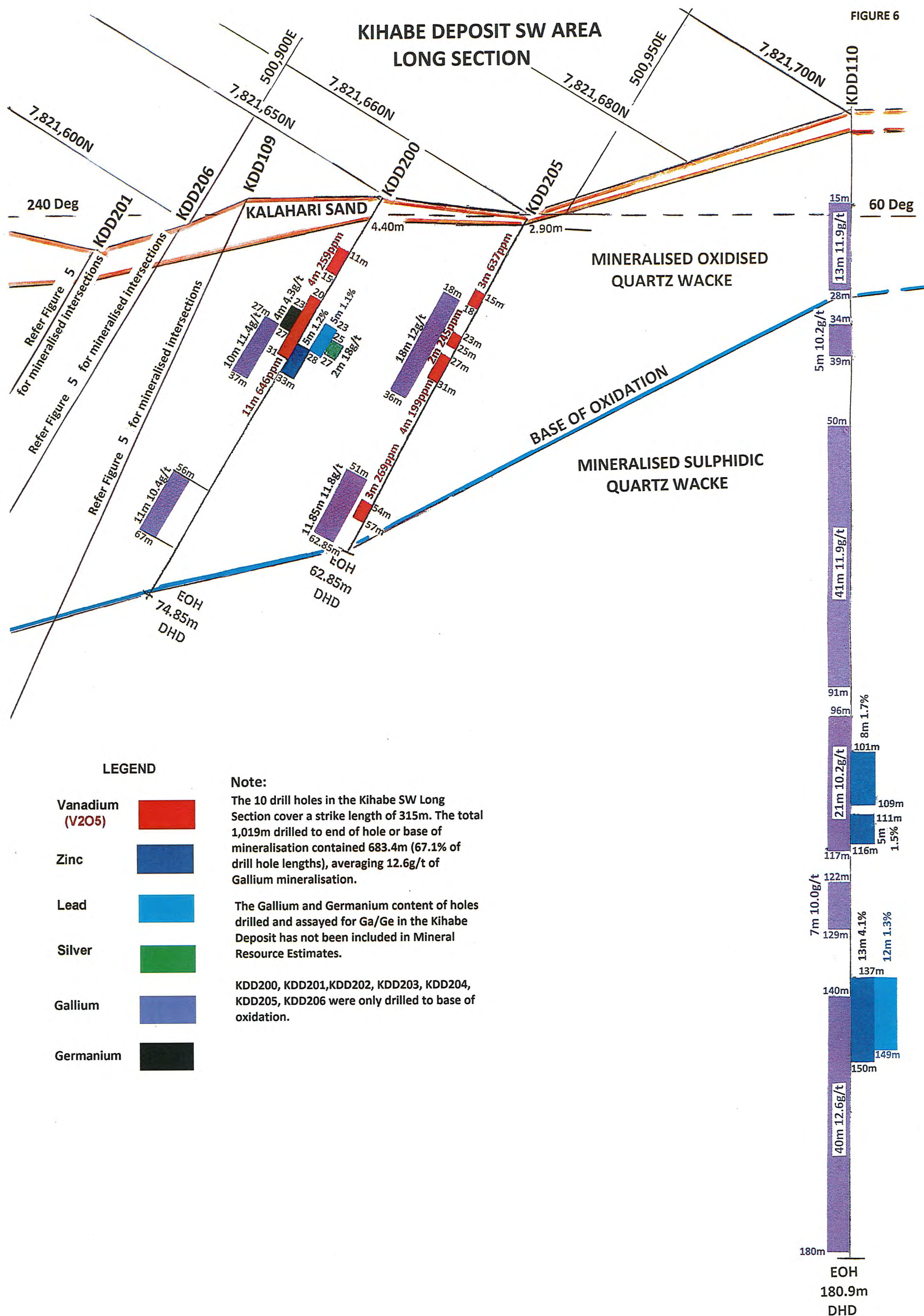


FIGURE 4

KIHABE DEPOSIT SW AREA LONG SECTION



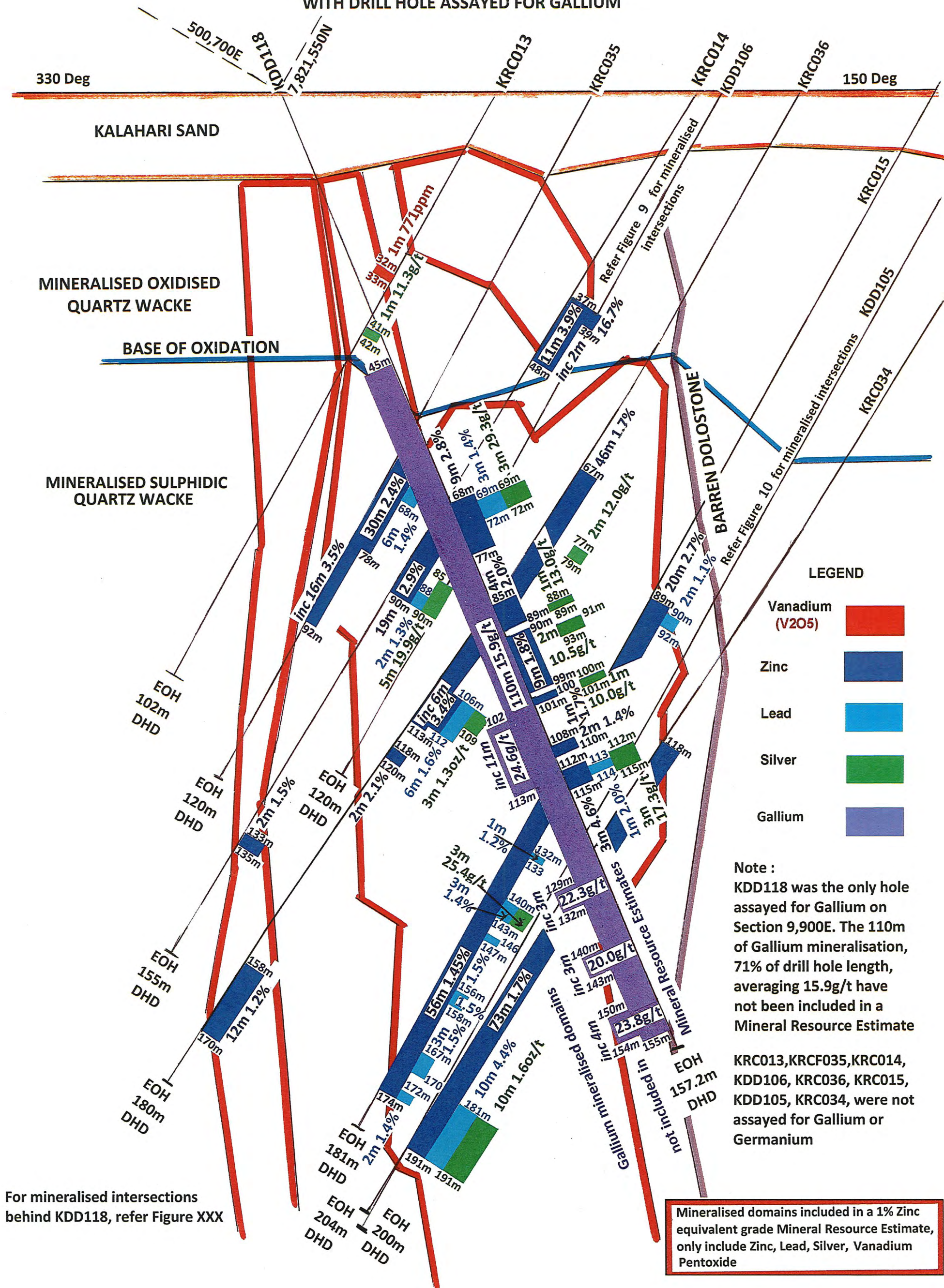


KIHABE DEPOSIT SW AREA

SECTION 9,900E

WITH DRILL HOLE ASSAYED FOR GALLIUM

FIGURE 7



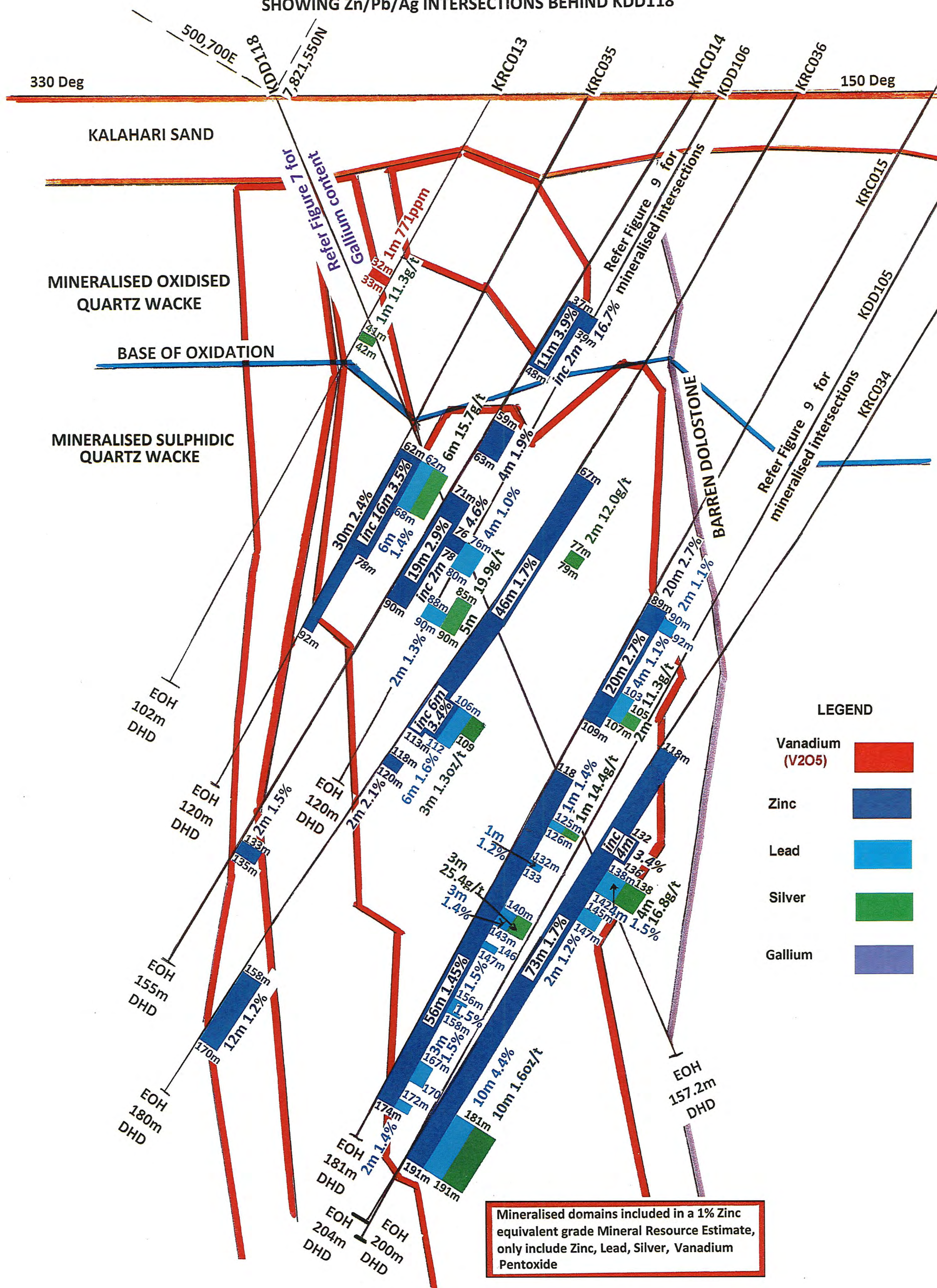
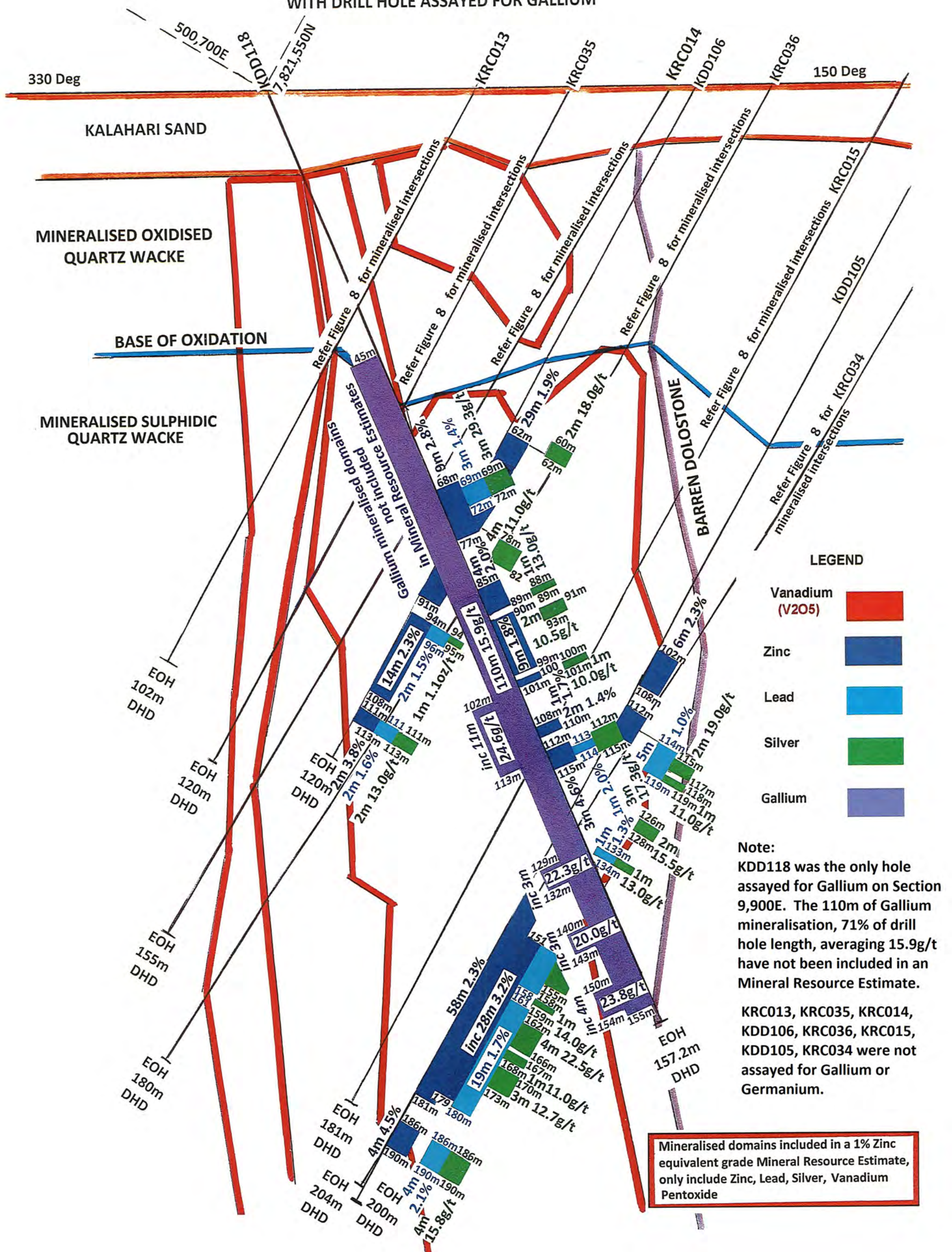
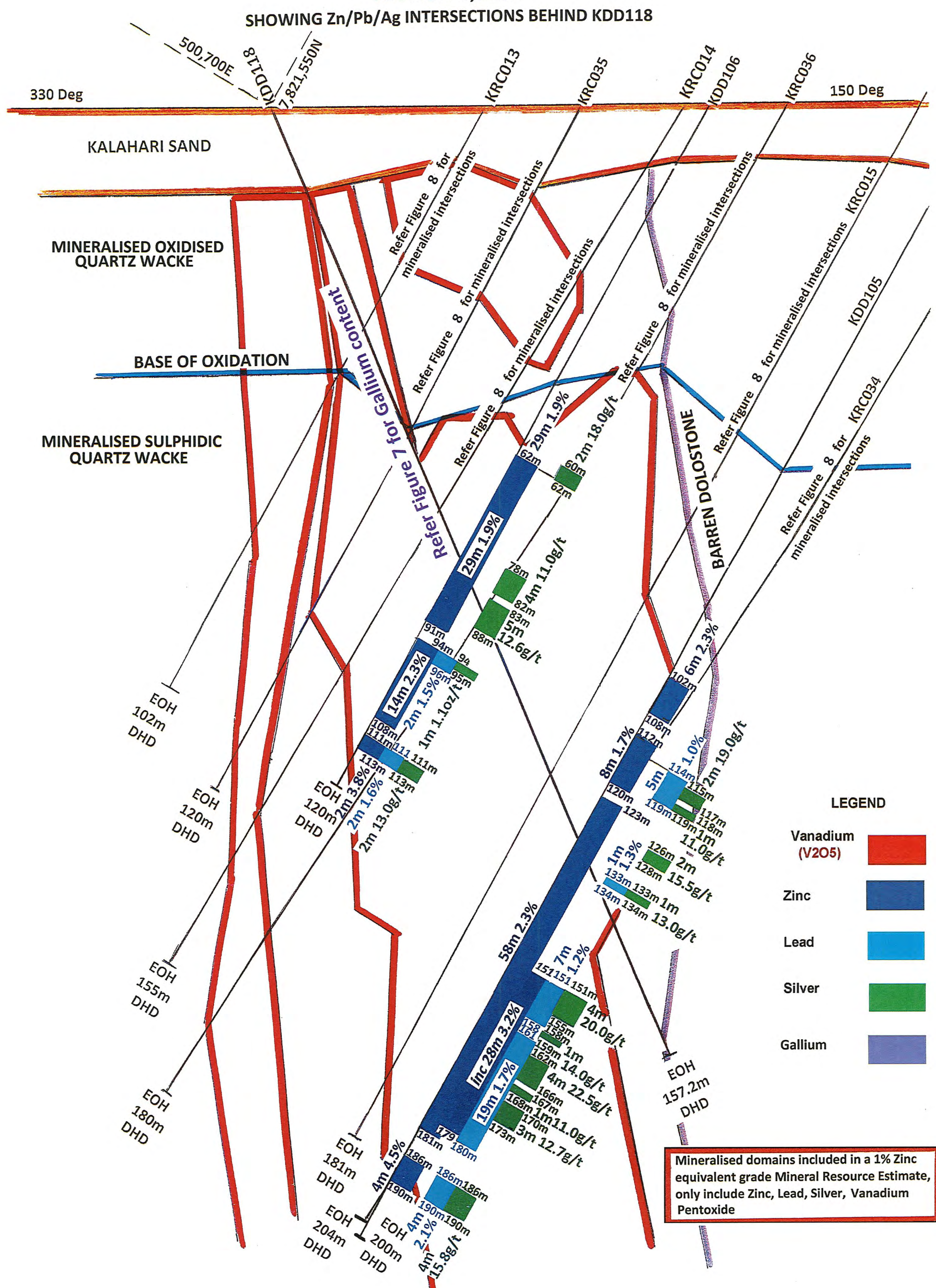


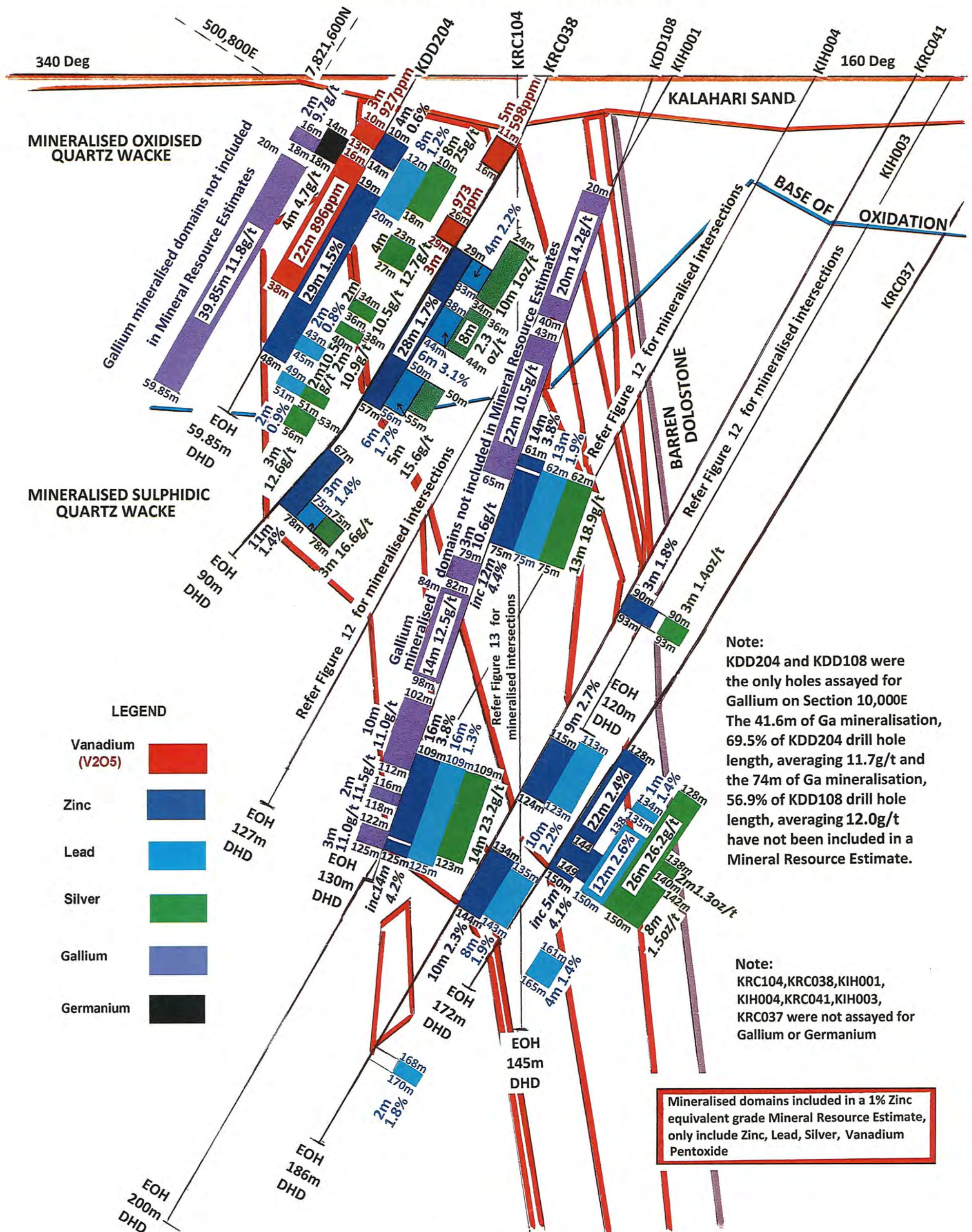
FIGURE 9

WITH DRILL HOLE ASSAYED FOR GALLIUM

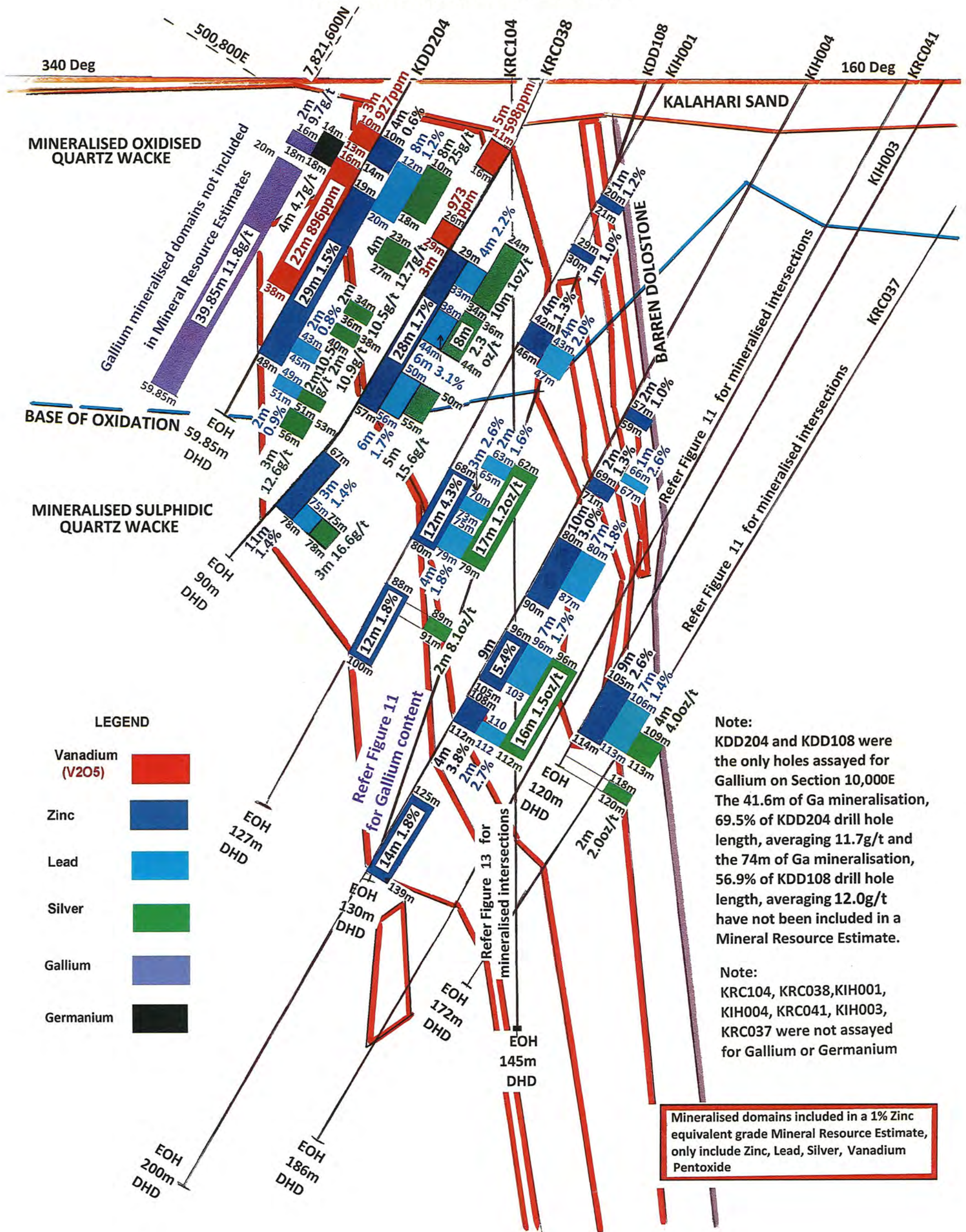


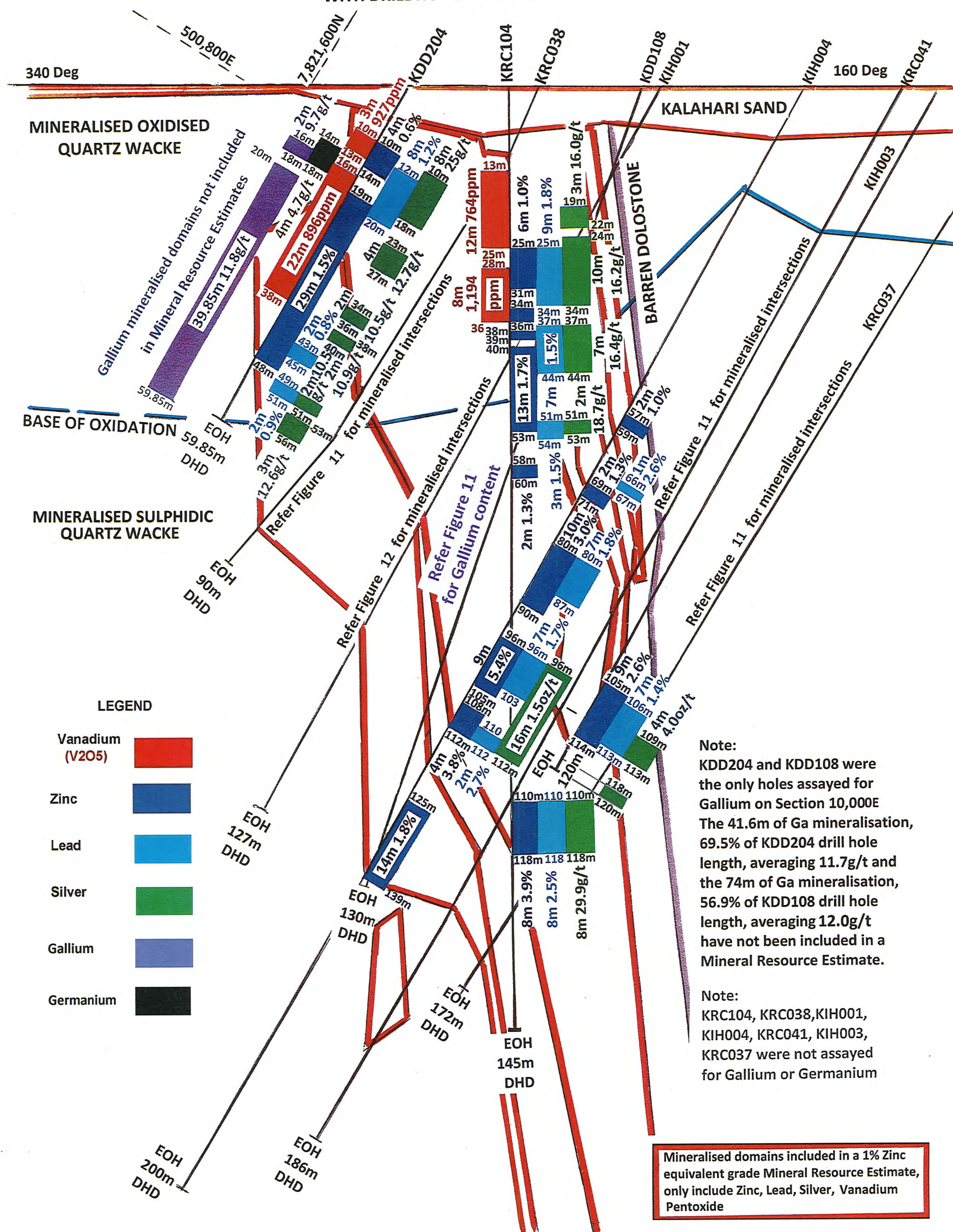


KIHABE DEPOSIT SW AREA SECTION 10,000E WITH DRILL HOLES ASSAYED FOR GALLIUM

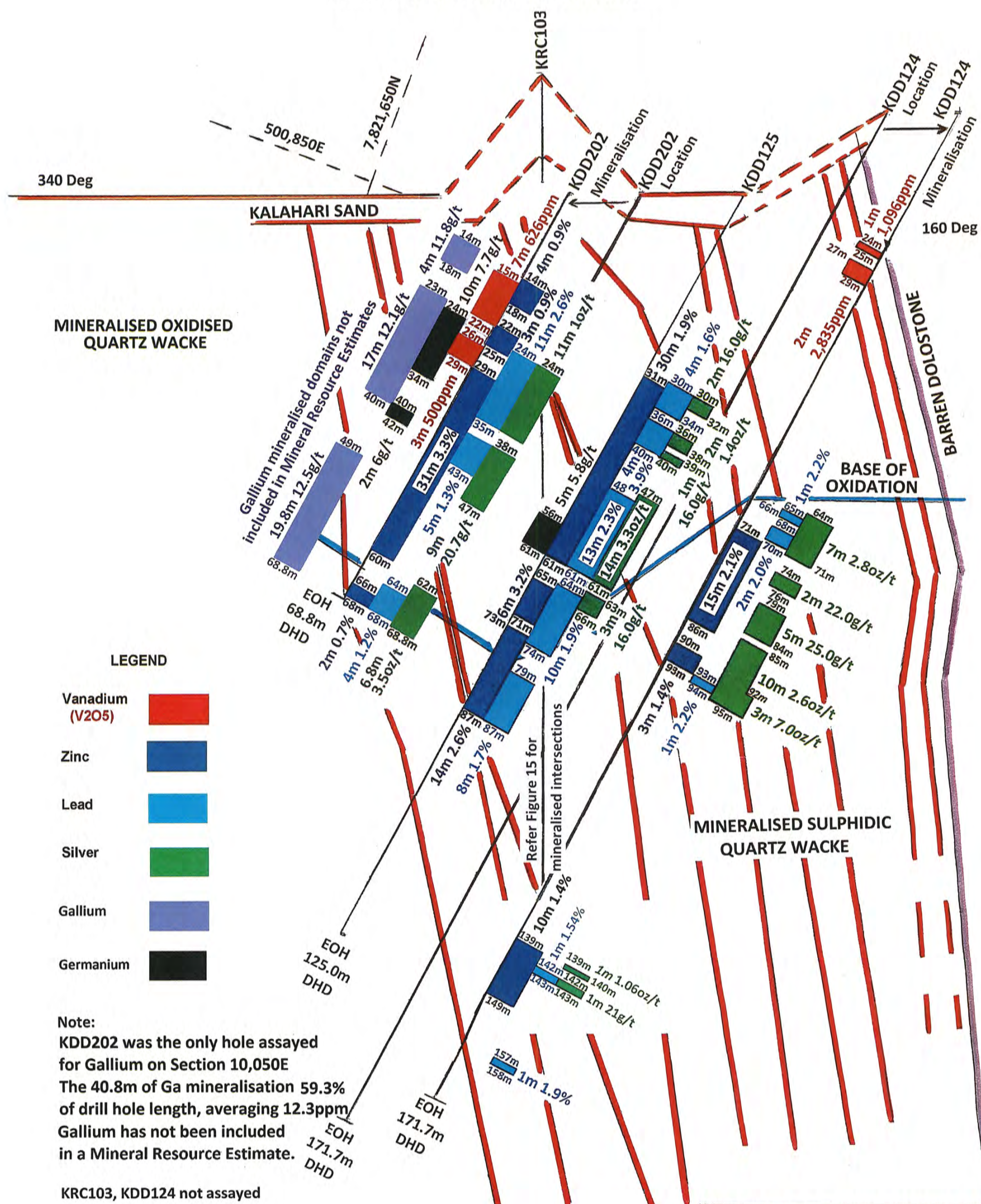


KIHABE DEPOSIT SW AREA
/ SECTION 10,000E
WITH DRILL HOLES ASSAYED FOR GALLIUM

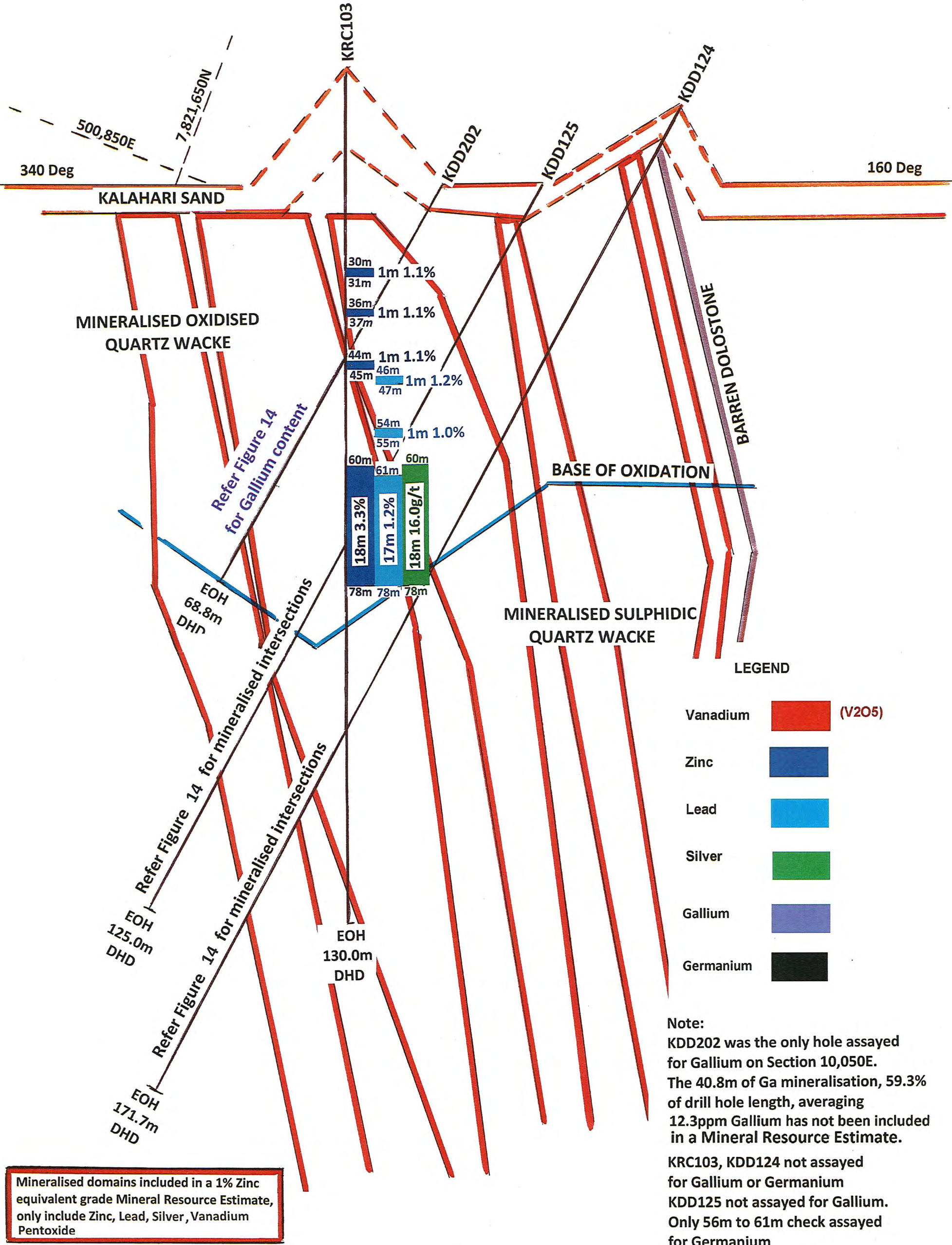




KIHABE DEPOSIT SW AREA SECTION 10,050E WITH DRILL HOLE ASSAYED FOR GALLIUM

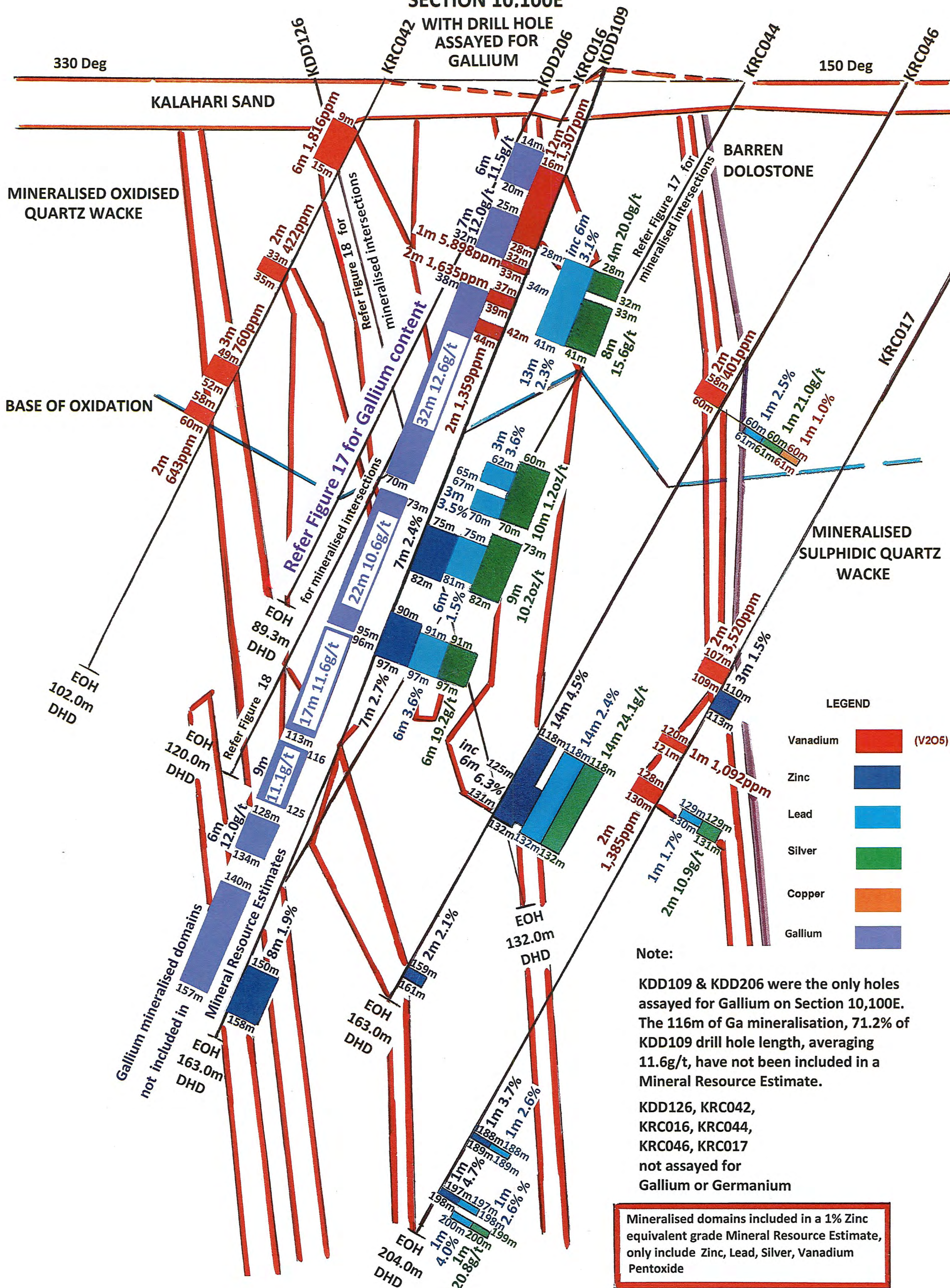


KIHABE DEPOSIT SW AREA
 SECTION 10,050E



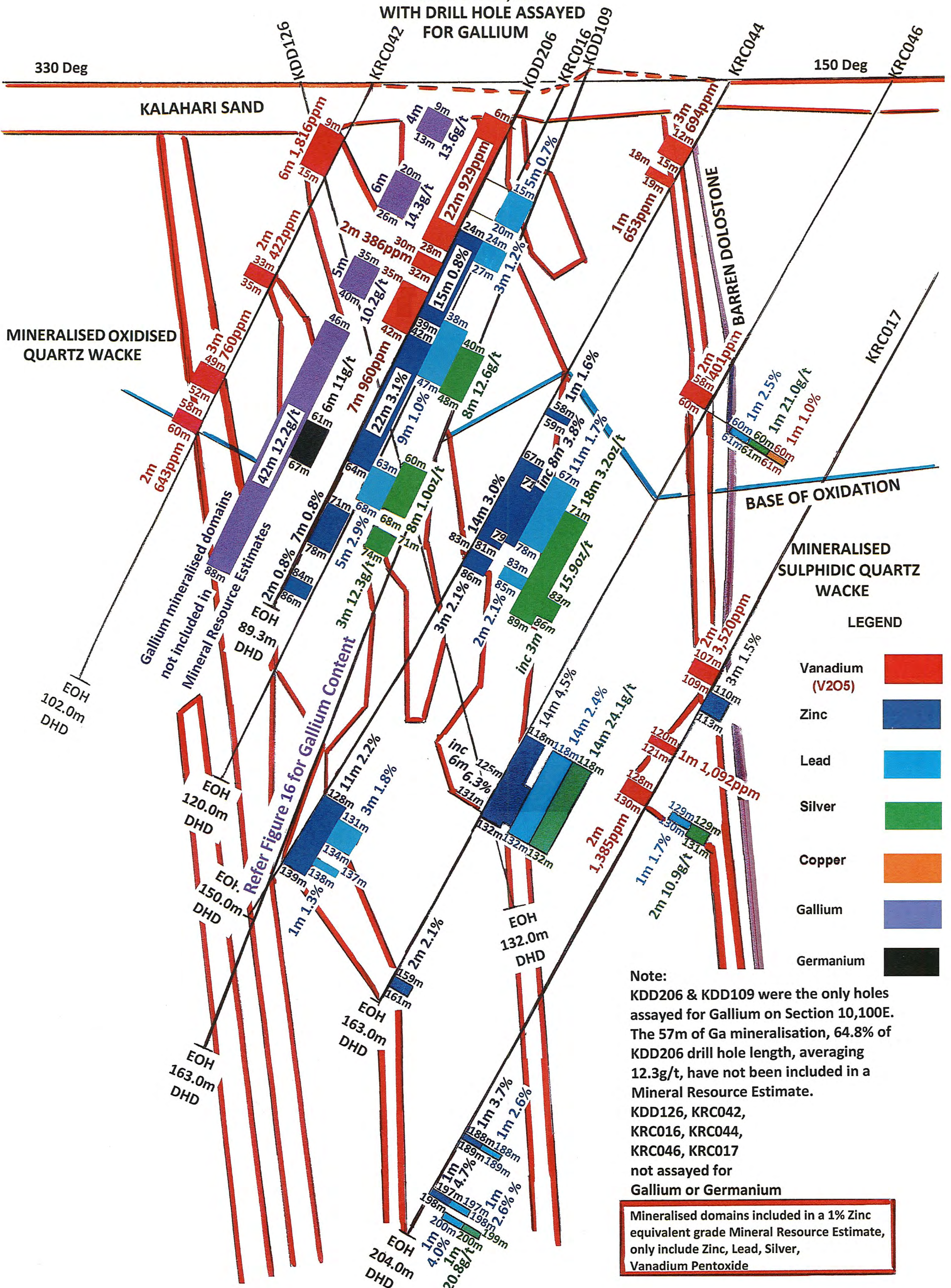
KIHABE DEPOSIT SW AREA SECTION 10.100E

FIGURE 16



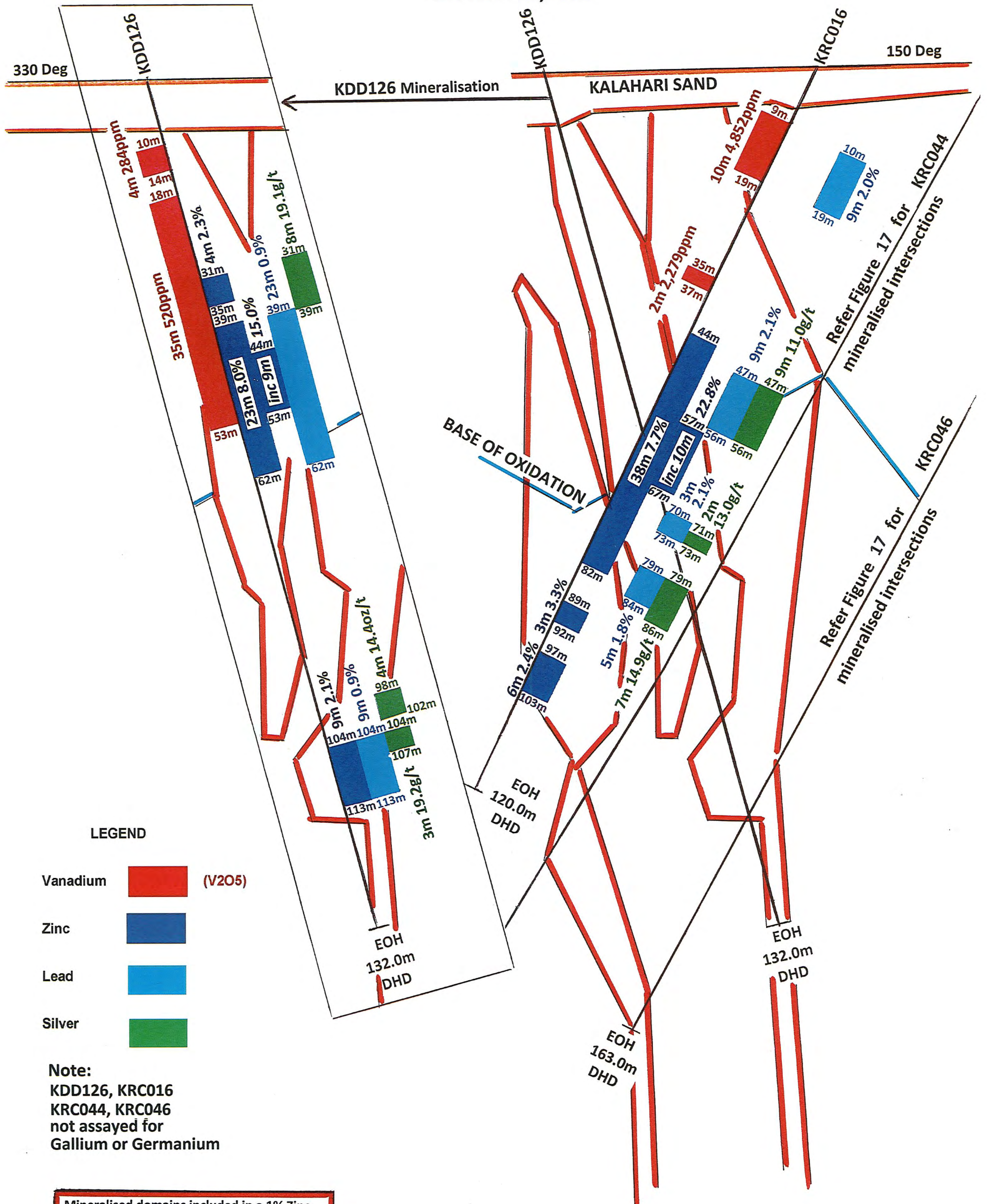
KIHABE DEPOSIT SW AREA
SECTION 10,100E
WITH DRILL HOLE ASSAYED
FOR GALLIUM

FIGURE 17



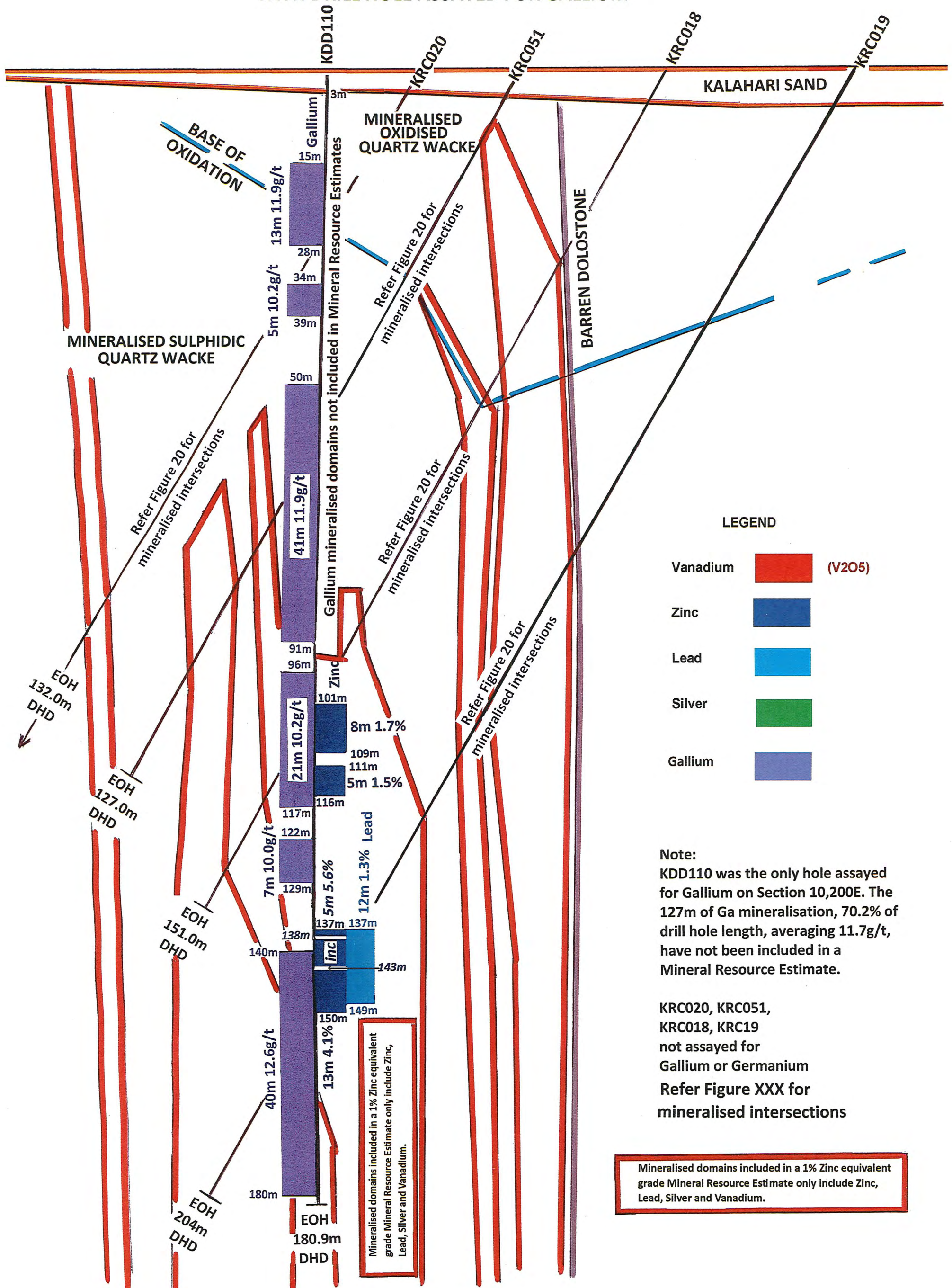
KIHABE DEPOSIT SW AREA SECTION 10,100E

FIGURE 18



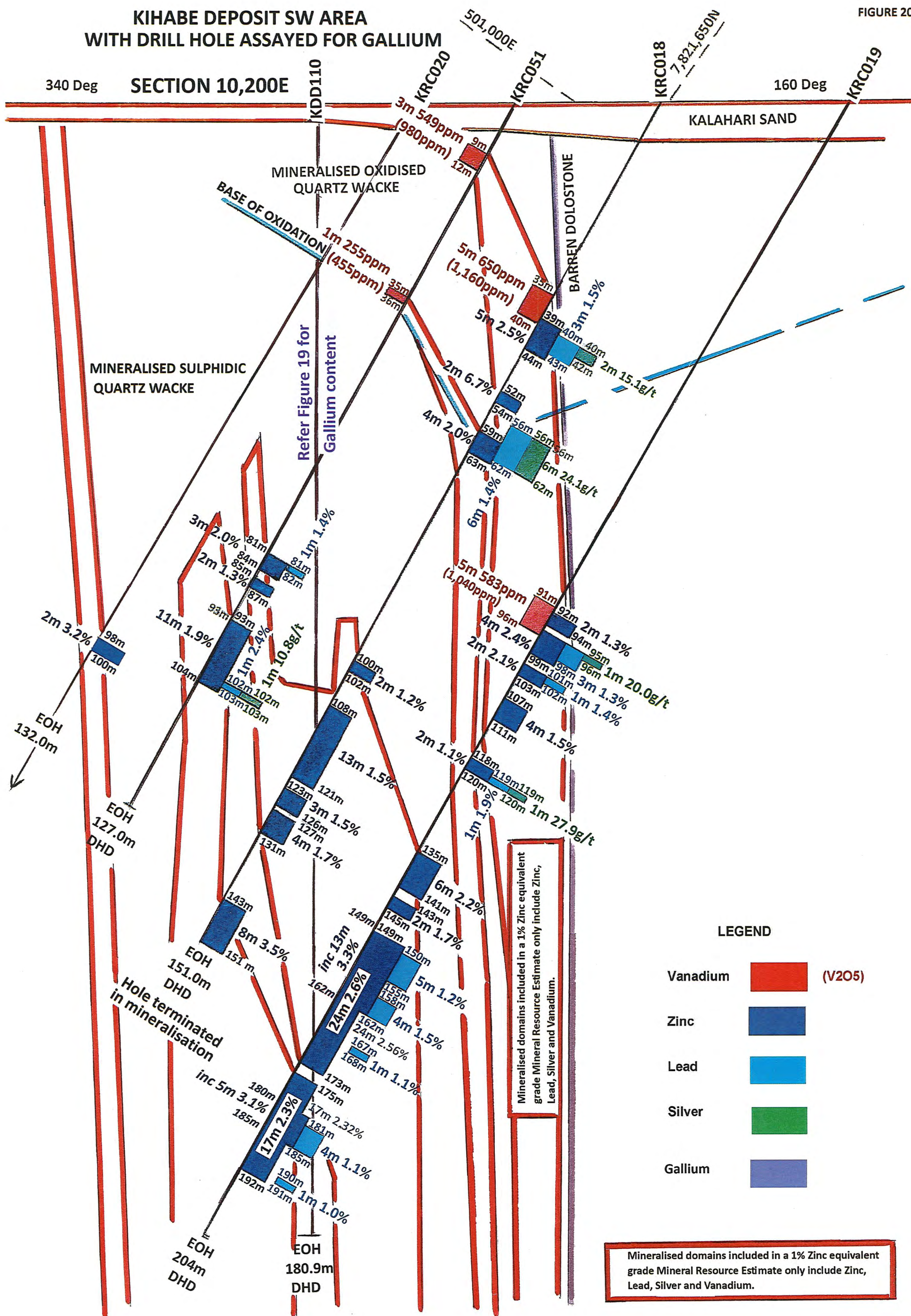
KIHABE DEPOSIT SW AREA SECTION 10,200E WITH DRILL HOLE ASSAYED FOR GALLIUM

FIGURE 19



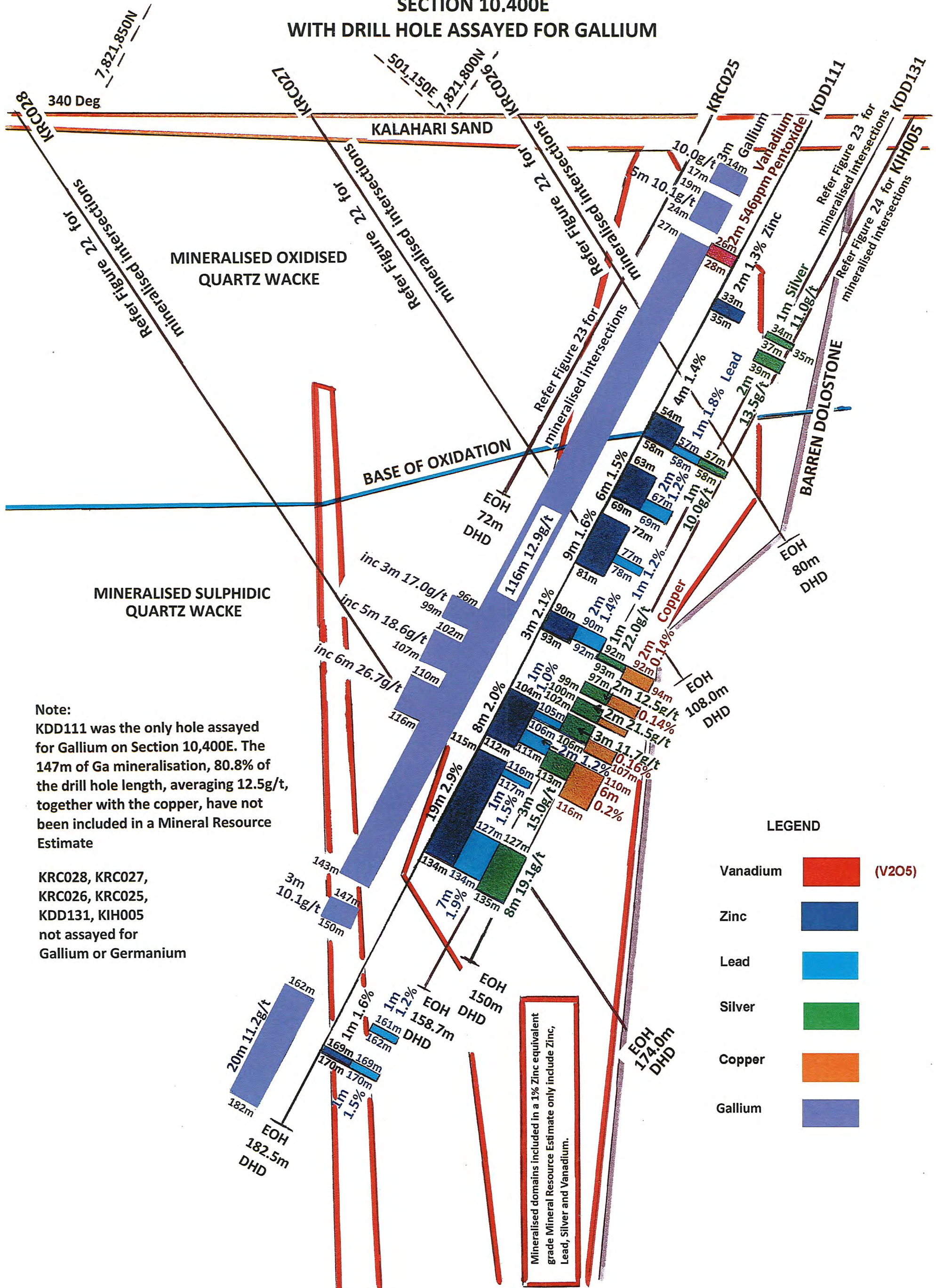
KIHABE DEPOSIT SW AREA WITH DRILL HOLE ASSAYED FOR GALLIUM

FIGURE 20



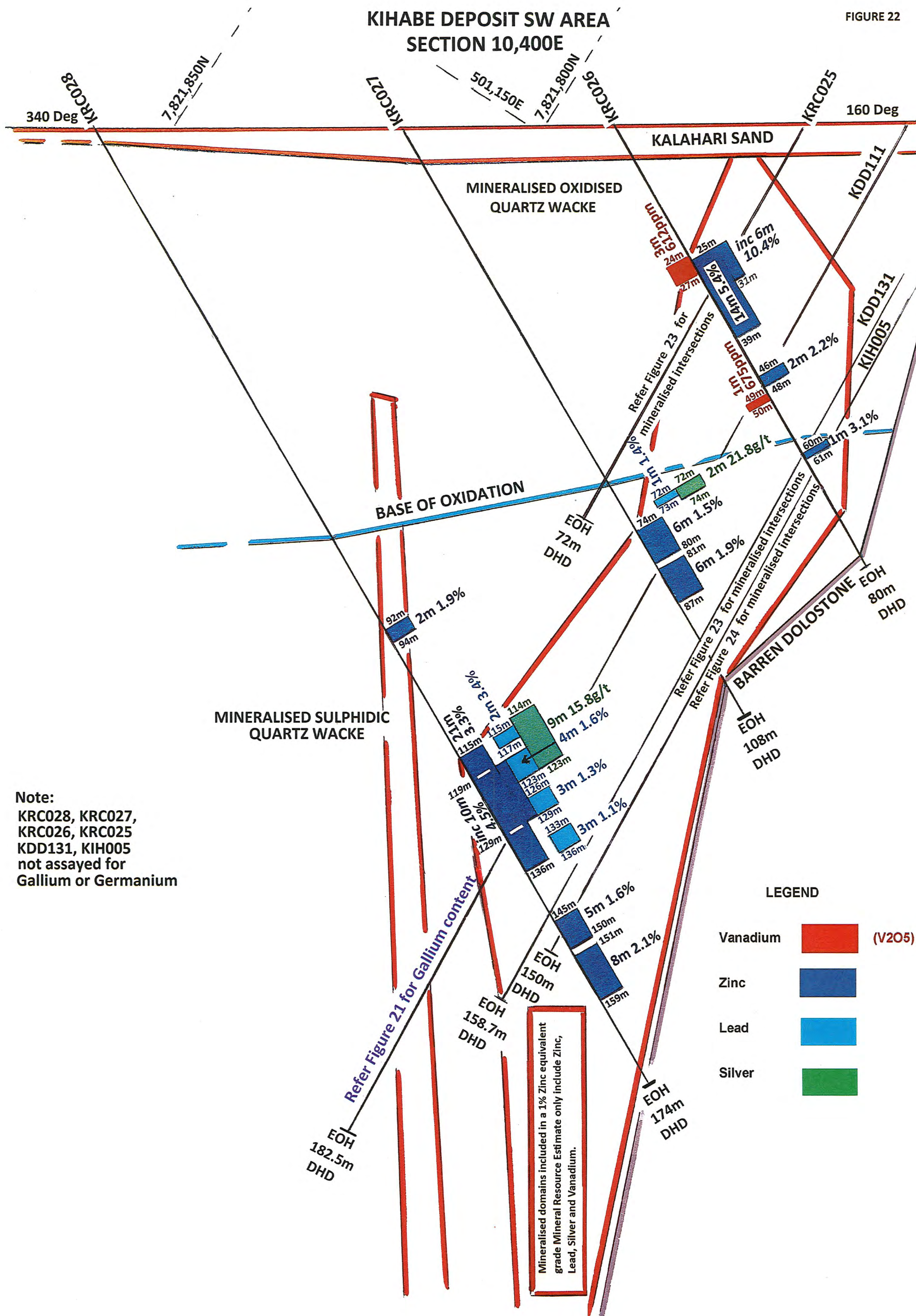
KIHABE DEPOSIT SW AREA SECTION 10.400E WITH DRILL HOLE ASSAYED FOR GALLIUM

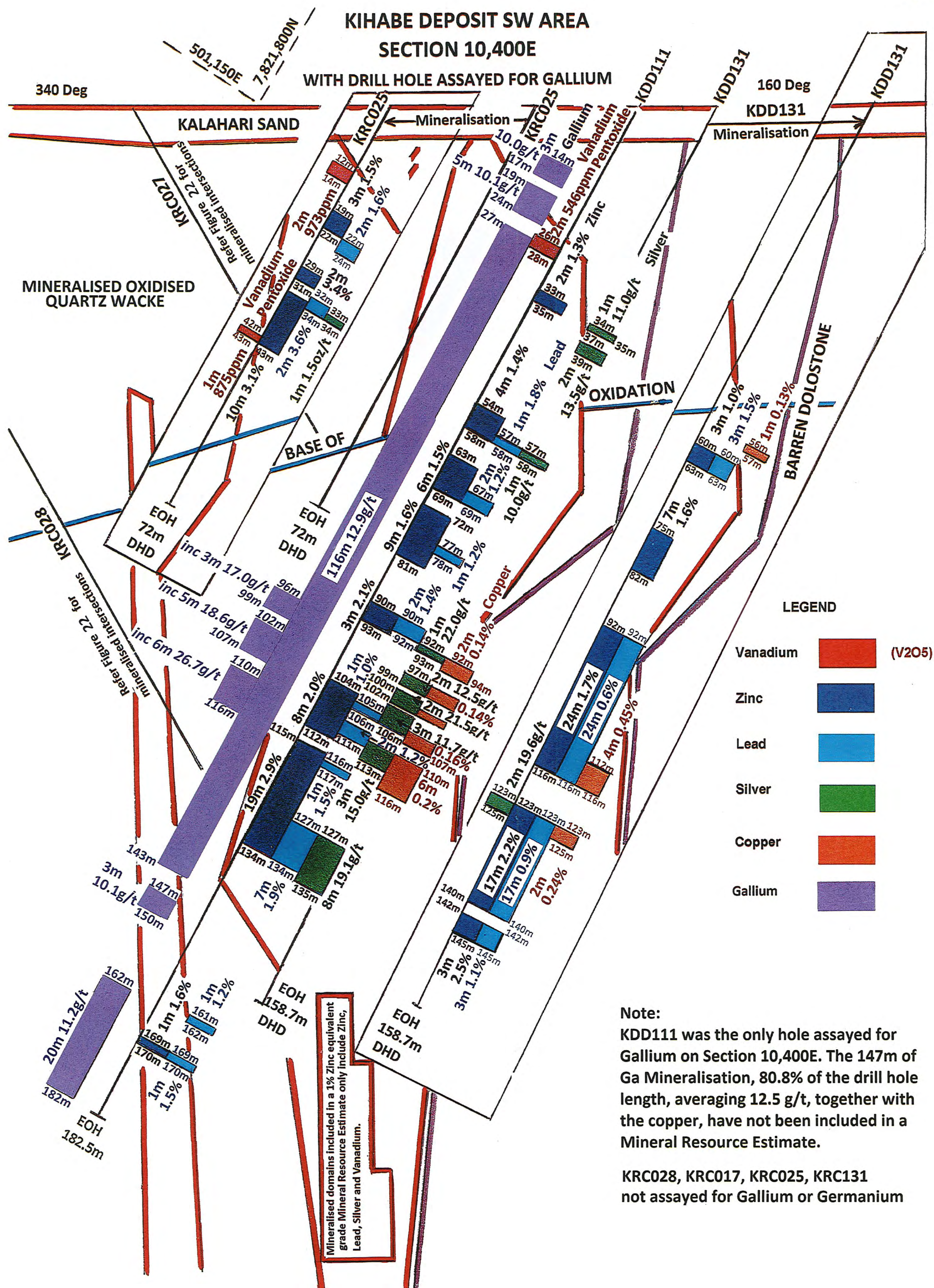
FIGURE 21



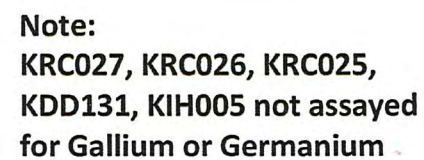
KIHABE DEPOSIT SW AREA SECTION 10,400E

FIGURE 22





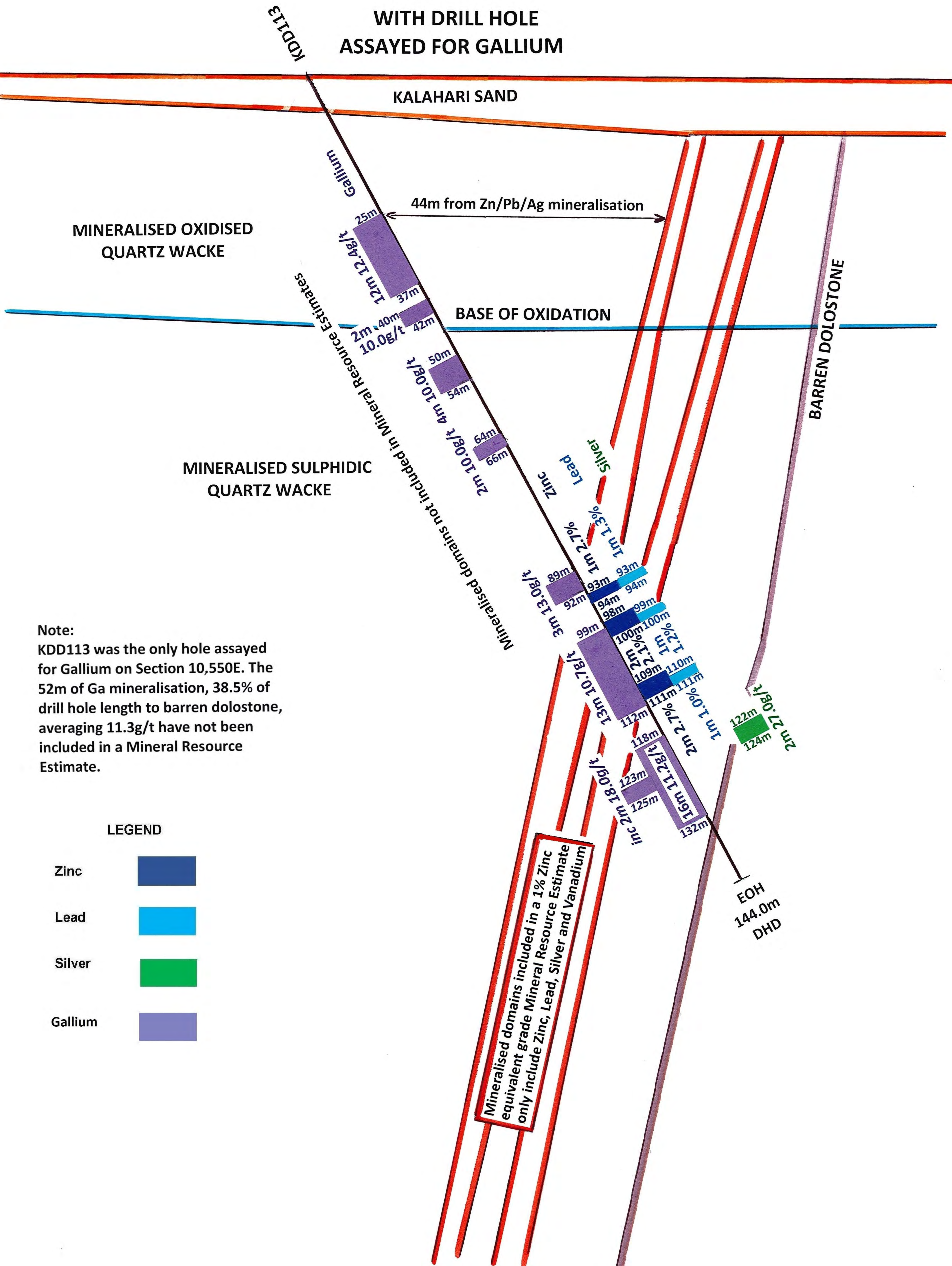
KIHABE DEPOSIT SW AREA SECTION 10,400E





Mineralised domains included in a 1% Zinc equivalent grade Mineral Resource Estimate only include Zinc, Lead, Silver and Vanadium.

KIHABE DEPOSIT SW AREA
SECTION 10,550E
WITH DRILL HOLE
ASSAYED FOR GALLIUM



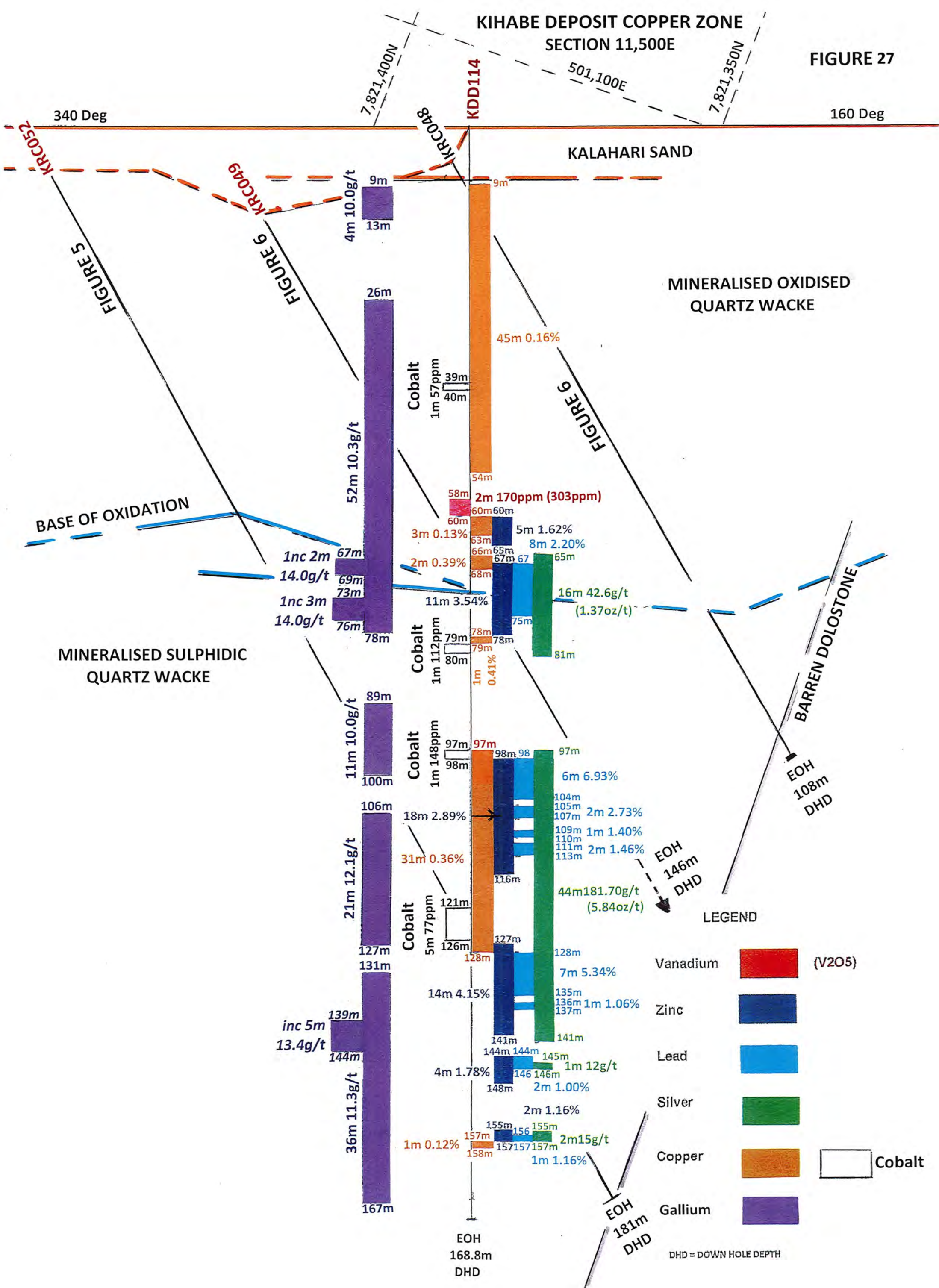
Note:
KDD113 was the only hole assayed
for Gallium on Section 10,550E. The
52m of Ga mineralisation, 38.5% of
drill hole length to barren dolostone,
averaging 11.3g/t have not been
included in a Mineral Resource
Estimate.

LEGEND

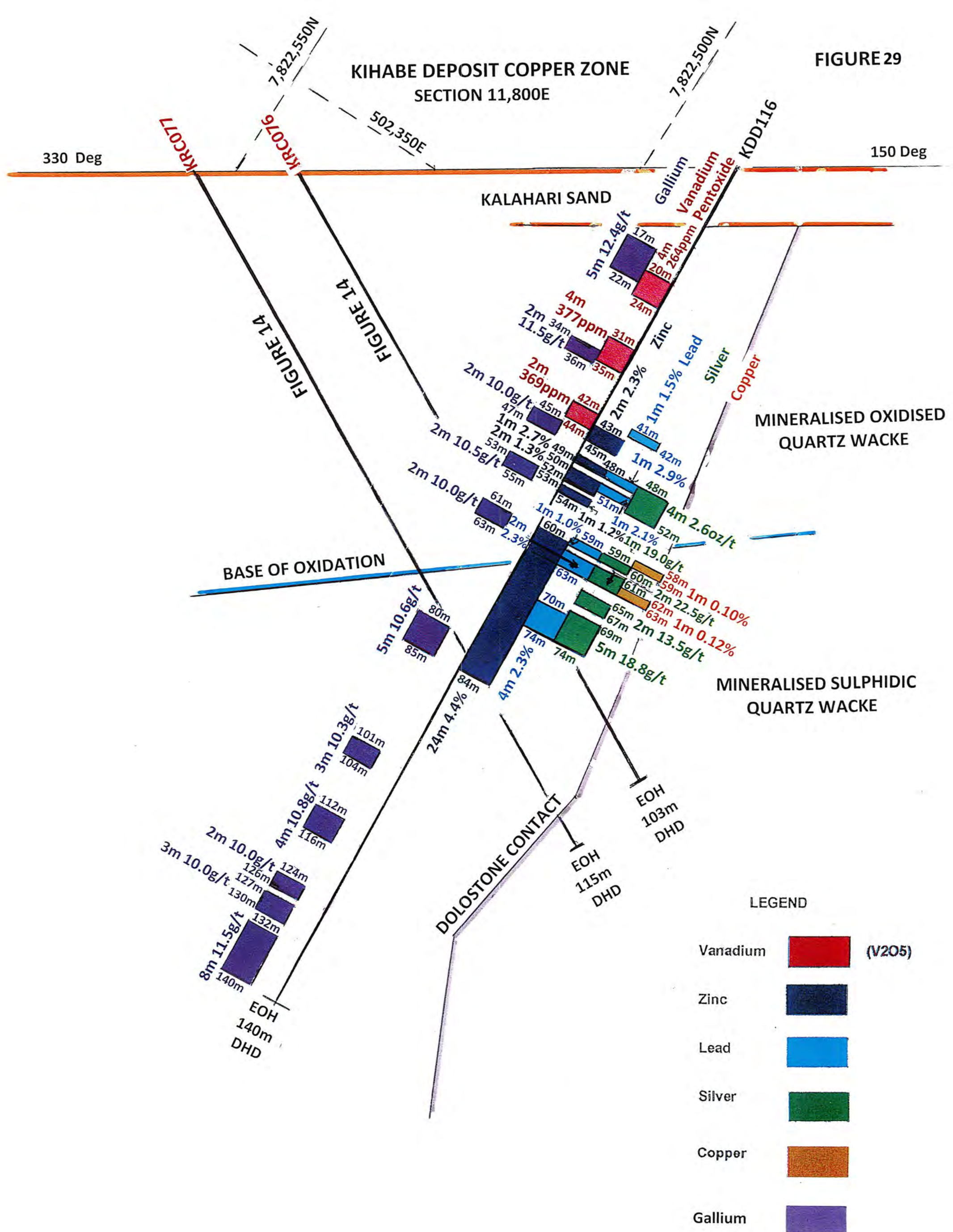
- Zinc
- Lead
- Silver
- Gallium

SECTION 11,500E

160 Deg



KIHABE DEPOSIT COPPER ZONE
SECTION 11,800E



KIHABE DEPOSIT COPPER ZONE SECTION 12,000E

FIGURE 30

340 Deg

160 Deg

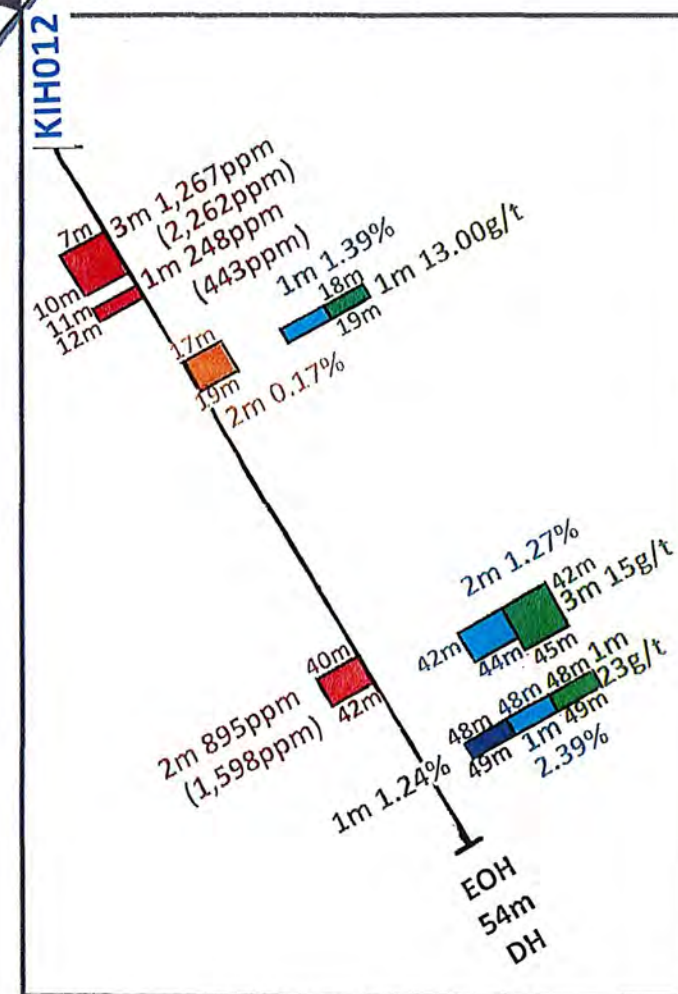
KALAHARI SAND

MINERALISED OXIDISED
QUARTZ WACKE

BASE OF
OXIDATION

MINERALISED SULPHIDIC
QUARTZ WACKE

BARREN DOLOSTONE



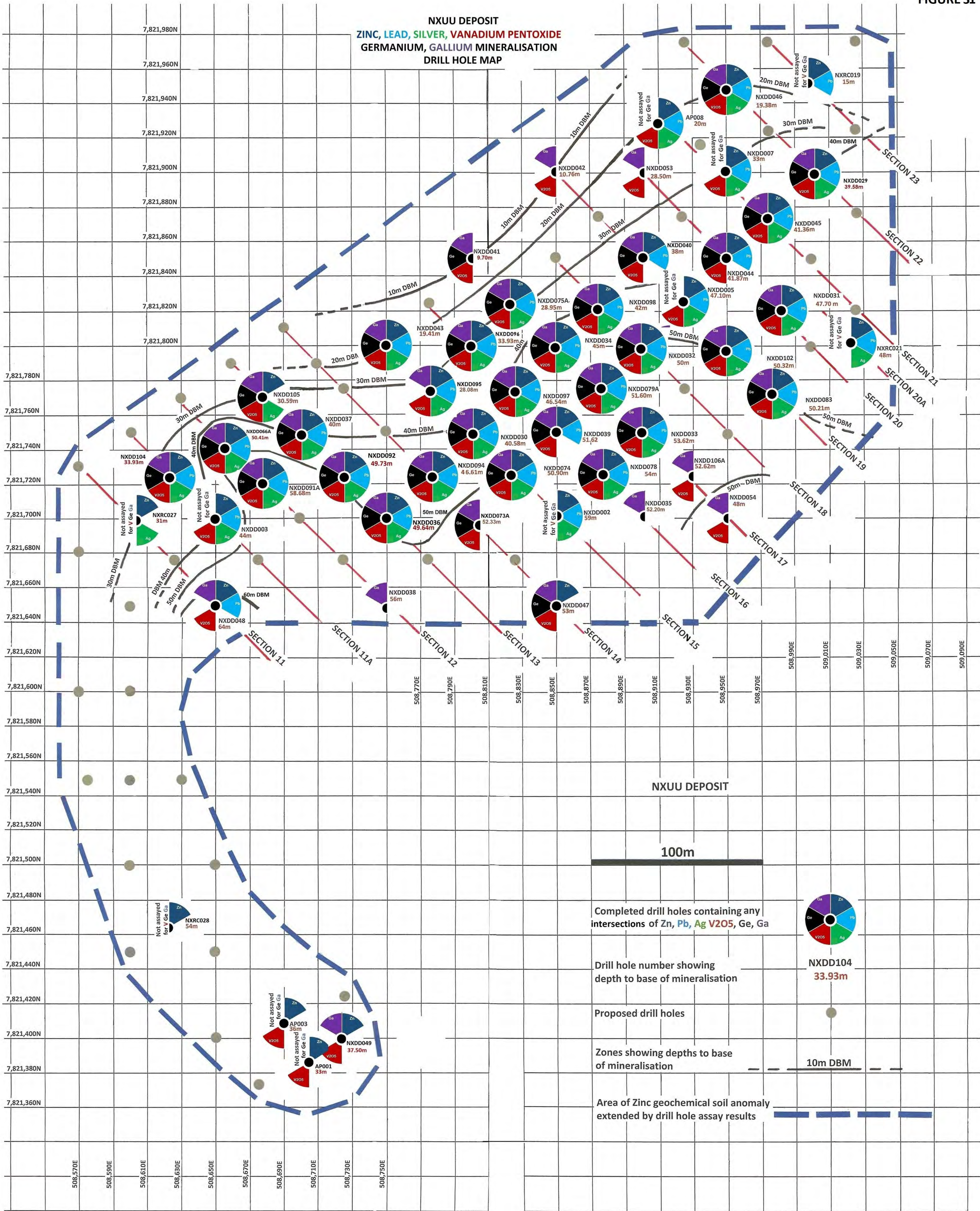
LEGEND

Vanadium	■	(V2O5)
Zinc	■	
Lead	■	
Silver	■	
Copper	■	
Gallium	■	

Average Grades of Mineralisation for
KIH012, KRC084 and KDD117

Average Cu grade over 11m of mineralisation = 0.21%
 Average Zn grade over 29m of mineralisation = 3.2%
 Average Pb grade over 23m of mineralisation = 2.4%
 Average Ag grade over 22m of mineralisation = 18.4g/t
 Average V2O5 grade over 12m of oxide mineralisation = 1,152ppm

FIGURE 31



NXUU DEPOSIT SECTION 12

FIGURE 32

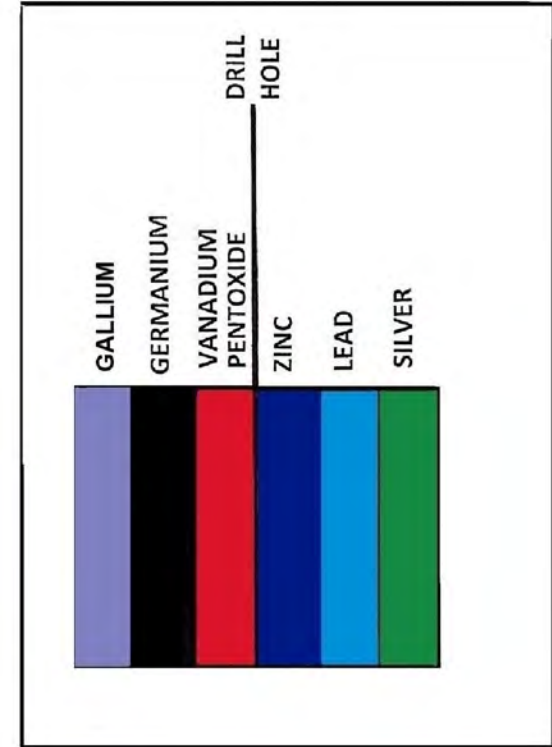
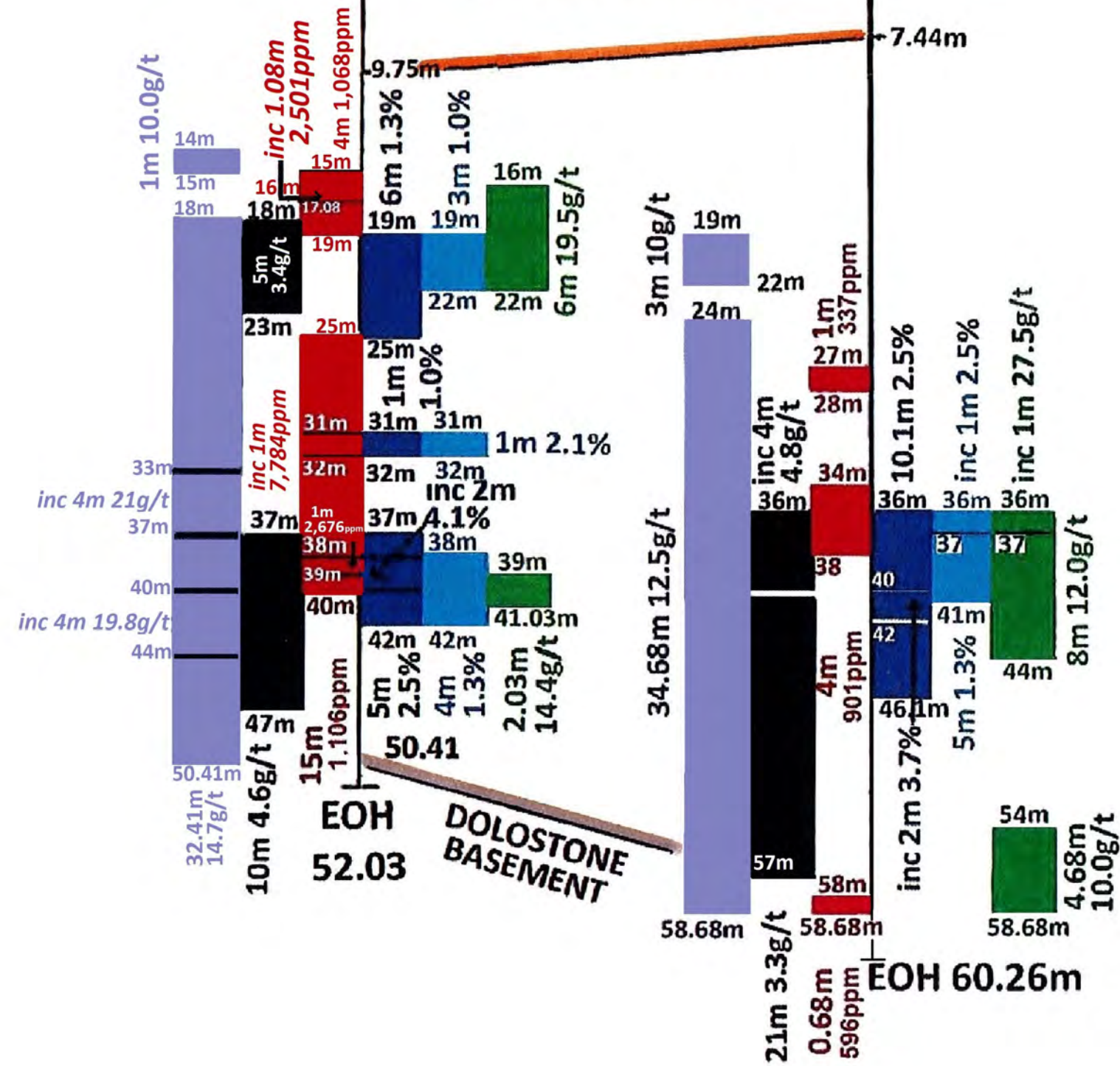
315 Deg

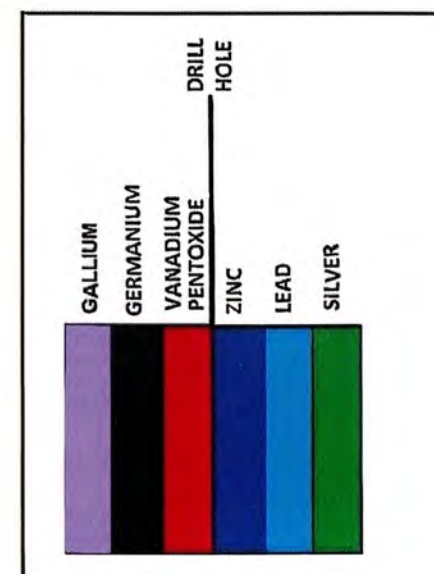
NXDD066A

32m

NXDD091A

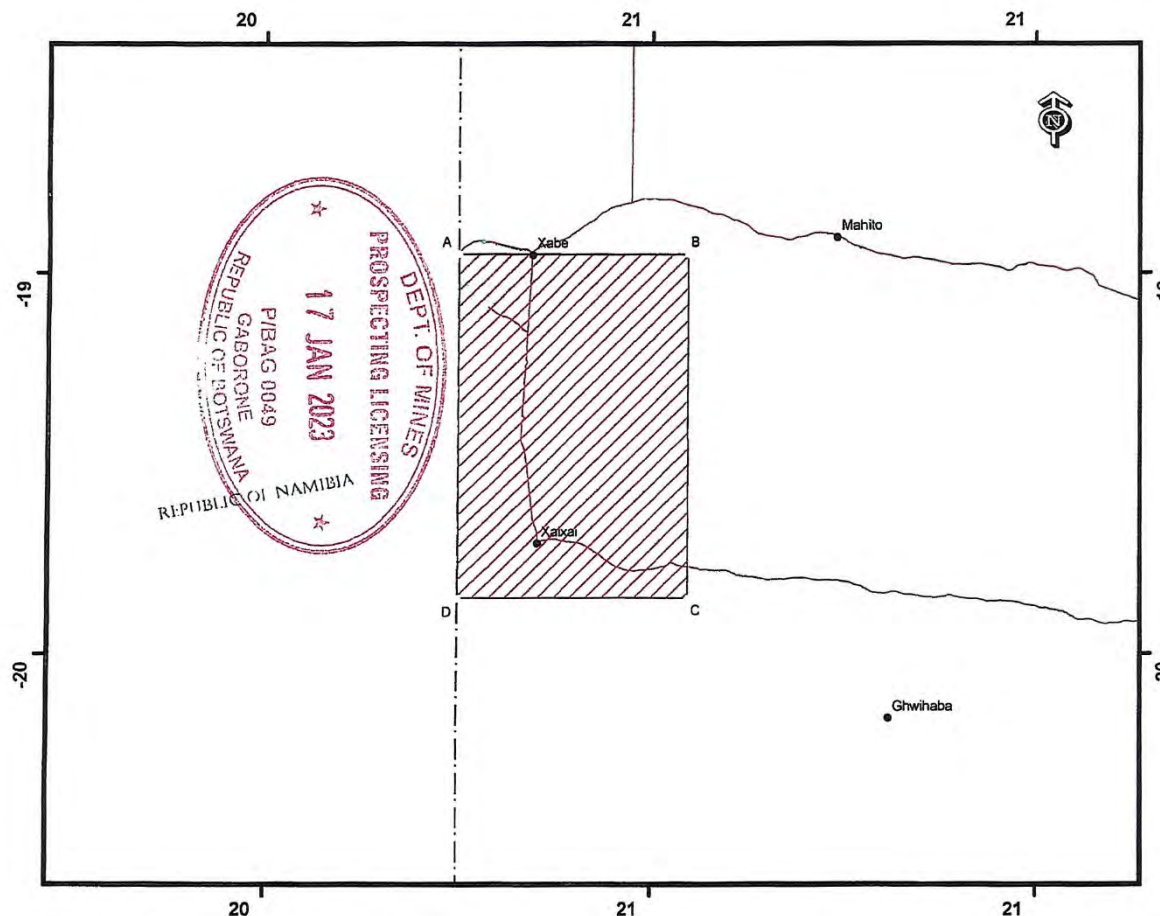
KALAHARI SAND





MOUNT BURGESS (BOTSWANA) (PTY) LTD

Prospecting Licence No.043/2016



The licence area is nine hundred and ninety 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.

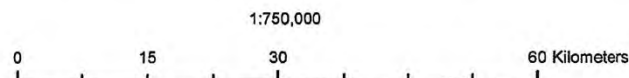
Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

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
- ▨ Licence Area
- International Boundary
- Water Body



Drawn on the 11/01/2023

By Kelvin Ketshabile

Checked By P. Matlotse

Department of Mines

JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

Criteria	JORC Code explanation	Commentary
	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>and the larger bag also labelled describing the contents. Field duplicates were inserted at regular intervals.</p> <ul style="list-style-type: none"> 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. All samples currently being reported on were assayed for Ag/Pb/Zn/V/Ge/Ga/Cu/Co.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> 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.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 60° , at 150° or 330° 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	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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.

Criteria	JORC Code explanation	Commentary
Drill hole information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results are not being reported. All information has been included in the appendices. No drill hole information has been excluded.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results are not being reported. Not applicable as a Mineral Resource is being reported. For the Nxuu Deposit $ZnEq = \text{Zinc equivalent grade}$, which is estimated based on Kitco prices as of 21st October 2022 and calculated with the formula: $ZnEq = [(Zn\% \times 3,000) + (Pb\% \times 2,000) + (Ag \text{ g/t} \times (20.0/31.1035)) + (V_2O_5\% \times 16,000)] / (3,000).$ For the Kihabe Deposit $ZnEq = \text{zinc equivalent grade}$, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: $ZnEq = \{(Zn\% \times 3,410) + (Pb\% \times 1,955) + Ag \text{ g/t} \times (20.7/31.1035)\} + V_2O_5\% \times 20,720\} / (3,410)$ 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	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 (%), V₂O₅ (%), 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 V₂O₅ can be recovered in a V₂O₅ 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

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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 use of reconciliation data if available. 	<p>mineralisation.</p> <ul style="list-style-type: none"> At Nxuu the 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 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 V₂O₅ 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	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages and grades were estimated on a dry in situ basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> 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: $\text{ZnEq} = 100 \times \frac{(\text{Zn}\% \times 3,000) + (\text{Pb}\% \times 2,000) + (\text{Ag g/t} \times (20.0/31.1035)) + (\text{V}_2\text{O}_5\% \times 16,000)}{(3,000)}$ For the Kihabe Deposit ZnEq = zinc equivalent grade, which is estimated on LME closing prices on 30 June 2022 and calculated with the formula: $\text{ZnEq} = \{(\text{Zn}\% \times 3,410) + (\text{Pb}\% \times 1,955) + \text{Ag g/t} \times (20.7/31.1035)\} + \text{V}_2\text{O}_5\% \times 20,720 / (3,410)$

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Mining factors or assumptions	<ul style="list-style-type: none"> 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 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. 	<ul style="list-style-type: none"> 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 estimated from a future Mineral Resource with higher levels of confidence.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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/m³ for oxide) at Nxuu and 2.46t/m³ for oxide and 2.58t/m³ 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	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> 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

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	<p><i>confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<p>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 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.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • Internal audits have been completed by Ashmore which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • 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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