

# **NI 43-101 Technical Report of the Kunsu Gold Project Kunsu-Ghana, West Africa**

## Project Location

Latitude 6° 48 00" N; Longitude 1° 56 00" W

## Prepared For

**Castle Peak Mining Limited  
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## **1 EXECUTIVE SUMMARY**

### **1.1 Introduction**

This technical report on the Kunsu gold property (“Kunsu property” or “Kunsu project”) located at Kunsu, Ahafo-Ano South district of the Ashanti Region, Ghana was prepared for Castle Peak Mining Limited (“Castle Peak” or the “issuer”), a publicly registered company with office at 29-1255 Riverside Drive, Port Coquitlam, Vancouver, British Columbia, V3B 7WS, Canada by Prosper Mackenzie Nude, PhD, MAIG, FSEG (“Author”; the “Qualified Person”). The technical report was prepared in accordance with the disclosure and reporting requirements of the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

The purpose of the technical report is to provide geological and technical information on the Kunsu property required in support of Castle Peak’s obligations to file a technical report for a transaction under TSX Venture policies.

The Author is responsible for preparing all the contents of this technical report. In the preparation of this report, the author relied on information obtained through the review of private documents and reports, including previous and current operators’ project reports, as well as information provided by Castle Peak. Information was also gathered from the author’s visits to the project site and from expert geologists associated with the project.

Prosper Mackenzie Nude, PhD, is an independent Consulting Geologist and a Professor at the Department of Earth Science, University of Ghana, and is a qualified person (“QP”) as defined in NI 43-101.

### **1.2 Property Description and Ownership**

The Kunsu property comprises a single Prospecting Licence (PL) covering an area of approximately 141.3 square kilometres. Wononuo Investment Limited (“Wononuo Investment”, “Wononuo”) with address of Post Office Box 6277, Cantonments, Accra-Ghana currently owns 100 percent working interest in the property (subject to a 10 % free carried interest by the Ghanaian government).

Castle Peak on June 20<sup>th</sup> 2018 entered into an Optional Agreement with Wononuo Investment. Pursuant to the terms of the agreement, Wononuo Investment will transfer the Property to Castle Peak in exchange for a total purchase price of US\$2,000,000 (Two Million United States Dollars) The transaction will constitute a sale of purchase of the Property of WIL and will be a “Reviewable Transaction” as such term is defined in Policy 5.3 of the TSX Venture Exchange.

### **1.3 Accessibility, Climate, Local Resources and Physiography**

The Kunsu prospecting licence (Kunsu PL) spans two Districts Assemblies, namely: Atwima and Ahafo-Ano South, both in the Ashanti Region. It is situated approximately 40km North West of Kumasi and 240km Northwest of Accra. Access to Kunsu is mainly by way of the Kumasi-Sunyani highway and then turning off west at Mankranso. Access from Accra the nation's Capital to Kumasi is four hours by vehicle on all weather paved road for approximately 280 kilometres. There is also about 45-minute flight (4 to 5 flights daily) from the nation's Capital to Kumasi. There are a series of interconnecting motorable to semi-motorable dirt roads which can be used to fairly traverse about 70% of the licence area. Foot paths and farm tracks can also be used to access the area on foot or motor bikes. The closest (5 km from Kunsu) administrative centre is Mankranso; the District capital of the Ahafo-Ano South District with infrastructure that includes a hospital, schools, telecommunication services and a connection to the national electricity grid. The Kunsu Township is a vibrant community with shops and market.

Climate in the area is wet semi-equatorial with an average annual rainfall of 2000 millimetres. Rain falls throughout the year but with two maxima in April-July and September-November. The daytime temperatures range from 20 to 35 degrees Celsius. The area has a series of moderate to low undulating topography with a highest point of about 270m above mean sea level.

### **1.4 Exploration History**

The available information shows that the Kunsu area attracted little attention in the exploration booms of the colonial periods. It was not until the early 1990s when several local groups acquired concessions covering several areas including Kunsu. Prior to Wononuo Investment acquiring the concession in September 2006, Star Goldfields Ltd is believed to have held the ground in the 1990s. Modern exploration work on the Kunsu property was undertaken by Newmont, and currently by Castle Peak.

#### **1.4.1 Exploration by Newmont**

From February 2010 to August 2013, Newmont explored the Kunsu tenement under an optional agreement with Wononuo Investment. During the three years Newmont carried out extensive exploration work on the Kunsu property with 37 drainage and 3387 soil samples. Sixteen pits were dug to an average depth of 2.9m and 1932m of trenching were completed. 265 Air Core holes were drilled for a total depth of 4967m. 38 RC holes and 7 diamond (DD) holes were drilled to 2835m and 1068m respectively. The results of the combined soil sampling programmes generated encouraging trends within the northern and central grids which became the focus of the subsurface investigation.

336 km lines of Induced Polarization (IP), and Resistivity surveys followed by limited pitting and trenching were undertaken in the areas with encouraging gold in soil anomalies.

The best trench Au assay results were KUTR002: 13m @ 2.49g/t; TR18/10: 2m @ 1.34g/t; KUTR001: 14m @ 0.25g/t and KUTR007: 3.6m @ 0.73g/t.

The RC drilling was carried out in three phases within the northern soil grid on air core intercepts and some IP resistivity/chargeability targets. Significant intercepts included hole KURC021; 28m@5.55g/t Au from 62m (including 18m @ 8.4g/t Au); KURC023: 22@2.31g/t from 18m and KURC029: 54m@3.18g/t from 86m including 8m @ 8.07g/t Au).

The DD holes were sited on three fences as a follow up on interesting RC intercepts. A combined strike length of 500m within the northern soil grid area was tested. The best intercepts reported were 2.4m @ 2.41g/t from 37.6m in KUDD0005 and 4m @ 2.68g/t from 37.6m in KUDD0002. The RC holes where these two DD holes were cited yielded 28m @ 5.55g/t and 22m @ 2.31g/t.

#### 1.4.2 Exploration by Castle Peak

Castle Peak in the last quarter of 2018 reviewed the historical geological and assay data from the previous exploration work by Newmont, followed by a supplemental field work which included IP survey, trenching and core drilling. The work involved 211.9 m of trench work, 11.6 Km electrical resistivity ground geophysical survey, 318.8 m of diamond core drilling at the north grid zone to test Newmont's defied anomalous targets.

The significant trench intersections recorded in the two trenches were: 16m @ 0.35g/t in trench GKUTR001, and 65m @ 0.22g/t in trench GKUTR002. Gold grade intersections in the two diamond core holes drilled by Castle Peak as paired holes to explore two of Newmont's historical drill holes is summarized in Table 1-1

Table 1-1: Castle Peak's Drill-hole Intersections in Paired Holes of Newmont

Drill-Hole-Newmont				Drill Hole-Castle Peak			
Hole ID	Depth (m)	Width (m)	Au Grade (g/t)	Hole ID	Depth (m)	Width (m)	Au Grade (g/t)
KURC0029	86-122	36	4.08	GKUDD001	0-4	4	0.26
	122-140	18	1.37		88.5-91.5	3	1.32
			109.5-115.5		6	0.45	
			154.5-155.5		1	24.8	
KURC0021	0-10	10	0.32	GKUDD002	14.5-19.5	5	0.22
	20-38	18	0.37		80.5-93.3	12.8	0.42
	64-90	26	5.9				
KUDD005	0-14.7	14.7	1.27				
	32-51	19	0.44				

## **1.5 Sampling and Analyses**

Castle Peak's sampling and analytical procedures followed Newmont's protocols. All samplers collected were received on a daily basis at a camp facility on the Project. Samples were taken and logged by experienced and qualified geologists or by a geologist-in-training under the supervision of a qualified geologist. Trench, Aircore, RC and Core samples were taken at 1.0 m length intervals. Whenever possible, lithological contacts, the appearance of mineralization, and changes in alteration type, vein type or vein density in drilled cored were considered in the sampling. Core samples were sawed in half for NQ core diameter and Quarter for HQ core diameter.

All samples were prepared at the sample preparation facilities of ALS Ghana Ltd ("ALS") in Kumasi, Ghana. The lab is commercial laboratory independent of Newmont and Castle Peak with no interests in the Project. The laboratory has International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) (ISO/IEC 17025) accreditation.

Sample preparation procedures for routine fire assaying are to initially crush to >70% passing 1,700 microns. A 250 g subsample is split by rotary split and pulverized to >85% passing 107 microns. This subsample is sent for assay where a 50 g subsample is taken and fire-assayed with an atomic absorption (AA) spectrometry finish.

Quality control measures were set in place. These include written field procedures and independent outsourcing drilling, surveying, sampling and assaying. Sampling protocol involved the insertion of duplicates, blanks and Certified Reference Material (CRM) throughout the sampling and assaying process.

The Author is of the opinion that the sample preparation and analytical procedures are adequate and comply with industry best practices.

## **1.6 Geological Setting and Mineralization**

The Kunsu Project area is located within the Kumasi Basin in the Paleoproterozoic Birimian of Ghana. The area is within the Asankragwa shear zone, a known gold-bearing structural zone along the centre of the Kumasi basin; a 60-75 km wide swath of folded metasedimentary rocks. The basin is fault-bounded to the southeast and northwest against volcanic rocks of the Ashanti and Sefwi belts respectively. Sedimentary rocks of the Kumasi Basin comprise thick monotonous sequence of thinly to thickly inter-layered argillites, wacke, and minor conglomerate. These rocks display increased folding with proximity to individual shear and splay zones. Available data indicate that the entire rock assemblage has been deformed and weakly to moderately metamorphosed. Minor exposures of north-south trending post-Birimian mafic and dolerite dykes have been reported at the western portion of the concession.

The Kunsu prospecting licence is dominantly underlain by argillites, wacke and volcanoclastic rocks of the Kumasi Basin sediments. Lithological, the host sequences comprise massive, thinly layered purple to black graphitic phyllite and massive to thickly bedded wacke facies rocks. The phyllites are marked by high angle foliation that may show relicts of folding. The greywackes are somewhat massive, but generally deformed. There is also interfolding of the units in highly strained corridors of the property. All the lithologies host quartz-carbonate-sulphide minerals of various sizes.

Gold mineralization in the Kunsu area has been observed from the drilled cores to occur in the quartz-carbonate veins and discontinuous quartz stringers and veinlets hosted within parallel NE-SW trending, moderately to steeply west-dipping bodies of strongly foliated phyllite which contain fine grained disseminated sulphide minerals. Mineralization is more prolific in the wacke facies rocks and occurs in the highly strained zones with disseminated fine sulphide minerals and brecciated quartz or quartz stockworks. The mineralization associated with the black graphitic phyllites occurs predominantly along the high angle foliation planes with the disseminated sulphides and along the selvages of quartz veins.

### **1.7 Data Validation**

The Author was granted full access to historic (Newmont) and recent due diligence data by Castle Peak. The data reviewed included surface data, drill-hole data, assay certificates, library cores and chips, recent core photos etc. The data provided was in Microsoft Excel format and copies of assay certificates were in Portable Document Format (PDF).

The Author considers the database provided to be valid and of sufficient quality to be used for this Technical Report.

### **1.8 Interpretation and Conclusion**

Although from the available data, some significant mineralized intercepts were realized from Newmont's drilling campaign, the drilling density applied is not sufficiently reliable to support the interpretation of the boundaries and extent of the gold mineralization at this stage.

Supplemental field work carried out by Castle Peak identified prominent structural trends, N-S lineaments within the western parts of the concession and an inferred high-K zone trending NE-SW across the middle of the concession to the North Grid anomaly zone delineated by Newmont. From the reprocessed gold in soils data, two prospective mineralization corridors have been identified, within which are six NE-SW trending anomalies and one NW-SE anomaly, mostly these anomalies confirm Newmont's delineated soil targets and were reconfirmed in the field exercise. Only one of these targets at the North Grid zone has been tested by Newmont.

The Author also believes there are several opportunities to find more targets on the Kunsu Project.

## **1.9 Recommendation**

The delineated mineralized corridor from the Castle Peak's latest trench results provides an area worthy of follow up. Further geophysical work, possibly IP, across the entire West-North Grid anomaly area to the East-North Grid anomaly area and the surrounding corridor of the delineated zone is recommended.

With the current knowledge of the Kunsu prospect it is further deemed important to focus on an additional targeted drilling exercise. This exercise should focus on deeper drill-holes at the NW section of the projected mineralized zone to intersect the possible structures hosting the auriferous zones at depth.

In summary, the Author recommends a two-phase work programme as below; advancing to the subsequent phase is contingent on positive results of the previous phase.

### **Phase 1**

- The ground geophysical programme using time domain induced polarization (IP) survey
- Geological prospecting and mapping
- 2000m of core drilling.

### **Phase 2**

- 3900m of RC drilling.
- 1800m of core drilling to tail RC holes.

The Author has prepared cost estimates for the recommended two-phase work programme to serve as a guideline for the project. The budget for the proposed programme is presented in Table 19.1. Expenditure for Phase 1 is estimated at C\$867,231 (US\$667,101). Expenditure for Phase 2 is estimated at C\$1,473,737 (US\$1,133,644). The grand total is C\$2,340,986 (US\$1,800,745).

The Author is of the opinion that the recommended two-phase work programme and proposed expenditures are appropriate and well thought out, and that the character of the Project is of sufficient merit to justify the recommended programme. The Author believes that the proposed budget reasonably reflects the type and amount of the contemplated activities.

## **2 INTRODUCTION**

### **2.1 Background**

This technical report of the Kunsu gold property (Kunsu property) has been prepared by Prosper Mackenzie Nude, PhD, MAIG, (qualified person) at the request of Castle Peak Mining Limited (“Castle Peak”), a publicly registered company with an office at #29-1255 Riverside Dr, Port Coquitlam, Vancouver BC V3B 7WS, Canada.

The Kunsu prospecting licence (Kunsu PL) was acquired by Wononuo Investment Limited (“Wononuo”), a wholly owned Ghanaian registered company incorporated under the Companies Code of Ghana, 1963. Castle Peak entered into an option agreement with Wononuo on the 20<sup>th</sup> of June 2018 to explore for gold on the Kunsu property.

Castle Peak commissioned Geological Management Consultancy Limited (GEOMAN), Accra, Ghana to carry out a technical due diligence work and geological assessment of gold (Au) mineralization and prospectivity of the Kunsu property in order to gain more understanding of the style and control of mineralization of the Kunsu Property. This work, which was carefully coordinated by JDS and Associates Limited represented by Mr. Jurgen Eijgendaal, commenced on 09 August 2018 and was completed on 22<sup>nd</sup> November 2018.

### **2.2 Purpose of Report**

The purpose of this report is to provide geological and technical information on the Kunsu property required in support of Castle Peak Mining’s obligations to file a technical report for a transaction under TSX Venture policies. The technical report was prepared in accordance with the disclosure and reporting requirements of the Canadian Securities Administrators’ National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

### **2.3 Terms of Reference**

The mandate and scope of this work comprise a review of relevant and pertinent technical reports and data on the Kunsu property relative to the geology, project history regarding exploration activities, quality assurance and quality control, results and interpretations, and environmental information. Also required is on-site inspections and verifications and the author’s independent evaluation of the exploration works on the Kunsu property and the details of the underlying data from which the evaluation was made. Recommendations have been made for further exploration work to be undertaken in order to gain more knowledge and confidence on the property and also determine the potential for the discovery of gold mineralization similar to those currently being exploited on adjacent properties.

## **2.4 Sources of Information**

This report is based on historical exploration information made available by Castle Peak, with the primary reference being the exploration work conducted by Newmont [1] on the Kunsu property between February 2010 and August 2013, and the due diligence work conducted for Castle Peak by GEOMAN from September 2018 to November 2018 [2,3,4].

The author's evaluation is based on a detailed review of the historical exploration works including geological, geochemical, geophysical and drill-hole data from Newmont and GEOMAN and the related reports, as well as available published geological data [5]. Information was also based on the author's field visits and verifications of Newmont's historical sampling sites and multiple field visits and inspections of GEOMAN's exploration methodology and sampling procedures and protocols. The author has reviewed the available data, visited the project site and believes that data and information provided by Castle Peak are accurate representation of the project and reliable in their collection, analysis and of results.

The author also relied on individuals of the GEOMAN team and their expertise as sources of information during the preparation of this Technical Report. The team comprised Moses DOWUONA (Exploration Geologist, 26+ years' experience), John M. ASIGRI (Field Geologist, 7 years' experience), Thomas K. ARMAH, PhD (Geophysicist, 25+ years' experience), Emmanuel ARHIN, PhD (Geologist-Regolith Geochemist, 23+ years' experience) and led by Yakubu IDDIRISU (Geologist-Geophysicist and Chief Consultant, 40+ years' experience).

Mr Samuel Torkonoo, P. Geo, (an independent Geologist with +23 years' experience, a registered member of the Association of Professional Geoscientists of Ontario, the President and the CEO of Torkonoo and Associates Limited, located at 200 Westland Boulevard, West Legon-Accra-Ghana) contributed by way of peer review and the discussion on QAQC in Item 11 of this report.

All the above individuals are Professionals who have the relevant and requisite experiences and skills to contribute this report.

## **2.5 Author's Inspection of Property**

The Author visited the Kunsu property multiple times. The first was an 8-day field inspection during the first week of September 2018. During that period, the relevant features that were verified included Newmont's drill-hole collars, trench positions and selected soil sample points. Selected soil anomalous areas from Newmont's soil sampling program were re-sampled with duplicates. Also collected for Au analysis were 16 pit samples and 7 rock chip samples.

Surveying of relevant features in the field was done using GPS set to UTM Zone 30N, WGS84 datum coordinate system. At the time of the author's first visit, artisanal miners were seen working the alluvial and colluvial areas, and the terraces close to the south-eastern boundary of the property. The drill-hole sites visited were overgrown with vegetation in some instances. However, some of the borehole collar locations were marked using concrete benchmarks or PVC casings with engraved borehole details, and these were located. Trenches positions were observed to have been filled back in accordance with the Environmental Protection Agency (EPA) requirements in Ghana. There was no field activity at the time of the author's first visit. On 4<sup>th</sup> September, the author visited Asanko mine where active gold mining is currently taking place to acquaint with the geology and gold mineralization style.

The Author visited the Kunsu property the second time from 20<sup>th</sup> to 27<sup>th</sup> October 2018 to witness trench excavation, sampling and mapping by GEOMAN.

A third visit by the Author took place from 3<sup>rd</sup> November to 10<sup>th</sup> November 2018 to witness and review ongoing HQ and core drilling programme. The author also inspected the mineralized zones in the trenches and the structures and lithologies hosting mineralization.

## **2.6 Units**

All currencies in this report are in United States dollar denominations (unless otherwise stated) and measurements and data generated at Kunsu are in the International System of Units (SI metric units). All the report plans and geological maps are plotted in WGS 84 Zone 30N or WGS 84 geographic coordinate system.

The terms "Property", "Project", "Tenement" and "Concession" are used interchangeably.

Assay and/or geochemical data is presented as parts per billion (ppb), as parts per million (ppm) or grams per tonne (g/t)

A list of abbreviations and acronyms used in this report are listed below:

<b><u>Abbreviation</u></b>	<b><u>Unit or Term</u></b>
AAS	Atomic Absorption Spectroscopy
Asanko	Asanko Gold Ghana Limited
Au	Gold
BLEG	Bulk Leach Extractable Gold
CD\$	Canadian Dollar
CRM	Certified Reference Material
cm	centimetre(s)
DD	Diamond Drill
EPA	Environmental Protection Agency
FA	Fire Assay
g/t	grams per ton
Galamsey	Illegal/Illicit mining
GEOMAN	Geological Management Consultancy Limited
GHS	Ghana cedi
Government	Government of the Republic of Ghana
in	inch(s)
ICP – AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
IEC	International Electrotechnical Commission
IP	Induced Polarization
ISO	International Organization for Standardization
Km	kilometre(s)
Kg	kilogram(s)
K	Potassium
Kunsu PL	Kunsu Prospecting Licence
Ma	million years before present
mm	millimetre(s)
m	metre(s)
NE	Northeast
Newmont	Newmont Ghana Limited
NI 43-101	National Instrument 43-101
NNW	North Northwest
NW	Northwest
oz Au/t	Ounces of gold per short ton
PL	Prospecting Licence
PMMC	Precious Minerals Marketing Corporation
ppb	Parts per billion
ppm	Parts per million
QA	Quality Assurance
QC	Quality Control
RL	reconnaissance licence
RC	Reverse Circulation
RQD	Rock Quality Designation
SSE	South Southeast
SW	Southwest

Th	Thorium
TMI	Total Magnetic Intensity
U	Uranium
US\$	United States Dollar
UTM	Universal Transverse Mercator
UTM	Universal Transverse Mercator
WGS	World Geodetic System
Wononuo	Wononuo Investment Limited
WGS	World Geodetic System
%	Percentage

### **3 RELIANCE ON OTHER EXPERTS**

Castle Peak supplied information about option agreements, mineral title status and available public sources of relevant technical information. The author has not performed an independent verification of land title and tenure as summarized in Item 4 of this report. The author did not verify the legality of any underlying agreement(s) that may exist concerning the permit or the agreement(s) between Castle Peak and Wononuo or other parties. Thus, the author is not qualified to express any legal opinion with respect to property titles, current ownership or possible litigation.

#### **3.1 Brief Profile of Geological Management Consultancy Limited**

Geological Management Consultancy Limited, also known as Geoman Consult Limited (GEOMAN) is a mineral industry consulting company which was incorporated in Ghana in 1989 as a private limited liability company. Its office location is at GEOMAN House, Pig Farm Junction, Mamobi, Accra Ghana; postal address is P. O. Box LG172, Legon-Ghana. GEOMAN has for the past 29 years provided expertise across the entire mining and minerals sector; from grass root exploration through to development as well as business promotion and mineral policy consultancy. The Company has provided services to international institutions such as, The EU, World Bank, Danish International Development Agency (DANIDA), German Development Agency (GIZ) as well as other major mining companies within Ghana and Africa and Government Agencies in Ghana.

## **4 PROPERTY DESCRIPTION AND LOCATION**

### **4.1 Property Area and Location**

The Kunsu Property is located approximately 40 Km Northwest of Kumasi and 240 Km Northwest of Accra, the capital city of Ghana (Figure 4-1). Access to the Licence area is mainly by way of the Kumasi-Sunyani highway and then northwest at Mankranso to Kunsu township, after which the concession is named. There are a series of interconnecting motorable to semi-motorable dirt roads running through the Licence area. Foot paths and farm tracks can be used to access the area on foot or motor bikes.

The property is centred approximately on Latitude 6°48'00" North and Longitude 1° 56.00" West (WGS84 Zone 30N) on Ghana Survey Field Sheet 0602A1.

### **4.2 Mineral Tenure and Licence Area**

The Kunsu prospecting Licence (RL.6/57, LVB 18256/09) was first granted to Wononuo Investment Limited for the period 19th September 2006 to 18th September, 2008 and subsequently extended. Newmont Ghana Gold Limited signed a 5-year Option Agreement, effective 24th February, 2010 following Ministerial approval which gave Newmont rights to acquire all of Wononuo's interest in the licence. Newmont however opted out of the Option Agreement on 22nd August, 2013 and returned the licence to Wononuo following re-evaluation of the company's exploration programmes.

The current status of the Kunsu Project is consistent with section 35 (1) of the Minerals and Mining Act, 2006. The Kunsu PL permit has been renewed for a further 3-year period, effective 16th July 2018, and will expire on 15th July, 2021. The Annual Mineral Right fee of GHS 91, 942.00 has been fully paid to cover the 3-year period of the licence. This is in respect of the new cadastral block system for which the Kunsu PL covers 672 Blocks (141.3 km<sup>2</sup>) (Figure 4-2), the coordinates in UTM are presented in Table 4-1.

An Environmental Permit for mineral exploration is required from the Environmental Protection Agency (EPA). This has been applied for by Wononuo and is currently receiving attention at the EPA.

Access rights and community entry are usually negotiated with local inhabitants and it is customary to compensate local farmers for crop disturbances caused by surface exploration work. The author is not aware of any other significant factors and risks that may affect access, ownership, or the right or ability to perform the proposed work programme on the project.

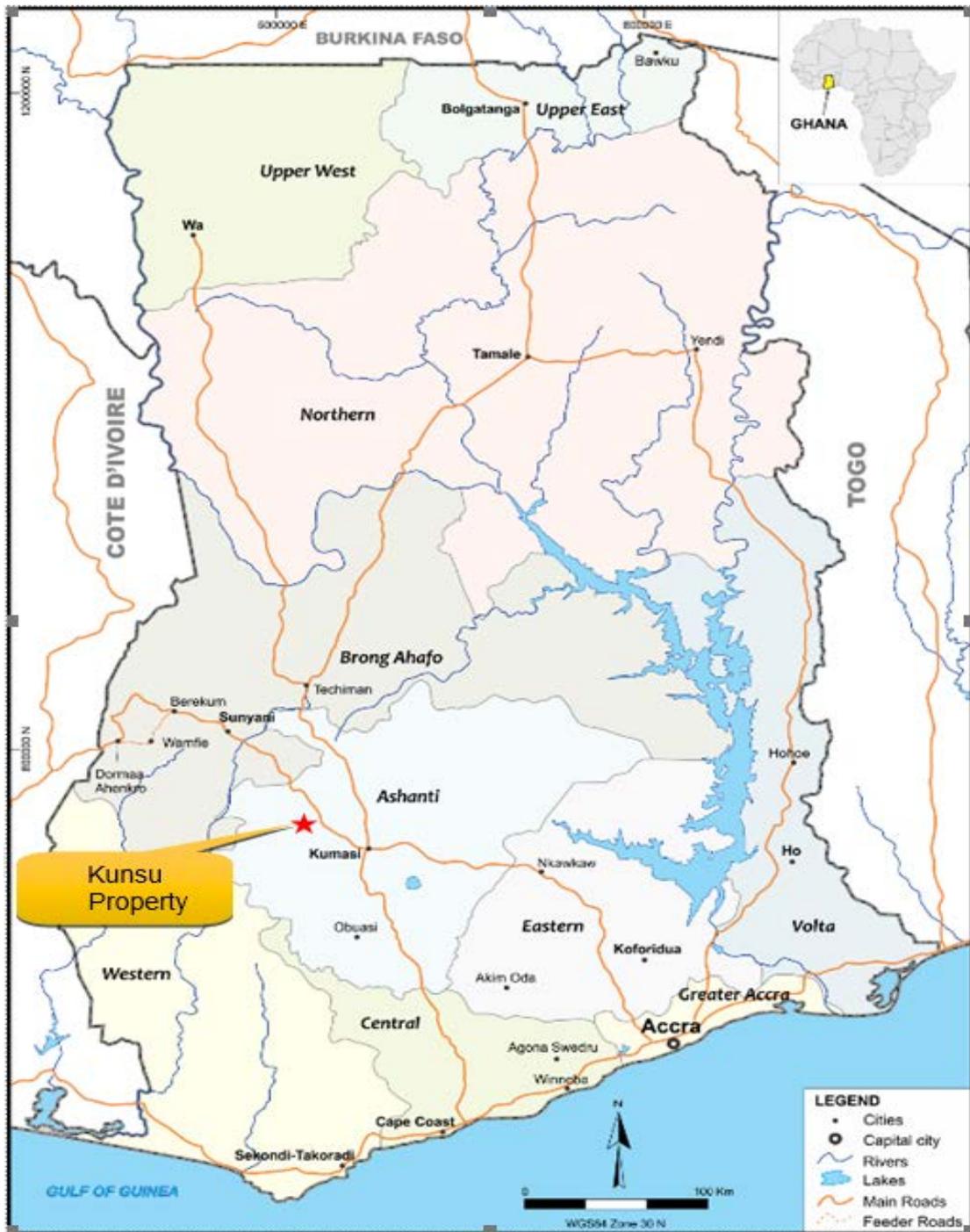
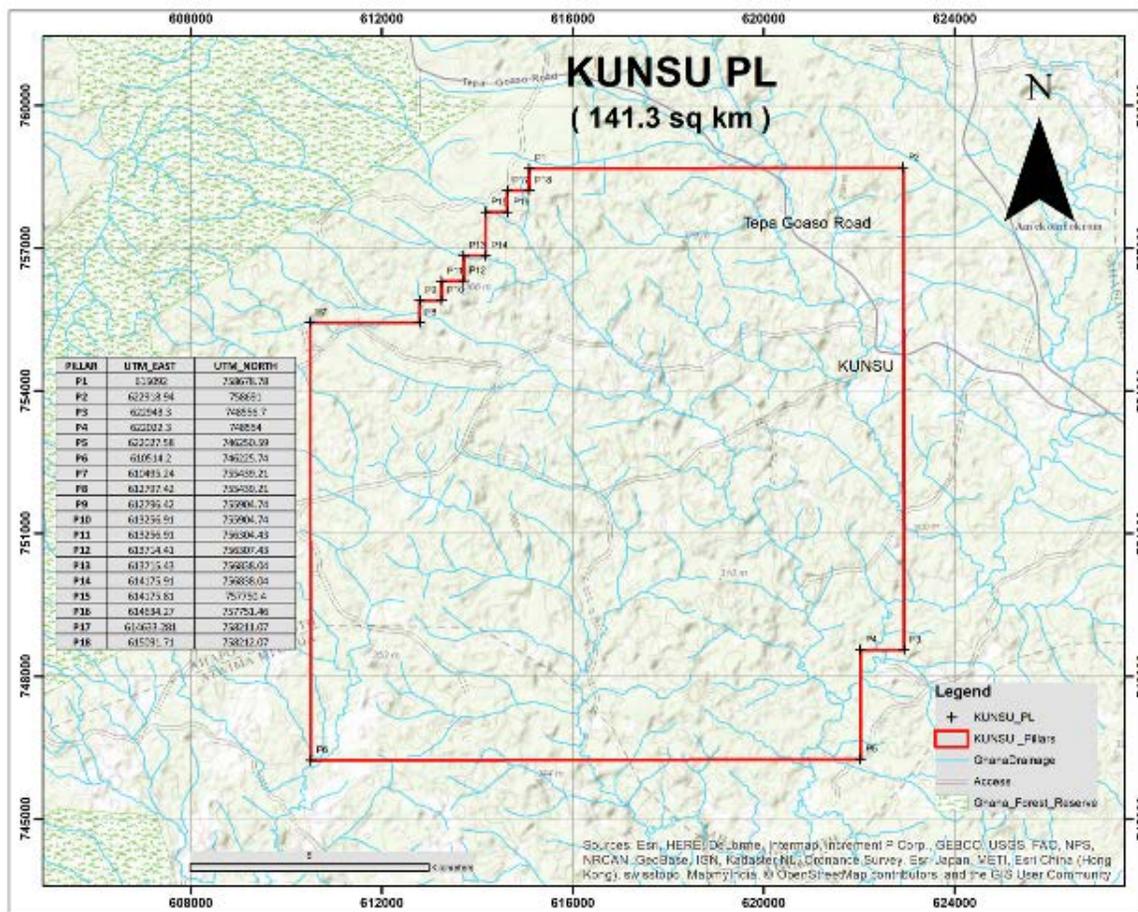


Figure 4-1: Map of Ghana Showing the Location of the Kunsu Project



**Figure 4-2: Concession Map of the Kunsu PL. The Kunsu PL covers an area of 672 Cadastral Blocks (141.3 km<sup>2</sup>).**

Table 4-1: Kunsu PL Coordinates in UTM

<b>Index</b>	<b>East UTM</b>	<b>North UTM</b>
P1	615092	758679
P2	622919	758691
P3	622943	748557
P4	622022	748554
P5	622028	746251
P6	610514	746226
P7	610495	755439
P8	612797	755439
P9	612796	755905
P10	613257	755905
P11	613257	756304
P12	613714	756307
P13	613715	756838
P14	614176	756838
P15	614176	757750
P16	614634	757751
P17	614633	758211
P18	615092	758212

### 4.3 Underlying Agreements between Castle Peak and Wononuo

- i. Wononou Investment Limited (the “Vendor”) and Castle Peak Mining Limited (the “Purchaser”) entered into an option agreement effective on June 23, 2018 [6] and as modified by the extension letter to the option agreement dated October 29, 2018 [7] and the second extension letter to the option agreement dated January 12, 2019 [8] (collectively the “Option Agreement”) to set out the basic terms upon which to enter into a Definitive Agreement (“this Agreement”) [9].
- ii. The Vendor has agreed to sell, and the Purchaser has agreed to purchase, subject to certain exceptions listed in this Agreement, the Kunsu Prospecting License in the Ahafo Ano South District of the Ashanti Region of Ghana, on the terms and subject to the conditions provided in this Agreement.
- iii. Pursuant to the transaction the total purchase price payable by the Purchaser to the Vendor for the Assets will be \$2,000,000USD (the “Purchase Price”)
  - (a) The parties acknowledge that a deposit of \$200,000 USD (the “First Deposit”) towards the Purchase Price was paid by the Purchaser to the Vendor upon execution of the Option Agreement dated June 23, 2018.

- (b) On execution of this Agreement, the Purchaser shall pay a deposit of \$200,000 USD (the “Second Deposit”) towards the Purchase Price, to the Vendor or to the solicitors for the Vendor, in trust.
- (c) After execution of this Agreement, a deposit of \$600,000 USD (the “Third Deposit”) will be paid in accordance to the payment schedule in “Schedule B” of the Agreement.
- iv. On the Closing Date the Purchase Price of \$2,000,000 USD shall be paid by way of the following:
- (a) By application of the First Deposit and Second Deposit in the aggregate amount of \$400,000 USD towards the Purchase Price; and
- (b) By application of the Third Deposit in the aggregate amount of \$600,000 USD towards the Purchase Price paid by the Purchaser to the Vendor in accordance with Schedule B of the Agreement.
- (c) As to any remaining balance of the Purchase Price by way of bank draft, wire transfer, or solicitor’s trust cheque to the Vendor.
- v. Time of Closing: Subject to the terms and conditions of this Agreement, the transaction will be completed on the day that is the EARLIER OF:(a) The 10th business day following the satisfaction or waiver of all the conditions precedent to this Agreement; or (b) The closing date set out in Schedule B of the agreement

#### **4.4 Permits and Authorization**

The Minerals Commission of Ghana requires that in addition to a Prospecting Licence (PL), other permits for exploration activities include an Operating Permit issued by the Inspectorate Division of the Minerals Commission and an Environmental Permit issued by the office of the Ghana Environmental Protection Agency (EPA) branch responsible for mineral exploration.

In addition to the EPA and Operating Permits, it is important to establish strong socio-cultural relationships with communities within and around exploration and mining projects. Access rights must be negotiated with the local inhabitants and it is mandatory to compensate local farmers for crop disturbances caused by surface exploration. This process is crucial to securing the social licence required to operate within the communities.

#### **4.5 Environmental Issues**

All employees and contractors are responsible for upholding the highest standards of environmental management. Employees and contractors are provided with all necessary personal protective equipment to ensure the safety of all workers.

Exploration companies working in Ghana are required to operate under the guidance of best practices which minimizes adverse impact on the environment. Flagging tapes and signboards are erected around dangerous working areas to prevent people straying into them. Roads to working areas are carefully planned to avoid degrading the natural environment. Excessive felling of trees and food crops are avoided by diverting roads. Trenching or preparing of access roads near streams is avoided to save water bodies. Good bridges and rafts are built on rivers and streams where necessary to avoid polluting them.

Adequate crop compensation is paid to affected farmers where necessary. The agreed prices of the crops are pre-negotiated with the farmers. The negotiation usually involves other stakeholders such as non-government organizations, traditional authorities (chiefs), regulatory authorities, and local government authorities.

Trenching and preparing of access roads to drill sites are usually manual, creating more jobs for the local people which results in a significant reduction of surface disturbance. Pits, sumps, and trenches are considered as temporary exposures and are fenced (barricaded) during operation. Sumps are reclaimed immediately after drilling. Pits and trenches are backfilled as soon as practicable after exposed surfaces have been logged and sampled. Such backfilled pits, sumps, or trenches are re-inspected six months after initial backfilling to determine if further back filling is required, due to settlement.

Obligations governing the socio-environmental factors such as honouring corporate social responsibility (CSR) commitments (includes but not limited to providing water boreholes, assistance to school projects, etc.), the establishment of a good working relationship with chiefs, elders, and people of the traditional area, and protection of the environment which may be affected by exploration operations, are observed and acted upon in accordance with Ghanaian legislation and experience gained from work in other countries.

No formal environmental assessment has been made. While there are no known environmental liabilities associated with previous and present exploration activities, there is an indication of some environmental damages that may have occurred as a result of artisanal and illicit mining activity.

#### **4.6 Mineral Rights in Ghana**

The legal framework governing mineral exploration, mining and processing in Ghana is defined by the 1992 Constitution of the Republic of Ghana and backed by the relevant

Acts, Legislations and Regulations. The Minerals Commission was established under the Minerals Commission Act, 1993, (Act 450). The Commission is responsible for the regulation and management of the utilization of the mineral resources of Ghana and the co-ordination of the policies in relation to them. The Act also mandates the Minerals Commission to grant applicable licenses and leases to registered and qualified firms and to ensure compliance with laid down Mineral and Mining Laws and Regulations of Ghana.

The Minerals and Mining Act of 2006 (Act 703) spells out the conditions pertaining to the application and retention of mineral rights in Ghana. In terms of the Act, all minerals in their natural state in or upon any land or water are the property of the Republic of Ghana and vested in the President on behalf of the people of Ghana. The approval of a mineral right application is subject to recommendations by the Minerals Commission and final accent by the sector Minister on behalf of the President.

Under the Minerals and Mining Act (Act 703) of Ghana, the following Minerals rights may be granted:

#### **4.6.1 Reconnaissance Licence**

A Reconnaissance Licence confers on the holder the right to search for a specific mineral (or commodity) within the licence area by geochemical and photogeological surveys or other remote sensing techniques. Except as otherwise provided in the licence, it does not permit drilling, excavation, or other sub-surface techniques.

The licence is normally granted for one year and may be renewed by the sector Minister from time to time for periods up to one year at a time upon application by the holder. The application for renewal must be made at least three months before the expiration of the licence. The size of the area over which a Reconnaissance Licence may be granted is limited to 5,000 contiguous blocks or 1,050 square kilometres.

#### **4.6.2 Prospecting Licence**

A Prospecting Licence gives the holder the exclusive right to search for specific minerals (or commodities) by conducting geological, geophysical, and geochemical investigations to determine the extent and economic value of any deposit within the licence area. Drilling, excavation, or other sub-surface techniques are permitted under the Prospecting Licence. The initial grant of the licence is limited to three years and a maximum area of 750 contiguous blocks or 157.5 square kilometres.

A Prospecting Licence is granted for a period not exceeding three years and may be renewed for a maximum of two terms or for further periods of up to three years each. The holder of a Prospecting Licence shall, prior to or at the expiration of the initial term, surrender no less than half the number of blocks of the prospecting area so long as a minimum of 125 blocks or 26.3 square kilometres remain subject to the licence and the

blocks form not more than three discrete areas each consisting of a single block, or a number of blocks each having a side in common with at least one other block in that area.

### **4.6.3 Mining Licence**

The grant of a Mining Lease gives the holder the right to mine, win, or extract specified minerals (or commodities) within the lease area. The lease may be granted to the holder of a Prospecting Licence or any person who establishes to the satisfaction of the Minister that a mineral to which the lease relates exists in commercial quantities within the proposed lease area and can be mined at a profit. The lease is issued initially for a 30-year period subject to renewal for a further 30 year term. The size of the area in respect of which a lease may be granted is limited to 300 contiguous blocks or 63 square km for a single grant.

A person other than the holder of a Reconnaissance or Prospecting Licence may apply for a mining lease in respect of a mineral specified in the application over land that is not the subject of a mineral right for the same mineral applied for.

### **4.6.4 Restricted Licence or Lease for Industrial Minerals**

Mineral rights governing the exploration and exploitation of industrial minerals and building materials are granted through the issuance of a Restricted Licence or Lease. A Restricted Licence may be granted as in the case of other minerals for the different stages of mineral operations (that is, reconnaissance, prospecting, and production) in the form of a Restricted Reconnaissance Licence, a Restricted Prospecting Licence, or a Restricted Mining Lease.

The Restricted Reconnaissance Licence is normally granted for up to one year and may be renewed by the Minister from time to time for periods up to one year. The Restricted Prospecting Licence is normally granted for a period not exceeding three years and may be renewed for a maximum of two terms or for further periods of up to three years. The Restricted Mining Lease is normally granted for a period not exceeding 15 years and may be renewed for the same number of years.

Mineral rights for building and industrial minerals are reserved for Ghanaian citizens except where an exemption is made by the Minister, on the advice of the Minerals Commission, as being in the public interest. A local authority, owner, or lawful occupier of any land is permitted to prospect for and mine, on any land owned or occupied by him, any building or industrial mineral for use in building, road making, or agricultural purposes.

A person who is not a Ghanaian may apply for a mineral right in respect of industrial mineral provided the proposed investment in the mineral operations is ten (10) million US dollars or above.

#### **4.6.5 Small Scale Mining**

The small-scale Mining Licence governs winning, mining, and production of minerals such as gold, diamonds, salt, kaolin, silica, sand, brown clay, aggregates, and crushed rocks by an effective and efficient method and observe good mining practices, health and safety rules, and pay due regard to the protection of the environment during mining operations.

A licence is granted to a person, a group of persons, a cooperative society, or a company for a period of no more than five years from the date of issue in the first instance and may be renewed on expiry for a further period that the Minister may determine.

The size of the area in respect of which a licence may be granted for small scale mining shall not exceed 25 acres (10 hectares). Only Ghanaians of at least 18 years can be granted a small-scale Mining Licence.

#### **4.6.6 Mining Royalties**

Pursuant to the 2006 Mining Act 703, amended in 2015, the holder of a mining lease is required to pay, quarterly, a royalty of 5%.

#### **4.6.7 Reporting Requirements**

In order to maintain a Licence, the owner is required to submit the following reports:

- Quarterly Return Form to the Minerals Commission.
- Environmental Report to the Environmental Protection Agency.
- Terminal Report to the Minerals Commission.

#### **4.6.8 Licence Fees**

Under the Minerals Act 2006, Act 703, there are a number of fees applicable. Annual Mineral Right Fees are payable depending on the type of licence type, the size and licence duration.

For a Reconnaissance Licence, the Annual Mineral Right fees for each cadastral unit costs US\$16 for the first year, and US\$20 from the second year. A Prospecting Licence attracts an annual fee of US\$32 for each cadastral unit for the first three years, US\$50 from years 4-6, and US\$70 from years 7-9.

Approval charges for a transfer, assignment, mortgage or joint venture of a Reconnaissance Licence is pegged at US\$20,000 and US\$40,000 for a Prospecting Licence. Option agreement is US\$10,000 for both Reconnaissance Licence and Prospecting Licence. In addition to the fees shown above, all mineral rights holders pay a “ground rent” to traditional landowners annually through the Ghanaian government. The ground rent fee for a Prospecting Licence is about US\$8 per square kilometre.

To the extent known by the author, or Castle Peak, there are no other significant factors and risks besides noted in this technical report that may affect access, title, or the right or ability to perform work on the property.

## **5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES & PHYSIOGRAPHY**

### **5.1 Physiography**

The Kunsu PL is drained predominantly by the Mankrakese and Bonkwa Rivers which have their headwaters westwards from hills along the Tano Ofin Forest reserve. Subsistence farming of food crops such as plantain, cassava, and cocoyam is most common, and cash crops such as cocoa and oil palm are within the licence area. The area exhibits a series of moderate to low undulating topography with a highest point of about 270m above mean sea level.

### **5.2 Accessibility, Local Resources and Infrastructure**

Access to the licence area is mainly by way of the Kumasi-Sunyani highway and then turning northwest at Mankranso to Kunsu township. There are a series of interconnecting motorable to semi-motorable dirt roads which can be used to fairly traverse about 70% of the licence areas. Other foot paths and farm tracks can be used to access the area on foot or motor bikes. The closest (5 km from Kunsu) administrative centre is Mankranso; the District capital of the Ahafo Ano South District with infrastructure that includes a hospital, schools, telecommunication services and a connection to the national electricity grid. The Kunsu Township is a vibrant community with shops and market.

### **5.3 Climate**

The climatic conditions pertaining in the area is wet semi-equatorial with an average annual rainfall in the range of 1500 mm -2000 mm and temperatures range from 22°C to 36°C. Rainfall within the year occurs within two peak periods; in April-July and September-November.

## **6 HISTORY**

### **6.1 Introduction**

The available information shows that the Kunsu area attracted little attention in the exploration booms of the colonial periods. It was until the early 1990s when several local groups acquired concessions covering several areas including Kunsu. In a report dated September 2008, Wononuo Investment reported on 254 pits dug to an average depth of 4 m by Star Goldfields Ltd in the area. Wononuo Investment on its part, reported to have carried out data processing of satellite imagery and airborne geophysical data interpretation. Chip sampling of exposures and stream sediment sampling were also carried out by Wononuo in the area.

The current Kunsu licence was granted to Wononuo Investment for the period 19th September 2006 to 18th September, 2008; the licence has subsequently been extended. Newmont Ghana Limited (“Newmont”) signed a 5-year Option Agreement, effective 24th February, 2010 following Ministerial approval which gave Newmont rights to acquire all of Wononuo’s interest in the licence. Newmont however, opted out of the Option Agreement on 22nd August, 2013 and returned the licence to Wononuo Investment.

### **6.2 Newmont’s Exploration Work**

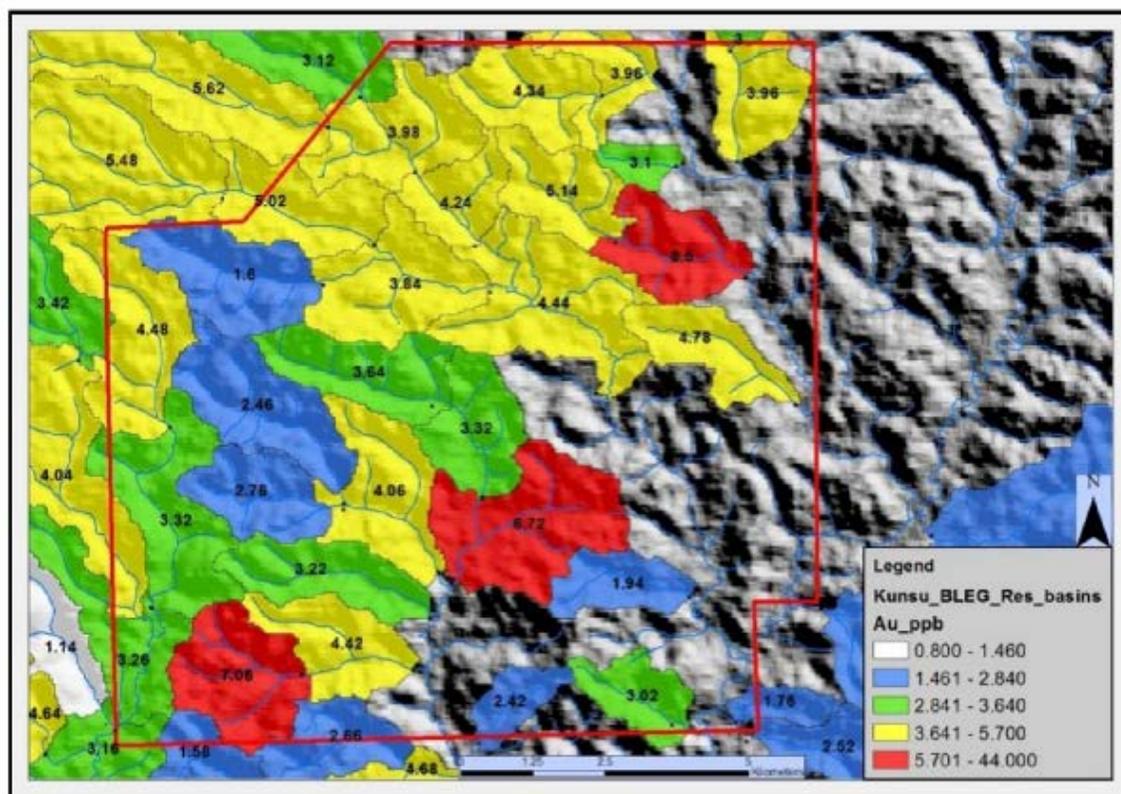
During the three years of Wononuo Investment-Newmont agreement, Newmont completed many phases of soil sampling programmes within the Kunsu concession as follow up to the BLEG stream survey. Induced Polarization (IP) and Resistivity surveys followed by limited pitting and trenching were undertaken in areas with encouraging gold in soil anomalies. Drilling programmes which included Air Core, Reverse Circulation (RC) and Diamond Drilling (DD) were also completed within the period.

The details of exploration works completed by Newmont Ghana Gold Limited within the Kunsu prospecting licence are presented below.

#### **6.2.1 Stream Sediment Geochemistry**

Newmont carried out Bulk Leach Extractable Gold (BLEG) Stream Sediment Geochemistry programme within the Kunsu tenement in an effort to delineate anomalous broad catchment areas for follow up work. A total of 37 composite samples (including 1 QAQC sample) consisting of fines in the stream load were taken from a minimum of 5 multiple sites along stream channel at a density of 1 sample per 3.7 sq.km. An average of 4kg sample each was taken from the field into micro pore bags to allow any trapped water to drain off. Samples were air dried and sieved to -600 microns before air freighted to Newmont’s laboratory in Perth, Australia for analysis. Laboratory sample preparation and analysis involved sieving, leaching the whole fine fraction in cyanide and analyzing the solution for multi-elements including Au, Ag and Cu at low detection.

The BLEG campaign outlined interesting anomalies with best assay results reported at the northeastern, central and southwestern parts of the concession. The gold values ranges from 1.14 - 8.5ppb. A peak value of 8.5ppb draining from a first order stream and background of 1.14-2.36 were reported. Anomalous catchment areas were subsequently followed-up with soil geochemistry programme. Figure 6-1 below shows the catchment analysis of the BLEG results within Kunsu concession.



**Figure 6-1: Kunsu Catchment Analysis of the BLEG Results (after Newmont)**

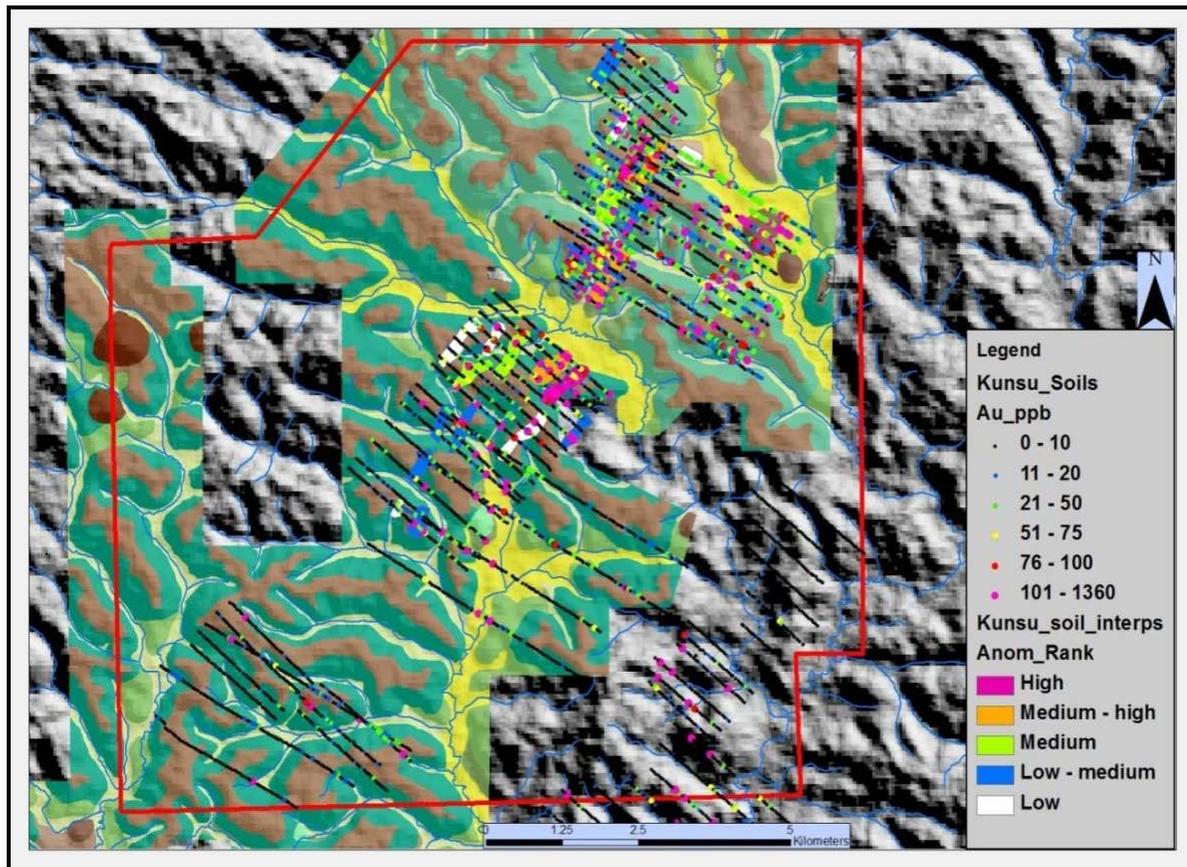
## 6.2.2 Soil Geochemistry

As follow up to stream sediment survey, Newmont completed several phases of soil sampling programmes within the Kunsu concession. The first phase commenced in February 2010, samples were collected within three grid areas in the northern, central and southern parts of the concession. Initial grid spacing of 400m x 50m was adopted for the northern grid and subsequently infilled to 200m x 50m. The central and southern grids were both cut at a uniform grid spacing of 800m x 50m without any infill. The three grids were oriented at a bearing of 120°.

A second phase of soil sampling programme was completed in the year 2011 largely within the central grid area and partly as an infill within the northern grid. Grid orientation of about 150° was used this time with line spacing ranging from 400 to 200m and samples collected at 50m intervals.

The last phase of soil sampling programme was completed in March 2012 largely within the south-eastern part of the concession and partly within the southern grid area. Four lines were cut within the northern grid area as an extension towards the northern boundary of the concession. Varying line spacing of 200m to 400m was used with samples collected at 50m intervals. The same grid orientation as in the 2011 programme was adopted. In all, a total of 3846 samples including 98 QAQC analyzed for Au at the ALS Laboratory in Kumasi.

The results of the combined soil sampling programmes generated encouraging trends within the northern and central grids whilst the southern and south-eastern grids returned largely spotty anomalies. An isolated peak assay value of up 10000ppb was reported within the south-eastern grid in an area characterized by low magnetic feature. Mean background value of 35ppb was observed. Several anomalous targets ranked in order of priority (from high to low) were noted within residual regolith regimes which became the focus of subsurface investigation. Figure 6-2 shows Newmont's gold results for the combined soil sampling programme.



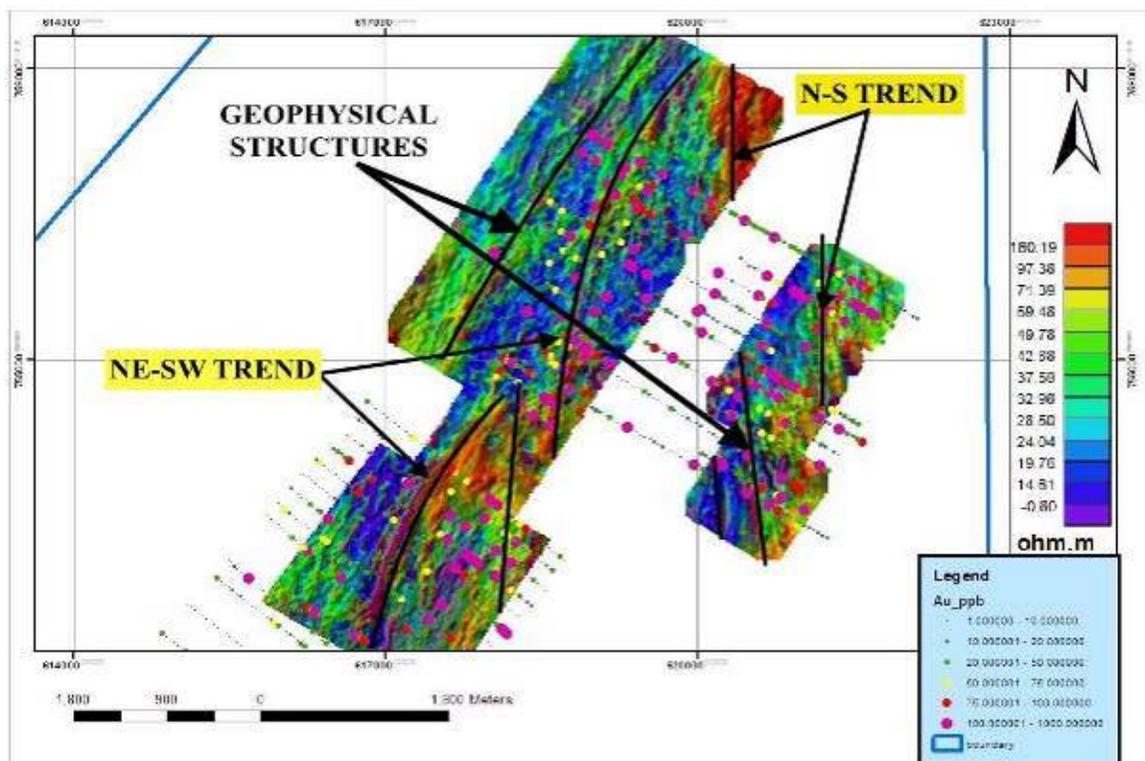
**Figure 6-2: Kunsu Soil Results on Regolith Map (after Newmont).**

### 6.2.3 IP Survey

Newmont carried out an Induced Polarization (IP) and Resistivity surveys on 16 blocks each with dimension 1km x 1km with the objective of measuring high-density Apparent Resistivity and Chargeability distribution of the subsurface and to delineate discrete resistors and chargeable bodies potentially associated with gold mineralization. The survey was carried out on about 336 km lines oriented at the same bearing with the linear soil anomalies.

An Induced Polarization (IP) and Resistivity surveys comprising 16 blocks each with dimension 1km x 1km were carried out with the objective of measuring high-density apparent Resistivity and Chargeability distribution of the subsurface. The primary objective was to delineate discrete resistors and chargeable bodies potentially associated with gold mineralization. Induced polarization surveys helps in delineating sulphide minerals whiles the resistivity survey maps the silica alterations associated with the mineralization

The survey was carried out on about 336 km lines oriented at the same bearing with the linear soil anomalies. Figure 6-3 shows a merger of chargeability and resistivity image, with interpreted structures.



**Figure 6-3: Merged Chargeability and Resistivity**

#### 6.2.4 Pitting and Trenching

A pitting programme was undertaken by Newmont in June 2010 to assess *in situ* gold mineralization within saprolitic zones. Sixteen (16) pits were dug at an average depth of 2.9m and samples collected at the base using chisel and a hammer. Ninety seven (97) pit samples (including QAQC) were analyzed for Au by Standard Fire Assay at ALS Laboratories in Kumasi.

Four regolith regimes were identified from the pit mapping; a lateritic/gravel regime dominated by quartz fragments and pisoliths; a clay zone consisting of highly weathered materials with completely obliterated fabrics; a mottled clay which often occurs as patches of clay and little preserved fabrics and a saprolite horizon. Scanty structural data is available to give any meaningful structural information. The Au assay results were not encouraging. Minimum and maximum assays of 7ppb and 468ppb were reported respectively. Most of the samples returned average assay value of 6ppb. Pit ID WNPT07 gave the best results with an average assay of 129ppb in saprolite. Following the

disappointing results posted in the pitting exercise, the pitting programme was replaced with trenching.

The trenching programme spanned from February 2012 to October 2012 during which fourteen trenches were dug for a combined length of about 1,932 m. A total of 1, 372 samples (including QAQC samples) were collected and analyzed for gold by standard fire assay at ALS Laboratory in Kumasi. The trenches were sparingly mapped as samples were collected within weathered saprolitic zones. The best trench results reported are KUTR002: 13m @ 2.49g/t; TR18/10: 2m @ 1.34g/t; KUTR001: 14m @ 0.25g/t and KUTR007: 3.6m @ 0.73g/t. Figure 6-4 shows the location of the trenches dug over soil anomalies and Figure 6-5 is combined pit and trench locations over resistivity map.

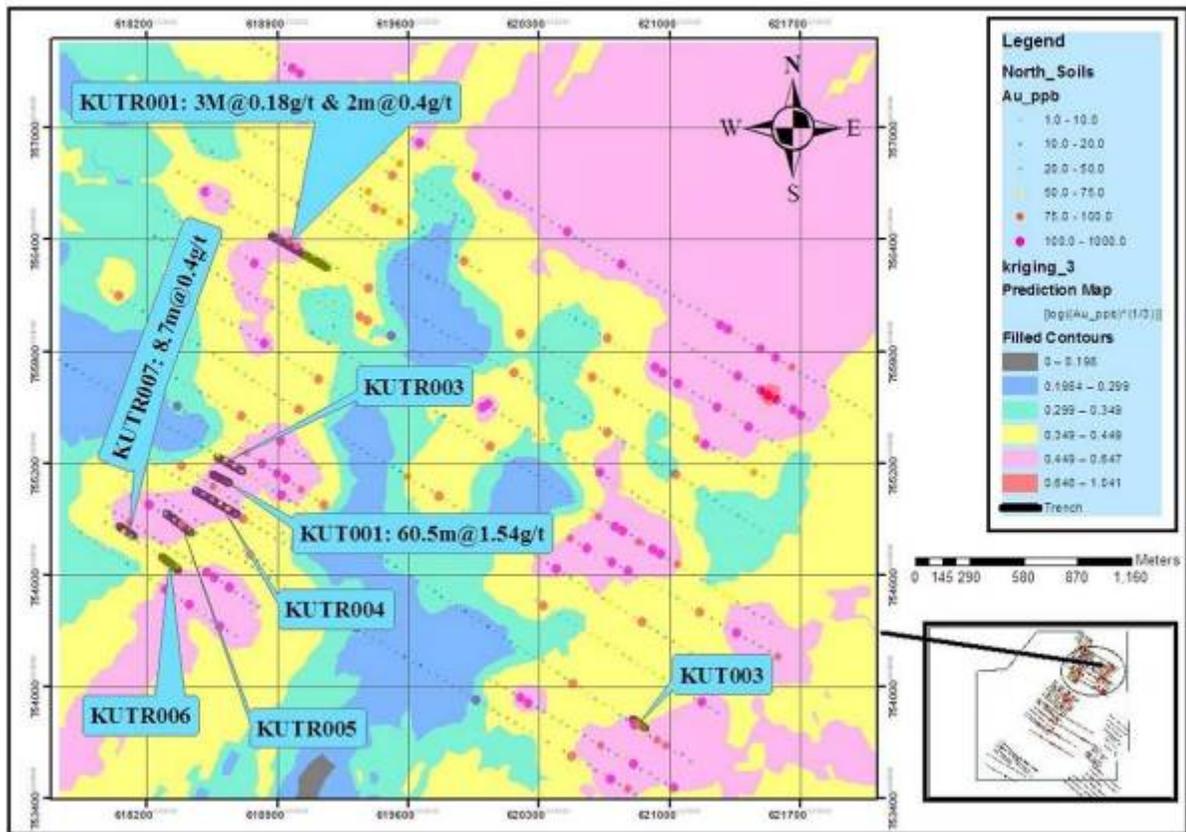
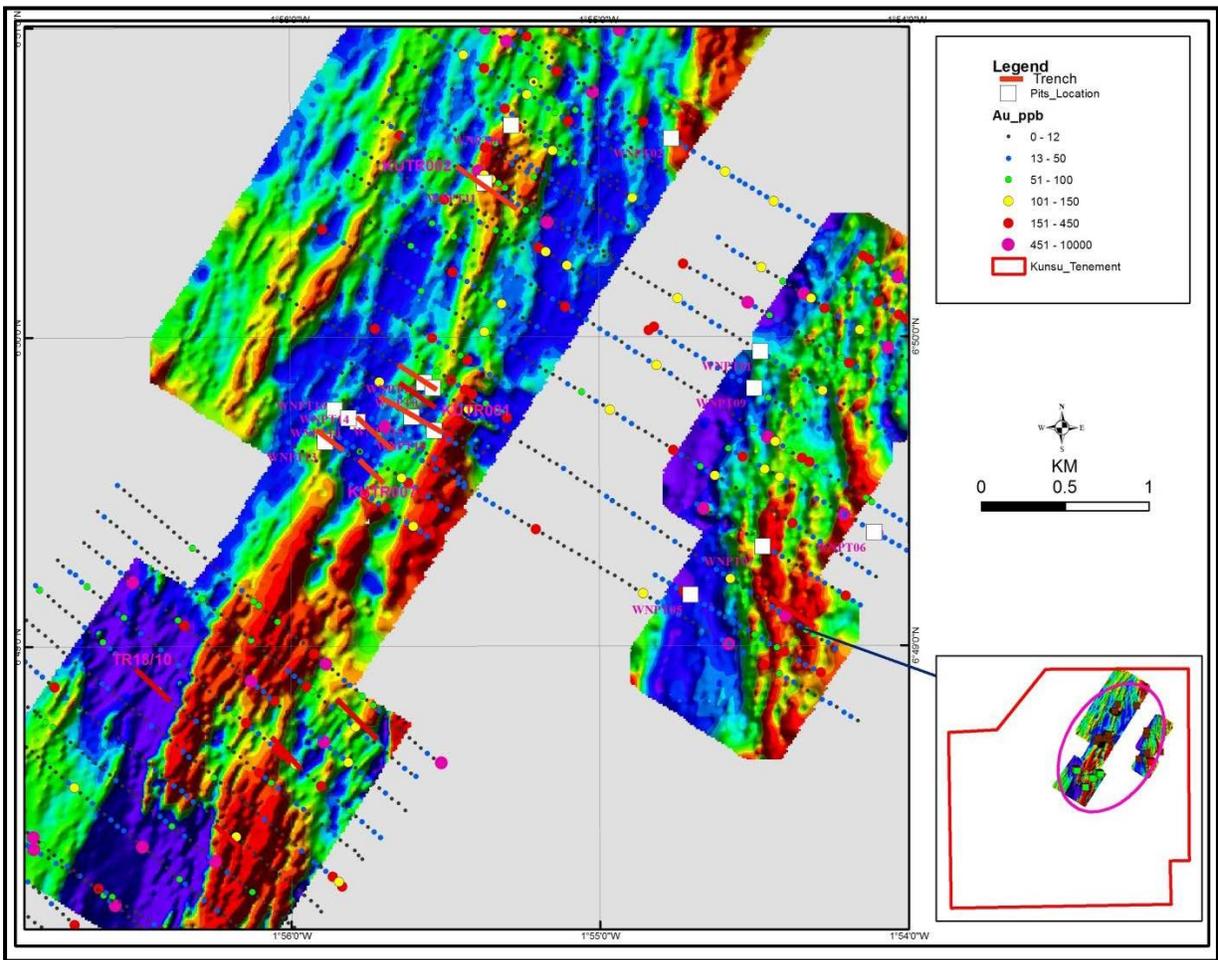


Figure 6-4: Kunsu Trench Locations on Soil Anomalies (after Newmont)



**Figure 6-5: Kunsu Pit and Trench Locations on Resistivity Image (after Newmont)**

### 6.2.5 Aircore Drilling by Newmont

In all 265 Air Core holes were reported drilled in October 2010 to a total depth of 4967m. Two meter composite samples, totalling 2673 samples (including 119 QAQC samples) were taken and analyzed for gold at ALS lab in Kumasi. Two of the aircore holes KUAC059 and KUAC061 were reported to have ended in mineralization at 12m and 20m respectively. Average dip and azimuth of  $-50^{\circ}$  and  $315^{\circ}$  were used respectively. The rock types encountered were weakly foliated saprolite after phyllites with fragments of smoky/glassy quartz. Aircore programme returned very weak and marginal intercepts which positions are shown in Figure 6-6 and intercepts summarized in Table 6-1.

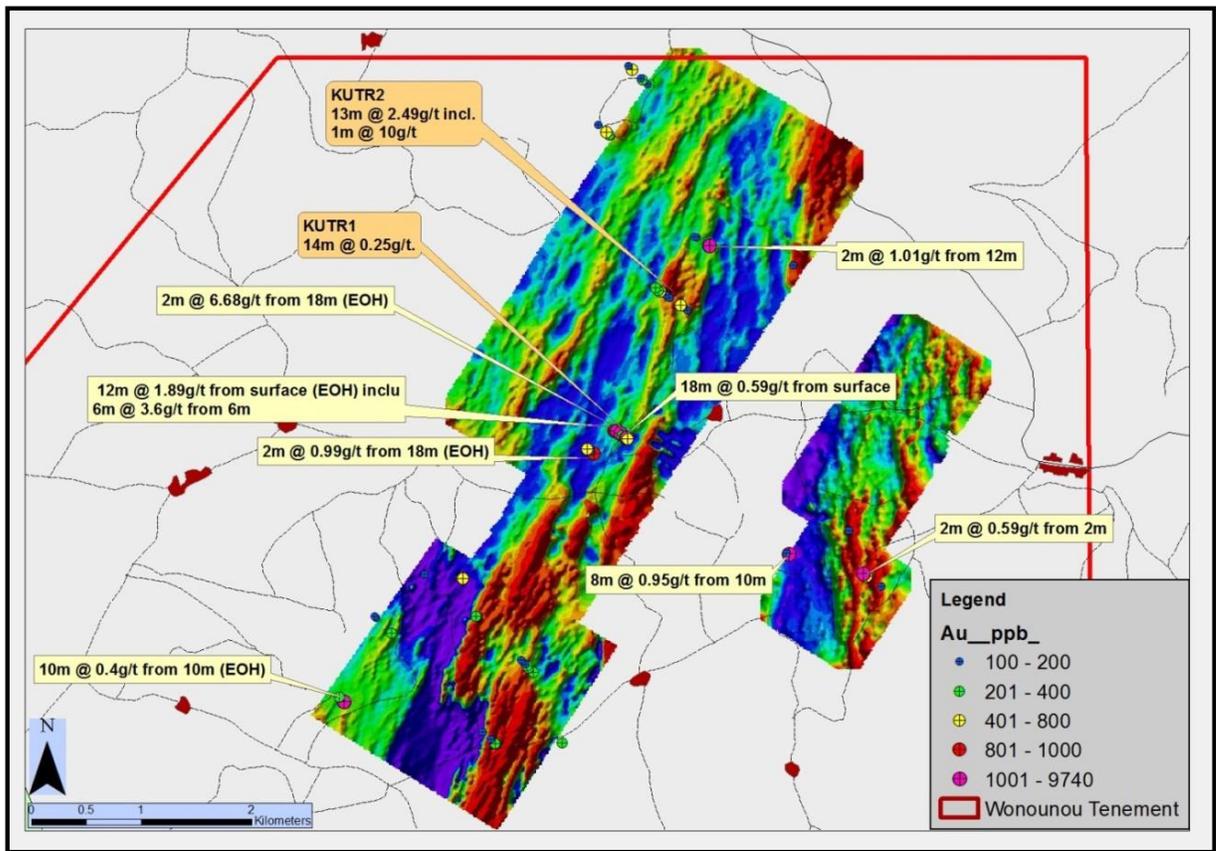


Figure 6-6: Kunsu Air Core Drill Intercepts on Resistivity Image (after Newmont).

Table 6-1: Significant Aircore Intercepts

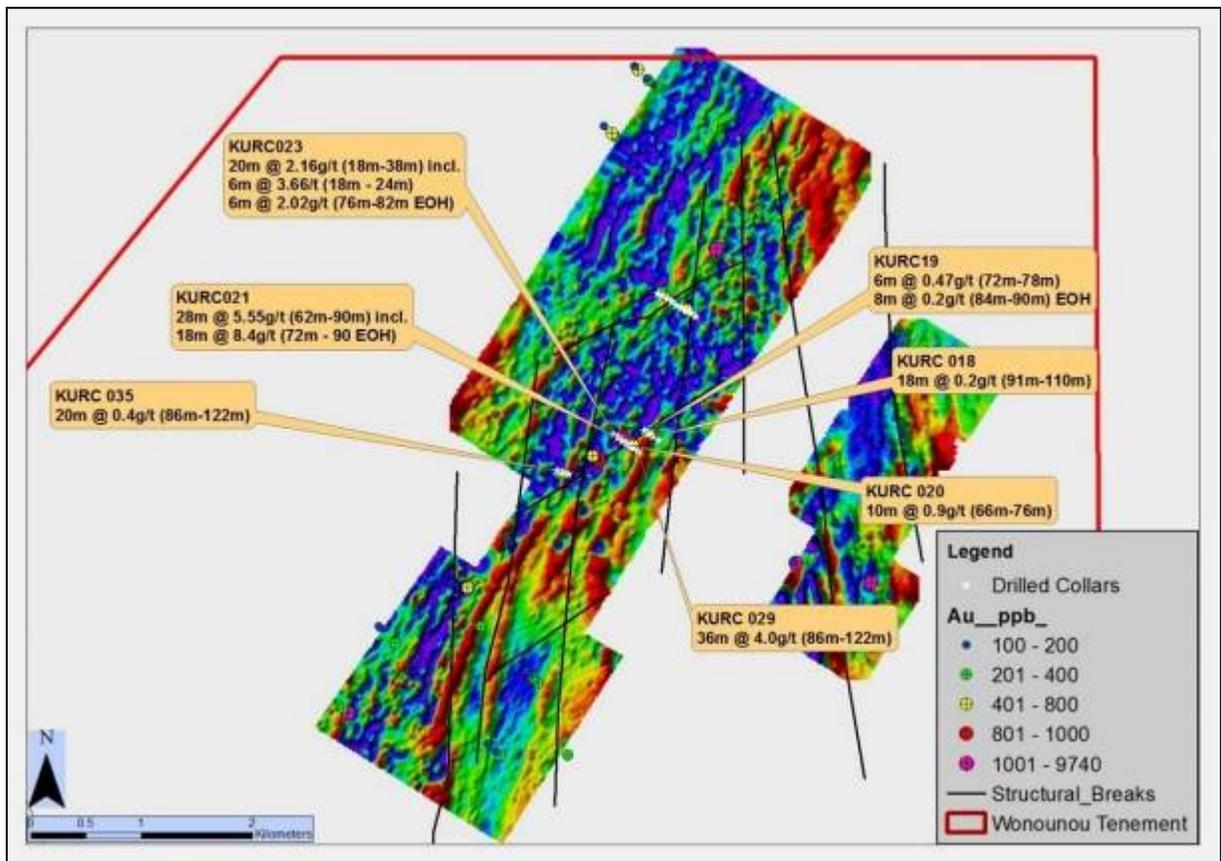
Hole ID	From (m)	To (m)	Width (m)	Grade (g/t)
KUAC019	2	4	2	0.59
KUAC021	2	4	2	1.7
KUAC027	16	18	2	2.59
KUAC039	18	20	2	0.99
KUAC058	24	25	1	0.94
KUAC059	6	8	2	0.5
KUAC059	8	10	2	9.74
KUAC059	10	12	2	0.56
KUAC061	18	20	2	6.68
KUAC064	14	16	2	2.35
KUAC064	16	18	2	0.46
KUAC065	14	16	2	0.41
KUAC099	12	14	2	1.01
KUAC128	6	8	2	0.56
KUAC160	18	20	2	1.06
KUAC261	14	15	2	0.62

### 6.2.6 RC Drilling by Newmont

Newmont carried out three phases of RC drilling to investigate at depth significant air core intercepts and some IP resistivity/chargeability targets (Figure 6-7). The first phase of drilling was undertaken in August 2011 when 28 RC collars were drilled in 5 fences to test a combined strike of 1.8km. A total of 2,835m of drilling was accomplished in this phase. About 1,499 samples, including QA/QC samples were rifle-split and two-meter composite samples bagged for analysis by fire assay. Average dip of 52° and azimuth of 147° were used except for hole KURC0020 which was drilled at an azimuth of 335°.

The second phase of drilling was carried out in June 2012 during which another 7 holes were drilled for a total depth of 736m. Average dip and azimuth 51° and 124° were respectively surveyed. Hole KURC0029 was again drilled at an azimuth of 325°. A total of 389 samples were analyzed for gold by fire assay. The last phase of drilling was completed in August 2013 as an extension and infill programme to the first two phases of drilling. A total of 308m of drilling was accomplished and 163 samples analyzed by fire assay. Dip and azimuth of 55° and 322° were respectively used for all three halls.

All the three phases of drilling were carried out within the northern soil grid. Significant intercepts in Table 6-2 included hole KURC021; 28m@5.55g/t Au from 62m (including 18m @ 8.4g/t Au); KURC023: 22@2.31g/t from 18m and KURC029: 54m@3.18g/t from 86m including 8m @ 8.07g/t Au). Oxidation in most of the holes was up to 60m down profile and gold mineralization is controlled by altered phyllite and greywackes with associated quartz veining.



*Figure 6-7: Kunsu RC Intercepts on Chargeability Image (after Newmont)*

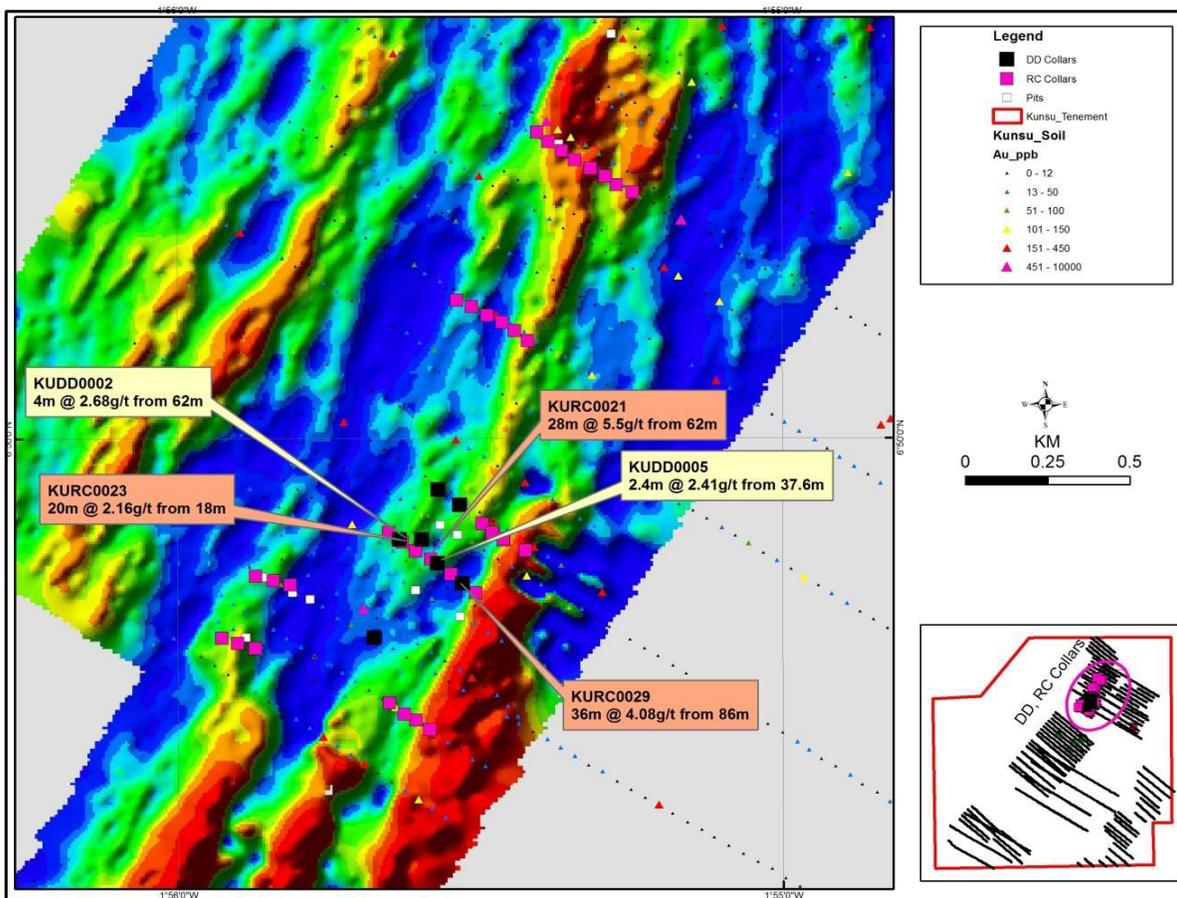
Table 6-2: RC Intercepts of Significance

Hole ID	From(m)	To(m)	Width (m)	Grade (g/t)	Remarks
KURC003	72	76	4	0.62	
KURC003	94	98	4	0.46	
KURC0020	66	68	2	0.53	
KURC0020	72	74	2	2.16	
KURC0020	74	76	2	1.65	
KURC0020	90	92	2	2.58	
KURC0020	122	124	2	0.68	
KURC0021	<b>62</b>	<b>90</b>	<b>28</b>	<b>5.55</b>	ended in mineralisation
<b>including</b>	<b>72</b>	<b>90</b>	<b>18</b>	<b>8.40</b>	
KURC0022	14	20	<b>6</b>	2.15	
KURC0023	<b>16</b>	<b>38</b>	<b>22</b>	<b>2.31</b>	
KURC0023	80	82	2	5.85	ended in mineralisation
KURC0025	48	50	2	1.38	
KURC0027	32	34	2	0.31	
KURC0028	34	36	2	0.75	
<b>KURC0029</b>	<b>86</b>	<b>140</b>	<b>54</b>	<b>3.18</b>	
<b>including</b>	<b>86</b>	<b>94</b>	<b>8</b>	<b>8.07</b>	
KURC0032	14	20	6	0.67	
KURC0032	68	70	2	0.33	
KURC0035	8	10	2	0.38	
KURC0035	32	34	2	0.44	
KURC0035	60	64	4	0.34	
KURC0035	66	70	4	0.55	
KURC0035	78	100	22	0.36	
KURC0036	128	140	12	0.85	ended in mineralisation
KURC0037	8	10	2	0.87	

### 6.2.7 Core Drilling by Newmont

Newmont again drilled 7 Diamond Drill holes for a total depth of 1067.7m. Average dip and azimuth of 55° and 137° were used respectively. The holes were sited on three fences as a follow up on interesting RC intercepts. A combined strike length of 500m within the northern soil grid area was tested. A total of 1023 including QAQC samples were collected and analyzed for gold by fire assay at ALS Laboratory in Kumasi.

The results reported for the core drilling programme did not replicate the highly encouraging RC results. The best intercepts reported were 2.4m @ 2.41g/t from 37.6m in KUDD0005 and 4m @ 2.68g/t from 37.6m in KUDD0002. The RC holes where these two DD holes were cited yielded 28m @ 5.55g/t and 22m @ 2.31g/t. Figure 6-8 shows the locations of the DD collars in relation to the RC collars on IP resistivity image.



**Figure 6-8: Diamond Drill-Hole Collars on Resistivity Image Superimposed on Geology (after Newmont).**

### 6.3 Comments on Newmont’s Exploration Work

Newmont carried out extensive exploration work on the Kunsu property. From the available data, some significant mineralized intercepts were realized from Newmont’s drilling campaign.

The Author is of the opinion that the drilling density applied, in which the drilling fences vary between 200m to 700m, is not sufficiently reliable to support the interpretation of the boundaries and extent of the gold mineralization at this stage. Although individual targets have indicated good mineralization, there still remains further work to be carried out in order to adequately understand the grade distribution and density.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

Southwest Ghana is underlain by the Paleoproterozoic Birimian and Tarkwaian Supergroups (Figure 7-1). The Birimian is broadly subdivided into a metasedimentary group consisting of phyllites, tuffs and greywackes, and a metavolcanic group that consists of various basaltic to andesitic lavas. These subdivisions have been deformed and weakly to moderately metamorphosed regionally.

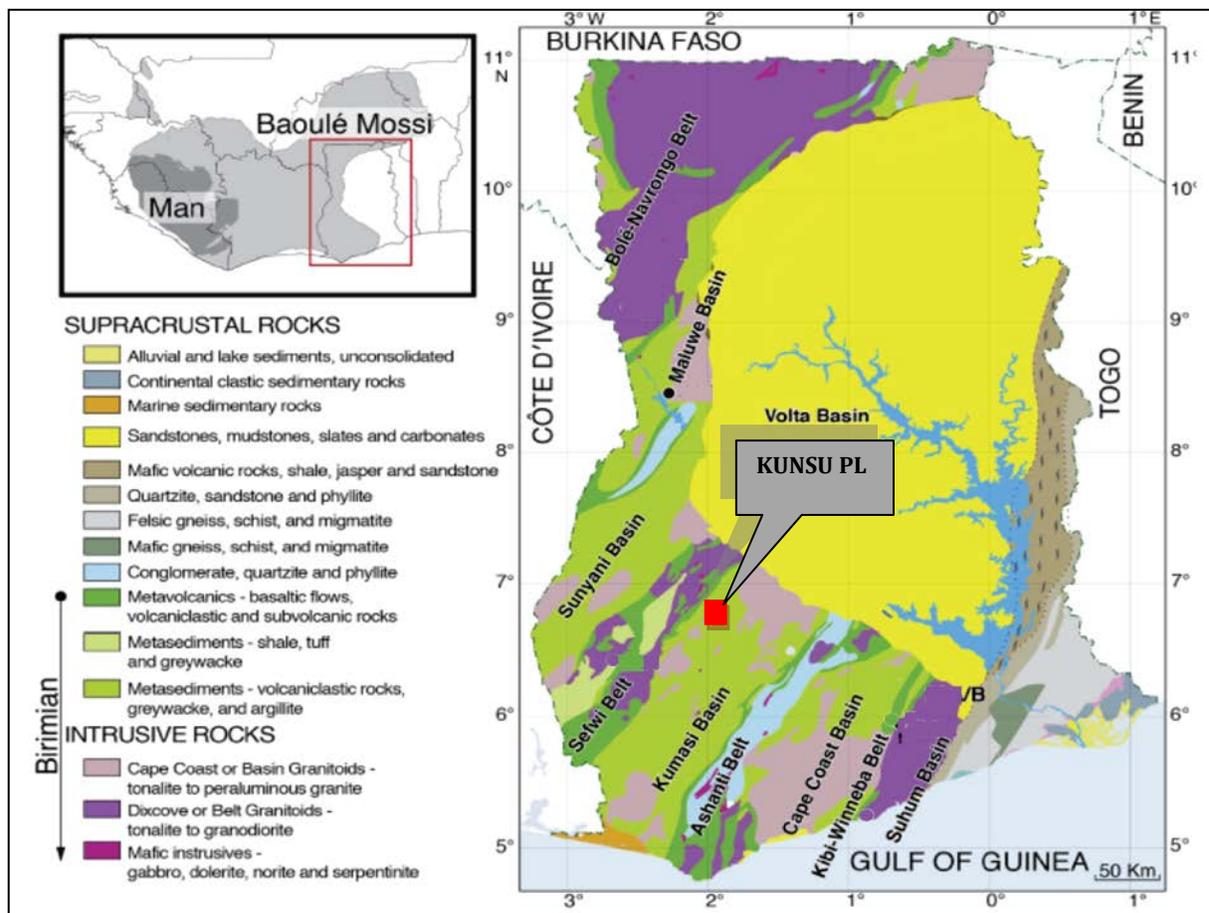
The Birimian rocks consist of narrow greenstone (volcanic) belts, which may be traced for hundreds of kilometers along strike but are usually only 20 km to 60 km wide. These belts are separated by wider basins of mainly marine clastic sediments. Along the margins of the basins and belts are considerable inter-bedding of basin sediments and volcanoclastic and pyroclastic units of the volcanic belts. Thin but laterally extensive chemical sediments consisting of chert and fine-grained manganese-rich and graphitic sediments often mark the transitional zones. The margins of the belts commonly exhibit faulting on local and regional scales. These structures are fundamentally important in the development of gold deposits for which the region is well known.

The Birimian has been extensively metamorphosed. The most widespread metamorphic facies is greenschist, although in many areas, higher temperatures and pressures are indicated by amphibolite facies. Multiple tectonic events have affected virtually all Birimian rocks with the most substantive being a fold-thrust compressional event (Eburnean orogeny) that affected both the volcanic and sedimentary belts throughout the region. Available data suggests that although there is considerable heterogeneity in the extent and styles of deformation in many areas, most of the structural elements have common features, which are compatible with a single, extended and progressive phase of regional deformation involving substantial northwest-southeast compression. The tectonic contacts between the metasediments and the metavolcanic sequences have often been the focus of economic attention, as these are the major positions for the major shear zones and quartz veins that host the world class gold deposits such the Obuasi, Prestea, Konongo, Bibiani, Akyem and Chirano gold mines. Gold is invariably associated with arsenopyrite and subordinate pyrite. Gold mineralization in the Birimian of Ghana has been extensively reviewed in the literature [e.g. **10, 11, 12**].

Three identifiable granitoid types have intruded the Birimian; the two most extensive being the Cape Coast (or basin type) and the Dixcove (or belt type) suites. Gold is noted to be hosted by belt type at Chirano, Yamfo, Abore and Mpasatia, among other deposits.

The Tarkwaian sediments overlie the Birimian, and consist of a thick series of arenaceous, and to a lesser extent, argillaceous sediments interpreted to be derived from the erosion of the Birimian. Gold hosted conglomerates and quartzites, termed the Banket Group, form sections of the basal portions of the series and have been the major focus of gold mining. The largest occurrence of Tarkwaian is centrally within the major

Axim-Konongo belt and hosts the gold deposits at Tarkwa, Teberebie and Iduapriem. Hydrothermal stock work mineralization also occurs within Tarkwaian quartzites and dolerite at Damang.



**Figure 7-1: Generalized Geological Map of Ghana [13] Showing the Location of Kunsu**

## 7.2 Property Geology

The Kunsu Project area is located within the Kumasi Basin in the Birimian of Ghana; a sketch of the geology extracted from the Geological map of Ghana (2010) is shown in Figure 7-2. The area is within the Asankragwa shear zone, a known gold-bearing structural zone along the centre of the Kumasi basin; a 60-75 km wide swath of folded metasedimentary rocks. The basin is fault-bounded to the southeast and northwest against volcanic rocks of the Ashanti and Sefwi belts respectively. Sedimentary rocks of the Kumasi Basin comprise thick monotonous sequence of thinly to thickly inter-layered argillites, wacke, and minor conglomerate. These rocks display increased folding with proximity to individual shear and splay zones. Available data indicate that the entire rock assemblage has been deformed and weakly to moderately metamorphosed. Minor

exposures of north-south trending post-Birimian mafic and dolerite dykes have been reported at the western portion of the concession.

The Kunsu prospecting licence is dominantly underlain by argillites, wacke and volcanoclastic rocks of the Kumasi Basin sediments. Lithologically, the host sequences comprise massive, thinly layered purple to black graphitic phyllite and massive to thickly bedded wacke facies rocks. The phyllites are marked by high angle foliation that may show relicts of folding. The greywacke are somewhat massive, but generally deformed. There is also interfolding of the units in highly strained corridors of the property. All the lithologies host quartz-carbonate-sulphide minerals of various sizes.

The Asankrangwa shear zone has similar characteristics to those that host the major gold deposits along the margins of the Ashanti and Sefwi Belts. World renowned gold mines such as AngloGold Ashanti Limited's Obuasi deposit and Newmont Ahafo Mine are located in the neighbouring Ashanti and Sefwi belts respectively. Similar vein deposits in the Ashanti belt, such as Prestea and Konongo, have robust gold production histories. Figure 7-3 shows the location of Kunsu PL in relation to some major gold occurrences.

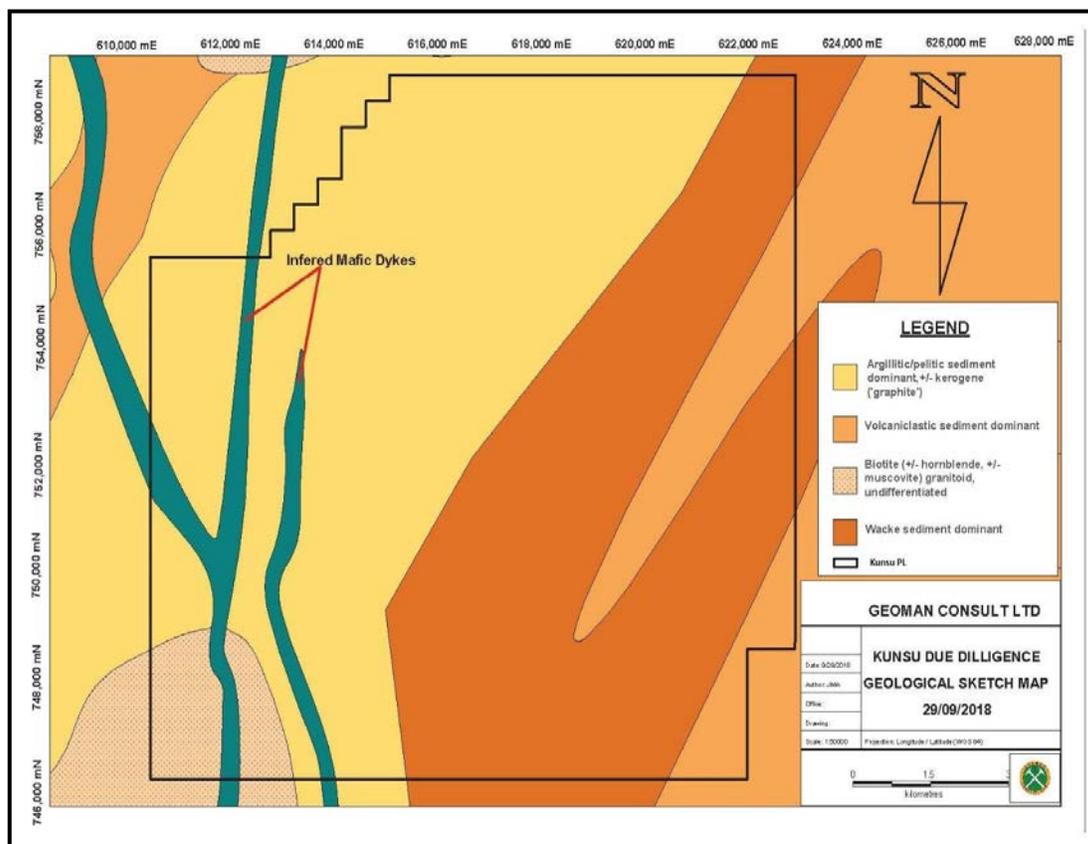
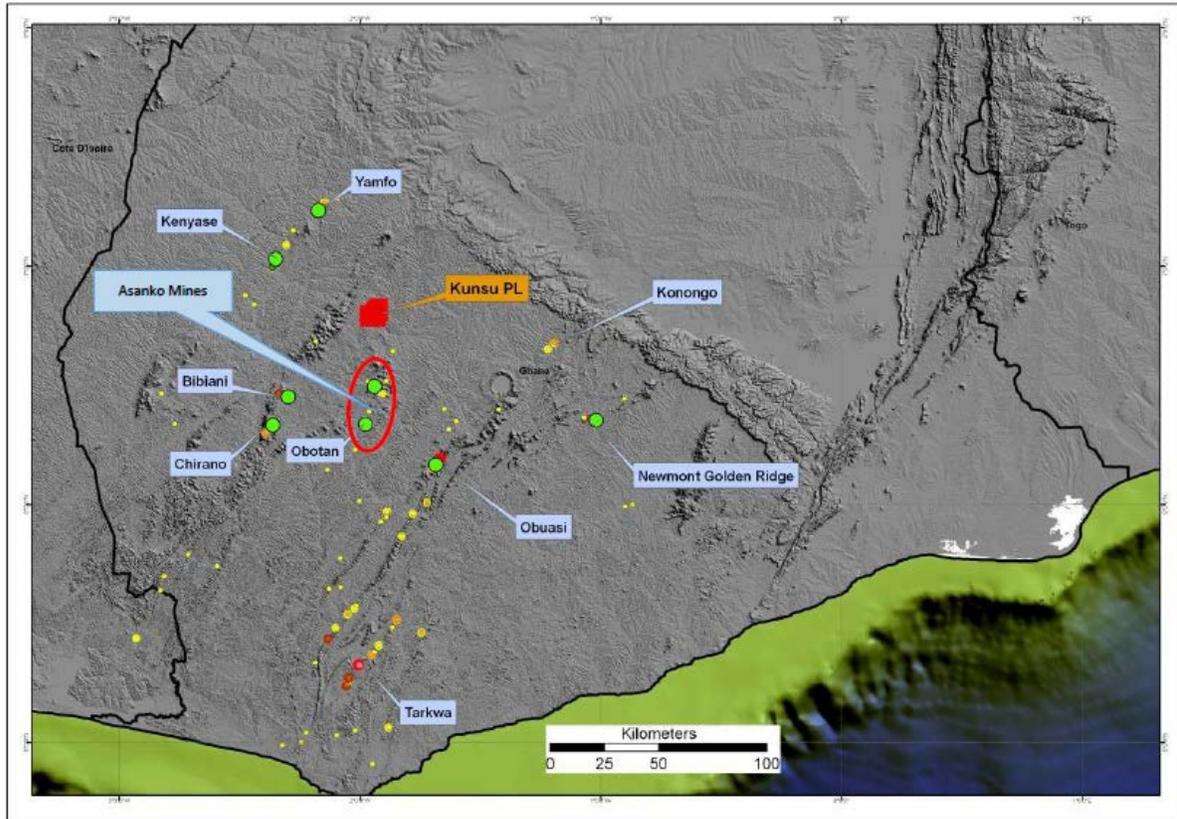


Figure 7-1: Geological Sketch Map of the Kunsu PL



**Figure 7-2: Location of Kunsu PL in Relation to some Major Gold Occurrences in SW Ghana (modified after Newmont)**

## **8 DEPOSIT TYPES**

The Kunsu tenement is within the Asankrangwa Belt of the Kumasi Basin. The shear zones host gold mineralisation in a manner similar to that of gold deposits along the margins of the Ashanti and Sefwi Belts. The Kunsu deposit is to the north of Asanko Gold Mine situated at Nkran and Essase. The deposit style is interpreted as quartz-sulphide ± carbonate hosted by brecciated wacke and graphitic phyllite, typical of quartz vein lode gold system. At Kunsu, generally, mineralization is inferred to be associated with quartz lode and veining with sulphide traces in the deformed metasediments.

## 9 EXPLORATION

Castle Peak commissioned GEOMAN to conduct a due diligence work on the Kunsu property. [14]. GEOMAN reviewed historical geological and assay data from the previous exploration work by Newmont and carried out airborne geophysical data interpretation and an initial field sampling followed by a supplemental field work which included IP survey, trenching and core drilling.

The limited supplemental work was carried out from 18th October 2018 to 22nd November 2018. The work involved:

- a) 11.6 Km electrical resistivity ground geophysical survey;
- b) 318.8 m of core diamond drilling;
- c) Reopening of 211.9 m of two old trenches from Newmont's work, of which a total of 178 m sections were sampled, and the excavation of 94.4 m of one new trench of which 80 m section was sampled.

A summary of the field activities completed are as follows:

### 9.1 Soil Sampling

Four (4) isolated soil anomalous areas which returned assay values ranging from 1,000 ppb, to 10 000 ppb from Newmont's soil sampling programme were re-sampled with duplicates. The samples were labelled and bagged and submitted to ALS laboratory in Kumasi, Ghana for Au analysis.

### 9.2 Pit Sampling

Eight (8) active illegal mining (galamsey) pits were sampled at the NE part of the concession. The pit profiles generally comprised of about 0.6 m of scree and humus material, 4 m mottled clay zone with pisolitic material and a gravel layer of about 2 m. A total of sixteen (16) representative samples comprising composite samples and duplicates were collected from the gravel horizons grading into the saprolitic zone. Samples collected generally have clayey matrix, with quartz pebbles and saprolite material. The samples were appropriately labelled and bagged and submitted to assay laboratory Au analysis.

### 9.3 Assay Results

The gold assay results returned from ALS for the selected soil and pit samples were very low, although consistent, with gold concentrations within background values of 26 ppb to 48 ppb. Only one pit sample returned a value of 448 ppb. The sample logs and assay results are provided in the data repository.

#### **9.4 Airborne Geophysical Data Interpretation**

Aeromagnetic and radiometric data was acquired from the Ghana Geological Survey Authority and processed, analysed and interpreted using Oasis Montaj. The objectives were to use the data in aid to mapping out the various geological units, alterations and reveal sub-surface structural trends within the Kunsu PL due to lack of outcrops and rock exposures. Integrated processed images produced include the Total Magnetic Intensity (TMI) and Geophysical Interpreted Map.

The processed image (Figure 9-1) shows two main geological units characterized by unique magnetic signatures. The northeast and west to the southwest sections of the concession are inferred to be dominated by rocks with relatively higher magnetic susceptibilities than it is associated with the formations in the northwest through the central to the southeast areas. The boundary between the different magnetic compositions at the western side of the property appears to be dominated by linear structures, inferred to be trending in the NNW-SSE and N-S directions. The magnetic signatures of these linear features compared to the other parts of the area may suggest different lithological compositions. And from their linear characteristics, these are interpreted as cross-cutting structures such as dykes and/or faults. The magnetic signatures exhibited in the central to the south-eastern parts of the property suggest the presence of geological units with low magnetic composition.

A geophysical interpreted map was generated from the data (Figure 9-2). The delineated zone in the mid-section appears to be characterized by relatively high concentration of Potassium (K) with corresponding low Uranium (U) and Thorium (Th). The inferred zones further indicate subtle NE-SW trend with a probable displacement in the N-S trend.

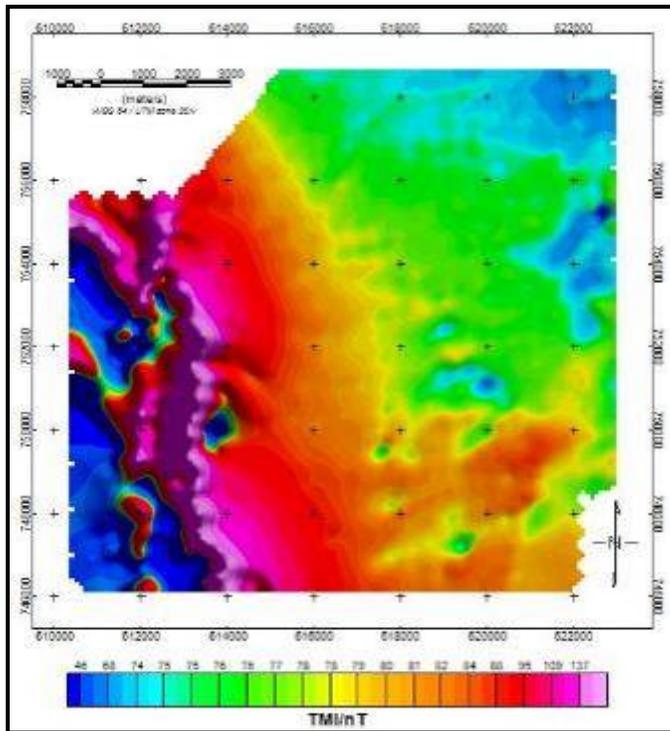


Figure 9-1: Total Magnetic Intensity (TMI) Map

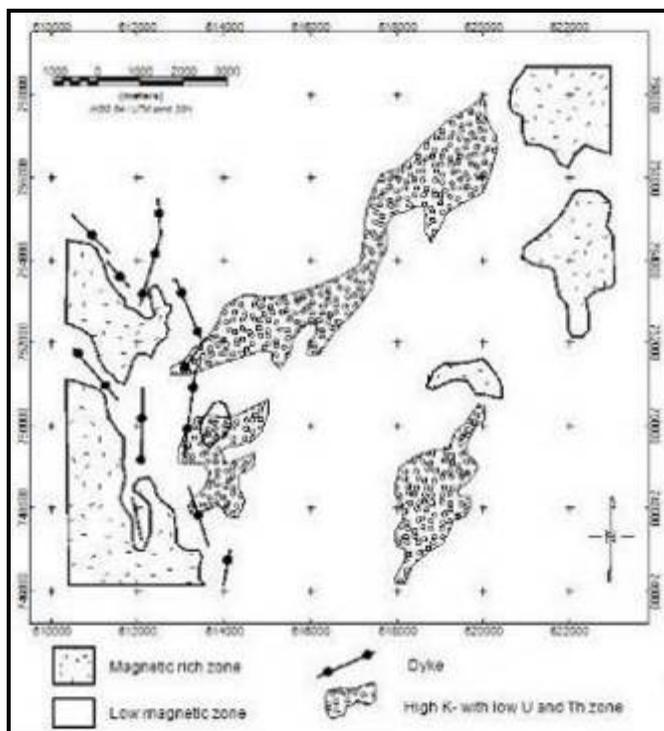


Figure 9-2: Geophysical Interpreted Map.

### 9.5 Review of Newmont’s Historical Soil Geochemical Data

Re-processing of historical soil geochemical data on the Kunsu concession was undertaken to map out potential gold in soil anomalous trends. Statistical models were used to establish thresholds which also accounted for the regolith regime in the interpretations of the soil geochemical data. The method defined the gold indicators based on the respective established thresholds and also prioritized the anomalies based on probability rankings. Figure 9-3 is the result of the combination of the transformed gold in soil data for all the regolith regimes. A probability Kriging was then performed on a second threshold derived from the combined transformed data to identify prospective anomalies. The anomalies are ranked between 0 and 1; with “1” being most prospective anomaly, and “0” being less prospective zone.

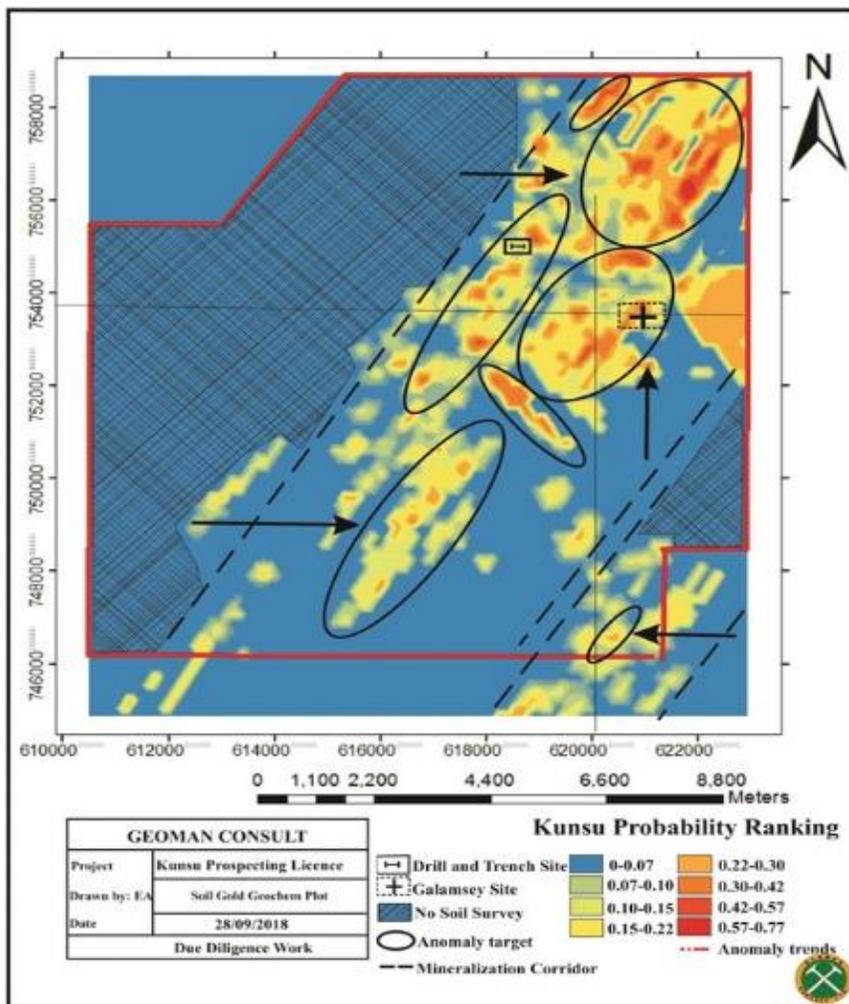


Figure 9-3: Probability Anomaly Rankings of Au in Soil Concentrations.

From Figure 9-3, two prospective mineralization corridors have been identified, within which are six NE-SW trending anomalies and one NW-SE anomaly. Gold assays in soils ranging from 1000 ppb to 10 000 ppb are associated with the mineralization corridor at the SE of the concession. Newmont tested one of the targets with trenches followed by drilling. But it appears the other prospective anomalous targets have not been tested for bedrock mineralization. The main anomalous corridor from the gold in soil trend is NE-SW. This follows the regional structural trend. The minor NW-SE trend may relate to a subtle and cross-cutting structure. The intersection area of the two anomalous trends is a potential zone for hosting of significant mineralization. This assumption requires further investigation by the application geophysical means, since outcrops are scarce on the concession.

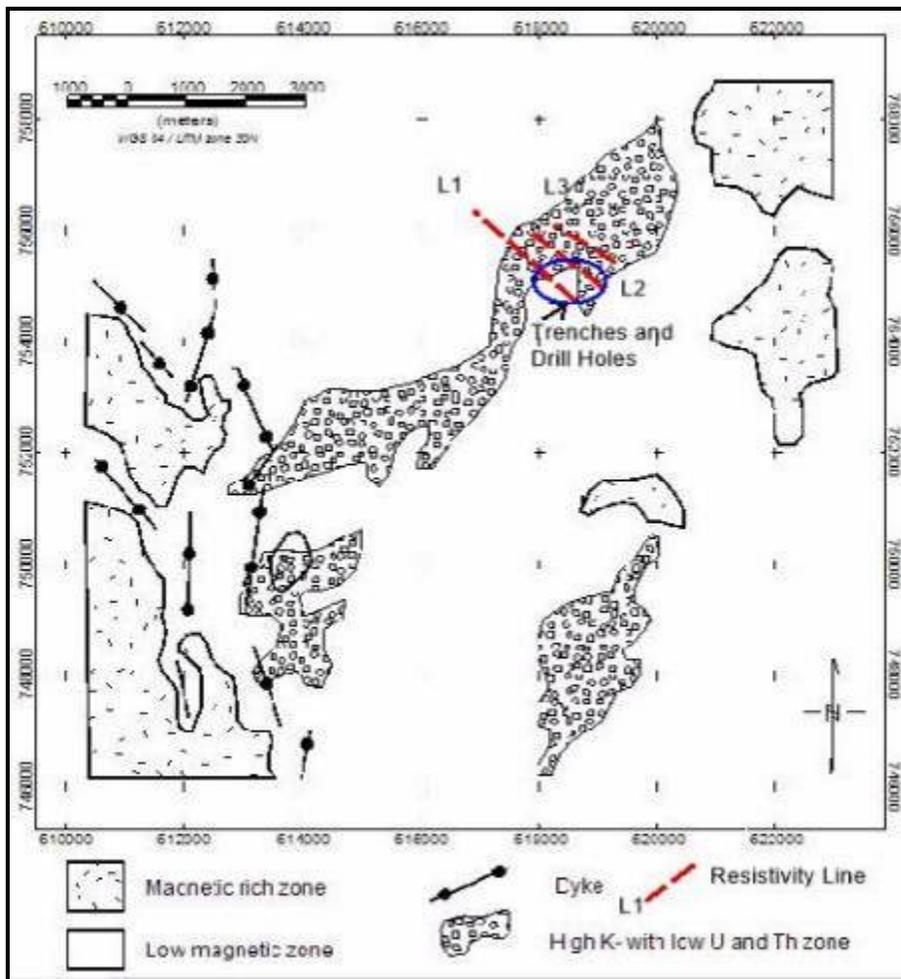
## 9.6 Ground Geophysical Survey

Limited supplemental field work was carried out on the Kunsu Property from 18<sup>th</sup> October 2018 to 22<sup>nd</sup> November 2018. Electrical Resistivity surveys involving Tomography and Azimuthal techniques were conducted over selected sections in the northern grid areas of the property where Newmont carried out its drilling campaigns. The objectives were to provide cross-sections of electrical resistivity beneath the survey lines to reveal the distribution of materials of contrasting electrical properties as well as their variations with azimuth. The tomography technique was used to map the depths to different geological units or lithologies along three selected lines (Figure 9-4).

In this technique, the geophysical data were collected in line with the normal operating procedures involving a multi-electrode set-up, with the ABEM LS Terrameter resistivity system using the Wenner-Schlumberger electrode array type. On each line the setup involved 6 cables with 61 electrode take outs, spaced at 20 m intervals. This setup ensured an average depth of investigation of approximately 100m below ground level.

The field survey involves the injection of a D.C. electrical current into the ground at various electrode spacing, along each section surveyed using stainless steel electrodes to ensure good electrical contact at each survey station. The dataset was processed using the standard processing routines in RES2DINV software to derive modelled electrical cross-sections of the subsurface.

Multiple azimuthal surveys with current electrode spacing of 60 m, 100 m, 140 m, 180 m and 300 m were carried out over the drill-hole GKUDD002 with measurements at intervals of 15° to determine the variations of apparent resistivity with azimuth at different depth along the drill hole.



**Figure 9-4: Electrical Resistivity Surveyed Lines Projected on the Airborne Geophysical Interpreted Map.**

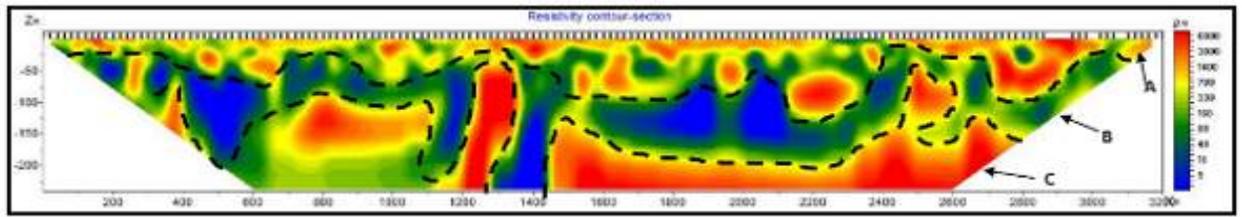
## 9.7 Ground Geophysical Survey Results and Interpretation

The resistivity survey results are presented as colour sections in Figure 9-5, Figure 9-6 and Figure 9-7. These represent pseudo-sections of the subsurface resistivity distributions along the three lines surveyed. The three pseudo-sections indicate that the areas surveyed are characterized by subsurface materials with resistivity values ranging from about 10 to over 6000  $\Omega/m$ . Along the lines the characteristic pattern of the resistivity distributions suggest the presence of three layers (labelled A, B and C in the figures).

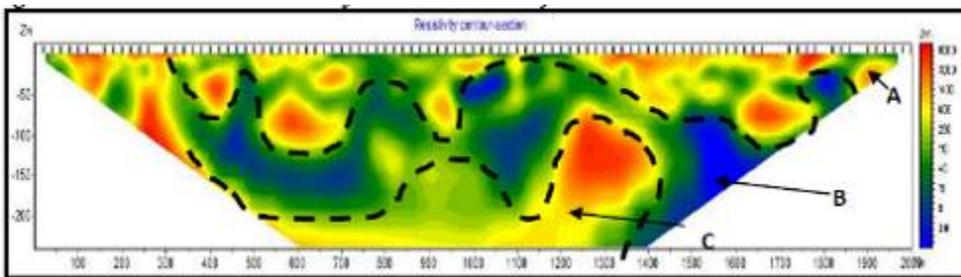
The upper sections, (labelled A) along the three lines are dominated by materials with resistivity values ranging between 1500  $\Omega/m$  and 3000  $\Omega/m$ . Starting from the surface, this feature is characterized by varying bottom depths averaging about 75 m. Underneath the upper layer, materials of relatively low resistivity values (B: 10  $\Omega/m$  – 200  $\Omega/m$ ) and probably reaching average depths of 150 m are encountered. The

resistivity values of this layer suggest the presence of a significantly conductive material, probably associated with the graphitic phyllite materials and in wackes in the area. Beneath layer B are materials (C) inferred to be of higher resistivity than the upper two layers. The high resistivity characteristics of layer C probably relates to the quartz stringers and sulphide materials at depth.

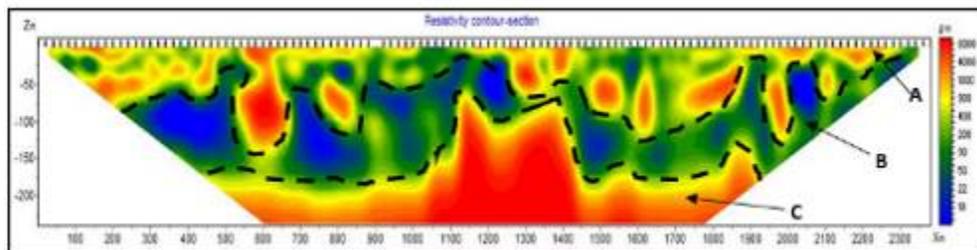
The azimuthal resistivity surveys carried out at different AB and MN spacing suggest that the subsurface resistivity values in the area investigated are anisotropic. The resistivity trends vary widely, both vertically and laterally. Schlumberger set up show the multiple resistivity trends with the prominent ones in 060°/240°, 100°/280°, 170°/350° directions (Figure 9-8a-f).



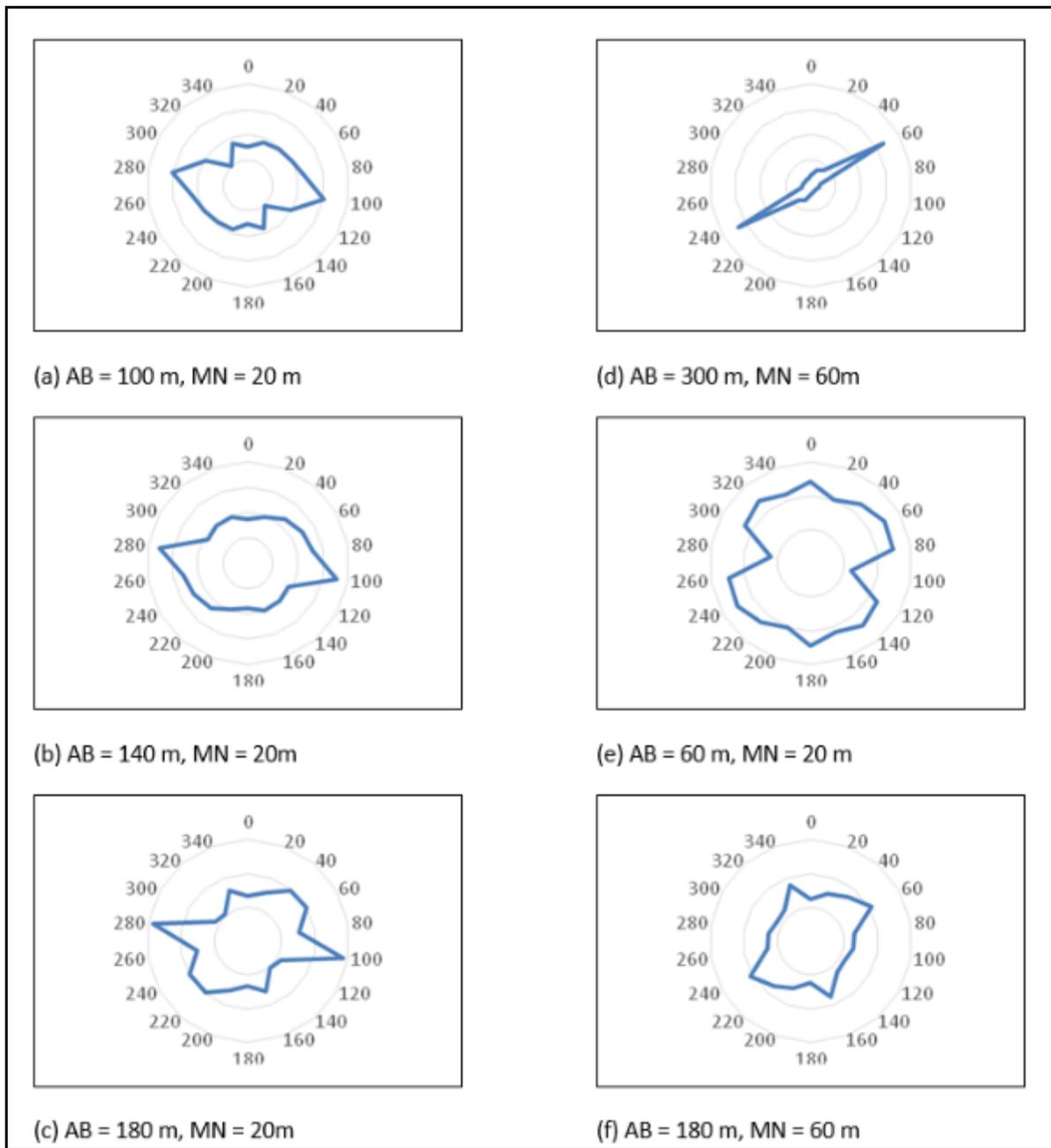
**Figure 9-5: Electrical Resistivity Pseudosection of Line 1**



**Figure 9-6: Electrical Resistivity Pseudosection of Line 2**



**Figure 9-7: Electrical Resistivity Pseudosection of Line 3**



**Figure 9-8: Azimuthal Resistivity Trends.**

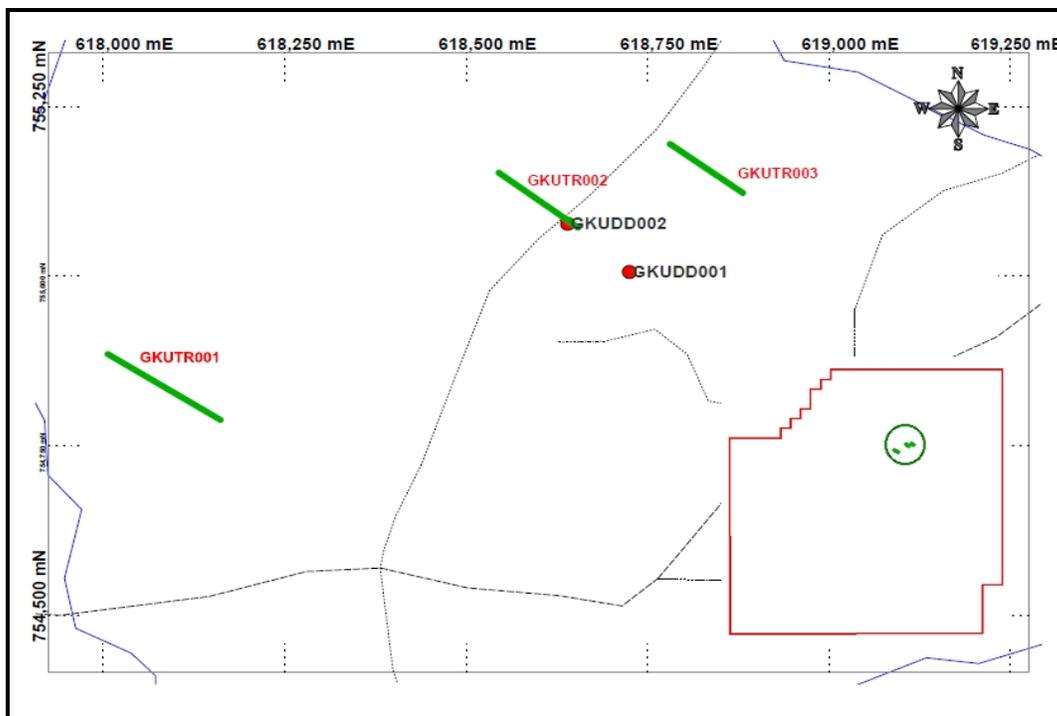
## 9.8 Trenching

The locations of the trenches sampled during the supplemental field work are shown in Figure 9-9. Two of the trenches with a total length of 211.9m were old Newmont trenches, KUTR007 (identified as GKUTR001 in the current work is 124.8m long, and a total of 111m sections were sampled) and KUT001 (identified as GKUTR002 in the

current work is 87.1m in length of which 67m was sampled). Because KUTR007 ended in mineralization during Newmont's work, it was extended 20m to the NW.

These two trenches, each of which recorded significant gold assay values from Newmont's work, were oriented at  $308^{\circ}$ , with 500 m separation along NE-SW trend; portions of the trench zones were also drilled by Newmont. The other trench (identified as GKUTR003 in the current work is 94.4m of which 80 m was sampled due to the exclusion of 14.4 m of disturbed and embankment zones), was new and excavated to test the surface mineralization of  $2\text{m}@1.16\text{g/t}$  encountered at 2-4m in Newmont's drill hole KURC0037.

The reopening and digging of new trenches were done manually using pick and axe, but followed the Newmont standards (Figure 9-10) The trenches which were normally 1 meter wide and 3 meters deep were benched at every 5m intervals to prevent collapse. Each trench area was fenced off for safety reasons. Trenches dug were mapped for structures, and sampled on the trench floors horizontally at 1 meter composite sampling intervals at the northern walls. A total of 285 samples comprising 258 trench samples and 27 QAQC samples were submitted to the ALS in Kumasi for gold analysis. All the trenches have since been backfilled.



**Figure 9-9: Sampled Trenches Locations in Relation to New Drill-Holes.**



***Figure 9-10: Typical Trench Architecture at Kunsu Showing Embankments.***

## **9.9 Trench Results**

The Au assay results from the trench samples are provided in the data repository and the data plots are shown in Figures 9-11 and 9-12. GKUTR001 and GKUTR002 recorded Au mineralization which warrants further investigation. GKUTR003 assay results return relatively low but consistent background Au values.

The notable and significant intersections are: GKUTR001: 16m @ 0.35g/t, and GKTR002: 65m @ 0.22g/t. The new trench results confirm Newmont's reported results, with even some improvement. This is compelling evidence to suggest that the Kunsu property is hosting Au mineralization.

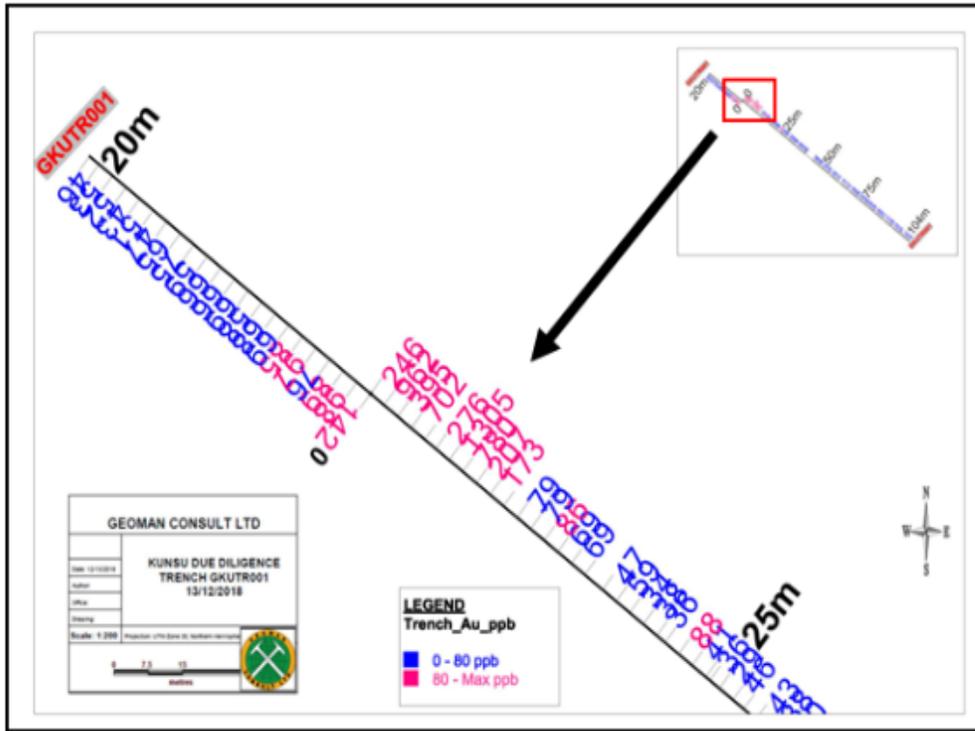


Figure 9-11: Trench GKUTR001 with Au intercept of 16m @ 0.35g/t.

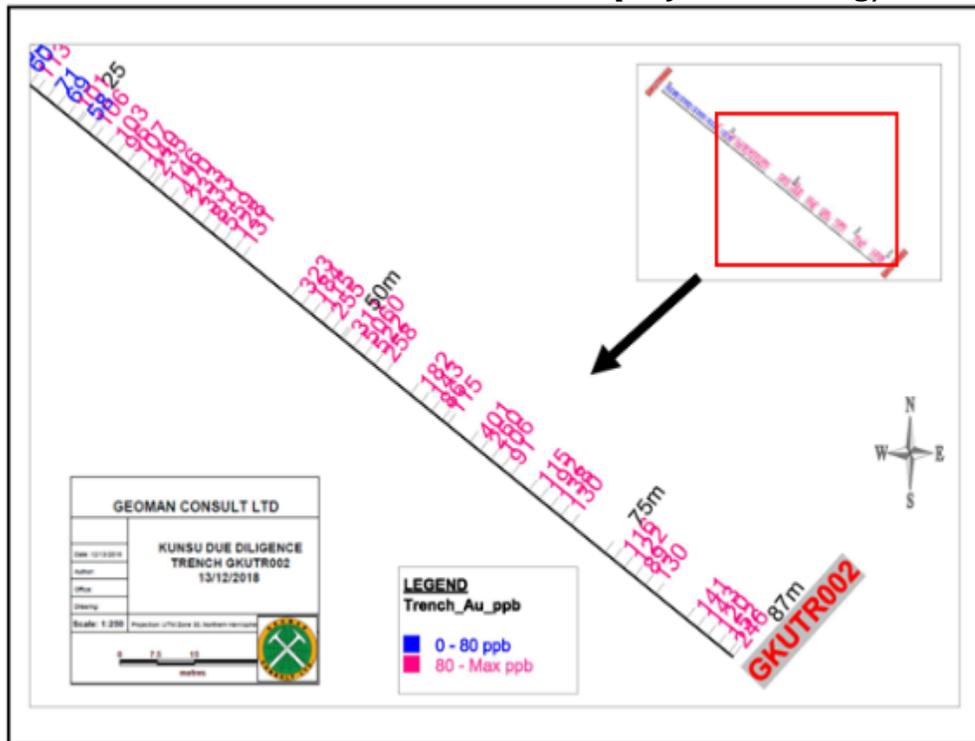


Figure 9-12: Trench GKUTR002 with Au intercept of 65m @ 0.22g/t.

## 10 DRILLING

### 10.1 Diamond Core Drilling

Two core holes were drilled in the month of November, 2018 to confirm the two of the Newmont’s historical drill holes, KURC0029 and KURC0021 which returned significant Au mineralisation of 54m @ 3.18g/t) and 28 m @ 5.55g/t) respectively.

Two drill-holes with identification numbers GKUDD001 and GKUDD002 (Figure 10-1) were diamond core-drilled during this exercise.

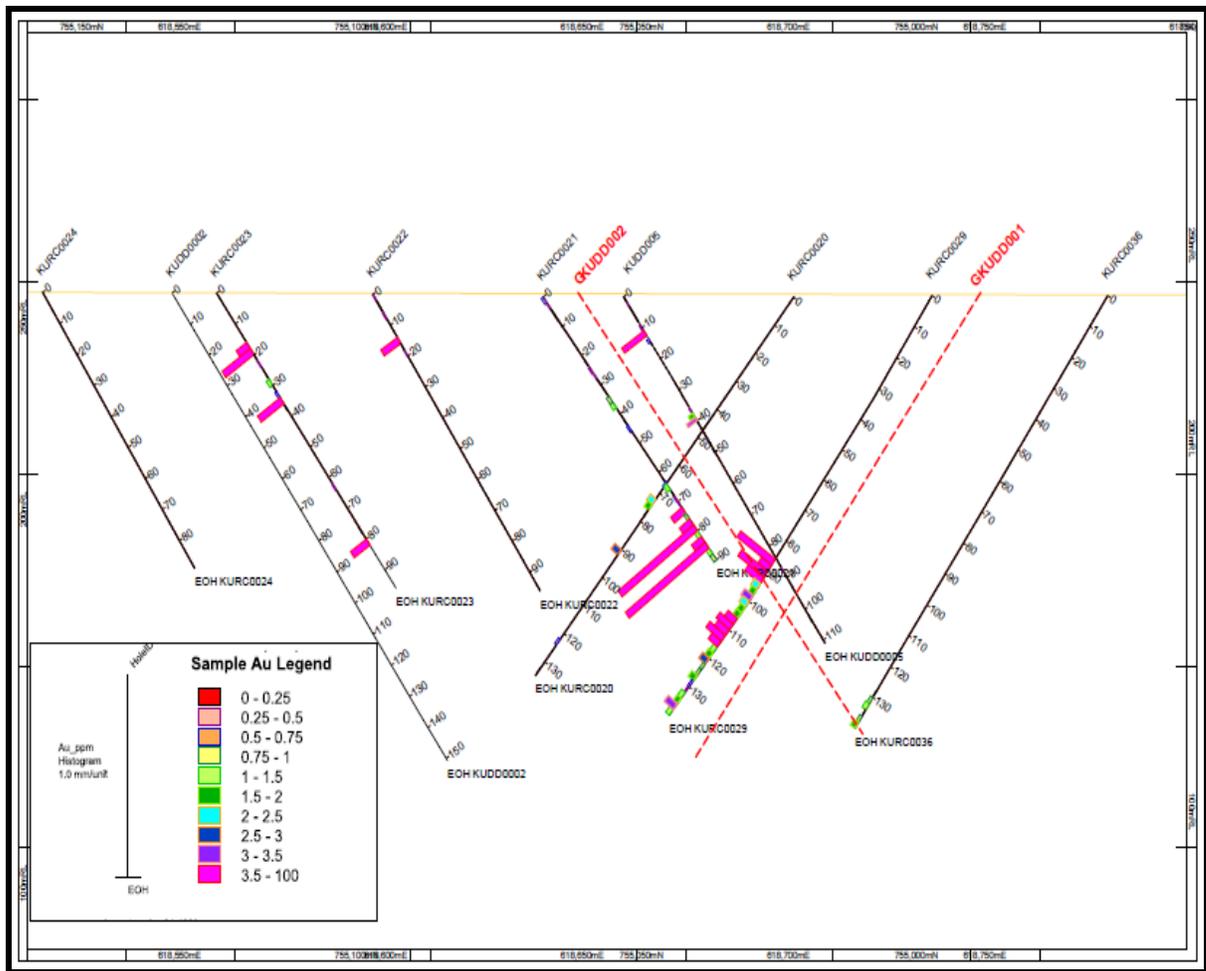


Figure 10-1: GKUDD001 and GKUDD002 within Historical Drill-Holes.

## 10.2 Drill-Hole GKUDD001

GKUDD001 was drilled to check the down-dip mineralization intersected in KURC0029 which is also along the same drill-hole sections as KURC0020 and KURC0036. A zone of 54 m wide mineralized area, with an average Au grade of 3.18g/t, was encountered in KURC0029 during Newmont's drilling campaign, and this appears to be the hole with the widest mineralized intersection zone recorded. Sample photographs of selected core sections showing quartz veining in graphitic phyllites are shown in Figure 10-2.



**Figure 10-2: Selected Core Sections from Hole GKUDD001.**

## 10.3 Drill-Hole GKUDD002

GKUDD002 was drilled to test the extension at depth of three sets of mineralized zones as well as down-dip mineralization intercepted by Newmont in previous holes KURC0021 (28m @ 5.56 g/t Au), KURC0029 (54m @ 3.18g/t Au) and KURC0036 (12m @ 0.85 g/t Au) respectively, also to check Newmont's results in KUDD005. GKUDD002 was extended to intersect mineralization at bottom of KURC0036 which ended in mineralization with a grade of 1.7 g/t.

#### **10.4 Down-Hole Survey**

The drill-holes were surveyed down-hole at initial depths of 6m and 9m on each hole and subsequently on approximately 30 m down-hole intervals, using a Reflex EZ-Shot®, an electronic single shot instrument manufactured by Reflex of Sweden.

The diamond-drilled core was oriented by a combination of the spear technique, the 2iC Ezy-mark orientation device and Reflex ACT II electronic orientation system. Limited structural and geotechnical data were collected from the oriented cores. The drill-hole collars were surveyed by a Garmin handheld GPS device using the previous drill-holes within the area as a reference to improve the accuracy of the points.

#### **10.5 Drill-Hole Lithologies**

Lithologies sampled from the drill-holes comprise purple to black graphitic phyllites with carbonate in the matrix. This was underlain by massive to thickly bedded wacke that may be inter-layered with the phyllite at places. The phyllite has high angle foliation planes showing relicts of interfolding. The wackes are somewhat massive, volcanoclastic, but generally deformed. All the lithologies host quartz + sulphide ± carbonate minerals of various sizes. A typical weathering profile from top to bottom consists of lateritic horizon, saprolite, oxidized bedrock, and fresh bedrock (there is often a gradational zone of saprock between the saprolite and oxidized bedrock).

#### **10.6 Au Mineralization**

Gold mineralization in the cores is observed to occur in the quartz-carbonate veins and discontinuous quartz stringers and veinlets hosted within parallel NE-SW trending, moderately to steeply west-dipping bodies of strongly foliated phyllite hosting fine grained disseminated sulphide minerals. Mineralization is more prolific in the wacke facies rocks and occurs in the highly strained zones with disseminated fine sulphide minerals and brecciated quartz or quartz stock-works. Figure 10-3 showing core sections, (A) is a brecciated quartz horizons in KUDD002 and (B) is a sulphide mineral along the margins of quartz hosted in greywacke (wacke) at 154.5-155.5m in hole GKUDD001. This zone recorded mineralization of @24.8g/t. The mineralization associated with the graphitic phyllites occurs predominantly along the high angle foliation planes with disseminated sulphides and along the selvages of quartz veins.



**Figure 10-3: Core sections; (A) Quartz-breccia; (B) Quartz-Sulphide Mineralization**

### **10.7 Drill-Hole Au Assay Results**

The Au assay results obtained from GKUDD001 and GKUDD002 along the holes have been plotted and compared to Au values in KURC0021, KUDD0005, KURC0029 and KURC0036. The Au results obtained from the drilling are more patchy, lack continuity, but repeat isolated intersections of significance. GKUDD001 recorded a high value of 24.8g/t near the end of the hole at 154.5m -155.5m, this is significant, and suggests that mineralization could be at depth.

## **11 SAMPLE PREPARATION, ANALYSIS AND SECURITY**

The following paragraphs describe the Newmont and Castle Peak sample preparation, analysis and security procedures for both surficial sampling and drilling programmes. The information was provided by GEOMAN, Castle Peak's consultant on the Kunsu Project.

The Author reviewed the QAQC procedures and results for Newmont and Castle Peak programmes.

### **11.1 Historical Sampling and Security by Newmont**

The surficial samples were taken between 30 cm to 40 cm usually in the B-horizon. Trench samples were taken in the saprolitic horizons on the trench floors horizontally at 1 meter sampling intervals at the northern walls. For each sample, 3-4kg was placed in sealed and labelled plastic bags and sent to storage.

Aircore and RC samples were systematically collected every metre for the entire length of the boreholes. However, 3-4kg of 2m composite samples from the cyclone underflow is placed in polypropylene bags labelled with an identification and drill borehole numbers.

Core boxes from the rig are received on a daily at Newmont base Camp at Kunsu project site. Drill core is logged and sampled by experienced and qualified geologists. Samples usually range from 0.5 m to 1.0 m in length and, whenever possible, sample contacts respect lithological contacts, the presence of mineralization, alteration type and vein type or vein density. Sampled core intervals are identified by geologists with marks on the core and sample tags placed at the end of the interval. Core samples are sawed in half (NQ core diameter) and quarter (HQ core diameter). Sawing is carried out by an experienced technician who follows the geologist's markings using an electric core saw. One half of the core is placed in a plastic bag with the matching sample tag while the other half is replaced in the core box and stored for future reference. Individual sample bags are placed in large bags along with the list of samples. Samples are usually shipped to the laboratory once a drill hole has been fully sampled. The laboratories usually offer their own transport service.

Rock strength, RQD percentage and rock defects including frequency, orientation, type and characteristics were not reported. However, the author is of the opinion that the sampling procedures are adequate and comply with industry best practices.

### **11.2 Sampling and Security by Castle Peak**

Trenching was done manually to safe depth of about 3.5m. Samples were taken in the saprolitic horizons on the trench floors horizontally at 1 meter composite sampling intervals at the northern walls. For each sample, 3-4kg was placed in sealed and labelled

plastic bags and sent to storage. Trenching and sampling were supervised by a qualified geologist.

The drilling programme was conducted by Geodrill Ghana Limited (Geodrill), a reputable and Toronto listed (TSX: GEO) independent drilling contractor under the supervision of a qualified geologist. The set up was a Sandvik DE710 crawler mounted drill rig on a single shift. The drilling of GKUDD001 started with HQ3 triple tube drilling to the depth of 101.8 m after which a changeover to NQ. A total depth of 159.5 m on an azimuth of 318° and dip of -55° was achieved, Drill-hole KUDD002 commenced with HQ sized rods until a changeover to NQ at a depth of 74.4 m. The hole was drilled to a total depth of 159.3 m on an azimuth of 145° with a dip of -55°.

Drill cores were placed in labelled plastic trays and depth marker blocks inserted, and digitally photographed. All field samples were transferred to a secure core facility. Core samples are collected from half core cut lengthwise with a diamond saw, on regular 1-meter intervals for both HQ and NQ diameter cores. Whenever possible, lithological contacts and mineralization are considered. 0-80m of hole GKUDD001 was taken as 2m composite samples based on the low Au values recorded in that horizon in previous drill holes.

The core cutting was done using electric diamond blade core saw; a Wurth WAC 120 electric core cutter (Figure 11-1). The core cut was made 1cm to the right in a downhole direction of the orientation line, with the left half retained, and the other half of the split core broken up and placed in an assay tagged sample bag by the geologist for assay. Sample information is recorded in a database. In the upper oxide zones where the core was too friable for diamond saw cutting, the procedure was to cut the moist material using a putty knife. The split cores were stored in a secured core yard as reference samples. Castle Peak shipped the samples to the ALS laboratory in Kumasi in two batches.

Although rock strength, RQD percentage and rock defects including frequency, orientation, type and characteristics were not reported, the author is of the opinion that the sampling procedures are comply with industry best practices.



**Figure 11-1: Core Cutting Process**

### **11.3 Sample Preparation and Laboratory Analysis**

All surface and drill samples collected by both Newmont and Castle Peak on the Kunsu property except the 37 stream sediment samples were prepared and analysed at the ALS facility in Kumasi. The stream sediment samples collected by Newmont were sent to Newmont Laboratory in Perth Australia for Bulk Leach Extractable Gold (BLEG) and Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP – AES) multi-element analysis.

The ALS laboratory in Kumasi, is part of the ALS Group of laboratories that operates under a global quality management system accredited to ISO 9001:2008 and also participates in international proficiency testing programmes such as those managed by Geostats Pty Ltd. ALS is commercial laboratory independent of Newmont and Castle Peak with no interests in the Project. The laboratory has ISO/IEC 17025 accreditation.

Sealed and tagged bags of samples upon arrival at the laboratory, goes through the laboratory's chain of custody procedures and protocols for analysis for gold by standard

Fire Assay (FA) and Atomic Absorption Spectroscopy finish (AAS). A Laboratory Work Order (LWO), detailing the number of samples; the preparation procedures; and the analytical procedures, were compiled for each sample consignment. Sample preparation procedures for routine fire assaying are weighed, dried, give login bar codes, fine crushed to >70% passing 2mm. A 250g subsample is split by riffle splitter and pulverized to >85% passing 75mm. This subsample is sent for assay where a 50 g subsample is taken and fire-assayed with AAS finish. The analytical methods used for the historical assay were Au-AA22 and Au-AA26. Both methods analysed gold using 50g fire assay with AAS finish. The Au-AA22 has a low detection limit of 0.002ppm and that of Au-AA26 has an ore grade detection limit of 0.01ppm. In 2018, ALS analysed all samples received by Fire Assay (FA) with AAS Finishing. The surface samples were analysed with low detection limit of 5ppb (Au-AA24). The drill core samples were analysed with detection limit of 0.01ppm (Au-AA26)..

#### 11.4 Quality Assurance and Quality Control (QAQC) Programmes

Both Newmont and Castle Peak implemented QAQC protocols for surficial and drilling drill core samples including the insertion of duplicates, blanks and Certified Reference Materials (CRM) as standards into the sampling stream.

##### 11.4.1 Historical QAQC by Newmont

The QAQC programme instituted by Newmont from 2010 to 2013 for both surface and drill programme included the insertion of field duplicates, coarse blanks and CRM. In total Newmont collected and analysed 11086 (including 443 QAQC) samples. On the average one QAQC sample was inserted into a sample stream for every 24 samples, which implies there was QAQC sample in each ALS analytical batch. The results of these inserted control samples are summarized in Table 11-1.

Table 11-1: Newmont’s 2010-2013 Sampling with QAQC Insertions

Exploration Program	Original Sample	Field Duplicates	Blanks	CRM	Total	QAQC	%
Stream	36	1	0	0	37	1	3
Pit	87	6	2	2	97	10	11
Soil	3748	42	18	38	3846	98	3
Trench	1297	30	16	29	1372	75	6
Aircore	2554	33	28	58	2673	119	5
RC	1959	29	20	43	2051	92	5
Drill Core	962	16	9	23	1010	48	5
<b>Total</b>	<b>10643</b>	<b>157</b>	<b>93</b>	<b>193</b>	<b>11086</b>	<b>443</b>	<b>4</b>

The discussion below details the results of the blanks for all samples, CRM and duplicates for drill core samples only.

**Blank Samples:** Ninety three ((93) coarse blank samples were used by Newmont in the 2010-2013 exploration programme. The coarse blank sample was derived from barren crushed rock from Newmont Ahafo mine. It was described as Ntotroso in the logs. Each sample of the blank material was placed into a plastic sample bag and given a sample identification number ALS.

The eighteen (18) blanks inserted into soil programme recorded values ranging from below detection limit to 34ppb. The sixteen (16), inserted into the trench programme returned grades ranging from the expected detection limit to 16ppb. The twenty eight (28), inserted into the Aircore sampling stream had twenty four (24) returning values below the expected detection limit, three (3) returned a value of 10ppb and one (1) recorded a grade of 20ppb. A total of twenty (20) inserted into RC programme, two (2) recorded 20ppb, two (2) recorded values below expected detection limit and sixteen (16) returned a value of 10ppb. Finally, nine (9) inserted into drill core samples recorded values below 10ppb. The QAQC quality control protocol used in analysing the blank samples is that, if any blank yields a gold value above 10x the detection limit (i.e., 100 ppb or 0.1ppm) then that represent a failure. None of the blank samples analysed by Newmont failed.

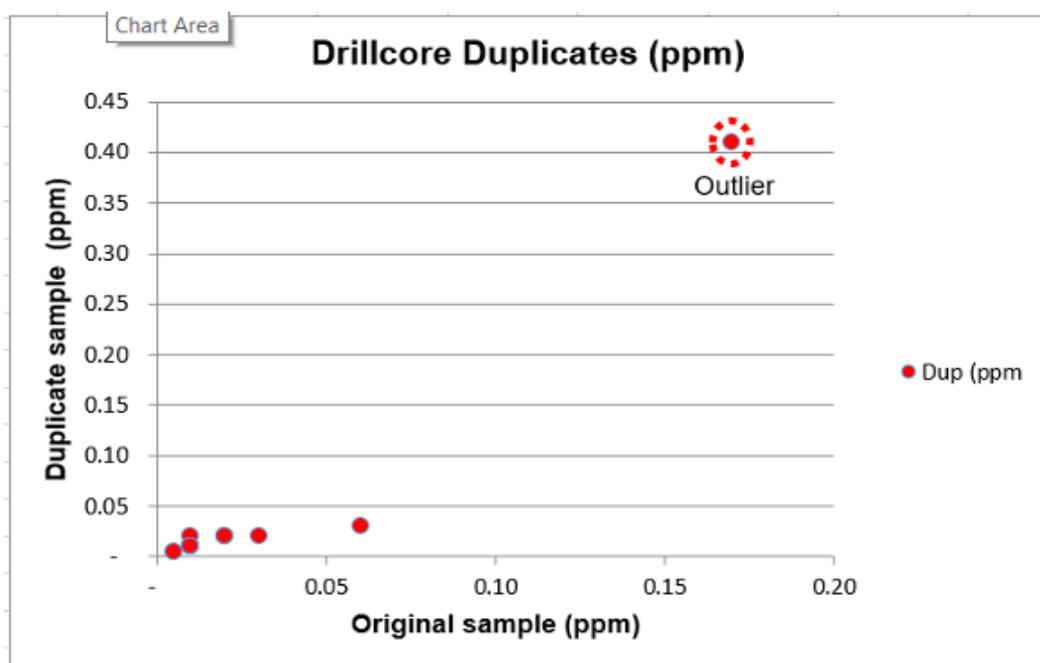
**Certified Reference Materials (CRM):** Newmont used one hundred and ninety three (193) CRMs to monitor and evaluate the analytical accuracy and precision in all sample assays performed at ALS by Newmont from 2010 to 2013. However, only twenty three (23) CRMs inserted into drill cores are discussed in this report. A total of fifteen (15) different CRMs were used in the drill core sampling programme. Two sets of CRMs were analysed to have different certified values in Table 11-2. G303-2 had two (2) and G904-3 had four (4) respectively. The source of the CRMs could not be found in the historical data to verify name accuracy.

All the 23 CRMs inserted in the core samples were analysed and statistically 95% were found to lie within two standard-deviations (2SD) of the certified value. One (1) CRM failed as it was analysed to be outside of the three standard-deviation (3SD) limits. This failure could be due to error in the labelling of the CRM. The CRM analyses indicate a slight low bias in the ALS gold assays relative to the CRMs, as most ALS assays of the CRMs (17 out of 23) were less than the certified means

Table 11-2: Newmont's CRMs

Sample Type	CRM Name	Certified Value (ppm)	1 Standard Deviation (ppm)	No. of CRM Analysed	Outside +/-2SD	Outside +/-3SD
Drill Core	G303-2	0.807	0.07	1	0	
Drill Core	G303-2	0.81	0.08	3	0	
Drill Core	G306-3X3	0.9	0.11	1		1
Drill Core	G306-3X4	1.16	0.12	1	0	
Drill Core	G307-1	3.37	0.1	1	0	
Drill Core	G308-3	2.5	0.11	1	0	
Drill Core	G904-3	1.66	0.22	3	0	
Drill Core	G904-3	1.54	0.21	1	0	
Drill Core	G904-3	1.37	0.2	1	0	
Drill Core	G904-3	1.29	0.19	1	0	
Drill Core	G904-7	1.58	0.09	1	0	
Drill Core	G906-3	0.31	0.04	2	0	
Drill Core	G906-8	7.24	0.27	4	0	
Drill Core	G999-1	0.82	0.06	1	0	
Drill Core	G999-8	3.42	0.19	1	0	

**Field Duplicates:** One hundred and fifty seven (157) field duplicates were collected analysed by Newmont. However, sixteen (16) of the field duplicates analysed are discussed in the report. The drill core field duplicates are splits of drill samples taken at the same time as the original sample splits are collected during drilling. Field duplicates are mainly used to assess geologic variability and sub-sampling variance. The field duplicate samples were submitted to ALS at the same time as their associated drill samples. The field duplicates were collected randomly, which resulted in sampling unmineralized intervals. One (1) paired sample returned significant outlier (Figure 11-2). This may probably have been the result of a sample switch; however, the value is at a magnitude that is not material to the project at this stage.



**Figure 11-2: Newmont Drill Core Duplicate Data**

#### 11.4.2 Castle Peak QAQC Protocol

Field duplicates, blanks CRMs were used to monitor and evaluate the analytical accuracy and precision in the 2018 last quarter due diligence programme by Castle Peak. A total of 562 including 44 QAQC samples in Table 11-3 were assayed at ALS laboratory in Kumasi, Ghana. The QAQC protocol included the insertion of three (3) duplicates into prospecting samples Twelve (12) duplicates and ten (10) CRMs into trench samples, seven (7) CRMs, seven (7) duplicates and five (5) certified blanks inserted into drill core sampling stream. The QAQC insertion rate for the programme was 9%.

Table 11-3: Castle Peak’s 2018 Sampling With QAQC Insertions

Exploration Program	Original Sample	Field Duplicates	Blanks	CRM	Total	QAQC	%
Prospecting	21	3			24	3	14
Trench	258	12		10	285	22	9
Drill Core	234	7	5	7	253	19	8
<b>Total</b>	<b>513</b>	<b>22</b>	<b>5</b>	<b>17</b>	<b>562</b>	<b>44</b>	<b>9</b>

The discussion below details the results of the blanks CRMs and duplicates inserted as part of Castle Peak QAQC protocol.

**Certified Reference Materials:** Castle Peak monitored accuracy by inserting CRMs. CRMs are used to detect assays problems with specific sample batches and long-term biases in the overall database. Three (3) different pre-packaged CRMs from ROCKLABS, New Zealand, each weighing 50 grams, were inserted into trench and drill core samples directly after each zone expected to have some level of gold mineralization, and also inserted at the start of each sampling batch. The CRMs inserted are summarized in Table 11-4.

Table 11-4: CRMs used by Castle Peak

Sample Type	CRM name	Certified Value (ppm)	1 Standard Deviation ppm)	No. of CRM Analysed
Trench	OxF142	0.805	0.019	10
Drill Core	Si81	1.790	0.030	5
Drill Core	SJ80	2.656	0.057	2

In the case of normally distributed data, 95% of the CRM analyses would be expected to lie within 2SD of the certified value, while only 0.3% of the analyses are expected to lie outside of the 3SD limits. CRM analyses outside of the 3SD limits are typically considered to be failures. As it is statistically unlikely that two consecutive analyses of CRMs would lie between the 2SD and 3SD limits, such samples are also considered to be failures unless further investigations suggest otherwise.

For the ten (10) CRMs analysed in the trench dataset and illustrated in Figure 11-3 four (4) were considered outliers. This is problematic and according to quality control protocols, the batch should be re-analyzed unless the intercepts are not considered significant.

The seven (7) CRMs analysed in the drill core dataset AS illustrated in Figure 11-4 tested accurately. For accurate results the equation for the red broken line should have equation  $X=Y$ . But the current red line has equation  $Y=0.9424X$  which is close to the true anticipated equation. The correlation coefficient is nearly 1. Therefore the analytical quality should be acceptable. The accuracy is close to the 95th percentile range.

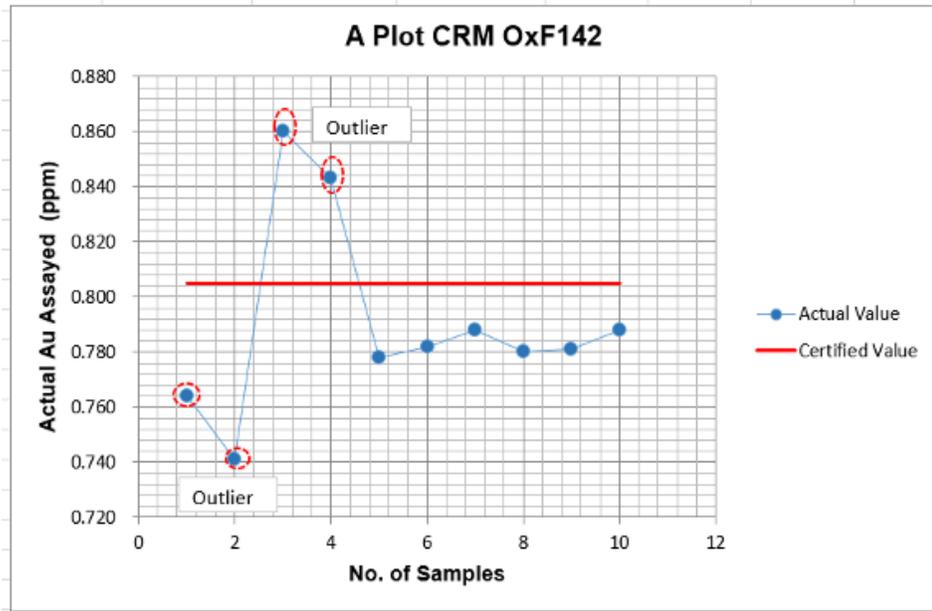


Figure 11-3: Graphs of ALS Analysed CRM OxF142

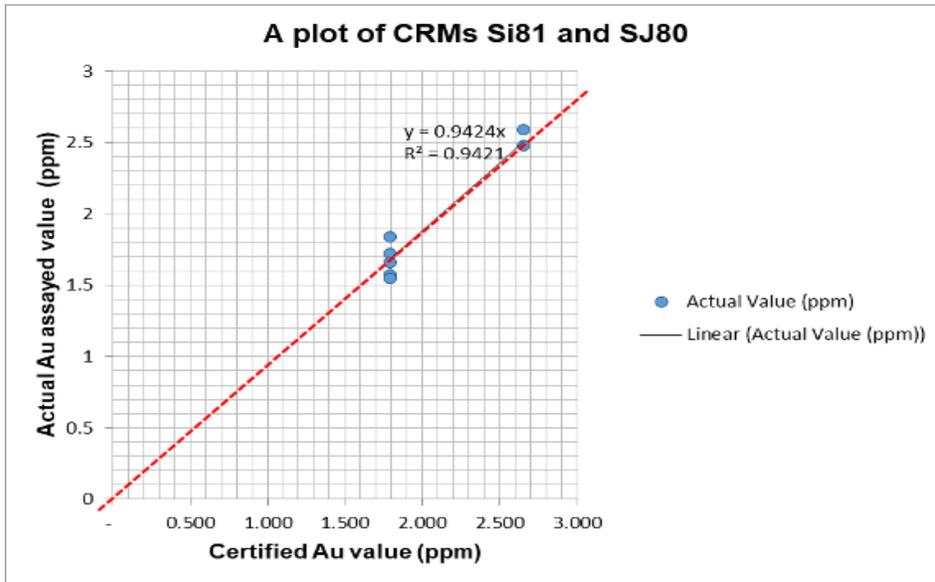
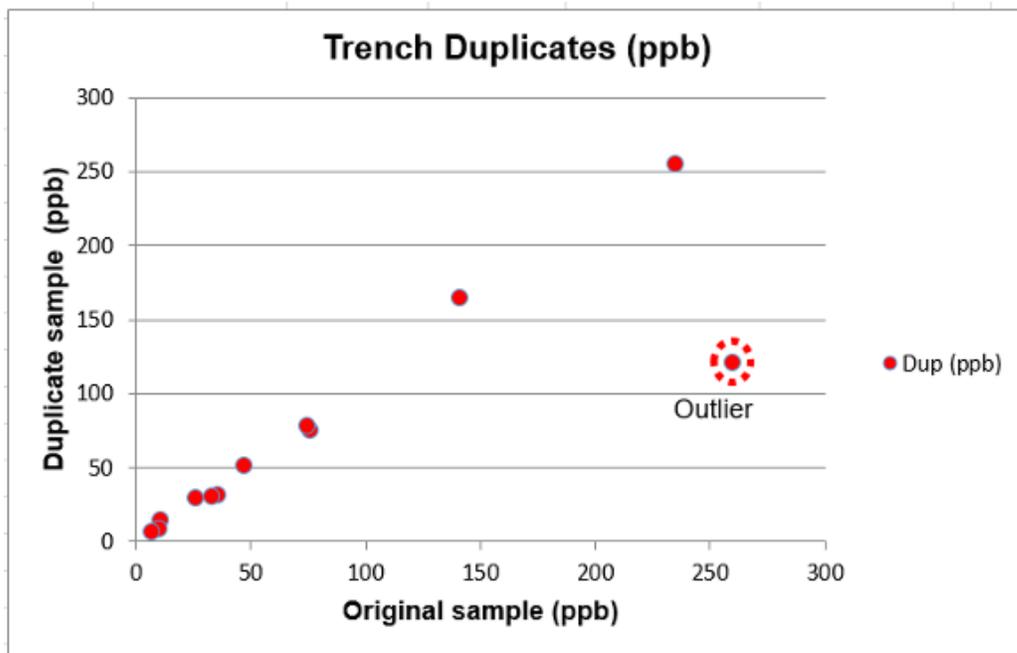


Figure 11-4: Graph of Drill-core CRMs

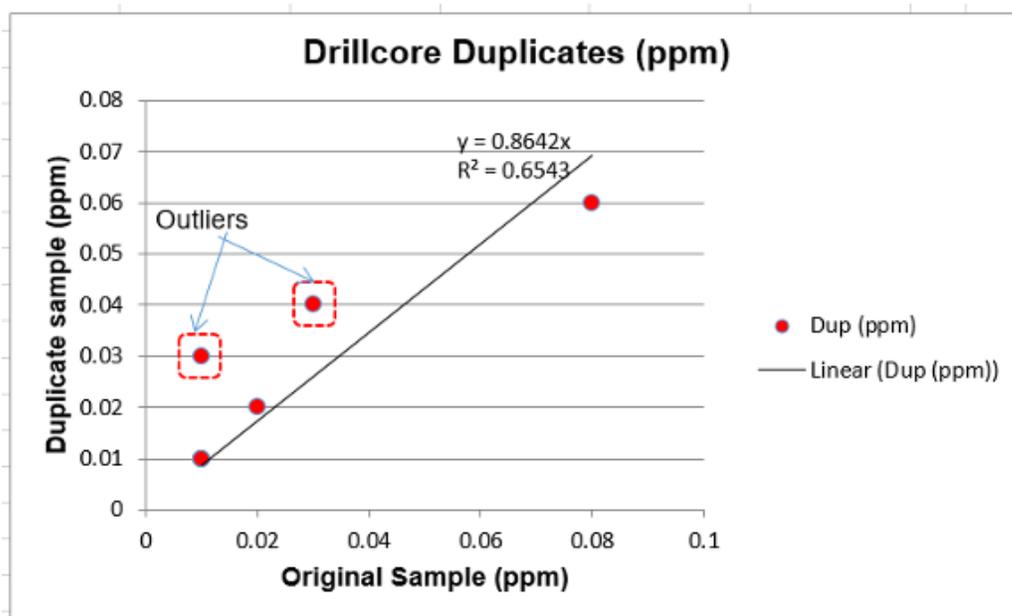
**Blanks:** Castle Peak monitored accuracy by inserting certified blanks from ROCKLABS, New Zealand, each weighing 50 grams. Five (5) certified blanks were inserted into the drill core samples. The detection limit for the certified blank is <0.004ppm and the ALS detection limit is <0.01ppm. Accordingly, if any blank yields a gold value above 10x the detection limit (i.e., 0.1ppm or 100ppb), the entire batch should be re-assayed. The assay

certificate returned no significant gold values which were consistent with the detection limit selected which did not warrant any re-assaying. Four (4) recorded 0.01ppm and one (1) recorded 0.02ppm. However, the author is of the view that considering the determining limit of the certified blank much lower detection limit of 0.002ppm should have been selected.

**Field Duplicates:** Prospecting, trench and drill core field duplicates were taken at the same time as the original sample. The drill core duplicates were quarter splits of half drill core samples taken at the same time as the original sample splits. Twelve (12) trench field duplicates and seven (7) drill core duplicates were analysed. Most of the field duplicates analysed correlated very well with one (1) outlier in the trench data (Figure 11-5) and two (2) outliers in the drill core data (Figure 11-6). An outlier plot away from the trend-line is an indication of possible contamination or a sample switch.



**Figure 11-5: Castle Peak Trench Duplicate Data Plot**



**Figure 11-6: Castle Peak Drill Core Duplicate Data Plot**

### 11.5 Comments on Item 11

The laboratory used is independent of Newmont and Castle Peak, widely known and used by the exploration and mining industry in Ghana.

The author is of the opinion that the sample preparation and analytical procedures for the historical work by Newmont were adequate and comply with industry best practices. However, there was no indication that pulp samples and coarse rejects were analysed. Check assaying is normally performed as an additional test of the reliability of assaying results; it generally involves re-assaying a set number of coarse rejects and pulps at a secondary umpire laboratory. The QAQC density of 4% employed by Newmont in the 2010-2013 programme is rather low compared to the expected industry standard. The density should have been about 10% of the entire sample population.

At the level of the project, the Author is of the opinion that the procedures and methods used for the sampling and security by Castle Peak were adequate and appropriate. However, one batch of the trench CRM analysed at ALS returned as an outlier; this requires investigation. The drill core CRMs performed very well and are considered acceptable.

Most of the field duplicates analysed by Castle Peak correlated very well. An outlier plot away from the trend-line is an indication of possible contamination or a sample switch which requires investigation.

## **12 DATA VERIFICATION**

### **12.1 Historic Data by Newmont**

The Author's data verification included a review of surface data, drill hole collar locations, drilling sampling (Aircore, RC and core) intervals, core photographs, gold assays, the QAQC programme, downhole surveys, and the descriptions of lithologies. The author verified field data by plotting the coordinates of sample locations to check their validity.

All surface and drill-hole collars in the Project were either professionally surveyed or surveyed using a GPS unit. The collar surveys are considered adequate at this state of the project; although any collar surveyed using a GPS only should also be professionally surveyed.

Two hundred and thirty five (235) boxes of half diamond drill (DD) core samples from seven (7) DD holes, and fifteen (15) bags containing Reverse Circulation (RC) chip samples in plastic trays from thirty eight (38) RC holes from Newmont's work were made available.

Downhole surveys were conducted on six (6) of the seven (7) DD holes. Average dip and azimuth of  $55^{\circ}$  and  $137^{\circ}$  were used respectively. The deviations in the dip and azimuth analysed varied from  $-1.7^{\circ}$  to  $2^{\circ}$  and  $-7.9^{\circ}$  to  $6.5^{\circ}$  respectively. The Reflex downhole tool was used for the survey and all the deviations at 100m were within  $\pm 5^{\circ}$  tolerance for dip and azimuth. While all the dips fell within the tolerance the azimuth for KUDD001 at 201m and KUDD005 at 111m deviated as much as  $-7.9^{\circ}$  and  $6.5^{\circ}$  respectively.

The Author had access to the assay certificates for all historical and current holes database. Assays were verified for 97% of the Newmont historical data. The assays recorded in the database were compared to the original certificates from ALS laboratory. Minor errors of the type normally encountered in a project database were found and corrected. The drill hole database was seven (7) samples less than report (i.e. 1017 is reported and 1010 in the database). The final database is considered to be of good overall quality.

### **12.2 Castle Peak Database**

The Castle Peak database was verified for consistency in the information contained in the database. One data entry error was identified and corrected. The two (2) drill whole collars were picked with GPS in UTM, WGS 84 Zone 30N coordinate system. Downhole was done with Reflex down hole survey tool.

### **12.3 QAQC Audit**

Details of the QAQC analysis for Newmont and Castle Peak are discussed in detail in Item 11.

### **12.4 Field Verification**

The Author visited the Kunsu property multiple times. During the authors 8-day visit in the first week of that period, Newmont's drill-hole collars, trench positions and selected soil sample points were verified. Selected surficial samples comprising soils, pit and rock chips were taken for gold analysis. Surveying of relevant features in the field was done using GPS set to UTM Zone 30N, WGS84 datum coordinate system. Some of the borehole collar locations which were marked using concrete benchmarks or PVC casings with engraved borehole details were located. Trenches positions were observed to have been filled back in accordance with the Environmental Protection Agency (EPA) requirements in Ghana.

The Author visited the Kunsu property the second time from 20<sup>th</sup> to 27<sup>th</sup> October 2018 to witness trench excavation, sampling and mapping by GEOMAN. A third visit by the Author took place from 3<sup>rd</sup> to 10<sup>th</sup> November 2018 to witness and review ongoing HQ and core drilling programme. The Author also inspected the mineralized zones in the trenches and the structures and lithologies hosting mineralization.

### **12.5 Comments on Item 12**

Although the Author was unable to verify the reliability of all aspects of the Newmont data provided, the author is of the opinion that the Newmont data collection, sample preparation and assaying conform to industry standards and protocols, and the assay results are generally reliable. Samples and data storage and inventory have been found to be appropriate and according to industry standards.

### **13 ADJACENT PROPERTIES**

The Kunsu concession is about 27 km north of Asanko Gold mine, and nearer to the Esaase gold prospect, all of which are on a regional geological-structural trend and inferred to be underlain by similar geology as Kunsu. In this context, the Asanko Mine is considered a relevant adjacent property.

At Asanko, gold mineralization is structurally controlled fundamentally by N-S to NE-SW and NW-SE basement structures. Au mineralization is mainly within quartz veins and stockwork hosted in the sandstones (wacke) at vertical levels of 100 m and beyond. From the Kunsu trenches, drill-hole logs and geophysical image interpretations, there appears to be close similarities in geology and structures to Asanko, although these observations at Kunsu are subtle at this stage.

### **14 MINERAL PROCESSING AND METALLURGICAL TESTING**

Castle Peak has not completed field work that can be applied to mineral processing or metallurgical testing study.

### **15 MINERAL RESOURCE ESTIMATES**

Castle Peak has not completed exploration work to date that can be used as the basis for resource estimation.

### **16 MINERAL RESERVE ESTIMATES**

Castle Peak has not completed exploration work to date that can be used as the basis for reserve estimation.

### **17 OTHER RELEVANT DATA AND INFORMATION**

Not applicable

## **18 INTERPRETATION AND CONCLUSIONS**

### **18.1 Introduction**

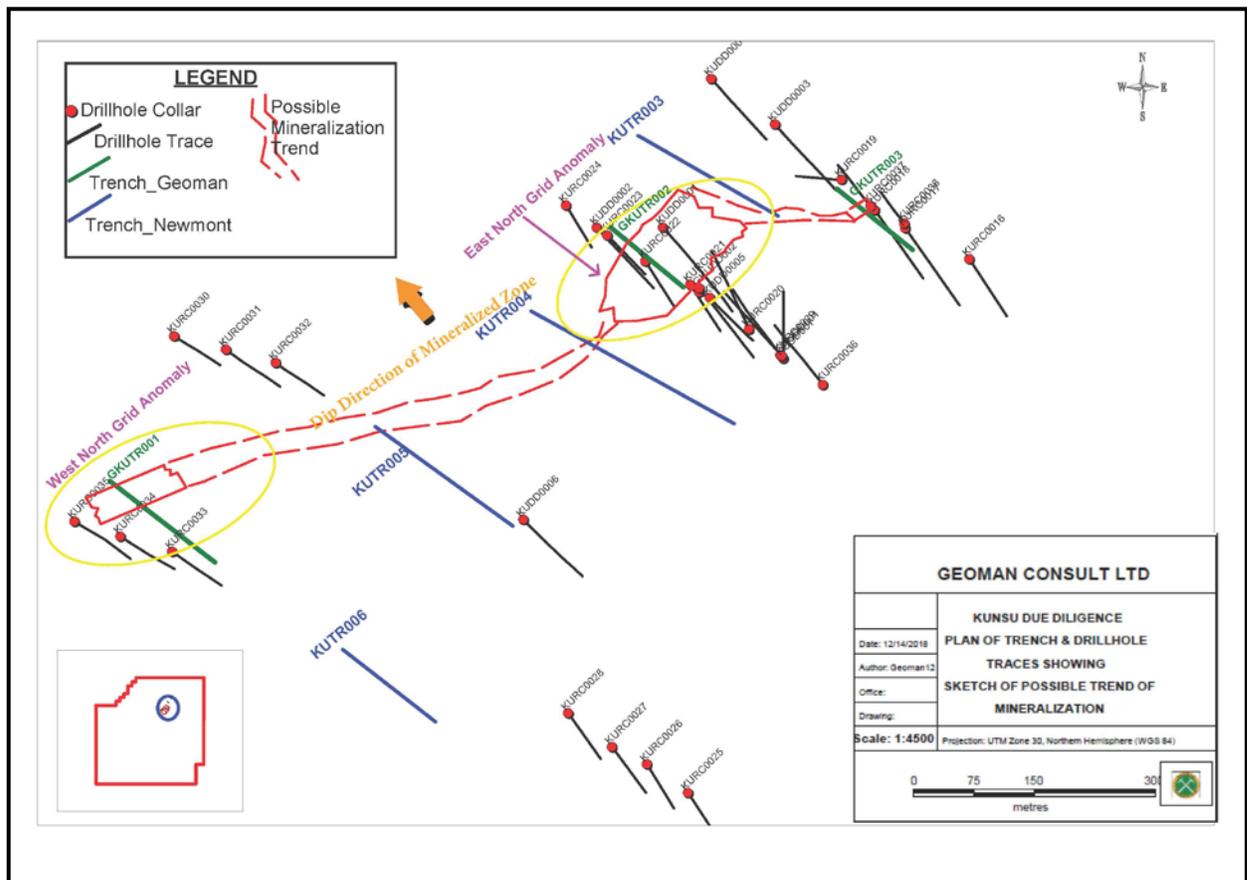
The evidence that the Kunsu concession has zones of Au mineralization was broadly confirmed by Newmont. The new trench assay results even have some improvement on Newmont's results. Au assay values obtained from the due diligence drilling work were moderate, but patchy and discontinuous, and within quartz-sulphide ± carbonate hosted by brecciated wacke and graphitic phyllite, typical of quartz vein lode gold system. Generally, mineralization is inferred to be associated with quartz veining with sulphide traces in the deformed metasediments.

Considering that the Kunsu Project lies within the Kumasi basin where geological structures controlling mineralization are known to be deep, the Au values of 16m @ 0.35g/t and 65m @ 0.25g/t, with consistent background values in trenches GKUTR001 and GKUTR002 respectively, are deemed significant and merit follow up work.

### **18.2 Trench Results**

Figure 16-1 is a sketch of part of the North Grid anomaly area from Newmont's work. The figure shows the projection of Au mineralized zone based on new Au grades from trenches GKUTR001 (Mineralized zone: 16m @ 0.35g/t,) and GKUTR002 (Mineralized zone: 65m @ 0.25g/t) and structural data obtained from the trench mapping. From the figure, two zones of significant Au in trench intersections, West-North Grid anomaly (around GKUTR001) and East-North Grid anomaly (around GKUTR002) are defined; both mineralized zones appear to dip generally to the NW. Because the two zones are about 500m apart, they are linked by projection across two trenches dug by Newmont which was not re-sampled at this stage.

This projection is reasonable because GKUTR001 and GKUTR002 have similar lithologies and structural attitudes. East-North Grid anomaly (around GKUTR002) has relatively wider zone than the West-North Grid anomaly (around GKUTR001). Also shown in the figure (Fig 18-1) are four (4) of Newmont's trenches which were not re-sampled in the Castle Peak's current work.



**Figure 18-1: Integrated Plot of Part of North Grid Anomaly and Historical Trench And Drill Hole Positions**

### 18.2.1 West-North Grid Anomaly

In the West-North Grid anomaly, the Newmont’s drill-holes appear to deviate from the mineralized zone; with three (3) RC holes (KURC0033, KURC0034 and KURC0035) in the SW actually drilled outside the projected mineralized zone. Another three (3) RC holes (KURC0030, KURC0031 and KURC0032) to the NW of the mineralized corridor may have been too shallow and did not intersect the mineralized zone at depth. Thus the West-North Grid anomaly remains largely untested by drilling.

### 18.2.2 East-North Grid Anomaly

In the East-North Grid anomaly area, majority of Newmont’s drilling efforts appear to be mostly outside the mineralized zone with the holes either drilled away from dip of the inferred mineralized zone thereby intersecting only surface mineralization (e.g.

KURC0021, KUDD0005) in quartz stringers and discontinuous vein lodes, or the holes were not deep enough to intersect the suspected mineralized zone at depth.

### **18.3 Drilling Results at the North Grid Anomaly Zone**

GKUDD002 was drilled to test mineralization recorded by Newmont in KURC0021 and KUDD0005. Largely the hole did not return the values seen in KURC0021, but intersected mineralized quartz veins and discontinuous quartz stringers with patchy Au assay results at near surface that lack continuity down hole.

The holes drilled within the mineralized corridor and NW of the East-North Grid area showed varying Au mineralization grades intercepted at varying down-hole levels. Noteworthy are holes KURC0022, KURC0023, KUDD001 and KUDD002. Both holes KURC0022 and KUDD001 recorded an average Au grade of 0.77 g/t and 0.19 g/t respectively from surface. Intercepted zones were at 20m and 12m respectively. A significant Au grade of 6.05 g/t at 16m was realised in hole KURC0022.

Hole KURC0023 which was drilled some 15m east of KUDD002 showed discontinuous Au mineralization trends within similar horizons. Two mineralised horizons were observed in KUDD002; 0.69 g/t at 41- 42 m and 1.36 g/t at 60.9 – 68m, whereas hole KURC0023 recorded 2.31 g/t Au at 16 m – 38 m and 5.85 g/t at 82m.

Hole KURC0029 recorded very impressive gold values of 54m @ 3.18g/t and ended in mineralization at 140m with a grade of 1.4 g/t. A plausible explanation to this result is that this hole, which was a scissor hole, deepened towards the projected mineralization zone at depth. Similar results were obtained in GKUDD001 drilled with a value of 24.8g/t intercepted at 154.5m -155.5m, also towards the projected mineralized zone, however, the results did not show the consistency seen in KURC0029.

A summary of the drill-hole intersections and gold grades from drill-hole KURC0029 (drilled by Newmont) which was paired with drill-hole GKUDD001 (drilled by Castle Peak), and drill-P KURC0021 and KUDD005 (drilled by Newmont) which were paired with drill-hole GKUDD002 (drilled by Castle Peak) is shown in Table 18-1.

Table 18-1: Intersects of Newmont’s Cores Compared with Castle Peak’s

Drill-Hole-Newmont*				Drill Hole-GEOMAN/Castle Peak*			
Hole ID	Depth (m)	Width (m)	Au Grade (g/t)	Hole ID	Depth (m)	Width (m)	Au Grade (g/t)
KURC0029	86-122	36	4.08	GKUDD001	0-4	4	0.26
	122-140	18	1.37		88.5-91.5	3	1.32
					109.5-115.5	6	0.45
			154.5-155.5		1	24.8	
KURC0021	0-10	10	0.32	GKUDD002	14.5-19.5	5	0.22
	20-38	18	0.37		80.5-93.3	12.8	0.42
	64-90	26	5.9				
KUDD005	0-14.7	14.7	1.27				
	32-51	19	0.44				

\*KURC0029 was paired with GKUDD001; KURC0021 & KUDD005 were paired with GKUDD002.

#### 18.4 Resistivity Survey and Implications for Au Mineralization

The resistivity survey conducted over parts of the drill-hole and trench areas suggests heterogeneous subsurface materials. The high resistivity zone characteristics of the bottom layer at average depth of 200m probably relates to the quartz lode and sulphide materials at depth. This material is also seen as offshoots at near surface with varying bottoms depths averaging 75 m. What this implies is that the structures that may be hosting the major mineralized body may be deeper and probably beyond 150m.

It is possible that the drill-holes in the projected mineralized corridor may only be tapping the offshoot materials in the form of quartz veins (vein lodes) as the drill-holes may not have been deep enough to intersect the high resistivity materials suspected to be the major mineralized body beyond 150m at depth.

#### 18.5 The Case for Further Work in the Projected Mineralized Zone

From the Newmont’s data and also from interpretations made, most of the historic holes fell away from the trench delineated auriferous zones with few holes intersecting the zone at shallow levels. Structures in the auriferous zone have been confirmed by the recent trench mapping to be in NE-SW trending and majorly NW dipping. Ground resistivity survey conducted by Castle Peak suggests the host structures to be in excess of 150m at depth, with offshoots at near surface marked by high-K signatures.

Although this scenario remains speculative, further geophysical work, possibly by IP survey, could determine accurately the subsurface structures from the entire West-North Grid anomaly area to the East-North Grid anomaly area, and the surrounding corridor. This should be followed by deeper drill-holes at the NW section of the projected

mineralized zone placed to intersect the structures that may be hosting the auriferous zones at depth. The proposed additional drilling should be RC with DD tails at the zones to be delineated from the IP survey. The proposed new drill-holes are expected to establish the lateral continuity of the mineralization; provide insight into the structures, the gold distribution and style of mineralization. On completion, the data generated could support geological modeling and mineral resource evaluation of the North Grid area.

## **18.6 Conclusions**

This Technical report is the result of an independent review of exploration work on the Kunsu property in Ghana for Castle Peak. The Kunsu project is situated in the Ahafo-Ano South District of the Ashanti Region of Ghana. This report is authored by Prosper M. Nude according to the NI43-101 guidelines of reporting.

Newmont carried out an extensive modern exploration work from 2010 to 2013 on the Kunsu property. The results reported from core drilling programme did not replicate the highly encouraging RC results. The best DD intercepts reported were 2.4m @ 2.41g/t from 37.6m in KUDD0005 and 4m @ 2.68g/t from 37.6m in KUDD0002. The RC holes where these two DD holes were cited yielded 28m @ 5.55g/t and 22m @ 2.31g/t, both holes ended in mineralization.

Although moderate to significant mineralized intercepts were realized from Newmont's drilling campaign, and individual targets have indicated good mineralization, the Author is of the opinion that the drilling density applied, in which the drilling fences vary between 200m to 700m, is not sufficiently reliable to support the interpretation of the boundaries and extent of the gold mineralization at this stage. Further work is required to adequately understand the grade distribution and density.

Castle Peak engaged GEOMAN from 9<sup>th</sup> August 2018 to 31<sup>st</sup> December 2018 to complete due diligence work on the Kunsu Project under an option agreement between Wononuo Investment and Castle Peak. The supplemental field work which involved ground geophysical survey, and reopening and sampling of two selected old trenches and digging of another trench, as well diamond core drilling of two previous holes done during the Newmont period, were investigated by Castle Peak. Sampling procedures, field methodologies and analytical procedures were adopted from Newmont for consistency.

The compelling evidence that the Kunsu concession has zones of Au mineralization is seen from the new trench and drill-hole assay results obtained by Castle Peak during the due diligence work. Trench intersections of 16m @ 0.35g/t Au and 65m @ 0.22g/t Au can be considered moderate to significant. The Au results obtained from Castle Peak's drilling were mostly patchy, lack continuity, but show isolated intersections of significance. Hole GKUDD001 recorded a high value of 24.8g/t near the end of the hole at 154.5m -155.5m; this is significant, and may suggest that mineralization could be at

depth. Overall the Au results from the new drill hole compare largely with the previous drilling results by Newmont.

Au mineralization has been observed to be within quartz+sulphide ± carbonate hosted by brecciated wacke and graphitic phyllite, typical of quartz vein lode gold system. Thus mineralization is inferred to be associated with quartz veins with sulphides in the deformed metasediments.

## **19 RECOMMENDATIONS**

The trench results from work undertaken by Castle Peak provide compelling evidence of gold mineralization at Kunsu. Both the historical and recent drilling results are only indicative of subsurface mineralization. The distribution, style and nature of the auriferous body remain largely unknown. This is mainly due to the widely spaced drill fences applied to date. The directions of the drill-holes have not yet provided the lateral and strike continuities required for resource estimation. The next proposed schedule of exploration exercise should address this problem.

The delineated mineralized corridor from the latest trench results provides an area worthy of follow up. Further geophysical work, possibly IP, across the entire West-North Grid anomaly area to the East-North Grid anomaly area and the surrounding corridor of the delineated zone is recommended. This additional geophysical work would map out the zones of high chargeability at depth, thereby targeting the zones of the quartz-sulphide lodes.

The Author recommends that, with the current knowledge of the Kunsu prospect it is further deemed important to focus on an additional targeted drilling exercise. This exercise should focus on deeper drill-holes of at least 100m fence intervals at the NW section of the projected mineralized zone to intersect the possible structures hosting the auriferous zones at depth. The proposed additional drilling, should be RC with DD tails, and should have at least 100m spacing between fence lines of 4 holes on each fence. The proposed drill-holes are expected to establish continuity of the mineralization; provide information on structures, the gold distribution and the style of mineralization. On completion of the exercise, the data generated should support geological modeling and mineral resource evaluation of the North Grid area.

Knowledge gained from the proposed exploration work should be applied to the other anomalous target areas delineated from the re-processing and interpretation of Newmont's soil geochemical assay data, and the geophysical images, that have not yet been explored.

### **19.1 Proposal and Outline for Further Work**

Based on the current knowledge of the Kunsu gold prospect, individual targets at the North Grid zone, around the existing trenches GKUTR001 and GKUTR002, have indicated good Au mineralization with some highly encouraging results. But there still remains further work to be carried out in order to adequately understand the gold grade distribution, lateral and strike continuities and density for any reliable resource evaluation. It is therefore deemed important to propose a two stage work comprising ground geophysical IP survey and drilling exercise at the North Grid zone.

### **19.1.1 Ground Geophysical Survey**

The ground geophysical programme should involve 5.4Km of time domain induced polarization (IP) survey. The primary objective of the IP programme is to survey multiple zones of the prospective areas within the North Grid anomaly to delineate geophysical characteristics which may lead to the identification of targets for drilling. The surveys will be configured to investigate the variation of subsurface conductivity with respect to depth. It is expected that the IP coverage will determine accurately the subsurface structures from the entire West-North Grid anomaly area to the East-North Grid anomaly area and the surrounding corridor.

### **19.1.2 Drilling**

The drilling campaign would be in phases, in terms of priority, and would be based on the IP targets to be delineated. The details are as follows:

- a) The first priority drill-holes would comprise 10 core drilling holes. A scout drilling at 200m spacing with an initial 5 holes to be followed by an infill drilling at 100m spacing to achieve one (1) core drilling hole per drill fence. A total of 2000m of drilling is planned with 2200 core samples to be collected including QAQC samples.
- b) The second priority holes would be one hole on each fence; the hole placements would be based on the results obtained from the first priority drilling. These holes would be deeper relative to the first priority holes, and would be placed at the lower sections of dip of the projected mineralized body to target the extension of mineralization that may be intercepted in the first priority holes, and also check lateral extension of mineralization. Each hole would be 300m deep, comprising a pre-collar RC depth to 120m, and core tail of 180m. A total of 1200m of RC and 1800m of diamond core tail would be achieved and 3000 samples to be taken.
- c) The third priority holes would be 2RC holes per each fence and would be placed at the upper sections of dip of the mineralized target from the second priority drilling. These holes would target surface mineralization (shallow holes) and also check the lateral extent of mineralization at the upper levels. Depending on the second priority results. A total of 2700m of RC drilling would be achieved to average depth of 130m, with 2970 samples collected for assay including QAQC.

## **19.2 Concluding Remarks**

It is expected that the additional work outlined in this proposed programme, if carried out, would provide the information required for the understanding of the nature and the style of gold occurrence and its prospectivity at the Kunsu concession. It is expected that the results will provide the adequate understanding of the gold grade distribution, its

lateral continuity and density for a reliable resource evaluation of the North Grid zone, and importantly for Castle Peak to make informed decision on the Kunsu property.

## 20 BUDGET

A summary of activities and related expenditure proposed for the two-stage follow up work at the Kunsu Project is presented in Table 19-1. The proposed additional work on the Kunsu property is expected to cover two (2) years. Any advancing to the subsequent phase would be contingent on positive results of the previous.

Table 19-1: Kunsu Exploration Budget

<b>PHASE 1 WORK CORE DRILLING &amp; GEOPHYSICAL SURVEY</b>			
<b>Item</b>	<b>Description</b>	<b>Cost (US \$)</b>	<b>Cost (C\$)</b>
1	Technical Fees	112,000.00	145,600.00
2	Logistics	72,580.00	94,354.00
3	Geophysics	10,040.00	13,052.00
4	Priority 1 Drilling - 2000m Core	290,000.00	377,000.00
5	Handholding Costs	45,000.00	58,500.00
6	Protocol & Community Relations	10,000.00	13,000.00
	<b>SubTotal</b>	<b>539,620.00</b>	<b>701,506.00</b>
7	Administrative Costs @ 5%	26,981.00	35,075.30
	*Govt Taxes on Technical Fees	28,000.00	36,400.00
	*Govt Taxes on Priority 1 Drilling	72,500.00	94,250.00
	<b>TOTAL</b>	<b>667,101.00</b>	<b>867,231.30</b>
<b>PHASE 2 WORK - CORE AND RC DRILLING</b>			
<b>Item</b>	<b>Description</b>	<b>Cost (US\$)</b>	<b>Cost (C\$)</b>
1	Technical Fees	125,000.00	162,500.00
2	Logistics	86,600.00	112,580.00
3	Priority 2 Drilling - 1200m RC, 1800 m Core	420,587.50	546,763.75
4	Priority 3 Drilling - 2700m RC, 1800m Core	256,500.00	333,450.00
	<b>SubTotal</b>	<b>888,687.50</b>	<b>1,155,293.75</b>
	Administrative Costs @ 5%	44,434.38	57,764.69
	*Govt Taxes on Technical Fees	31,250.00	40,625.00
	*Govt Taxes on Priority 2 & 3 Drilling	169,271.88	220,053.44
	<b>TOTAL</b>	<b>1,133,643.76</b>	<b>1,473,736.88</b>
<b>GRAND TOTAL (PHASES 1 &amp; 2 WORKS)</b>		<b>1,800,744.75</b>	<b>2,340,968.18</b>

\*Liable to change

## 21 REFERENCES

- [1] Report on exploration work completed by Newmont Ghana Gold Limited within the Kunsu prospecting licence (RL.6/57, LVB 29386/08) during the option period 25th August 2009 to 22nd August, 2013.
- [2] Inception Report on the Kunsu PL to Castle Peak Minerals Limited by GEOMAN Consult - 01 September 2018.
- [3] 1st Progress Report on the Kunsu PL to Castle Peak Minerals Limited by GEOMAN Consult – 01 October 2018.
- [4] 2nd Progress Report on the Kunsu PL to Castle Peak Minerals Limited by GEOMAN Consult –27 November2018.
- [5] Wononuo Investment Limited: Terminal Report and Application for Extension of the Kunsu Prospecting Licence, April 2017, Compiled by Minright Ghana Limited, 27pp.
- [6] Option agreement between Castle Peak Mining Limited and Wononuo Investment limited dated June 20 2018.
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- [8] Second Extension to the Signing of Definitive agreement between Castle Peak Mining Limited and Wononuo Investment Limited dated January 15, 2019.
- [9] Definitive Agreement between Castle Peak Mining Limited and Wononuo Investment Limited dated February 15, 2019
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- [11] Smith, A.J.B., Henry, G., Frost-Killian, S. (2016): A review of the Birimian Supergroup- and Tarkwaian Group-hosted gold deposits of Ghana, Episodes 39 (2) 177-197.
- [12] Chudasama, B', Porwal, A., Kreuzer, O. P., Butera, K. (2016): Geology, geodynamics and orogenic gold prospectivity modelling of the Paleoproterozoic Kumasi Basin, Ghana, West Africa, Ore Geology Reviews 78:692-711.
- [13] Petersson, A., Scherstén, A., Gerdes, A. (2018): Zircon Extensive reworking of Archaean crust within the Birimian terrane in Ghana as revealed by combined zircon U-Pb and Lu-Hf isotopes, Geoscience Frontiers 9, 173-189.

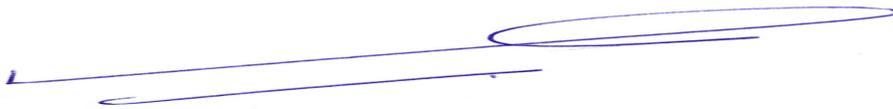
- [14]** Wononuo Investment Limited's letter of August 08 2018 and the submission of data and materials inventory pertaining to the Kunsu Prospecting Licence (PL) to GEOMAN Consult.

## 22 DATE AND SIGNATURE PAGE

The effective date of this Technical Report entitled “NI 43-101 Technical Report of the Kunsu Gold Project, Kunsu-Ghana, West Africa”, prepared by Prosper Mackenzie Nude on behalf of Castle Peak Mining Limited, 329-1255 Riverside Drive, Port Coquitlam British Columbia V3B, Canada is April 20, 2019.

**The effective date of report: April 20, 2019.**

**The signature date of report: May 3rd, 2019**

A handwritten signature in blue ink, consisting of a long horizontal stroke followed by a loop and a shorter horizontal stroke.

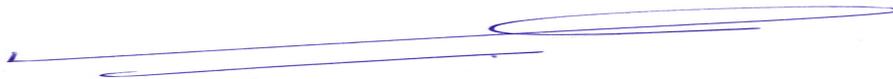
.....  
**Prosper Mackenzie Nude, PhD, MAIG; FSEG  
(Professor of Geology)**

## 23 CERTIFICATE OF QUALIFIED PERSON

1. I, Prosper Mackenzie NUDE, PhD, of the Department of Earth Science, University of Ghana, P. O. Box LG 58 Legon-Ghana, Phone Number: +233-244116879, and Email address: [pmnude@ug.edu.gh](mailto:pmnude@ug.edu.gh) do hereby certify that:
2. This certificate applies to the technical Report entitled “NI 43-101 Technical Report of the Kunsu Gold Project, Kunsu-Ghana, West Africa” (the Technical Report”) dated May 3<sup>rd</sup> 2019.
3. I have obtained the following degrees: BSc Geology with Chemistry (1990), MPhil Geology (1995), PhD Geology (2006), all from the University of Ghana.
4. I am a currently Full Professor of Geology at the Department of Earth Science, University of Ghana (February 2016-Date); having joined the University as a Lecturer (March 2000-January 2009), Senior Lecturer (February 2009-March 2012) and Associate Professor (April 2012-January 2016). I have over 25 years’ experience in the geosciences, spanning industry and academia. I have over 90 publications in the field of geosciences, including journal papers, technical and expert reports.
5. I have worked at the Council for Scientific and Industrial Research (CSIR), Ghana, as a Research Geologist (1993-1996), and with large International Mining and Mineral Exploration Companies, and Small and Private Mineral Exploration Tenements that explore and mine precious minerals, industrial minerals and rocks (1996-2000).
6. Since 2000 I have served as a Consulting Geoscientist in different capacities to the private and public sectors in different operations, and in mineral exploration projects and applied research and development. I have served as Expert Witness at the International Court of Arbitration, and also as Expert Reviewer, for the Government of The Republic of Ghana in mineral arbitration cases (2013-2016).
7. I belong, and in good standing, to the following Professional Associations as follows:
  - a) Member, Australian Institute of Geoscientists (MAIG, #7381).
  - b) Member, Ghana Institution of Geoscientists (GhIG #198).
  - c) Member, Geological Society of Africa (GSAF-LM-0095).
  - d) Member, European Association of Geochemistry (EAG, #2014-018).
  - e) Fellow, Society of Economic Geologists (SEG 2011 F, #899386).
8. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with professional association (as defined by NI 43-101) and relevant experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.

9. I am responsible for all sections of the Technical Report, subject to my reliance on other experts identified in Item 3.0 and references cited in the report and listed in Item 21 of the report.
10. I visited the Kunsu Property multiple times, on 2<sup>nd</sup> to 9<sup>th</sup> September 2018, 20<sup>th</sup> to 27<sup>th</sup> October 2018, and 3<sup>rd</sup> to 10<sup>th</sup> November 2018, as part of project inspection, data validation, and evaluation of trenching and drilling works.
11. I am independent of the parties with interests in the Kunsu PL and do not have any material interest, direct or indirect, in any of the projects owned or controlled by these parties.
12. I have read the NI 43-101, and this report has been prepared in compliance with that Instrument.
13. As at the effective date of this Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report contain all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

**Dated this 3rd Day of May 2019**



.....  
**Prosper Mackenzie Nude, PhD; MAIG #7381; FSEG  
(Professor of Geology)**