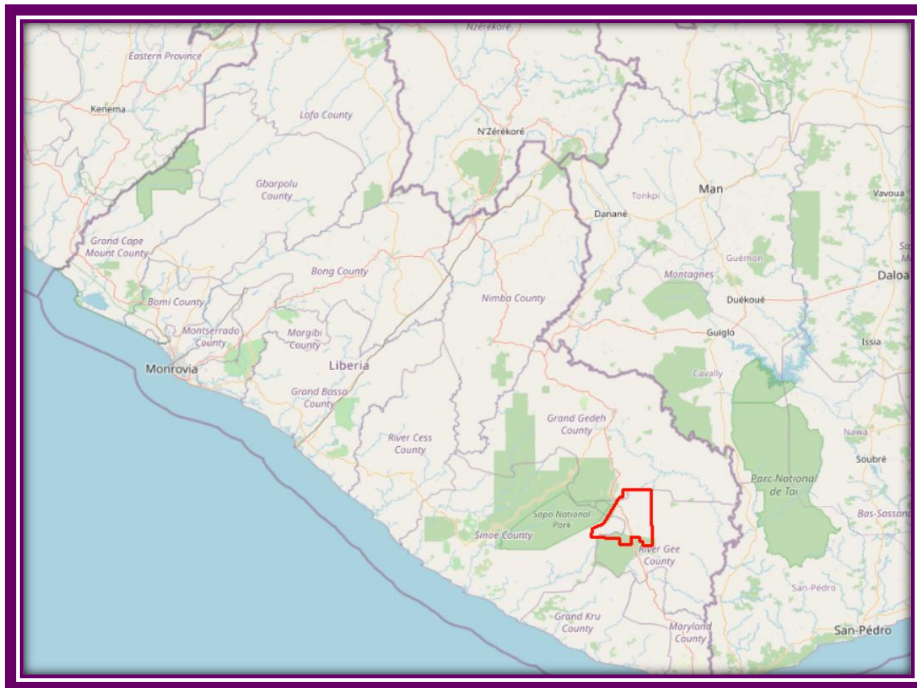


Technical Report on Gold Exploration Activities

(MEL 7011124)



Dugbe North Field Investigation
July 13 – August 1, 2025

LIBERIA GOLD LIMITED (LGL)

This report is prepared by experienced Geologists consulting on behalf of *Liberia Gold Limited*. It provides a comprehensive summary of major findings and recommendations from an investigative survey of two geological points and two geological belts of artisanal workings within the company’s Dugbe North tenement. The report further describes exploration activities, results and a preliminary assessment of the gold potential of the tenement. The focus is on explaining anomalies identified from combining desk studies with field observations and assay results. This can aid the company in strategic planning for a more systematic and / or detailed invasive exploration phase potentially leading to economic returns via an extraction operation.

STATEMENT OF COMPETENCE & QUALIFICATION

We, the undersigned, certify that we are consulting geologists in possession of the required qualification(s) and competency to evaluate and assess the type and style of mineral deposits sought. Together, we have been practicing our profession for over twelve (12) years, and our CVs can be made available upon request.


We further affirm that this report is based on field works and evaluation carried out on MEL 7011124 (lying within the Juazhon Quadrangle) from *July 13, 2025, up until August 1, 2025*.


This report is based on our collective experiences in evaluating:

- i) gold-quartz veins and disseminated, and possibly lode-gold associated with regional greenstone belts.
- ii) Homestake-type deposits associated with iron formations in West Africa.

We also hold membership with local professional bodies.

Authors:

1. Frank K. Cooper, Jr: _____

 Signature

2. Ousman B. Barry: _____

 Signature

Acknowledgement:

Local Mining & Administrative Officials of the Killepo Kanweaken, Pokpaken, Seagboken, Paris, Jokoken, Woloken, and Nyennawilken.

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1.0 Introduction

1.1 Background & Overview

Securing funding for innovative and promising exploration programs and mining projects presents significant challenges. Investors in mineral exploration and mining seek to identify projects with a high likelihood of generating substantial returns on investment. The preparation and publication of a mining prospectus is essential, as it will encompass critical information regarding the company's exploration and mining projects, including its tenements. A mining prospectus is a document created by a qualified individual that outlines the condition of the tenement(s) included in the report. Operators preparing a prospectus must adhere to national regulatory frameworks, including *Mining Laws, Exploration Regulations, and Mining Procedures*, alongside the stipulations of significant industry codes such as the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code)* and the *Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets (VALMIN Code)*. These codes necessitate the preparation of prospectus reports to inform the investment decisions of investors, potential investors, and their advisers.

This report describes major findings from exploration activities implemented in a survey of selected points and belts of artisanal workings, as well as an initial overview of the tenement's gold potential. The objective is to provide a comprehensive summary of activities encompassing a 20-day geological field survey and explain anomalies observed from assay results and field observations, potentially resulting in enhanced confidence in the tenement's gold potential and aiding the company in strategic planning of follow-up works.

1.2 Company Profile & Tenement Information

Liberia Gold Limited (LGL) is officially registered under the laws of the Republic of Liberia to engage in mineral exploration, mining, and dealership operations among others. Its official address is at *Congo Town Backroad, Monrovia, Montserrado County, Liberia, West Africa*. Mr. Tan Jun is the current Executive Director of the company which runs a range of businesses across several sectors including:

1. Exploration, Mining (gold, diamonds and other natural minerals), and Quarrying (sand, rock, etc.)

2. Buying, selling, converting, drilling, excavation, crushing, processing, and exporting of gold, diamonds, and other minerals for both domestic and export transactions.

The company’s tenement is a **990 sq km** area situated within parts of Rivergee (~ 60% of total area), Sinoe (~ 35% of total area), and Grand Gedeh (~ 5% of total area) counties – within the Juazohn Quadrangle. It occupies parts of Putu District (Grand Gedeh County), Jaedepo District (Sinoe County), and Chedepo, Karforh & Gbeapo Districts (Rivergee County). The tenement area topography is generally very rugged and includes the southern extension of the Putu range in the north, and the northern extension of the Tiehnpo range in the south. It features major highlands (e.g. “Joh” and “Dabletugbe”), countless seasonal streams, and intensive artisanal mining activities. The area is mostly covered by primary forest with lush jungle vegetation and farms in few places. The effective date of the license is August 21, 2024, with initial tenure expected to last until August 22, 2027.

1.3 Tenement Location & Access

The company’s tenement situated in southeast Liberia embodies five (5) districts in three (3) counties (Rivergee, Sinoe, and Grand Gedeh). It occupies parts of Putu, Chedepo, Karforh, Gbeapo, and Jaedepo Districts, and is on average 38 km East of the Sapo National Park. The town of Killepo Kanweaken, *a major landmark within the tenement*, is approximately 64 km south of Zwedru and some 36 kilometers northwest of Fish Town. LGL exploration block is situated in a semi-remote area, with few settlements and intensive artisanal mining activities.



Figure 1: Tenement Area Location & Access

Accessibility (by motor vehicle) from Monrovia to Killepo Kanweaken (a major town at the northwestern central party of the block) is currently possible via two routes – each with varying degree of difficulty and access challenge (during the rainy season). One is by means of the 535 km (*google maps*) Monrovia - Ganta - Tappita - Zwedru Highway. There are ongoing construction works along this corridor and as of the time of this report, the asphalt pavement has reached Tappita. From Zwedru to Killepo Kanweaken (alias small Kanweaken) is approximately 64 km via the southerly Zwedru-Fishtown highway. A second option to access the tenement is by using the direct 455 km (*google maps*) Monrovia-Buchanan-Juazohn-Pyne Town - Killepo Kanweaken route. The conditions of the laterite-surfaced segments of these roads present major challenges that vary with the seasons (wet versus dry).

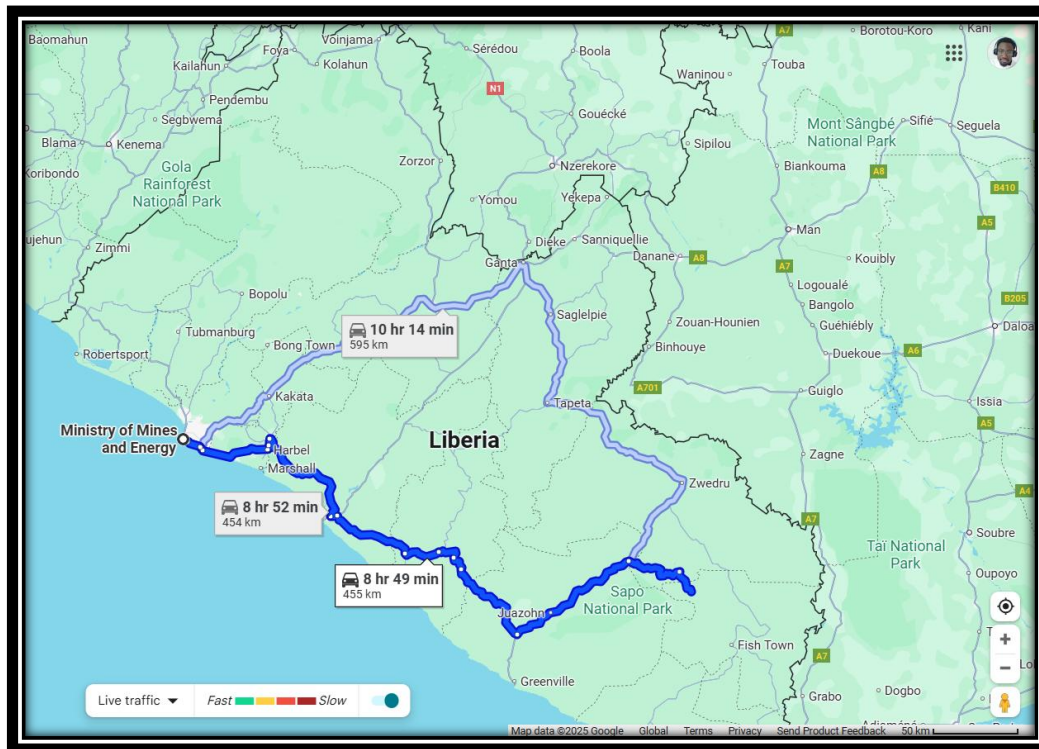


Figure 2: Google Maps of Alternative Access to the Exploration Tenement

The dimension of the area is defined and bounded within the coordinates (WGS84 UTM 9N) given in the table below:

<i>UTM Coordinates of LIBERIA GOLD LIMITED Exploration Tenement Boundaries</i>						
PT	EASTINGS	NORTHINGS	DX	DY	DMD	PRODUCTS
1	600470	619232	19,396.00	59.00	38,792.00	2,288,728.00
2	619866	619291	-3.00	-9,683.00	58,185.00	-563,405,355.00
3	619863	609608	314.00	-27,301.00	58,496.00	-1,596,999,296.00
4	620177	582307	-6,457.00	49.00	52,353.00	2,565,297.00
5	613720	582356	-6.00	3,063.00	45,890.00	140,561,070.00
6	613714	585419	-1,988.00	24.00	43,896.00	1,053,504.00
7	611726	585443	-38.00	2,362.00	41,870.00	98,896,940.00
8	611688	587805	-5,715.00	-9.00	36,117.00	-325,053.00
9	605973	587796	-7.00	-4,380.00	30,395.00	-133,130,100.00
10	605966	583416	-7,386.00	-38.00	23,002.00	-874,076.00
11	598580	583378	-5.00	3,671.00	15,611.00	57,307,981.00
12	598575	587049	-18,702.00	1,160.00	-3,096.00	-3,591,360.00
13	579873	588209	226.00	5,219.00	-21,572.00	-112,584,268.00
14	580099	593428	8,043.00	3,668.00	-13,303.00	-48,795,404.00
15	588142	597096	10,108.00	17,389.00	4,848.00	84,301,872.00
16	598250	614485	2,265.00	3.00	17,221.00	51,663.00
17	600515	614488	-45.00	4,744.00	19,441.00	92,228,104.00
1	600470	619232				
TOTALS			0.00	0.00	448,146.00	-1,980,449,753.00
					SQUARE METERS=	(990,224,876.50)
SQ. FT PER SQ. METER =			10.764	SQUARE FEET =		(10,658,649,228.31)
SQ. FT PER ACRE =			43,559.946	TOTAL ACRES =		(244,689.22)
					SQ.KM	(990.64)

<i>UTM COORDINATES OF AMISC TENEMENT AREA</i>						
PT	UTM E	UTM N	DX	DY	DMD	PRODUCTS
1	362580	789520	0.00	6,060.00	0.00	0.00
2	362580	795580	1,870.00	0.00	1,870.00	0.00
3	364450	795580	0.00	2,500.00	3,740.00	9,350,000.00
4	364450	798080	2,640.00	0.00	6,380.00	0.00
5	367090	798080	0.00	1,370.00	9,020.00	12,357,400.00
6	367090	799450	2,000.00	0.00	11,020.00	0.00
7	369090	799450	0.00	1,450.00	13,020.00	18,879,000.00
8	369090	800900	3,010.00	0.00	16,030.00	0.00
9	372100	800900	0.00	2,020.00	19,040.00	38,460,800.00

10	372100	802920	3,300.00	0.00	22,340.00	0.00
11	375400	802920	0.00	1,970.00	25,640.00	50,510,800.00
12	375400	804890	2,650.00	0.00	28,290.00	0.00
13	378050	804890	0.00	2,910.00	30,940.00	90,035,400.00
14	378050	807800	4,030.00	0.00	34,970.00	0.00
15	382080	807800	0.00	1,800.00	39,000.00	70,200,000.00
16	382080	809600	8,220.00	0.00	47,220.00	0.00
17	390300	809600	0.00	-	55,440.00	-747,331,200.00
18	390300	796120	-9,780.00	0.00	45,660.00	0.00
19	380520	796120	0.00	-6,600.00	35,880.00	-236,808,000.00
20	380520	789520	-17,940.00	0.00	17,940.00	0.00
1	362580	789520				
TOTALS			0.00	0.00	463,440.00	-694,345,800.00
				SQUARE METERS=		(347,172,900.00)
SQ. FT PER SQ. METER =			10.764	SQUARE FEET =		(3,736,923,046.97)
SQ. FT PER ACRE =			43,559.946	TOTAL ACRES =		(85,788.06)
				SQ.KM		(347.32)

<i>UTM Coordinates of LIBERIA GOLD LIMITED Exploration Tenement Boundaries</i>						
PT	EASTING	NORTHING	DX	DY	DMD	PRODUCTS
1	600470	619232	19,396.00	59.00	38,792.00	2,288,728.00
2	619866	619291	-3.00	9,683.00	58,185.00	563,405,355.00
3	619863	609608	314.00	27,301.00	58,496.00	1,596,999,296.00
4	620177	582307	6,457.00	49.00	52,353.00	2,565,297.00
5	613720	582356	-6.00	3,063.00	45,890.00	140,561,070.00
6	613714	585419	1,988.00	24.00	43,896.00	1,053,504.00
7	611726	585443	-38.00	2,362.00	41,870.00	98,896,940.00
8	611688	587805	5,715.00	-9.00	36,117.00	325,053.00

9	60597 3	587796	-7.00	4,380.0 0	- 30,39 5.00	133,130,100. 00
10	60596 6	583416	7,386.00	- 38.00	23,00 2.00	- 874,076.00
11	59858 0	583378	-5.00	3,671 .00	15,61 1.00	57,307,98 1.00
12	59857 5	587049	18,702.0 0	- 1,160 .00	- 3,096.00	- 3,591,360.00
13	57987 3	588209	226.0 0	5,219 .00	21,572.0 0	112,584,268. 00
14	58009 9	593428	8,043. 00	3,668 .00	- 13,303.0 0	- 48,795,404.0 0
15	58814 2	597096	10,10 8.00	17,38 9.00	4,848. 00	84,301,87 2.00
16	59825 0	614485	2,265. 00	3.00	17,22 1.00	51,663.00
17	60051 5	614488	-45.00	4,744 .00	19,44 1.00	92,228,10 4.00
1	60047 0	619232				
		TOTALS	0.00	0.00	448,1 46.00	- 1,980,449,75 3.00
					SQUARE METERS=	(990,224,876 .50)
		SQ. FT PER SQ. METER =	10.76 4		SQUARE FEET =	(10,658,649, 228.31)
		SQ. FT PER ACRE =	43,55 9.946		TOTAL ACRES =	(244,689.22)
					SQ.KM	(990.64)

1.4 Geology, Stratigraphy, Structure & Mineralization

Like much of Africa, Liberia is predominantly underlain by Precambrian crystalline basement rocks. The country is a component of the Guinean (Leo or Man) shield within the West African craton. Crystalline rocks from the Precambrian era (Archean and Proterozoic) constitute approximately 90% of the country's geology, except for specific coastal areas where unconsolidated sediments and sedimentary rocks are present.

Radiometric dating has identified three primary age provinces within the Precambrian basement rock of Liberia: The Liberian age province, the Pan-African age province, and the Eburnean age province.

LGL Dugbe-North tenement lies within the Juazohn quadrangle which is almost entirely underlain by crystalline rocks - both igneous and metamorphic. The Juazohn quadrangle forms part of the Guinean shield of West Africa and is made up largely of Precambrian igneous and metamorphic rocks. Exceptions are mainly diabase dikes of probable Jurassic age, laterite, canga, and young unconsolidated deposits. Most common are gneiss of quartz diorite composition with lesser granodiorite gneiss, schist, amphibolite, iron-formation, and dioritic to granitic rocks. Minor amounts of other rocks are also present (*Tysdal, Russell G., Geology of the Juazohn quadrangle, Liberia*).

The areas and hills traversed during this phase of exploration works within the project are dominated by two major lithologies: granitic gneiss (mostly partially weathered and

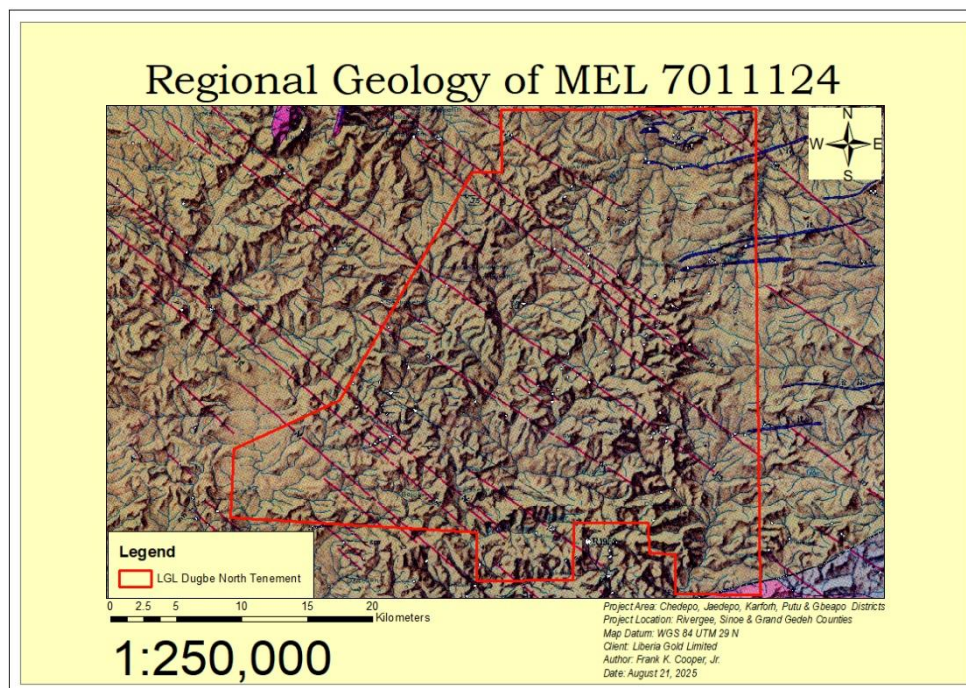


Figure 3: Regional Geology of Tenement Area

concentrated on the southeastern side of Belt 2) and iron formations / canga of the oxide facies. The granitic gneisses / granitoids seen are of several variants in terms of color and mineralogical composition ranging from leucocratic to melanocratic on one end and the other with or without sulfides. The presence of outcrops in the terrane is sparse. This can be mostly attributed to tropical weathering that has produced thick laterite and saprolite which are observable in road cuts. The limited number of outcrops is further blurred by

dense primary forests and lush vegetation in other parts of the tenement. In few places, ultramafic rocks, mostly diabase form dikes, plugs, and sills in both the crystalline basement and metasedimentary complexes.

A swarm of diabase dikes trends northwest across the central part of the Juazohn quadrangle, and a few widely spaced dikes crop out northeast and southwest of the main grouping. The diabase is fine grained and ophitic and is composed of labradorite, lesser augite, and as much as 10 percent magnetite and ilmenite. Some wide dikes show coarse-grained (gabbroic) interiors and chilled aphanitic borders. Diabase that has been weathered to saprolite is easy to recognize in road cuts because it generally retains its felted texture and is spotted with uniformly distributed tiny black grains of magnetite and ilmenite. At many places, the diabase weathers into rounded boulders (*Tysdal, Russell G., Geology of the Juazohn quadrangle, Liberia*).

In-situ weathering of some gneissic units showed folding in some places, particularly along road cuts around Nyennawilken ASM fields. As our field team traverse westward to assess other part of the study area, the gneisses became more foliated - some of them clearly displaying distinct mineralogical bands in the form of lineations.

Economic mineralization throughout Liberia is thought to be typical of other global Precambrian mineral deposits, i.e. banded iron deposits and quartz vein-hosted and shear-related mesothermal lode gold deposits associated with Greenstone belts. Liberia has a long history of alluvial gold and diamond mining. Because of the general lack of bedrock outcrops, artisanal gold mining is a useful guide for exploration. Throughout Liberia there is widespread artisanal mining of gold in lateritic soils. Many small mining operations have been active for generations. The prevalence of abundant placer gold and diamond workings throughout the country indicates probable local sources to the alluvial-elluvial

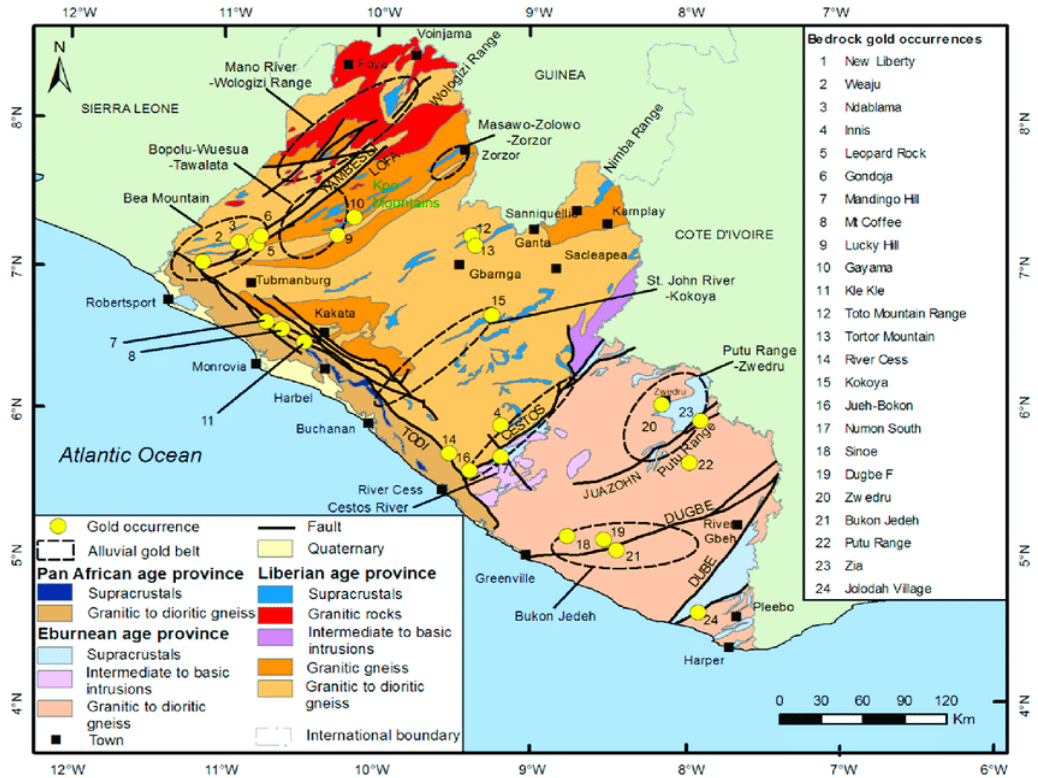


Figure 4: Distribution of Principal Bedrock Gold Occurrences and Belts in Liberia (Gunn et al., 2018)

deposits (presumably weathered laterite and saprolite). The country’s environment is favorable to the following economic deposit types: i) gold-quartz veins and disseminated, and possibly lode-gold associated with regional greenstone belts; ii) Homestake-type deposits associated with iron formations; iii) diamondiferous kimberlite pipes of a younger age than the host gneissic basement complex; and iv) alluvial/placer gold and diamond concentrations derived from the other deposit types.

The primary host lithology for the alluvial gold occurrences in the licensed area is still being investigated. However, artisanal mining activities are concentrated within the alluvium and soils / gravels from most parts of the project area.

2.0 Budget Commitments & Exploration Expenditure

Spending for this phase of the project amounted to [REDACTED]. This amount covered costs associated with desk studies and preliminary engagements, consultants honorarium, wages of casual laborers, procurement of logistics, transportation & accommodation, field work, local relations, insurance, and incidentals. The breakdown of these expenditures is shown in the table below:

Table 1: Phase I Exploration Expenditure

DUGBE NORTH PHASE I - OPERATIONAL EXPENSES			
A. Desk Studies & Preliminary Engagements			
Stakeholders Engagement / Letter of Authorization	Lumpsum	[REDACTED]	[REDACTED]
SUBTOTAL			[REDACTED]
B. Honorarium, Wages & Daily Subsistence Allowances			
Consulting Geologists	Lumpsum	[REDACTED]	[REDACTED]
Local Guides / Local Laborers	Lumpsum	[REDACTED]	[REDACTED]
SUBTOTAL			[REDACTED]
C. Logistics, Transportation, & Accommodation			
Procurement of Field Essentials	Lumpsum	[REDACTED]	[REDACTED]
Purchase of Insurance Coverage	Lumpsum	[REDACTED]	[REDACTED]
Accommodations for Field Staffs	Lumpsum	[REDACTED]	[REDACTED]
Transportation within Project Areas (Motorcycle Rentals)	Lumpsum	[REDACTED]	[REDACTED]
SUBTOTAL			[REDACTED]
D. Local Relations & Incidentals			
Local Relations & Incidentals	Lumpsum	[REDACTED]	[REDACTED]
SUBTOTAL			[REDACTED]
AGGREGATE EXPENDITURE			[REDACTED]

3.0 Resources, Logistics & Infrastructures

LGL tenement area is in a semi-remote and underdeveloped part of Liberia where power grid and rail infrastructures are unavailable. The surrounding towns exhibit a deficiency in developed infrastructure. Local shops for the purchase of essentials like food or bottled water are available in bigger towns like Killepo Kanweaken, Nyennawilken, and Pokpaken. Electricity is supplied by either small private generators or limited private solar systems. The semi-remote location results in limited cellular phone signal; therefore, satellite phones or local range radio frequency handsets are necessary communication devices for

teams operating in the area. The licensed area possesses adequate areas and regions suitable for the establishment of potential future mining operations.

Water for exploration and other purposes can be sourced from the few boreholes or one of the many streams which are arranged in a dendritic pattern throughout the property. Recruiting local labor force to assist exploration is cost intensive as many of the youths engaged in lucrative local mining that pays them up to LD [REDACTED] daily. There were considerable constraints during this phase of the work as laborers had to be sourced and transported from nearby remote villages.

Liberia Gold Limited has excellent contacts with geological consulting firms and individuals in Liberia; hence, extra specialist expertise is available. Staffing and labor compliments varied according to the phase of activity undertaken. During peak activities of this quarter, the following personnels were utilized: 2 geologists, 4 locally hired laborers, 1 chef, and 1 security / translator. Laborers for field work were locally hired on a part-time daily wage basis. They included 1 cutter, 2 diggers, and 1 sample carrier.

4.0 Reporting Obligations & Regulatory Compliance

LGL endeavors to be compliant with existing legislation as far as compliance and reporting are concerned. The company is actively working to complete its backlog of regular relevant filing with the Ministry of Mines & Energy which includes the following:

1. Quarterly & Annual Exploration Reports inclusive of Work Programs and Budgets
2. Information and samples
3. Other reporting obligations

as a way of demonstrating compliance with **sections 4 & 6** of *Liberia's Mineral Exploration Regulations of 2010*. The company is also in good standing with the Environmental Protection Agency (EPA) and other co-regulators of the mining sector.

5.0 Stakeholder & Community Relations

LGL field team have been able to maintain very cordial working relations with local mining and administrative officials in the tenement. Before the commencement of field works, letters of introduction were obtained from the Ministry of Mines & Energy to local officials (superintendents, districts commissioners, town chiefs, clan chiefs, paramount chiefs, and mining agents) within project areas. The service of a local translator (an excellent speaker of the Grebo language) was hired, based on the recommendation of Paramount Chief Sackor, to explain the field mission (as contained in the letter of introduction from the

Ministry) to townspeople and local citizens of towns and villages within the project environment. The company's exploration works were culturally sensitive and field excursion crews were cautious in obtaining and using information on sacred sites, local norms, and traditions. That way, all forms of cultural violation / entanglement were avoided.

The company bought gifts and presented little tokens to the chiefs, elders, women, and children within the towns of Killepo Kanweaken, Pokpaken, Seagboken, Woloken, Jokoken, and Jaytoken. This was followed by exit meetings detailing possible next steps



based on more favorable exploration results.

6.0 Occupational Health, Safety & Environmental Considerations

Ensuring commitment to health and safety standards, the company inducted all its field workers on occupational health, safety, and job hazard analysis. This was done via a face-to-face demonstration training which was conducted before the commencement of exploration activities. The Occupational Health Safety / Job Hazard Analysis (OHS-JHA) induction training module covered topics related to:

- Proper use of PPEs (hand gloves, helmets, safety shoes, nose masks, etc.)
- Job Hazard Assessment and Analysis
- Equipment Maintenance and Specification
- Fall and Fire Protection and Control
- Safeguards and Safe Operations of Tools, Equipment and Machineries
- General Exploration Requirements and Duties of Employees

LGL team of consultants reinforced this training by carrying out a daily review of what can be done better in terms of OHS.

With regards to the environment, exploration works in this phase had negligible to no impact on the environment and hence no rehabilitation / remediation was necessary. The company, however, plans to contact a renowned environmental consultancy to study and document the impacts of proposed activities on the air, water, land, fauna, flora and residents, to provide mitigation measures that will avert or alleviate those impacts.

Fortuitously, this area is duplicated by large tracts of land on all sides which offer the same habitat to fauna and flora. It is also almost entirely covered by lateritic soil. The employed methodology was of such nature that for the initial work there were minimal changes to the original land surface.

Consequently, there are no major environmental issues and no expectation of longer-term impacts in the next phase. All pits dug for sampling purposes were closed afterwards. Overall, the disturbance to the land surface was minimal. All rehabilitations were guided by and in compliance with relevant regulations.

7.0 Exploration Works Conducted

Exploration activities implemented for the period under review covered both technical (non-invasive and limited-invasive exploration) and non-technical (consultations, meetings, planning, community engagements, and public relations) methods. The aim was to gather preliminary data which included the following:

- ✓ Limited geological mapping and outcrop / float sampling
- ✓ Geochemical soil, stream, and artisanal pits gravel sampling
- ✓ Geological mapping
- ✓ Geological interpretations
- ✓ Compilation of historical data
- ✓ GIS Illustrations
- ✓ Reporting and planning

Activities executed for the period under review included community relations, recruitment of local workers, geological field mapping, assaying, and interpretations. The process of mapping and sampling were guided by points and belts within the study area. Justification for this methodology is to first investigate the lithologies and mineral distribution of the active ASM terrains before engaging other focal areas to ascertain if observed patterns are consistent throughout the property.

7.1 Geological Mapping & Geochemical Survey I

Maps (geological, geophysical, drainage, and target location) produced and/or gathered from desk studies were used to develop a comprehensive field investigation plan which guided daily field traverses. During daily field excursions, minerals in rocks were identified and variations in lithological units were recorded while taking structural measurements of strike, dip, and dip direction where applicable. Lithologies in the terrane are dominated by gneisses (both leucocratic and melanocratic types), granites, itabirites (canga), minor amphibolites, and diabases with constituent minerals like biotite, quartz, muscovite, P-feldspar, K-feldspar, magnetite, goethite, hematite, limonite and some sulfides. Indications of outcropping or near-surface mineralization were carefully observed during this phase. Geological mapping of areas of interest was layout on a scale suitable for the observed geological variability.



LBR-SIN-LGL-GP-57

LBR-RVG-LGL-GP-30

**A – A highly weathered granitic gneiss exposed along road cut enroute to Nyennawilken ASM field
B – A sample of ultramafic (diabase) taken from an active ASM pit in “Somalia”**



LBR-SIN-LGL-GP-34

LBR-SIN-LGL-GP-47

A – some variants of gneissic units within the study area; B – Geologist Ousman measuring dip angle of a gneissic outcrop exposed along road enroute to Nyennawilken ASM fields

Most parts of the exploration tenement are mountainous, and drained by numerous gullies, which makes stream sediment sampling an efficient gold exploration technique. Stream sediments representing the fine silty-clay portion of the first and second order stream beds were collected and bagged as samples weighing between 1.5 kg to 2 kg. In some locations, stream sediments and gravels (clastic materials) from artisanal pits were washed / processed in the field and bagged as 5 g sub-samples - PST. Some of these washed samples showed visible gold. The purpose of adopting such multi-sampling mode was to zoom in on mineralized occurrences by using field results to determine suitable pathfinders for primary gold assemblages.



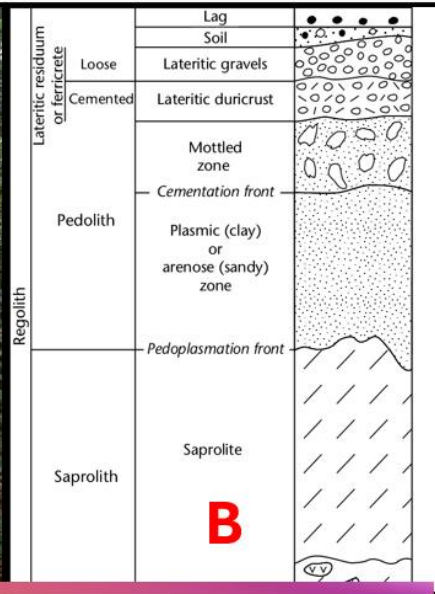
Topographic highs were systematically field checked with field maps and updated accordingly. Incomplete tasks were transferred to the next day when daily field objectives weren't met. Details of collected data were transferred to a camp site database (spatially referenced excel spread sheet) – modified copies of which are presented in the appendix.

7.2 Panning & Geochemical Survey II

Soil samples weighing between 1.5 kg to 2 kg were collected from nearly all major highlands along strike as we traverse the various belts and points within the study area. These samples, taken from depths ranging from 45 to 90 centimeters were rid of organics and classified as either *residual* or *ferruginous*. The regolith profile of each sample was described using Eggleton, 2001 idealized regolith profile. Priority was given to those

elevations having highly productive artisanal operation at their base. Most of the highlands along strike have evidence of either passive or active ASM workings at their base. Panning, a traditional method of gold exploration, was integrated into our overall methodology of assessing the gold potential of the tenement. To this end, two of our local hires, skilled in panning for gold, panned gravels taken from artisanal mining pits. The quantity (in decigrams) of gold recovered from panning at each sample location were recorded to be later compared with corresponding assay values.

A – Soil sample number 36



B – Idealized regolith profile after Eggleton 2001

A – Aerial view of an actively mined ASM pit in Camp “Somalia”;



B – Geologist inspecting clastic materials from an actively mined ASM pit near Belt 2, Point 1 (B2P1)



8.0 Assays, Interpretation & Key Findings

Usually, in analyses of assay results, we want to achieve some or all the following:

- ❖ Comparison of assay values with normal crustal abundance / background values
- ❖ Compare mean value of panned concentrates to that of stream sediments
- ❖ Compare statistics of different sampling media using basic numerical summaries and statistical graphics
- ❖ Outline anomalous zone(s) for detailed follow-up

To this end, samples were collected, bagged, and labelled in accordance with the following numbering scheme:

LGL – Liberia Gold Limited

SO – Soil Sample

ST – Stream sediment / Clastic materials from artisanal pits

PST – Panned concentrates

RC – Rock Chips (outcrops, channel, and grab samples)

Therefore, **LGL-SO-01** corresponds to the first soil sample collected, and so forth. Closed sample bags were appropriately secured and handled with the maximum possible care until they were dropped off at the preparatory laboratory lab in Fendell. After preparation, the pulps were shipped to SGS Ghana (Analysis Reports: *TWA25-15936* & *TWA25-16059*) for analyses. Analyses were done using *GO_FAA50V10* (Au, FAS, ore grade, AAS, 50g-10mL) and *GO_FAE50V10* (Au, FAS, Solvent Extraction, DIBK, AAS, 50g). *GO_FAA50V10* is a gold assay method which uses solvent extraction with DIBK (diisobutyl ketone) and detection by AAS (atomic absorption spectroscopy), likely starting with a 50g sample. The Au (gold), FAS (fire assay), solvent extraction (using DIBK), and AAS method is a robust and sensitive technique for determining gold concentrations in various materials, particularly geological samples, by combining pre-concentration with selective solvent extraction and sensitive atomic absorption spectroscopy. The process involves digesting the sample (possibly with aqua regia), extracting the gold into DIBK, and then measuring the gold concentration using AAS.

Consistent with available literature, general guidelines for anomalous gold values are as follows:

Table 2: General Overview for Anomalous Gold Values

Gold concentrations interval (ppm)	Sampling media	Interpretation
< 0.005	soils / stream sediments	background / not anomalous
0.005 - 0.020	soils / stream sediments	weakly anomalous
0.020 - 0.050	soils / stream sediments	moderately anomalous
> 0.050	soils / stream sediments	strongly anomalous
> 0.100	soils / stream sediments	highly anomalous
> 0.100	rock chips / trench	anomalous
> 1.000	rock chips / trench	very promising for hard rock potential

These are not rules of thumb as what is considered “anomalous” depends on other factors such as the geological context and background levels of the area. In some terranes with low background gold, even 10 to 20 ppb may be significant. Anomalous gold does not always mean economic mineralization. It indicates a geochemical signal that may be part of a larger mineralizing system.

In West Africa, a review of the literature and successes from other projects indicate **0.05 ppm Au** as threshold for anomalous. Specific to the case of Liberia, useful analogs based on similar Archean terrane as Ghana suggests the following

Table 3: Potential Thresholds for Anomalous Gold in Liberia

Gold concentrations interval (ppm)	Sampling media	Interpretation
< 0.01	soils / stream sediments	background / normal crustal abundance
0.05 - 0.1	soils / stream sediments	anomalous threshold
0.1 - 0.2	soils / stream sediments	strong anomaly

During this phase, a total of sixty-five (65) geological points were highlighted. From these points a total of twenty-one (21) rock chips, ten (10) stream sediments / clastic materials from ASM pits samples, and eight (8) pre-processed / washed stream sediments / clastic ASM gravel mixture were collected and sampled. The period also witnessed the collection of thirty-six (36) soil samples (including duplicates for quality assurance and quality control). Analyses results of these samples together with other relevant data and descriptions are comprehensively grouped together and presented in the Appendix of this report.

Statistical summary (both numerical and graphical) and distribution of assay results in *parts per million (g/ton) gold* were computed using both MS Excel and R software and presented below.

Table 4: Numerical Summary Statistics of Assay Values Across Different Sampling Media

Statistic	Soil	Streams Sediments / Clastic materials from ASM pits			Rocks		
Mean (geometric)	0.004	Assay Value (Au_PPM)	Sample Count	%	Assay Value (Au_PPM)	Sample Count	%
Mean (arithmetic)	0.004	< 0.01	6	60%	< 0.01	20	95%
Standard Deviation	0.023	0.01	1	10%	0.01	1	5%
Mode	0.003	0.04	1	10%	Total	21	100%
Median	0.004	0.07	1	10%			
		0.06	1	10%			
		Total	10	100%			

Statistic	Soil	Panned Concentrates		
		Assay Value (Au_PPM)	Sample Count	%
Min	0.002	2.78	1	13%
1st Qu	0.003	2.97	1	13%
Median	0.004	3.48	1	13%
Mean	0.004	42.81	1	13%
3rd Quarter	0.005	66.2	1	13%
Max	0.013	84.96	1	13%
		> 100	2	25%
		Total	8	100%

Statistic	Soil - A	Soil - B	Rocks - A	Rocks - B	Streams	Artisanal Pits Gravel
Mean (geometric)	0.007	0.013	0.006	0.007	0.025	0.015
Mean (arithmetic)	0.027	0.027	0.010	0.010	0.037	0.026
Standard Deviation	0.051	0.028	0.008	0.007	0.023	0.026
Mode	0.001	0.001	0.003	N / A	0.037	0.013
Median	0.004	0.015	0.006	0.008	0.037	0.017

Figure 5: Statistical Analysis of Soil Assay Results

Consistent with Table 2, 11 soil samples can be considered weakly anomalous. These samples are: **LGL-SO-01, LGL_SO-06, LGL-SO-11, LGL-SO-14, LGL-SO-15, LGL-SO-18, LGL-SO-17, LGL-SO-21, LGL-SO-23, LGL-SO-27, and LGL-SO-36**. For rocks, there's only 1 sample (LGL-RC-04) with value equal to the minimum detection limit (0.01). The rest are below the analytical threshold (< 0.01). Further invasive work can better explain if these geochemical signatures are consistent or improve as we move deeper into the saprolite. Such work can confirm if these signatures are normal background values or indications of something more pronounced in the lower saprolite. With regards to anomalous values (highlighted in green in Table 4 above) of streams, gravels from artisanal pits, and panned concentrates, it's intuitive to want to understand if the geochemical signatures in those locations have a limited or extended transport history. One way to understand this is to further investigate structures, lithologies, and elevations adjacent those areas.

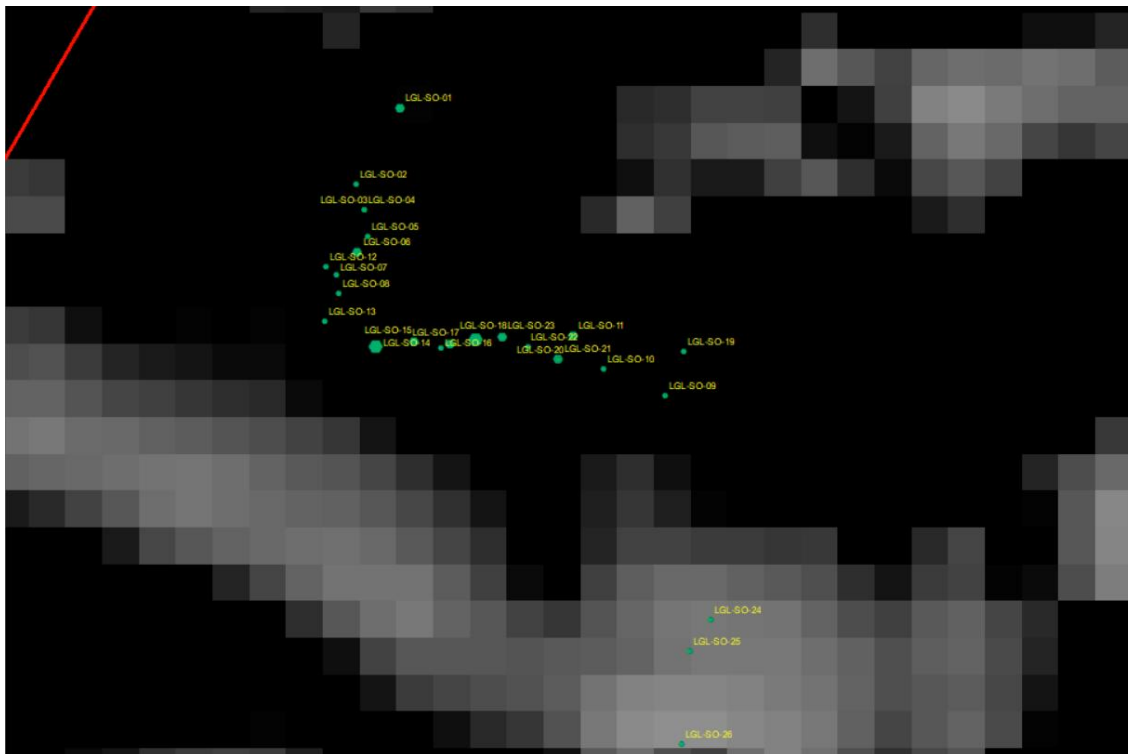
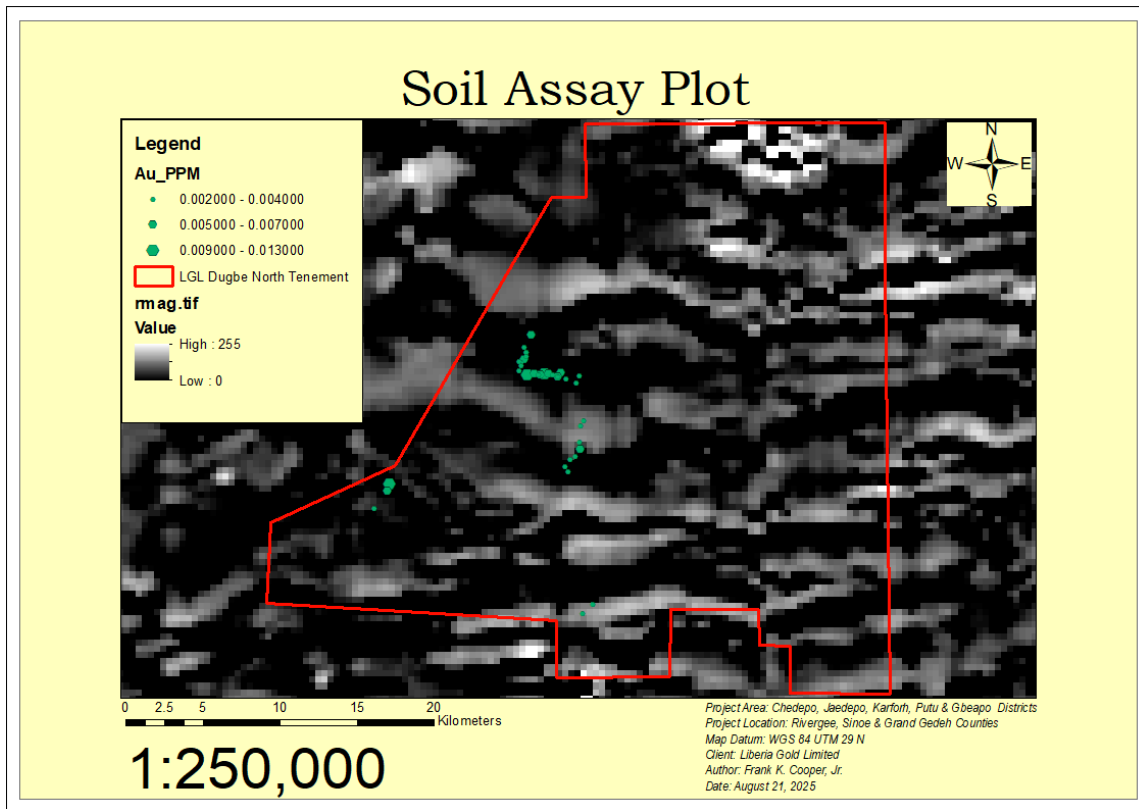


Figure 6: Soil Assay Plotted Over Shaded Relief

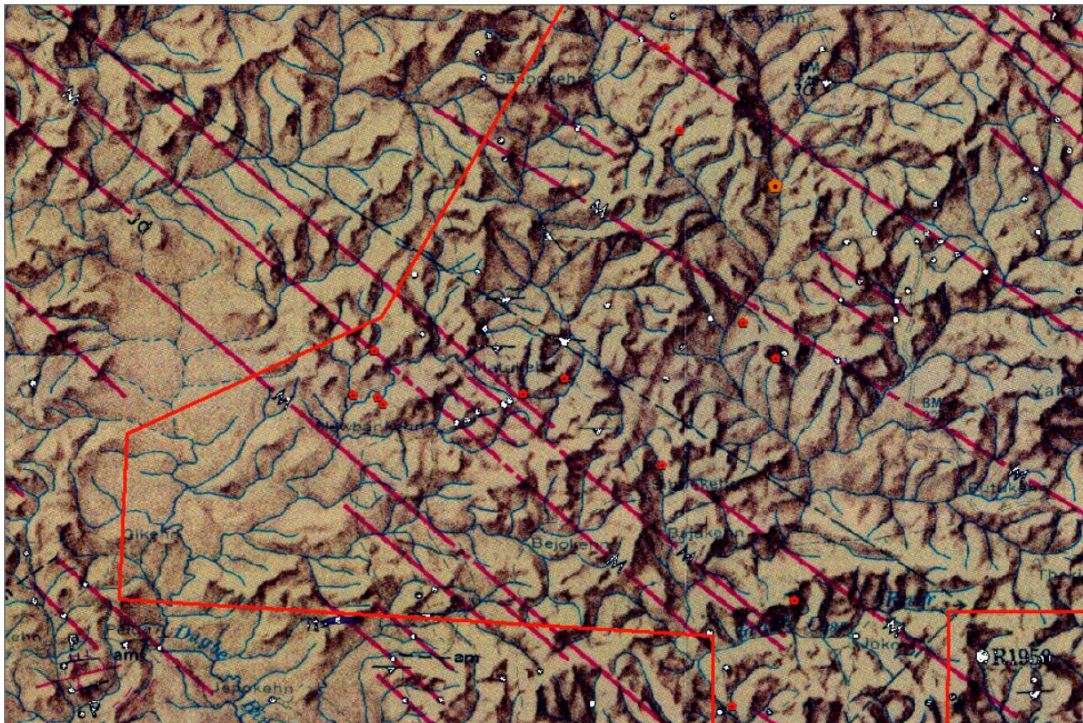
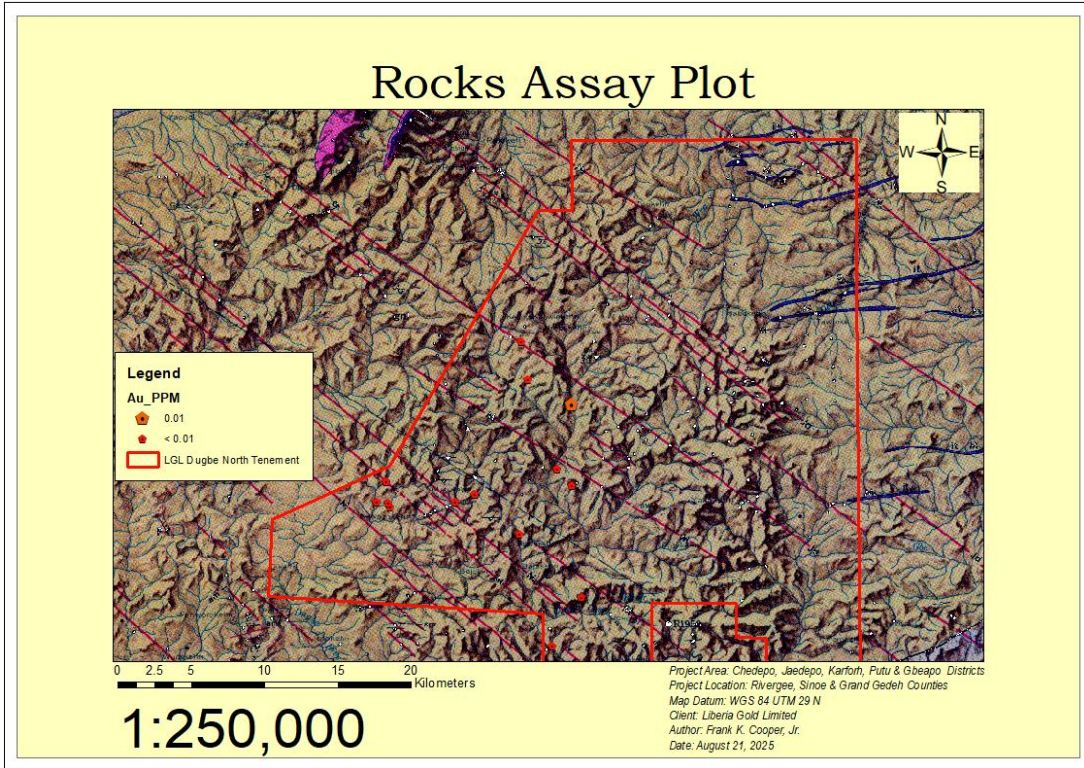
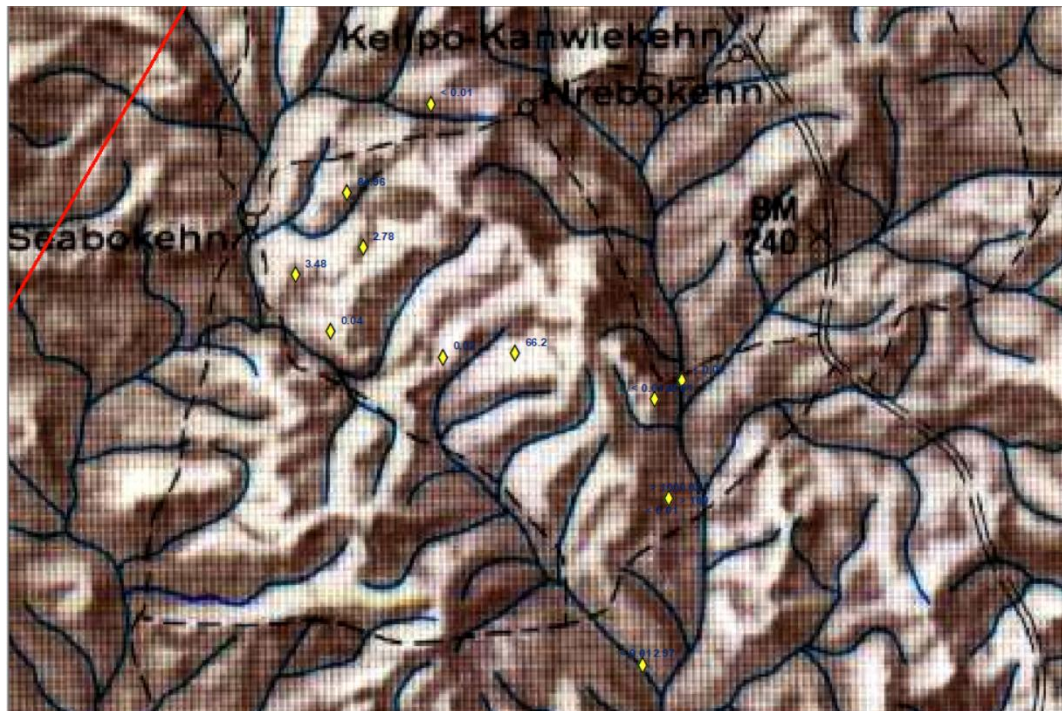
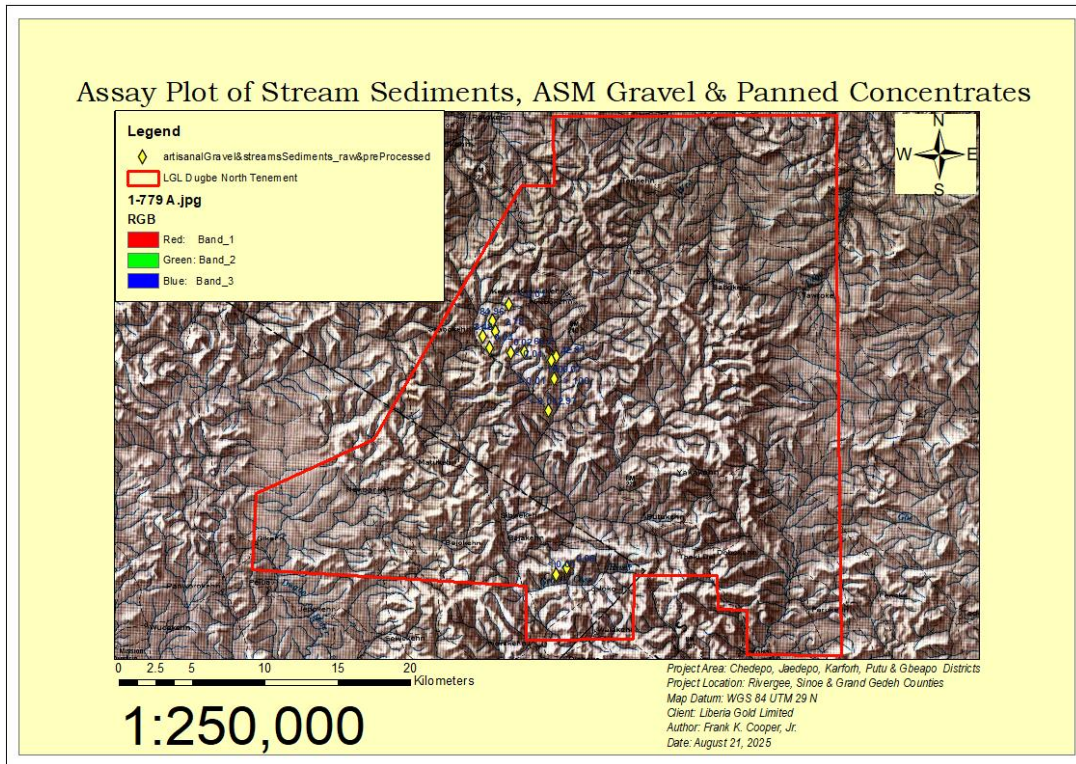


Figure 7: Rocks Assay Values Plotted Over Regional Geology



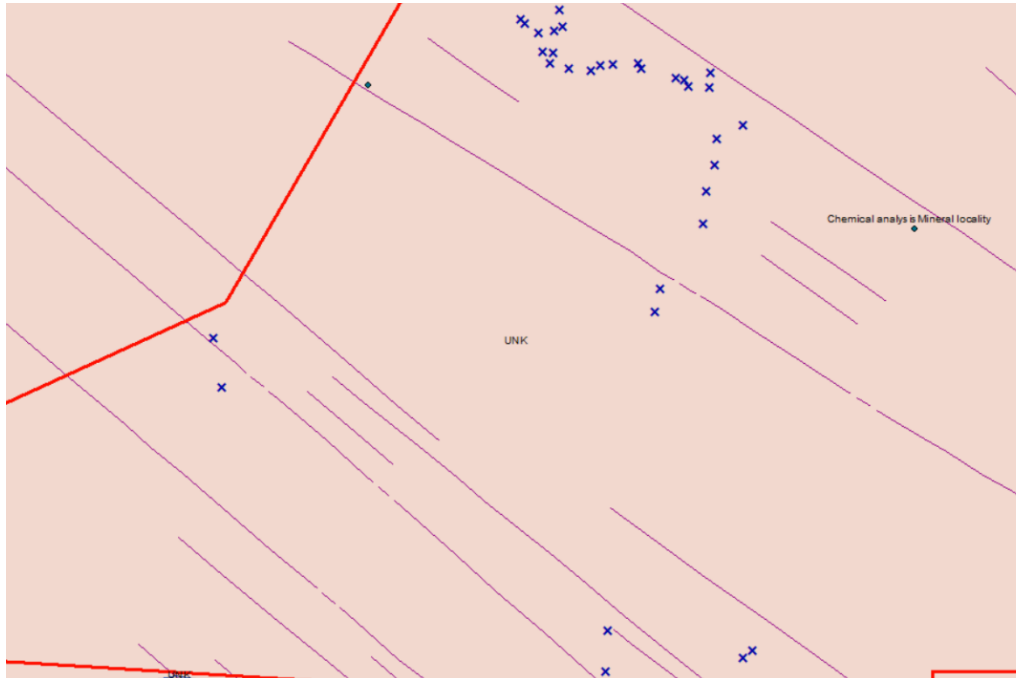
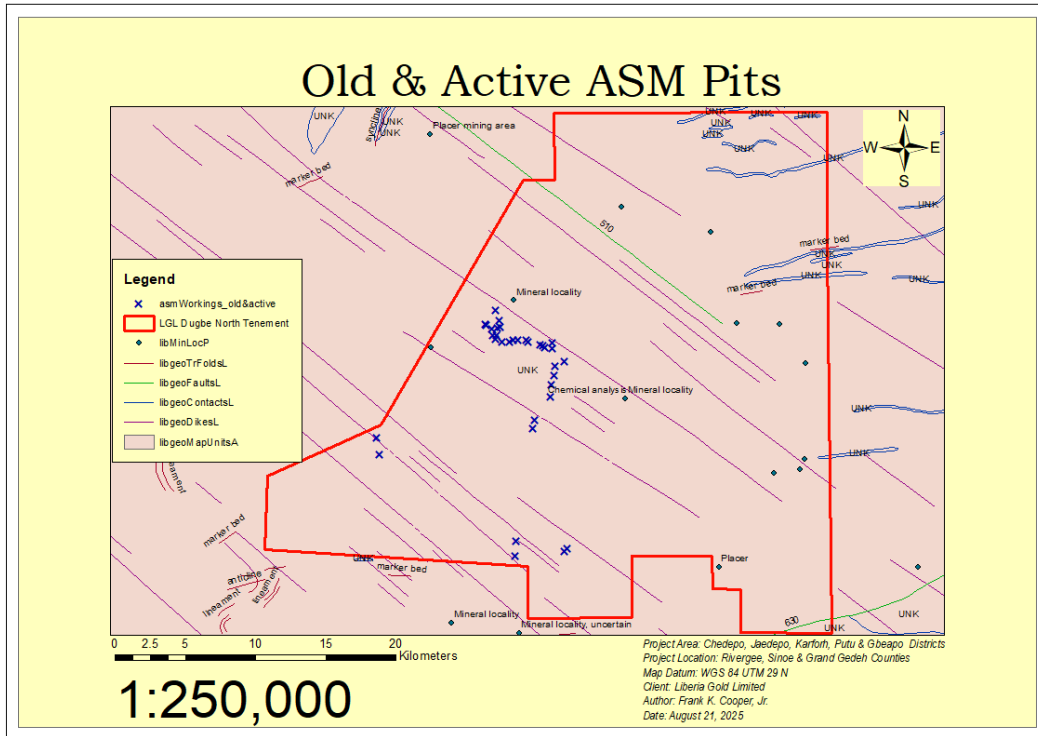


Figure 9: Assay Plots of Gravels from Active ASM Pits Over Geologic Structures

The exploration area of Liberia Gold Limited has been the focus of intense active and passive artisanal mining, and the region is known to host both alluvial gold and iron ore mineralization.

9.0 Conclusions & Recommendations for Future Work

The exploration works conducted so far further confirm vivid evidence for accumulations of placer gold mineralization in the area; the case of primary gold mineralization however is the subject of this study.

Primary and/or alluvial gold could still be present within the tenement; however, their locations could be limited to other parts of the tenement not yet surveyed due to access challenge and other factors

Activities for this phase have been predominantly concentrated in the eastern and southern parts of the tenement. Soil and rock assays revealed a weak to somewhat moderate geochemical signature within the upper saprolite of the investigated points and belts.

Initial analyses and findings from areas traversed and sampled call for more invasive and systematic geochemical soil sampling, pitting, and limited trenching of weakly anomalous surface zones in a potential follow-up phase.

Limited invasive exploration in the form of pitting, trenching and / or auger drilling will confirm if weakly anomalous soils are initial evidence of primary mineralization (non-placer deposits) from the saprolite. Both vertical and horizontal profiling are hereby proposed.

Efforts are needed to map out and sample active artisanal workings in other parts of the tenement, especially the western and northern portions which did not include the traversed areas (not covered by the points and belts surveyed).

Further investigation of both thickness and lateral extent of identified anomalies must be undertaken in the dry season when water levels are at their minimum. Such investigation is necessary to further establish the vertical and horizontal extent, and grade of any likely deposit and must make use of invasive exploration (more than 6 meters within the saprolite) and relevant data interpretations.

10.0 References

Online, T. (n.d.-b). Liberty International Mineral Corporation:: Projects :: Liberia :: Geological History. <https://www.libertymineral.com/projects/liberia/geology/>

Hadden, R. L., US Geological Survey Library, US Department of State, Topographic Engineering Center, US Army Corps of Engineers, & Geospatial Information Library (GIL). (2006). *The Geology of Liberia: a Selected Bibliography of Liberian Geology, Geography and Earth Science* [Bibliography; Print]. Topographic Engineering Center. <https://apps.dtic.mil/sti/tr/pdf/ADA451649.pdf>

Desert Research Institute. (2024, March 8). *DRI-Liberia Capacity Building - DRI*. DRI. <https://www.dri.edu/ciwas/dri-liberia-capacity-building/>

Gunn, A., Dorbor, J., Mankelow, J., Lusty, P., Deady, E., Shaw, R., & Goodenough, K. (2018). A review of the mineral potential of Liberia. *Ore Geology Reviews*, 101, 413–431. <https://doi.org/10.1016/j.oregeorev.2018.07.021>

11.0 APPENDIX (Table of Samples and Assay Values)