



PREMIUM REPORT

SATELLITE-BASED MINERAL DETECTION REPORT

# Enhanced Gold Prospectivity Mapping in Somalia

Using Temporal and Multispectral Satellite Analysis (2020–2025)

REPORT DATE

10th March 2026

CLIENT

Abdullahi Mohamed

PREPARED BY

Ground Technology

CONCESSION



AOI AREA

552 Hectares

CLASSIFICATION

CONFIDENTIAL

CONFIDENTIAL

GT-RPT-2026-0310

SECTION 01

# Executive Summary

## 1.1 Project Objective

The primary objective of this project was to conduct a comprehensive remote sensing analysis across a **552-Hectares Area of Interest (AOI)** in Somalia. The goal was to systematically identify, characterize, and rank high-potential **gold** exploration targets to guide efficient and cost-effective follow-up field investigation.

This report presents the findings of a comprehensive satellite-based gold detection analysis conducted over the Upper Part Shahfici AOI Concession, located at approximately [REDACTED] E. Utilizing advanced multi-spectral remote sensing, structural lineament analysis, and volumetric geological modelling, the investigation has identified **55 discrete gold anomaly zones** across a total anomaly footprint of **48.39 hectares**.

## Key Metrics Dashboard



The recoverable gold potential, accounting for 90% mining recovery and 90% metallurgical recovery (81% combined), is estimated at **5,454.1 kg** with a recoverable value of **US\$ 906.3 million** at the current gold price of US\$ 166,166 per kilogram. All 55 zones exhibit **Gossan Zone mineralization style**, indicating iron-oxide capped gold-bearing structures typical of epithermal to orogenic gold systems.

### Key Finding

The analysis reveals significant gold mineralization potential warranting immediate exploration investment. 27 zones exceed the high-confidence threshold, and 16 zones show high structural continuity (>80), suggesting well-defined, laterally persistent mineralized structures.

## SECTION 04

# Results — Final Gold Anomaly Map

The analytical methodology yielded clear, data-driven results that successfully identify and prioritize potential gold exploration targets within the Area of Interest.

## 4.1 Prospectivity Map

This map displays the final, filtered, and prioritized anomaly polygons overlaid on a true-color satellite composite of the AOI. These polygons represent the most promising targets that have passed all stages of the analytical workflow — spectral, temporal, and terrain-based filtering.

This map (Figure 4.1) is the primary deliverable of the study. It displays the final, filtered, and prioritized anomaly polygons overlaid on a true-color satellite composite of the AOI. These polygons represent the most promising targets that have passed all stages of the analytical workflow, including spectral, temporal, and terrain-based filtering.

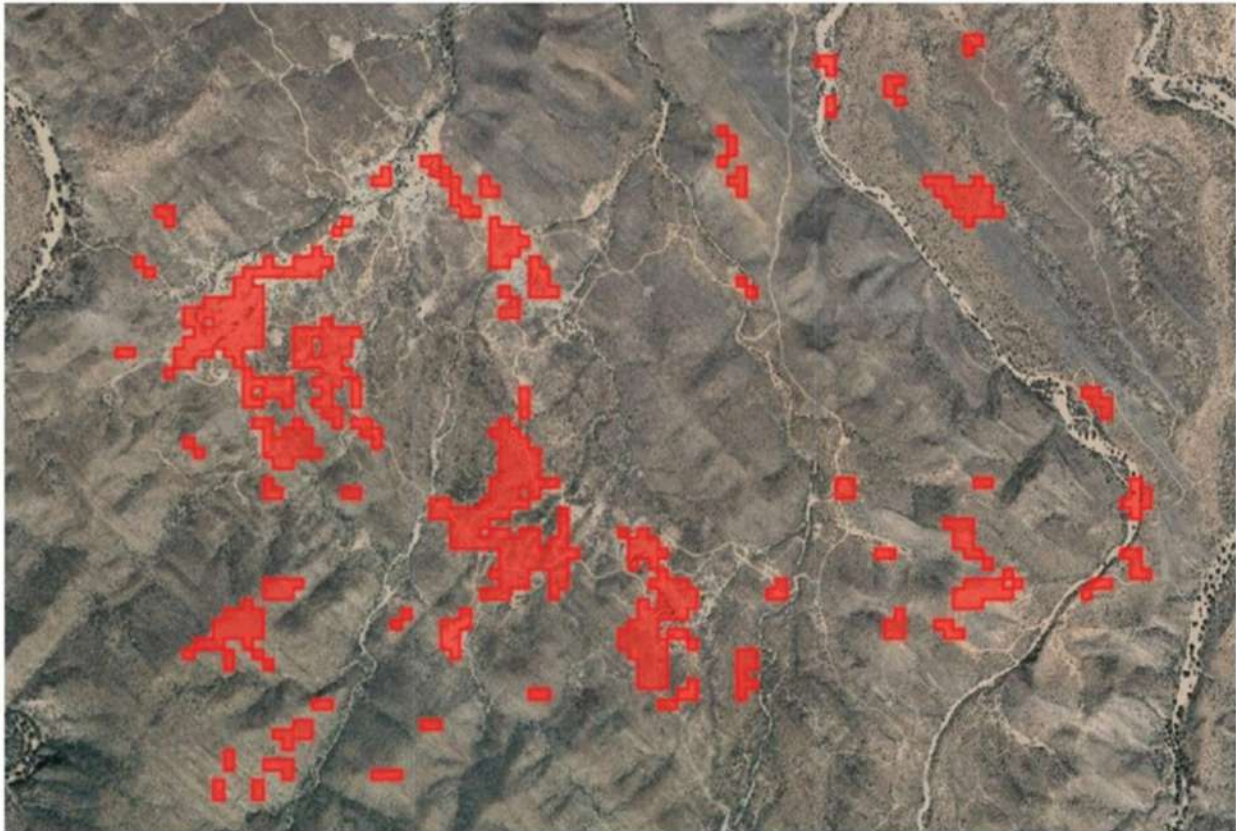


Figure 4.1.1 (a): Final prioritized gold anomaly polygons

● 5.2 Contained Gold & Grade by Zone (Top 15)

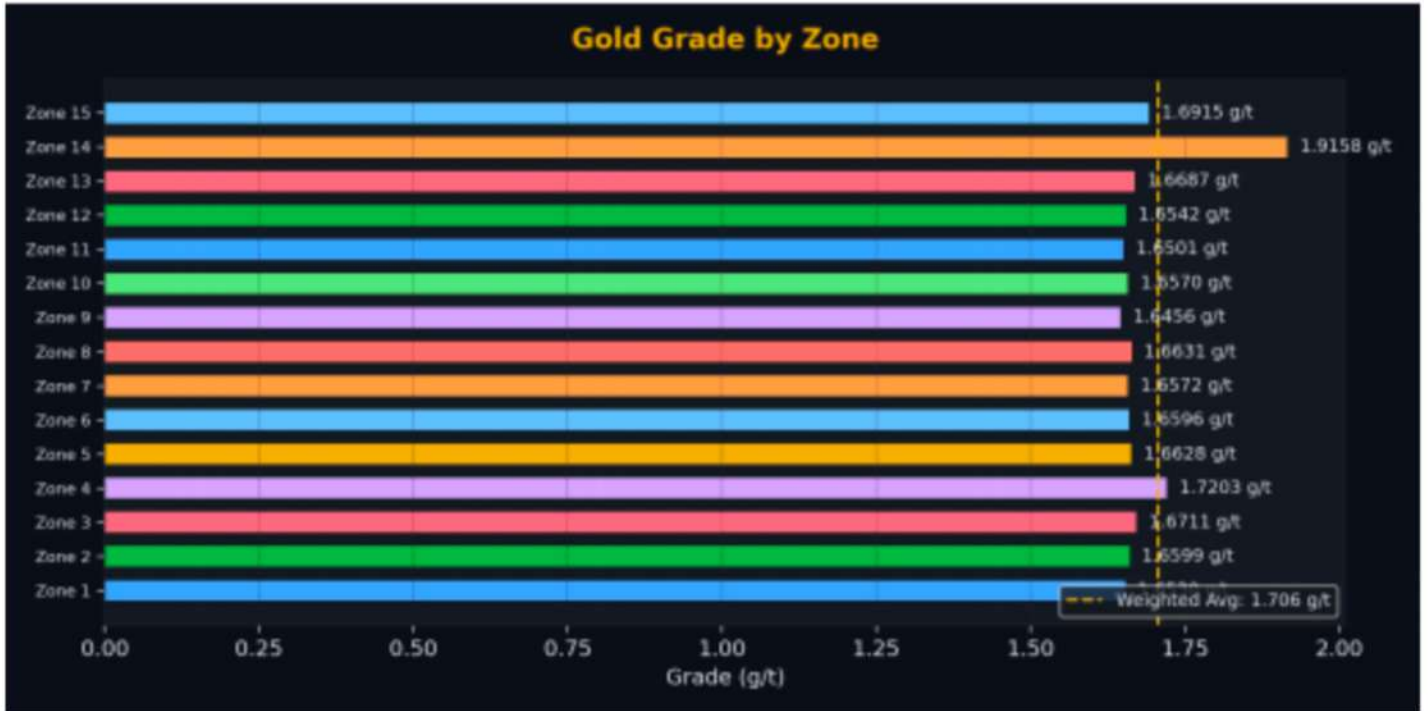


Figure 3: Gold Grade by Zone



Figure 4: Ore Tonnage by Zone

### ● 5.4 Top 15 Zones Summary Table

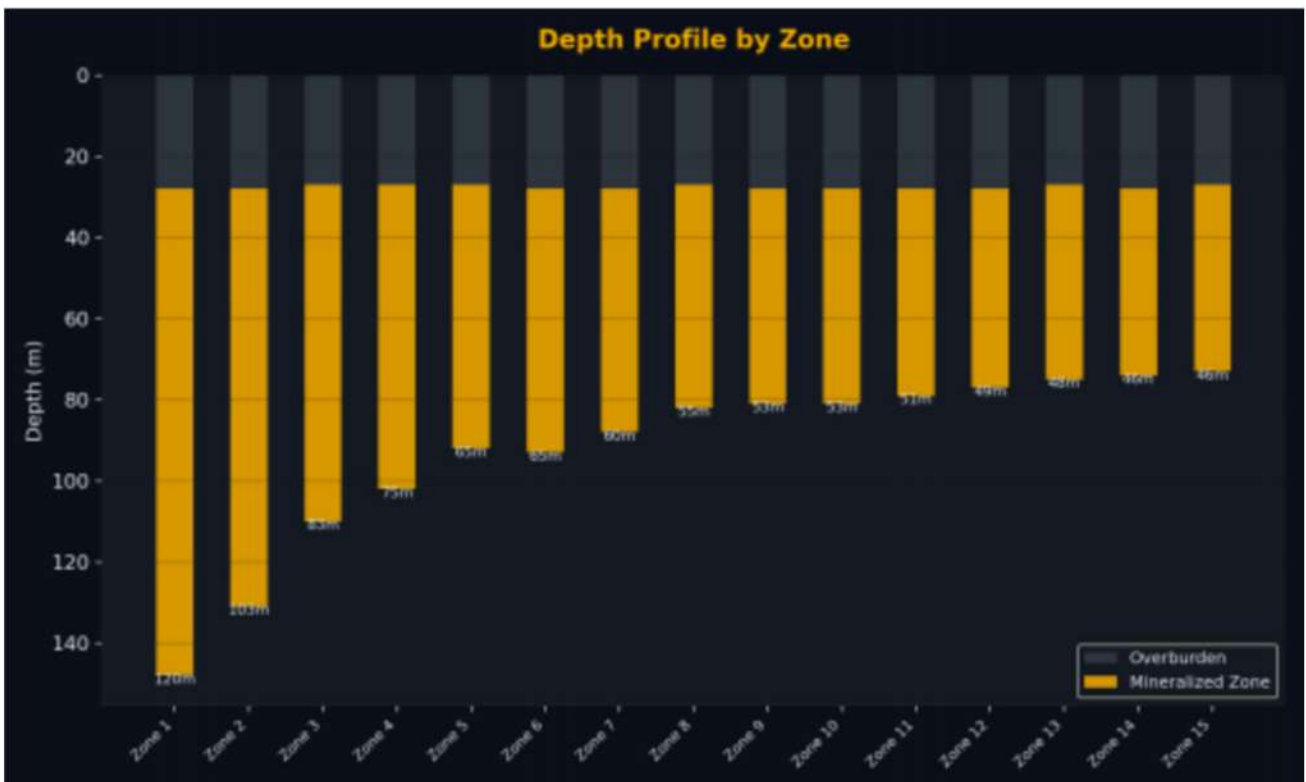
#	Zone	Grade (g/t)	Gold (kg)	Tonnage (t)	Area (m <sup>2</sup> )	Strike (m)	Depth (m)	GPI	Conf.	Value (US\$)
1	Zone 28	1.465	1999.1	1,364,346	88,136	1635	29-158	0.917	103.9	332.18M
2	Zone 14	1.451	1376.3	948,680	68,745	1402	30-145	0.928	85.6	228.70M
3	Zone 33	1.449	889.0	613,432	51,119	1110	29-129	0.921	101.8	147.71M
4	Zone 16	1.457	486.2	333,573	33,491	819	29-112	0.915	84.1	80.79M
5	Zone 7	1.467	253.2	172,607	21,153	618	29-97	0.913	113.1	42.07M
6	Zone 48	1.490	211.7	142,142	18,508	364	28-92	0.918	97.1	35.19M
7	Zone 12	1.464	195.1	133,261	17,627	367	29-92	0.919	93.4	32.41M
8	Zone 51	1.440	127.9	88,842	13,220	346	29-85	0.918	111.1	21.26M
9	Zone 27	1.442	105.0	72,869	11,457	213	30-83	0.914	76.5	17.46M
10	Zone 24	1.437	78.7	54,777	9,695	326	30-79	0.924	68.9	13.08M
11	Zone 47	1.432	72.7	50,766	8,814	263	30-78	0.916	117.3	12.08M
12	Zone 25	1.468	64.3	43,786	7,932	197	29-75	0.934	108.8	10.68M
13	Zone 38	1.493	55.6	37,229	7,051	203	28-72	0.913	83.3	9.24M
14	Zone 31	1.479	55.1	37,228	7,051	165	30-74	0.926	87.3	9.15M
15	Zone 11	1.778	54.0	30,354	6,170	130	29-70	0.907	108.5	8.97M

SECTION 06

## Depth & Drilling Analysis

Understanding the depth distribution and optimal drilling parameters is critical for exploration planning and cost estimation. The following analysis presents the depth profiles, strip ratios, and recommended drilling geometries.

### ● 6.1 Depth Profile (Top 15)



## 7.2 Gross Value Distribution

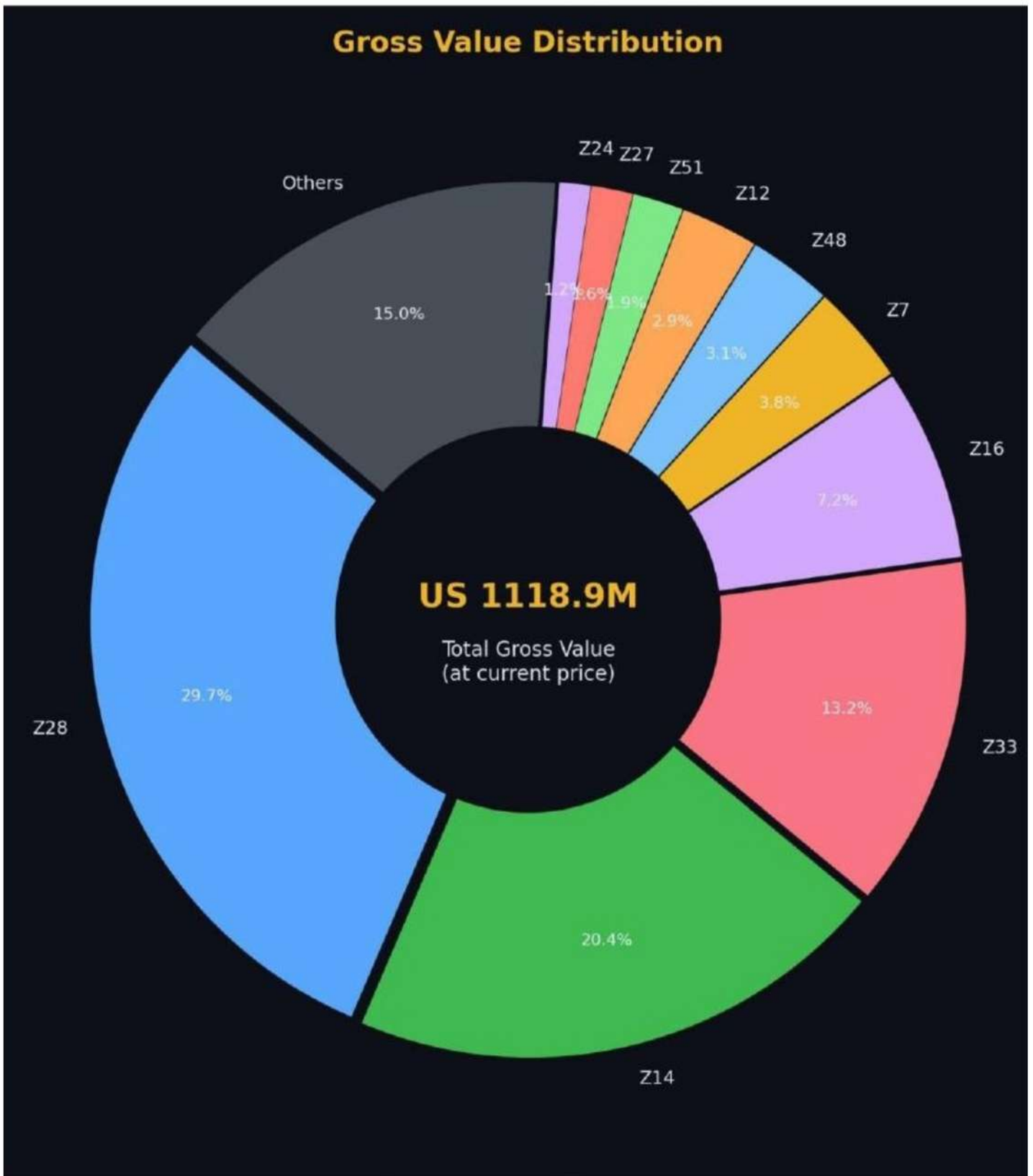


Figure 7: Gross Value Distribution by Zone

## SECTION 09

# Conclusions & Recommendations

The satellite-based gold detection analysis of the Upper Part Shahfici AOI Concession has identified **55 gold anomaly zones** containing an estimated **6,733.5 kg of gold** (216,487 troy ounces) with a gross in-situ value of **US\$ 1,118.9 million** at the current gold price of US\$ 166,166/kg. The weighted average grade of **1.4762 g/t** across 4.56 million tonnes of estimated ore confirms commercially viable mineralization across the concession area.

## 9.1 Value Proposition

Category	Description
Gold Resource	6,733.5 kg contained gold across 55 zones, with 3 Tier-2 mid-tier deposits
Economic Value	US\$ 1,118.9M gross, US\$ 906.3M recoverable (81% combined recovery)
Exploration Confidence	Avg GPI 0.914, 27 zones above high-confidence threshold
Accessibility	36 of 55 zones rated High (Easy Access), favorable terrain for drilling

## 9.2 Recommended Exploration Program

**Phase 1 (Priority Targets):** Focus on the top 5 zones by contained gold — Zone 28 (1999 kg), Zone 14 (1376 kg), Zone 33 (889 kg), Zone 16 (486 kg), Zone 7 (253 kg) — which collectively account for **74.3% of total contained gold**. These zones include Tier-2 deposits with established strike continuity.

**Phase 2 (Secondary Targets):** Systematic drill testing of remaining zones prioritized by GPI score, structural confidence, and accessibility ratings. Recommended program includes RC drilling at recommended azimuths perpendicular to dominant strike, with diamond core tails for metallurgical testing.

# Limitations

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1. This report has been prepared for the exclusive use of the client, based on the scope of work defined and the information made available at the time of preparation. It is intended to support decision-making by professionals such as geologists, engineers, and other stakeholders involved in exploration.
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