

Exploration Works Key Resources/Equipment required & client requirements

It is envisaged that the following resources will be required on mineral deposit ML 4442 at Karu Kaduna to carry out exploration works involving the following tasks;

General Tasks Phase 1

- 7000m of drill exploration using both reverse circulation and diamond core methods to depths up to 300m.
- 500 soils samples from 250m of trenching works up to 5m deep.
- Mapping, surveying, testing and reporting on mineral types and grades recorded.

General Tasks Phase 2

- 8000m of drill exploration using both reverse circulation and diamond core methods to depths up to 300m.
- 500 soils samples from 250m of trenching works up to 5m deep.
- Capability of down the hole surveying.
- Mapping, surveying, testing and reporting on mineral types and grades recorded.
- Completion of section diagrams illustrating vein depth, width, grade and type.

Resources/equipment required

- **Tracked reverse circulation drill rig** with sufficient drill rods to go 300m deep plus **compressor**.
- **Tracked diamond core drill rig** with capacity to drill 300m deep.
- Capability for **down the hole surveying**.
- **Surveyor** with assistance available from **geologist** to complete field mapping required and undertake ground magnetic survey - **Magnetometer and gps** used to carry out this work.
- **Core sample boxes and sampling bags**.
- Sampling and testing techniques e.g **down the hole gamma** method and **handheld XRF (X Ray Fluorescence) instruments**.
- **Water pump with bowser or storage tank**.
- **25 tonne excavator** for trenching works, TBC following visit by geologist.
- **Fuel storage tank (1 weeks capacity)**

General Notes/Information regarding site and client requirements

Area to be surveyed = 2.7km², split into two tiers. The upper tier contains Molybdenum, iridium, palladium, zirconium and lead. The lower tier contains silver and lead. There is a 300m elevation difference from upper and lower tiers.

Soil Sampling including trenching by excavator up to 5m deep on the lower tier, 1000 samples using a grid 50m x 25m grid.

Drilling – Reverse circulation and also allow Diamond core drilling up to 300m deep at initially 25m centers and then infills.

Include in costs for fuel and security to be provided by exploration contractor.

RC drilling expected to achieve up to 100m per day = 150 days for 1 rig based on 5 days work per week allowing for breakdowns. With two rigs operating the works should be complete in 15 weeks for both phases.

Include in costs for accommodation, food, messing facilities for staff/operatives.

MMN Ltd will provide for storage space of samples.

Include for cost to transport of samples to accredited laboratory in Abuja.

Client Specific Requirements

- Submission of daily drilling reports.
- Staff required on site – Supervisor to be a competent person(geologist) to oversee all works; including logging of geological and geotechnical results, supervision of sampling, surveying and drilling works. Competent drill rig operators, mechanic, logger, and general operatives.
- GPS system for recording location and level of drill hole collar, down hole length and interception length.
- Verification of results by accredited laboratory.
- Diagrams showing plan view of drill hole locations and sections showing intercepts where mineral is located and grade in this location.
- A report stating the estimated quantity of mineral within the deposit and all assumptions made to be listed. This in essence is a feasibility study that will convert the mineral resource into ore reserves.
- Payment terms to be outlined in quotation including VAT and withholding Tax where applicable.