

Summary of the Mineral Block

PART A

GENERAL INFORMATION ABOUT MINERAL BLOCK

	Features	Details
1	Location	
	Mineral Block	Nayakkarpatti Tungsten Block
i	Location	Block is bounded by, Latitude: 10.0028 ⁰ N to 10.0709 ⁰ N Longitude: 78.25 ⁰ E to 78.3116 ⁰ E
ii	Corner Points (Latitude, Longitude)	Attached as Annexure-1
	Villages	Kulanipatti and Melur
	Tehsil/ Taluka	Melur
	District	Madurai
	State	Tamil Nadu
2	Area (hectares)	
	Total Area of Block for Auction	2015.51 Ha
	Mineralised Area	-
	Non-mineralised area	-
3	Exploration	
	Status (G2/ G3/ G4 etc.)	G-4 (Reconnaissance Survey) (Recommended for Composite License)
	Exploration Agency	Geological Survey of India, State Unit- Tamil Nadu and Puducherry, Southern Region, Chennai
	Highlights of Geochemical Survey	13 nos. of samples (11 nos. of BRS and 02 nos. of PTS) sample are having analytical value of W >200ppm. Analysis of calc-granulite samples gives W value of 5 to 966 ppm with average value of 40.3ppm. The highest W and Sn values are analysed in the trenches are 610ppm and 42ppm respectively.
	Highlights of Petrographic Studies	Petrographic studied and SEM-EDX studies throw light on mode of occurrence of scheelite mineralization and mineral phase assemblages. Calc-granulite shows granulitic texture with plagioclase, pyroxene and quartz as major minerals and accessory minerals like scheelite, garnet, sphene, zircon, calcite, scapolite, ilmenite and other iron oxides. In general, schellite is subhedral to rounded but at places shows euhedral nature having equigranular grains. The grain size of scheelite ranges from 50 µm to 800 µm. It is having sharp contact with garnet, pyroxene, plagioclase and quartz and at places with epidote and calcite.

	Features	Details
	Drilling	No drilling carried out in the area.
	Borehole Density	No drilling carried out in the area.
	Trench and Pit	Trenching - One (50 cum)
4	Resources and Grade of Mineral	
	Minerals	Tungsten
	Resources not estimated.	
5	Mineralised Zones	
	Number of Mineral Zones	-
	Trend (Dip and Strike)	The regional strike of the fold is NE-SW. The Kulanipatti band in Kulanipatti-Sillipiyanpatti area forms western limb of the fold and the strike is NE-SW with dipping 20 ⁰ -70 ⁰ on both sides
	Extent of Mineralization	Scheelite is the tungsten bearing mineral found in the area
	Justification	Tungsten is one of the strategic mineral which has a wide application in defence purposes, automobile and medical industries. As per the data available in the report, it is reported the presence of Tungsten mineralization in the block area. The block may be recommended for putting for auction of composite license (CL) for up-gradation of level of exploration to assess the full economic potentiality of the Tungsten mineralization in the block.
6	Accessibility	
	Nearest Rail Head	Madurai Junction
	Road	The block area is well connected with district head quarter Madurai which is 30 km South-west and state capital Chennai (410km) by National Highway
	Airport	Madurai Airport
7	Hydrography	
	Local Surface Drainage Pattern	There is no major drainage course in the area. The northern part is irrigated by the Periyar Canal scheme.
	Rivers etc	
8	Climate	
	Mean Annual Rainfall	695.1 mm
	Temperature	The area experiences a dry and warm climate. Day temperatures vary from 21.30 to 39.6 ⁰ C.
	Temperature (June)	
9	Topography	
	Toposheet Number	58J/08
	Morphology of the area	The area is characterized by plain topography except some hillocks and elongated hills in SE and SW part of the study area.

PART B

PARTICULARS OF STATUTORY LICENSE, PERMITS, PERMISSIONS, CONCESSIONS, APPROVALS AND CONSENTS RELATED TO MINING OPERATIONS

Sl.No.	Particulars	Details/ Status
1	Forest clearance	To be obtained by the preferred bidder
2	Wild life clearance (sanctuary, reserve or special zone clearances)	To be obtained by the preferred bidder
3	Environmental clearance	To be obtained by the preferred bidder
4	Mining plan approval	To be obtained by the preferred bidder
5	Consent to establish	To be obtained by the preferred bidder
6	Explosive license	To be obtained by the preferred bidder
7	Permission for mine opening	To be obtained by the preferred bidder
8	Permission of installation/ trial operation of equipment	To be obtained by the preferred bidder
9	Ground water clearance (Centre/State)	To be obtained by the preferred bidder
10	Railway siding approval	To be obtained by the preferred bidder
11	Approval for diesel storage	To be obtained by the preferred bidder
12	Power line from state Discom	To be obtained by the preferred bidder
13	Clearances relating to work under an existing transmission line or shifting of the transmission line	To be obtained by the preferred bidder
14	GramaSabha consent	To be obtained by the preferred bidder
15	Any other clearances to start mining operation	To be obtained by the preferred bidder

PART C

PARTICULARS OF LAND

Sl. No.	Land Type	Area (in Hectares)
1	Total Concession Area	2015.51 Ha

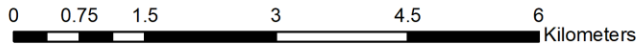
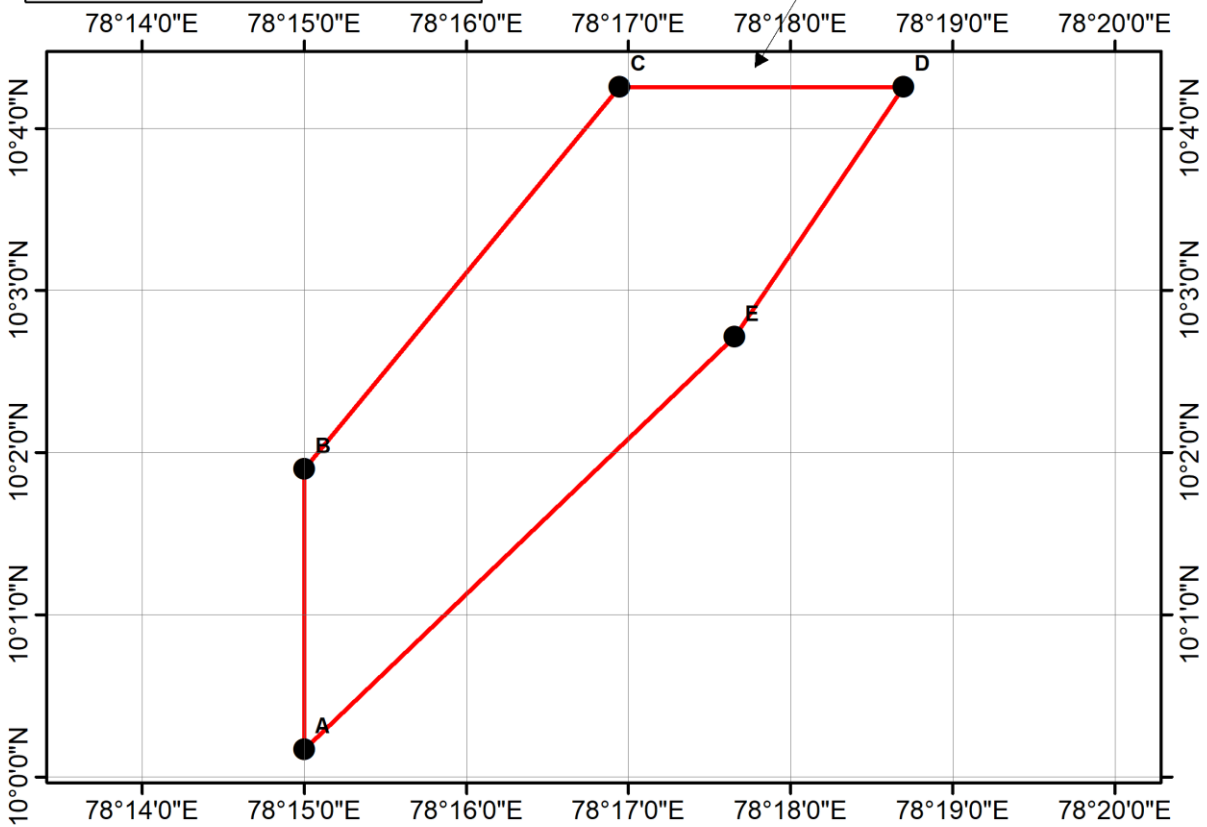
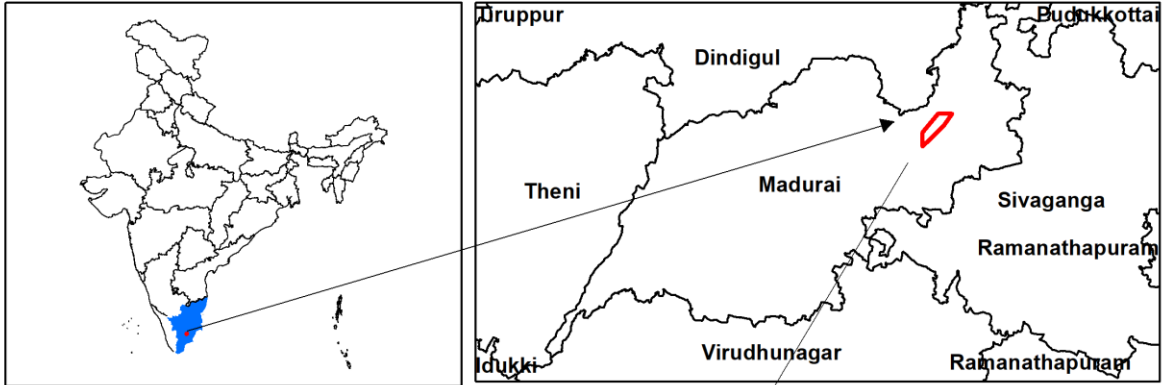
Note:

1. Mineral Block Summary has been prepared based on the available data in the Geological Memorandum (SR_TN_01-Block-1-Nayakkarpatti) and Geological Report submitted by the exploration agency.
2. Co-ordinate of the block boundary has been considered from the geological memorandum of the block.
3. Block area/ Concession area given in the mineral block summary is the calculated area of co-ordinates as provided in the Annexure-I.
4. As per Mineral Auction Rule-2015 and its amendments, land classification details are not mandatory for Composite Licence.

**Co-ordinates of Block Boundary Corner Points(in Decimal degree) of
Nayakkarpatti Tungsten Block**

CARDINAL POINTS	Longitude	Latitude
A	78.25 ⁰ E	10.0028 ⁰ N
B	78.25 ⁰ E	10.0316 ⁰ N
C	78.2824 ⁰ E	10.0709 ⁰ N
D	78.3116 ⁰ E	10.0709 ⁰ N
E	78.2942 ⁰ E	10.0452 ⁰ N

Block map of Nayakkarpatti Tungsten Block
 District: Madurai, State: Tamil Nadu, Area = 2015.51 ha



Coordinate of Block Boundary Points

CORNER POINTS	LATITUDE (DMS)	LONGITUDE (DMS)	Latitude (DD)	Longitude (DD)
A	10° 0' 10.080" N	78° 15' 0.000" E	10.0028	78.25
B	10° 1' 53.760" N	78° 15' 0.000" E	10.0316	78.25
C	10° 4' 15.240" N	78° 16' 56.640" E	10.0709	78.2824
D	10° 4' 15.240" N	78° 18' 41.760" E	10.0709	78.3116
E	10° 2' 42.720" N	78° 17' 39.120" E	10.0452	78.2942

Legend

- Block_Boundary_Points
- Block Boundary