

STATE REVIEWS



# Indian Minerals Yearbook 2013

(Part- I)

**52<sup>nd</sup> Edition**

**STATE REVIEWS  
(Mizoram & Nagaland)**

**(FINAL RELEASE)**

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**MIZORAM****Mineral Resources**

Occurrences of lignite, sandstone and pyrites are reported from the State. Major deposits of economic importance have not been reported so far in the State.

**Exploration & Development**

OIL and ONGC conducted geo-physical survey for petroleum & natural gas. OIL acquired data for 43.35 (2D-GLKM) and ONGC drilled one exploratory well for 1.97 km during 2011-12.

**Production**

No mineral production (except minor minerals) was reported from Mizoram during 2012-13. The value of minor minerals production was estimated at ₹222 lakh for the year 2012-13.

**NAGALAND****Mineral Resources**

Important mineral occurrences in the State are: **coal** in Borjan, Jhanzi-Disai, Tiesang and Tiru Valley Coalfields; **iron ore (magnetite)**, **cobalt** and **nickeliferous chromite** in Tuensang district and **limestone** in Phek and Tuensang districts (Table-1). The various coalfields and their reserves/resources are given in Table - 2.

**Exploration & Development**

Details of exploration activities conducted by GSI during 2012-13 are furnished in Table-3

**Production**

No mineral production (except minor minerals) was reported from Nagaland during 2012-13. The value of minor minerals production was estimated at ₹8 lakh for the year 2012-13.

**Table – 1 : Reserves/Resources of Minerals as on 1.4.2010 : Nagaland**

Mineral	Unit	Reserves		Remaining resources			Total resources (A+B)
		Proved STD111	Total (A)	Indicated STD332	Inferred STD333	Reconnaissance STD334	
Cobalt ore	million tonnes	-	-	-	-	5	5
Chromite	'000 tonnes	-	-	-	3200	-	3200
Copper Ore	'000 tonnes	-	-	-	2000	-	2000
Copper Metal	'000 tonnes	-	-	-	15	-	15
Iron ore (Magnetite)	'000 tonnes	-	-	5280	-	-	5280
Dunite	'000 tonnes	-	-	-	4800	-	4800
Limestone	'000 tonnes	825	825	1010000	27000	-	1037000
Nickel ore	million tonnes	-	-	-	5	-	5

Figures rounded off.

Resources of Petroleum crude and Natural gas in the State are included in Assam and are not available separately.

**Table – 2 : Reserves/Resources of Coal as on 1.4.2013 : Nagaland**

(In million tonnes)

Coalfield	Proved	Indicated	Inferred	Total
<b>Total</b>	<b>8.76</b>	<b>-</b>	<b>306.65</b>	<b>315.41</b>
Borjan	5.50	-	4.50	10.00
Jhanzi-Disai	2.00	-	0.08	2.08
Tuensang	1.26	-	2.00	3.26
Tiru Valley	-	-	6.60	6.60
DGM	-	-	293.47	293.47

Source: Coal Directory of India, 2012-13.

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**Table – 3: Details of Exploration Activities in Nagaland, 2012-13**

Agency/ Mineral/ District	Location	Mapping		Drilling		Sampling	Remarks Reserves/Resources estimated
		Scale	Area (sq km)	No. of boreholes	Meterage		
<b>GSI PGE</b>	Ophiolite belt of Nagaland	-	-	-	-	-	<p>Reconnaissance stage investigation (G-4) was taken up to search for PGE mineralisation through reconnoitry traverse mapping and detailed sampling. An area of 150 sq km was covered by reconnoitry geological traverses and samples were collected for analysis. The ultramafic and mafics are highly sheared, brecciated and serpenti-nised. Sulphide mineralisation in the form of pyrite and chalcopyrite in peridotite and basalt was recorded in areas to the SE of Thewati, Luthur and Zonger road section. Pillow structure is well exposed near Reguri. Deep blue stains possibly of azurite were observed in peridotite and basalt in Phokphur and Moya. Analytical results so far received are as follows:</p> <p style="text-align: right;">Range of values</p> <p>Platinum (Pt) : 0.5 ppb - 10 ppb  Palladium (Pd) : 7 ppb - 35 ppb  Iridium : 1.5 ppb - 4 ppb  Ruthenium (Ru): 1.5 ppb - 6 ppb  Rhodium (Rh) : 0 ppb - 1.5 ppb  Nickel : 1258 ppm - 2508 ppm  Chromium : 598 ppm - 3939 ppm</p> <p>Microprobe studies were carried out from ophiolite suite of rocks. Five different mineral phases were identified namely-Pyroxene (ortho-pyroxene &amp; clino - pyroxene), olivine, feldspar, serpentine and opaque. Chromite ores were analysed in which two different phases were identified i.e. chromite phase and chromium-spinel phase. During the course of study, sulphides were also identified mostly pyrite and chalcopyrite but no PGE grain was identified. The investigation will be continued in F.S.2013-14.</p>

