Government of India Ministry of Mines INDIAN BUREAU OF MINES Mineral Economics Division

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Bulletin of Mining Leases & Prospecting Licences, 2004

(Excluding Atomic Minerals, Coal, Lignite, Petroleum, Natural Gas and Minor Minerals)

Issued by
Controller General
INDIAN BUREAU OF MINES
Nagpur

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PREFACE

The preparation and updation of the Directory of Mining Leases is a continuous exercise carried out by Indian Bureau of Mines. Compilation of information on prospecting licences executed/renewed/revoked is being carried out for the purpose of publishing it in the Bulletin of Mineral Information, a half-yearly publication, which, inter alia, contains information on mining leases, mineral legislation, trade policy, etc. This is the seventh edition of the Bulletin of Mining Leases and Prospecting Licences, brought out by Indian Bureau of Mines.

This publication contains information on mining leases, prospecting licences as well as reconnaissance permits as on 31.3.2004. Information contained in the Directory of Mining Leases as on 31.3.2004 has been analysed with different parameters, and distribution of mining leases, statewise, districtwise, mineralwise and sectorwise which clearly demarcates high, medium and low mineral potential bearing districts. This type of information will not only satisfy the basic need of various entrepreneurs dealing with mineral industry, but also help the planners to consider 'district', as a unit in the process of planning and development of an area or a district.

The prospecting licences are classified into two groups. The first group consists of licences covering areas up to 25 sq. km in individual cases and the second group, the reconnaissance permits above 25 sq. km and up to 5,000 sq. km in individual cases.

For updation of the Directory of Mining Leases as on 31.3.2004, data supplied by the different State Governments under the statutory provision of Rule 57 (2) of MCR, 1960 was the basis and was used freely for the analysis. In so far as prospecting licences/ reconnaissance permits are concerned, the individual licence/permit deeds and the consolidated annual returns received under Rule 57(1) and (2) of MCR, 1960 have been utilised for the same period. Besides, the above approval orders in case of reconnaissance permits were the sources of information.

Indian Bureau of Mines is thankful to State Government Departments for furnishing information on mining leases, prospecting licences and reconnaissance permits and solicits their cooperation in future as well.

It is hoped that the analysis and information presented in this publication will be useful in the process of planning and programming of new ventures in judicious utilisation of mineral resources and project of mineral-based industries in the country.

Nagpur

Dated: 3.10.2006

(C.P. Ambesh)

Controller General
Indian Bureau of Mines

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1. INTRODUCTION

India has a total geographical area of about 328 million hectares. Of this, the mining lease area, except for fuel and atomic minerals, constitutes around 0.14% (4,53,624 hectares). The position of mining leases as on 31.3.2004 reveals that there are as many as 6,941 mining leases (compared to 9,131 in the previous year) granted in the country by the State Governments covering 59 minerals (excluding coal, lignite, petroleum, natural gas, atomic minerals and minor minerals) with a total area of 4,53,624 hectares and spread over 23 states. These 59 minerals are broadly classified into metallic and non-metallic minerals. This bulletin highlights statewise, sectorwise and districtwise distribution of mining leases, prospecting licences and reconnaissance permits etc. Though apparently negligible, this is still an important land use segment as it contributes to the economic growth of the country. Besides, it calls for environmental protection as land degradation takes place during the process of mining activities.

India is gifted with a wide variety of naturally occurring minerals. These are being exploited to cater the needs of domestic mineral based industries as well as exports to earn foreign exchange. Today, as many as 64 major Metallic and Non-metallic minerals are being exploited in the country excluding coal, atomic and some minor minerals.

The Indian mineral sector is fully opened to private sector both domestic and foreign. The Government had taken a series of new policy initiatives under the overall framework of the National Mineral Policy, 1993 for the growth of mineral sector. As per the amendment to the MMRD Act (now re-designated as MMDR Act), 1957 in December, 1999 a new entity termed 'Reconnaissance Permit' covering essentially prospecting licences over large areas has been introduced. In this amended Act, the limit of maximum areas of reconnaissance permits, prospecting licences and mining leases is 10,000 sq.kms., 25 sq.km and 10 sq.km respectively in a state. This provision may facilitate the entrepreneurs in acquiring more number of "reconnaissance permits, prospecting licences and mining leases" leading to increased mineral production. Besides, the amended Act provides powers to the State Governments for grant of prospecting licences and mining leases in areas which are not compact and contiguous in respect of minerals other than fuel and atomic minerals.

Under Rule 57 (1) of MCR,1960, a copy of every reconnaissance permit, (no provision for renewal of reconnaissance permits), prospecting licence and mining lease granted or renewed shall be supplied by each State Government within two months of such grant or renewal, to the Controller General, Indian Bureau of Mines. Besides, under Rule 57 (2) of MCR,1960 all the State Governments / Union Territories are required to submit to the Controller General, Indian Bureau of Mines, a consolidated annual return of reconnaissance permits/prospecting licences/mining leases granted or executed in proforma 'A', prospecting licences/mining leases renewed in proforma 'B', and termination of mining leases and reasons for termination in proforma 'C', for the preceding financial year ending March. The above statements for the previous financial year are required to be submitted to IBM on or before 30th June each year by the State Government. From such information received from all the State Governments under statutory provisions, the information pertaining to mining leases and prospecting licences has been processed and updated through computerization. Subsequently, the required outputs have been generated.

2. LAND USE SCENARIO

India's Geographical area is about 3,28,726 thousand hectares. The entire geographical area is broadly classified into 8 segments including mining lease areas as follows:

Sl. No.	Area/Segment	Total area in thousand hectares	Percentage of area
1.	Agricultural, Cultivable & Culturable Lands	182,845	55.63
2.	Permanent pastures & Other grazing Land	10,499	3.19
3.	Culturable Waste (Potentially Arable)	13,483	4.10
4.	Forest	69,467	21.13
5.	Barren & Un-culturable land	17,762	5.40
6.	Non-agricultural land	24,274	7.38
7.	Mining Lease area*	452	0.14
8.	Other area (No information available)	9,942	3.03
	Total	328726	100.00

Source: Directorate of Economics & Statistics, Ministry of Agriculture.
*Directory of Mining Leases, 2004, Indian Bureau of Mines.

Out of the total geographical area, almost two thirds are under agricultural, cultivable, permanent pastures and grazing lands.

The mining lease area, constitutes around 0.14% (4,53,624 hectares) of the total geographical area of India. However, mining lease area continues to be an important segment and contributing factor to the economy of the country. At the same time, due attention is to be paid for environmental protection as land degradation takes place during the process of mining activities.

TABLE-2: MINERALWISE SUMMARY OF LEASE DISTRIBUTION (as on 31.03.2004)

Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
2 1	Agate	that A one 2 2 see	45.58
2	Amethyst	5 6 9 8 10 5 mb 1 1	40.64
3	Apatite	best 4808 1 soc) (c	13.29
4	Asbestos	39	1,846.89
5	Ball clay	41	2,146.19
6	Barytes	119	2,494.20
7.01(0.14)	Bauxite	266	24,592.93
8	Calcareous sand	14	151.75
9	Calcite	57	1,593.63
10	Chalk	159	656.24
11	China clay	380	16,312.65
12	Chromite	29	8,548.71
13	Clay (others)	43	937.95
14	Copper ore	217 17 18 mg en	10,589.86
15	Corundum	12	145.41
16 /01	Diamond	Marur de Walla	576.51
17	Diaspore Canada Salata	17	185.98
18	Dolomite	423	15,600.52
	Dunite Spanisoness	to old	4.45
20	Epidote	besed	5.00
21	Felsite	2	5.10
22	Felspar	166	5,076.57
23	Fire clay	220	16,401.86
24	Fluorite	18	1,807.41
25	Garnet	68	1,038.83
26	Gold	9	6,683.12
27	Graphite	132	4,657.94
28	Gypsum	52	18,036.24
29	Iolite	4	24.38
30	Iron ore	474	79,041.71
31	Jaspar	5	211.70
32	Kyanite	23	3,056.25
33	Laterite	114	1,129.33
34	Lead & zinc ore	12	8,221.35
35	Lime kankar	24	891.14
36	Limeshell	29	3,793.13
37	Limestone	1,411	106,260.41
38	Magnesite	27	
39	Manganese ore	225	2,297.14
40	Mica	243	22,123.60
41	Moulding sand	39	7,807.76 738.70
42	Ochre	102	
42		102	3,382.79
44	Opal Perlite	1	200.00 144.65 (contd.)

3. MINING LEASES

3.1 STATEWISE ANALYSIS

As on 31.3.2004, there are 6,941 number of mining leases granted by 23 State Governments for 59 different minerals, covering an area of 4,53,624 hectares in the country. States rich in minerals where maximum number of mining leases granted are Andhra Pradesh (22.01%) followed by Gujarat (15.49%), Rajasthan (15.26%), Madhya Pradesh (9.85%), Orissa (6.32%), Karnataka (5.65%), Tamil Nadu (4.73%), Chhattisgarh (3.88%), Goa (3.60%) and Maharashtra (3.21%). These ten states together account for about 90% of total leases executed and remaining thirteen states account for remaining about 10% of mining leases.

The maximum mining lease area covered by different states are Rajasthan (23.04%) followed by Orissa (17.02%), Andhra Pradesh (11.41%), Karnataka (8.06%), Chhattisgarh (6.71%), Jharkhand (6.29%), Gujarat (5.21%), Madhya Pradesh (4.06%), Goa (4.00%) and Maharashtra (3.38%). These ten states account for about 89.18% of total lease areas executed and remaining thirteen states represent 10.82%.

The statewise mining lease distribution together with lease areas as well as statewise/districtwise distribution of mining leases as on 31.03.2004 are given in Tables-1 to 4.

TABLE-1: STATEWISE SUMMARY OF LEASE DISTRIBUTION (as on 31.03.2004)

SI. No.	State	No. of Lease	Percentage	Lease Area (Hect.)	Percentage
1	Andhra Pradesh	1,528	22.01	51,756.76	11.41
2	Assam	11	0.16	981.33	
3	Bihar	12	0.17		0.22
4	Chhattisgarh	269	3.87	2,087.77 30,452.62	0.46
5	Goa	250	3.60	18,165.99	6.71
6	Gujarat	1,075	15.49	23,632.81	4.00 5.21
7	Haryana	140	2.02	15,033.55	
	Himachal Pradesh	58	0.84	2,018.58	3.31 0.44
8 9	Jammu & Kashmir	18	0.26	729.58	0.44
10	Jharkhand	201	2.90	28,530.38	6.29
11	Karnataka	392	5.65	36,583.17	8.06
12	Kerala	101	1.46	2,205.49	0.49
13	Madhya Pradesh	684	9.85	18,423.60	4.06
14	Maharashtra	223	3.21	15,335.65	3.38
15	Manipur	2	0.03	610.17	0.13
16	Meghalaya	14	0.20	1,660.16	0.13
17	Orissa	439	6.32	77,188.32	17.02
18	Rajasthan	1,059	15.26	104,495.64	23.04
19	Sikkim	4	0.06	86.00	0.02
20	Tamil Nadu	328	4.72	5,467.31	1.21
21	Uttar Pradesh	40	0.58	5,120.63	1.13
22	Uttaranchal	42	0.61	1,485.36	0.33
23	West Bengal	51	0.73	11,572.76	2.55
	Total	6,941	100.00	453,623.63	100.00

			Table-2 (concld.)
Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
45	Phosphorite	16	3,492.77
46	Pyrite	1	647.50
47	Pyrophyllite	66	2,116.04
48	Quartz	845	12,780.42
49	Quartzite	53	624.60
50	Rock salt	53 3 46	53.86
51	Sand (others)	46	4,716.79
52	Shale	27	402.14
53	Silica sand	417	18,721.90
54	Sillimanite	5	9,945.84
55	Slate	17	868.47
56	Steatite	395	19,194.97
57	Tin	. 6	123.80
58	Vermiculite	11	212.55
59	Wollastonite	4	202.49
	Total	6,941	453,623.63

TABLE-3: STATEWISE/MINERALWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

State		Mineral	1	No. of Leases	Lease area (Hect.)	
Andhr	a Pradesh	Amethyst		4	12.99	
		Apatite	W W	1	13.29	
		Asbestos		7	352.08	
		Ball clay		20	254.01	
		Barytes		109	2,190.76	
		Calcite		5	139.20	
		China clay		57	893.40	
		Clay (others)		5	215.18	
		Corundum		6	35.93	
		Dolomite		95	1,601.85	
		Felspar		34	529.68	
		Fire clay		24	82.31	
		Garnet		13	220.00	
		Gold		3	408.86	
		Graphite		4	81.51	
		Iron ore		25		
		Laterite		78	1,511.15	
		Lead & zinc ore			642.44	
				1	200.00	
		Lime kankar		19	137.65	
		Limeshell		5	163.38	
		Limestone		201	21,484.88	
		Magnesite		1	6.57	
		Manganese ore		42	1,124.83	
		Mica		111	2,139.81	
		Moulding sand		1	31.36	
		Ochre		18	189.81	
		Phosphorite		1	2.83	
		Pyrophyllite		6	169.74	
		Quartz		407	5,306.28	
		Quartzite		15	169.86	
		Sand (others)		12	1,722.10	
		Shale		10	177.40	
		Silica sand		71	1,070.85	
		Sillimanite		1	7,000.00	
		Slate		12	461.26	
		Steatite		98	918.43	
		Vermiculite		6	95.28	
		Total		1,528	51,756.96	
Assam		Limestone		11	981.33	
		Total		11	981.33	
					(contd.)	
					(conta.)	

State	- 101 .1 2 (140)	Mineral		o. of eases	Lease are (Hect.)
85.01			ensing 4.	- (1	mesa) length
Bihar		Limestone		7	182.17
211.11		Mica		2	1,196.80
		Pyrite		1	647.50
		Quartz		2	61.30
		Total	N 254	12	2,087.77
		10001		8	A Park
Chhattisgarh		Bauxite		12	5,640.85
2 / / 2 /		China clay		5	13.16
		Dolomite		. 82	9,062.31
ne no		Fire clay		4	16.24
		Graphite		3	98.79
		Iron ore		15	10,699.49
hd star		Limestone		110	4,588.83
		Moulding sand		7	64.70
		Ochre		1	10.12
		Quartz		6	18.05
		Quartzite	oloj2	16	166.00
		Steatite	11012	4	7.89
		Tin		4	66.19
		Total		269	30,452.62
		Total		207	50,152.02
Goa		Bauxite	nor was	1	40.92
		Iron ore		187	14,002.79
		Manganese ore		62	4,122.28
		Total		250	18,165.99
Gujarat		Agate		1	4.64
		Ball clay		3	10.49
		Bauxite		149	4,040.71
		Calcareous sand		14	151.75
		Calcite		5	63.31
69 A.13 P.		Chalk		159	656.24
	. 7	China clay		45	1,204.07
		Clay (others)		35	701.21
		Copper ore		1	1,402.00
		Dolomite		98	1,225.04
		Felspar		1	1.00
		Fire clay		72	374.70
		Fluorite			31.69
		Gypsum		2 2	6.76
		Limestone		368	12,427.28
		Manganese ore		1	2.95
		Moulding sand		4	6.83
		Ochre		5	45.35
		Perlite		1	144.65
		Quartz		31	209.26
		Zour en			(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Gujarat (contd.)	Quartzite	1	10.20
Gujarat (contai)	Silica sand	69	19.30
	Steatite		856.50
	Vermiculite	6	22.04
	Total	1,075	25.04 23,632.81
Haryana	Barytes	1	70.22
	Calcite	1 2	79.32
	China clay	39	158.56
	Dolomite		3,243.30
	Felspar	2	252.15
	Iron ore	3	285.06
	Lime kankar	1	86.20
	Limestone	4	705.35
	Mica	11	592.51
		1	400.00
	Quartz	16	851.85
	Quartzite	4	68.23
	Silica sand	52	7,959.30
	Slate Total	4	351.72
Himachal Pradesh		140	15,033.55
rimachai Fradesh	Barytes	2	81.39
	Gypsum	1	116.68
	Limestone	52	1766.65
	Rock Salt	3	53.86
	Total	58	2018.58
Jammu & Kashmir	Gypsum	3	57.71
	Limestone	12	331.07
	Magnesite	2	140.80
	Opal	1	200.00
	Total	18	729.58
Tharkhand	Bauxite	39	3,625.18
	China clay	.8	219.48
	Copper ore	3	6,417.69
	Dolomite	1	18.45
	Felspar	6	200.25
	Fire clay	20	730.86
	Graphite	13	405.44
	Iron ore	25	9,675.37
	Kyanite	5	2,560.22
	Limestone	16	1,673.81
	Mica	29	964.39
	Ochre	1	5.62
	Pyrophyllite	i	22.50
	Quartz	18	236.36
	Sand (others)	13	1,765.35
	Steatite	3	9.41
	Total	201	28,530.38
		AUI.	40,330.30

(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Karnataka	Barytes	in the Market 1	17.00
	Bauxite	1	28.80
	Calcite	1	17.00
	China clay	13	839.51
	Chromite	6	987.47
	Clay (others)	1	20.23
	Copper ore	3	487.65
	Corundum	4	18.07
	Dolomite	14	305.10
	Dunite	1	4.45
	Felsite	2	5.10
	Felspar	4	131.91
	Fire clay	3	390.51
	Gold	6	6,274.26
	Graphite	4	235.04
	Iron ore	72	10,446.58
	Kyanite	5	200.70
	Laterite	2	95.21
	Limeshell	14	1,404.01
	Limestone	88	8,380.27
		7	406.47
	Magnesite	26	
	Manganese ore		2,719.58
	Moulding sand	24	586.99
	Ochre	5	617.18
	Quartz	47	454.38
	Quartzite	1	4.05
	Silica sand	30	1,345.01
	Steatite	6	134.34
	Vermiculite	1	26.30
	Total	392	36,583.17
Kerala	Bauxite	3	1.37
	China clay	41	95.56
	Laterite	1	0.19
	Limeshell	8	1,496.69
	Limestone	1	245.69
	Quartz	2	3.21
	Silica sand	42	35.43
	Sillimanite	3	327.35
	Total	101	2,205.49
Madhya Pradesh	Barytes	2	5.37
राज्य मृद्धा च चार्य व्यवस्था	Bauxite	35	795.09
	Calcite	24	63.26
	China clay	16	130.89
	Cillia Ciay	10	(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
	Clay (others)	2	1.33
69 9E 3	Copper ore	2 2 2	479.90
	Diamond	2	576.51
and the latter	Diaspore	11	80.11
	Dolomite	99	483.42
	Fire clay	32	291.23
	Iron ore	8	122.84
	Laterite	31	348.46
	Lead & zinc ore	1	11.00
	Limestone	264	
	Manganese ore	27	12,259.05
	Ochre -	44	1,446.91
	Phosphorite		572.10
		4	112.88
	Pyrophyllite	36	245.00
	Quartz	6	44.07
	Quartzite	1	6.10
	Sand (others)	2	7.52
	Shale	14	173.36
	Silica sand	4	6.25
	Slate	1	55.49
	Steatite	16	105.46
	Total	684	18,423.60
Maharashtra	Agate	berendikele.	40.94
	Bauxite	20	4,182.46
	China clay	9	91.77
	Chromite	1	16.22
	Dolomite	11	185.08
	Felspar		53.65
	Fire clay	2 2	
	Fluorite		18.40
		1	32.70
	Iron ore	25	870.12
	Kyanite	13	295.33
	Laterite	2	43.03
	Limestone	51	5,976.70
	Manganese ore	32	1,094.64
	Mica	1	42.06
	Moulding sand	1	47.02
	Ochre	1	12.36
	Quartz	8	139.86
	Quartzite	1	12.09
	Sand (others)	12	740.30
	Shale	1	41.48
	Silica sand	28	1,399.44
	Total	223	
		La La J	15,335.65

State	Mineral	No. of Leases	Lease area (Hect.)
Manipur	Chromite	2	610.17
Transput .	Total	2	610.17
Meghalaya	China clay	2	9.77
1120811111111111	Fire clay	1	221.44
	Limestone	10	1,424.05
	Shale	1	4.90
	Total	14	1,660.16
0.1	A414		27.65
Orissa	Amethyst		27.65
	Asbestos		49.22
	Bauxite	4	6,079.09
	China clay Chromite	11	797.28
	Chroning	· 20	6,934.85
	Corundum	2	91.41
	Dolomite	8	877.21
	Fire clay	17	1,899.59
	Graphite	101	3,161.99
	Iolite	4	24.38
	Iron ore	102	30,732.88
	Lead & zinc ore	2	504.86
	Lime kankar	1	48.14
	Limestone	34	8,798.36
	Magnesite	1	40.46
	Manganese ore	34	11,532.41
	Mica	1	2.67
	Ochre	2	197.77
	Pyrophyllite	10	576.96
	Quartz	59	1,236.21
	Quartzite	12	169.27
* -			437.43
	Sand (others) Sillimanite	6	
			2,618.49
	Steatite	3 2	292.13
	Tin		57.61
	Total	439	77,188.32
Rajasthan	Asbestos	31	1,445.59
	Ball clay	18	1,881.69
	Barytes	4	120.36
	Calcite	20	1,152.30
	China clay	105	8,153.24
	Copper ore	5	1,717.95
	Dolomite	8	579.28
	Epidote	1	5.00
	Felspar	114	3,833.32
		***	2,000,02
			(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Rajasthan (concld.)	Fire clay	25	2,383.60
11.003	Fluorite	15	1,743.02
	Garnet	14	340.99
	Graphite	2	383.55
	Gypsum	40	17,465.37
	Iron ore	14	894.29
	Jaspar	5	211.70
	Lead & zinc ore	8	7,505.49
	Limestone	52	20,408.73
	Magnesite	3	15.00
	Manganese ore	1	80.00
	Mica	98	3,062.03
	Ochre	24	1,726.72
	Phosphorite	7	2,251.88
	Pyrophyllite	6	308.16
	Quartz	116	
	Quartzite	110	3,971.07 5.00
	Shale	1	
	Silica sand	92	5.00
	Steatite		5,391.18
	Vermiculite	224	17,209.42
	Wollastonite	1	42.22
	Total	4 1,059	202.49 104,495.64
Sikkim	Copper ore	3	04.67
	Dolomite		84.67
	Total	1 4	1.33 86.00
Famil Nadu	Bauxite	2	158.46
	China clay	2	15.55
	Dolomite	1.	62.07
	Felspar	1	39.47
	Fire clay	11	
	Garnet	41	52.17
	Graphite	5	477.84
	Gypsum	4	291.62
	Limeshell	2	203.57
	Limestone		729.05
	Magnesite	115	1,926.77
	Quartz	11	1,195.64
	Silica sand	122	237.82
	Steatite Steatite	7	17.01
		3	36.56
	Vermiculite Total	1	23.71
	Total	328	5,467.31
			(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Uttar Pradesh	Diaspore	6	105.87
	Limestone	4	2,706.15
	Phosphorite	1	874.00
	Pyrophyllite	7	793.68
	Silica sand	22	640.93
	Total	40	5,120.63
Uttaranchal	Delomite	1	20.23
	Gypsum	2	186.15
	Limestone	3	105.44
	Magnesite	2	492.20
	Phosphorite	2	222.05
	Steatite	32	459.29
	Total	42	1,485.36
West Bengal	China elay	27	605.67
•	Delemite	2	927.00
	Felspar	$\overline{1}$	2.23
	Fire clay	9	9,940.81
	Limestone	1	0.67
	Moulding sand	2	2.00
	Ochre	1	5.76
	Phosphorite	1	29.13
	Quartz	5	10.70
	Quartzite	1	4.70
	Sand (others)	1	44.09
	Total	51	11,572.76

TABLE - 4: STATEWISE/DISTRICTWISE/MINERALWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
Andhra Pradesh	Adilabad	China clay	14	139.76
	Tunubuu	Laterite	1	2.84
		Limestone	12	2, 685.28
		Manganese ore	9	346.76
		Total	36	3,174.64
	Anantapur	Barytes	1	2.00
		China clay	3	28.35
		Corundum	2	16.36
		Dolomite	47	716.49
		Felspar	3	32.53
		Gold	1	168.42
		Iron ore	4	244.51
		Laterite	1	38.86
		Limestone	20	1,097.69
		Ochre		18.00
		Pyrophyllite	2 2	69.68
		Quartz	20	517.86
		Shale	1	3.16
		Steatite	35	511.07
		Total	142	3,464.98
	Chittoor	China clay	1	14.17
		Felspar	1	3.78
		Gold	2	240.44
		Pyrophyllite	2	8.08
		Quartz	11	100.79
		Steatite	2	15.20
		Total	19	382.46
	Cuddapah	Asbestos	7	352.08
	Hade-transferration A transferration	Barytes	90	1,584.30
		China clay	13	611.92
		Clay (others)	3	183.32
		Dolomite	9	163.57
		Felspar	15	311.14
		Iron ore	1	18.62
		Laterite	1	80.94
		Limestone	18	1,296.55
		Magnesite	1	6.57
		Ochre	7 2	36.07
		Pyrophyllite	2	91.98
	¥			(contd.

State	District	Mineral	No. of Leases	Lease Area (Hect.)
TVAL	Cuddapah (contd.)	Quartz	11	186.49
Profession and	The world that	Shale	2	19.71
		Silica sand	1	1.87
		Steatite	3	57.46
		Total	184	5,002.59
		in the second		Section 2 (c) (Section Sequence and a
	Godavari East	China clay	13	22.79
		Fire clay	22	74.22
		Graphite	1	5.00
		Laterite	13	75.53
		Total	49	177.54
	Godavari West	Ball clay	20	254.01
		China clay	5	35.51
		Clay (others)	2	31.86
		Total	27	321.38
	Guntur	Lead & zinc ores	1	200.00
		Limekankar	1	3.80
		Limestone	28	4,171.66
		Quartz	5	33.84
		Slate	2	80.95
		Total	37	4,490.25
	Karimnagar	Dolomite	2	32.47
	ixai mmagai	Laterite	2 2	8.30
		Limestone	3	804.8
			6	
		Sand (others) Silica sand		1,626.90
in Cla		Total	1 14	10.00 2,482.47
	77		nne a	
	Khammam	Barytes	4	297.91
		Corundum	. 4	19.57
		Dolomite	6	423.32
		Felspar	1	1.50
		Garnet	7	80.45
		Graphite	3	76.51
		Iron ore	5	629.68
		Limestone	2 2	32.23
		Mica	2	29.83
		Quartz	9	37.55
		Sand (others)	3	15.88
		Total	46	1,644.43
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
- Section 2	Krishna	Iron ore	disamble 4	19.77
17 00 0 .		Limestone	18	2,397.58
		Quartz	3	2.86
		Total	25	2,420.21
	181			
	Kurnool	Barytes	6	233.16
		Calcite	2	33.68
		China clay	3	17.03
		Dolomite	28	246.42
		Felspar	1	16.87
		Iron ore	7	52.33
		Laterite	6	19.83
		Limestone	67	3,109.72
		Ochre	7	124.60
		Quartz	14	162.12
		Quartzite	4	31.77
		Shale	6	21.46
		Siliea sand	13	178.43
		Steatite	58	334.7
		Total	222	
		10101	先生	4,582.12
	Mahbubnagar	Felspar	9	71.13
	mannanann a n	Quartz	95	592.5
		Total	104	663.63
		# Affil	194	663:63
	Medak	Amethyst	1	1.31
	*	Laterite	· 9	41.05
		Ochre	í	5.67
		Quartz	22	194.37
		' Total	31	242.40
		Total	31	444.4V
	Nalgonda	Laterite	4	4.82
		Limestone	28	4,694.10
		Quartz	20	184.42
L-Saftstan'		Total	52	4,883.34
		Total	Ju	4,003.34
	Nellore	Barytes	3	44.87
		Felspar	4	92.73
			1	39.68
		Garnet	1	39.68
		Garnet Iron ore	2	274.00
		Garnet Iron ore Laterite	2 9	274.00 63.34
		Garnet Iron ore Laterite Limeshell	2 9 3	274.00 63.34 150.75
		Garnet Iron ore Laterite Limeshell Mica	2 9 3 99	274.00 63.34 150.75 1,750.76
		Garnet Iron ore Laterite Limeshell	2 9 3	274.00 63.34 150.75

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Nellore (concld.)	Silica sand	39	842.92
	,	Vermiculite	6	95.28
		Total	234	4,328.05
				,
	Nizamabad	Laterite	2	12.86
	7	Quartz	2 3	7.65
30.000,1		Total	5	20.51
	Prakasam	Barytes	5	28.52
		Garnet	4	4.79
		Iron ore	2	272.24
		Quartz	72	1750.05
1.15 % L		Silica sand	16	30.13
		Slate	10	380.31
		Total	109	2,466.04
	Rangareddi	Amethyst	3	11.68
		China clay	2	6.47
		Fire clay	3 2 2	8.09
		Laterite	13	138.69
		Limestone	5	1,195.27
		Quartz	30	180.52
		Shale	1	133.07
		Total	56	1,673.79
	Srikakulam	Garnet	1	95.08
		Lime kankar	1	5.85
		Limeshell	1	4.00
		Quartz	2	12.98
		Quartzite	2	16.02
		Silica sand	1	7.5
		Sillimanite	1	7,000.00
		Total	9	7,141.43
	Visakhapatnam	Apatite	1	13.29
		Calcite	3	105.52
		China clay	3	17.40
		Laterite	6	57.93
		Limeshell	1	8.63
		Mica	10	359.22
		Ochre	1	5.47
		Phosphorite	1	2.83
		Quartz	. 11	226.47
		Total	37	796.76

State	District		No. of Leases	Lease Area (Hect.)
- 113	Vizianagaram	Limekankar	17	128.00
	8	Manganese ore	33	778.07
		Moulding sand	1	31.16
		Quartz	11	142.09
	61	Quartzite	9	122.07
		Sand (others)	2	65.47
		Total	73	1,266.86
	Warangal	Dolomite	3	19.58
		Laterite	13	97.45
		Sand (others)	1	13.85
	1.*	Total	17	130.88
				20000
ASSAM	Karbi Anglong	Limestone	3	185.83
		Total	3 3	185.83
	North Cachar Hills	Limestone	8	795.50
	- TOTAL CHEMINI ITMIS	Total	8	
10.0		Total	ð	795.50
BIHAR	Monghyr	Quartz	2	61.30
	Jacky	Total	2 2	61.30
				02.00
	Nawada	Mica	2	1,196.80
		Total	2 2	1,196.80
	Rohtas	Limestone	7	182.17
	Kontas	Pyrite		
		Total	1	647.50
		10121	8	829.67
CHHATTISGARH	Bastar	Limestone	18	43.89
		Quartzite	1	16.00
		Total	19	59.89
		201	17	37.07
	Bilaspur	Dolomite	32	8,646.31
		Total	32	8,646.31
	Devet	Y		
	Dantewara	Iron ore	6	6,886.90
		Tin	4	66.19
		Total	10	6,953.09
	Duur	D.1'		
	Durg	Dolomite	39	169.94
		Iron ore	4	2,732.62
		Limestone	38	679.09
		Moulding sand	4	33.1
		Quartzite	5	48.08
- 550		Total	90	3,662.83
	e d			
		18		(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
7 C 1 1 4 8	Janjgir-Champa	Dolomite	6	209.38
	Janjgar-Champa	Limestone	3	735.14
		Total	9	944.52
		Total	9	744.34
	Jashpur	Quartz	1	1.36
		Total	1	1.36
	Kanker	Bauxite	3	13.22
		Iron ore	4	999.26
		Limestone	1	0.63
		Mould sand	1	13.84
		Steatite	4	7.89
		Total	13	1,034.84
10	Kawardha	Bauxite	2	664.33
		Dolomite	1	12.14
		Limestone	1	3.78
		Total	4	680.25
	Korba	Fire clay	1	0.46
	2 2.10	Total	1	0.46
	Mahasamund	Fire clay	3	15.78
	17141141541114114	Quartz	1	2.21
		Total	4	17.99
	Raigarh	Dolomite	1	2.33
		Limestone	10	27.38
		Quartz	2	4.25
		Quartzite	2	54.4
		Total	15	88.36
	Raipur	Dolomite	3	22.21
	8 0	Limestone	36	3,090.65
		Total	39	3,112.86
	Rajnandgaon	China clay	5	13.16
	3	Iron ore	1	80.71
		Limestone		8.27
		Moulding sand	2	17.76
		Ochre	3 2 1 2 8	10.12
		Quartz	2	10.12
		Quartzite	Q	47.52
		Total	22	187.77
			Let Let	10/.//
		2000		20,1,,

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Surguja	Bauxite	7	4,963.30
	0 0	Graphite	3	98.79
		Total	10	5,062.09
GOA	North Goa	Iron ore	83	6,175.82
		Manganese ore	17	1,059.51
		Total	100	7,235.33
	South Goa	Bauxite	1	40.92
		Iron ore	104	7,826.97
		Manganese ore	45	3,062.77
		Total	150	10,930.66
GUJARAT	Amreli	Bauxite	3	160.66
		China clay	1	3.01
		Clay (others)	1	88.54
		Limestone	5	1,864.75
	back	Total	10	2,116.96
	Banaskantha	Calcite	1	3.76
		Copper ore	ī	1,402.00
		Limestone	9	422.64
		Vermiculite	1	1.84
		Total	12	1,830.24
	Bharuch	Agate	1	4.64
		Silica sand	26	442.23
		Total	27	446.87
	Bhavnagar	Chalk	1	12.00
		Clay (others)	4	190.81
		Dolomite	3	52.99
		Limestone	1	20.00
		Moulding sand	1	2.80
		Total	10	278.60
	Dahod	Fluorite	1	0.49
		Limestone	5	187.51
		Quartz	1	4.20
		Total	7	192.20
	Jamnagar	Bauxite	106	3,110.34
		Calcareous sand	14	151.75
		Chalk	8	33.56
		Clay (others)	1	20.23
		Limestone	52	2,092.96
		Ochre	1	20.03
		Total	182	5,428.87
				(contd.)
		20		

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Junagarh	Chalk	3	27.90
	8	Limestone	115	2,736.75
		Total	118	2,764.65
				_,, 00
	Kheda	Bauxite	16	84.78
		Limestone	1	10.93
		Total	17	95.71
	Kutch	Ball clay	2	5.00
		Bauxite	6	486.95
		China clay	28	283.17
		Clay (others)	22	290.03
		Gypsum	1	4.95
		Limestone	4	312.18
		Ochre	i	2.00
		Silica sand	5	174.16
		Total	69	1,558.44
	Mehesana	China clay	8	241.27
		Fire clay	1	32.37
		Total	9	273.64
	Panchmahals	Manganese ore	1	2.95
		Quartz	28	198.02
		Quartzite	1	19.30
		Total	30	220.27
	Patan	Ball clay	1	5.49
		China clay	1	36.22
		Clay (others)	5	103.82
		Ochre	3	23.32
		Total	10	168.85
	Porbandar	Bauxite	5	106.69
		Chalk	125	501.97
		China clay	1	3.97
		Limestone	171	3,235.15
		Total	302	3,847.78
	Rajkot	Chalk	22	80.81
		Fire clay	6	7.02
		Gypsum	1	1.81
		Limestone	2	37.13
		Perlite	1	144.65
		Total	32	271.42
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Sabarkantha	Bauxite	13	91.29
6		Calcite	3	6.58
		China clay	6	636.43
		Felspar	1	1.00
		Fire clay	14	50.36
* 17,48		Limestone	2	2.53
		Quartz	1	4.04
		Silica sand	15	70.03
		Steatite	6	22.04
		Total	61	884.30
		Total	O1	004.50
	Surat	Limestone	1	1,504.75
		Silica sand	1	6.52
		Total	2	1,511.27
			-	1,011.41
	Surendranagar	Clay (others)	2	7.78
	8	Fire clay	51	284.95
		Moulding sand	3	4.03
		Silica sand	22	163.56
		Total	78	460.32
	Vadodara	Calcite	1	52.97
		Dolomite	95	1,172.05
		Fluorite	1	31.20
	*	Quartz	. 1	3.00
		Vermiculite	1	23.20
		Total	99	1,282.42
HARYANA	Ambala	Limestone	2	340.56
	ZMIDAIA	Total	2	340.56
		Total	-	340.30
	Bhiwani	Limekankar	4	705.35
		Total	4	705.35
	Faridabad	China clay	2	165.73
	r ai iuabau	Silica sand	29	6,208.35
		Total	31	6,374.08
		Tutal	31	0,3/4.00
	Gurgaon	China clay	37	3,077.57
		Quartz	4	97.93
		Quartzite	2	47.78
		Silica sand	23	1,750.95
		Total	66	4,974.23
				-,
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)	
	Mahendragarh	Barytes	1	79.32	
	I	Calcite	2	158.56	
		Dolomite	2	252.15	
		Felspar	3	285.06	
		Iron ore	1	86.20	
		Limestone	9	251.95	
		Mica	1	400.00	
		Quartz	12	753.92	
		Slate	1	81.35	
		Total	32	2,348.51	
	Rewari	Quartzite	2	20.45	
		Slate	3	270.37	
		Total	5	290.82	
HIMACHAL PRADESH	Bilaspur	Limestone	4	248.39	
	•	Total	4	248.39	
	Kannaur	Gypsum	cameG ₁	116.68	
	***************************************	Total	1	116.68	
	Mandi	Rock salt	3	53.86	
		Total	3	53.86	
	Sirmur	Barytes	2	81.39	
	1911 11-11-	Limestone	46	761.18	
		Total	48	842.57	
	Solan	Limestone	2	757.08	
	Solali		2 2		
and the second		Total	2	757.08	
JAMMU & KASHMIR	Anantnag	Limestone	. 9	82.15	
		Total	9	82.15	
	Baramula	Gypsum	1	2.71	
	salax s	Total	. 1	2.71	
	Doda	Gypsum	2	55.00	
	Doua	Total	2	55.00	
		1000	and called "		
	Jammu	Limestone	1	4.67	
		Total	1	4.67	
	Leh	Opal	1	200.00	
		Total	1		
	0	Total	1	200.00	

State	District	Mineral	No. of Leases	Lease Area (Hect.)
50.00	Pulwama	Limestone Total	1 1	100.00 100.00
	Srinagar	Limestone Total	1 1	144.25 144.25
	Udhampur	Magnesite Total	2 2	140.80 140.80
JHARKHAND	Deogarh	Felspar Total	1 1	0.91 0.91
	Dhanbad	Fire clay Limestone Quartz Sand (others) Total	2 1 1 13 17	114.18 17.40 5.18 1,765.35 1,902.11
	Dumka	Quartz Total	1 1	0.88 0.88
02.52	Garwah	Limestone Total	3 3	1,178.92 1,178.92
	Giridih	Felspar Mica Steatite Total	3 3 1 7	194.96 190.72 3.64 389.32
	Gumla	Bauxite Total	21 21	2,346.18 2,346.1 8
	Hazaribagh	Felspar Fire clay Limestone Mica Pyrophyllite Total	1 3 2 1 1 8	3.13 211.12 117.05 197.00 22.50 550.80
	Kodarma	Mica Quartz Total	25 3 28	576.67 79.73 656.40
	Latehar	Bauxite China clay Fire clay	2 1 15	478.35 8.25 405.56
		24		(contd.)

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State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Latehar (concld.)	Graphite	1	17.81
	` '	Iron ore	- 1	2.04
		Quartz	11	142.32
		Total	31	1,054.33
		Total	31	1,054.55
	Lohardaga	Bauxite	16	800.65
		Total	16	800.65
	Palamau	Dolomite	1	18.45
	1 alamau		1	1.25
		Felspar		
		Graphite	12	387.63
		Iron ore	4	58.06
		Limestone	1	25.97
		Steatite	1	2.52
		Total	20	493.88
	Ranchi	Limestone	4	286.17
	,	Total	4	286.17
	Sahebganj	China clay	2	12.25
		Total	2 2	12.25
	Singhbhum (East)	Copper ore	3	6,417.69
		Kyanite	1	2.43
		Total	4	6,420.12
	Singhbhum (Wost)	China alay	5	100 00
	Singhbhum (West)	China clay	5	198.98
		Iron ore	20	9,615.27
		Kyanite	4	2,557.79
		Limestone	5	48.30
		Ochre	1	5.62
		Quartz	2	8.25
		Steatite	1	3.25
		Total	38	12,437.46
KARNATAKA	Bagalkot	Dolomite	11	290.52
	- Guitter	Iron ore	2	69.99
		Limestone	41	3,043.67
		Total	54	3,404.18
	Dangalana	China		40.55
	Bangalore	China clay	1	48.56
		Felspar	4	131.91
		Fire clay	1	2.02
	8	Silica sand	1	41.83
		Total	7	224.32
				(contd.)
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State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Belgaum	Calcite	1.	17.00
		China clay	1	6.58
		Dolomite	3	14.58
		Laterite	2	95.21
		Limestone	15	593.55
		Manganese ore	1	2.33
		Moulding sand	3	31.57
		Quartz	2	5.67
		Quartzite	1	4.05
		Silica sand	2	3.25
		Total	31	773.79
	Bellary	Iron ore	56	4,543.01
		Manganese ore	4	489.29
		Moulding sand	5	51.68
		Ochre	2	532.61
		Quartz	13	102.30
		Steatite	2	4.89
		Total	82	5,723.78
	Bidar	Ochre	dudes 1	21.85
	Ditti	Total	1	21.85
	Chickmagalur	Dunite	1	4.45
	Cinckinagaiui	Iron ore		4,647.70
		Total	2 3	4,652.15
		Total	3	4,032.13
	Chitradurga	Barytes	1	17.00
	8	Copper ore	2	416.83
		Iron ore	5	390.96
		Kyanite	1	169.96
		Limestone	13	1,622.54
		Manganese ore	10	619.21
		Quartz	3	81.60
		Total	35	3,318.10
		0 1	Janess .	0.00
	Coorg	Corundum	1	0.80
3.500		Total	1	0.80
	Dawangere	Manganese ore	2	64.61
	6	Moulding sand	2 5	113.82
		Quartz	3	12.14
		Total	10	190.57
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Dharwar	Clay (others)	1	20.23
		Total	1	20.23
				20.23
	Gulbarga	Gold	1	55.75
	Guibarga	Limestone	9	
				2,606.46
		Moulding sand	1	6.50
		Quartz	2	39.61
		Total	13	2,708.32
	TT	C1 ' 1	,	
	Hassan	China clay	2	311.60
		Chromite	6	987.47
		Copper ore	1	70.82
		Quartz	3	68.69
		Steatite	1	80.94
		Vermiculite	1	26.30
		Total	14	1,545.82

	Haveri	Moulding sand	8	246.44
		Total	8	246.44
	Kolar	China clay	4	300.51
		Gold	1	5,215.39
		Total	5	5,515.90
		Total	. 3	3,313.90
	Koppal	Quartz	7	64.16
	repper	Total	7	64.16
		Ittal	,	04.10
	Mandya	Corundum	timb/J	1.64
	Mandya		1	1.64
		Felsite	1	1.61
		Quartz	2	27.31
		Total	4	30.56
	24	0 1		
	Mysore	Corundum	2	15.63
		Felsite	1	3.49
		Graphite	4	235.04
		Kyanite	3	28.32
		Limestone	1	110.00
		Magnesite	7	406.47
		Quartz	1	0.90
		Steatite	1	12.14
		Total	20	811.99
		lastala -		
	North Kanara	Limeshell	10	996.48
		Limestone	2	136.62
		Manganese ore	1	464.00
		Moulding sand	2	136.98
		Quartz	1	1.82
		Silica sand	10	
		Total		253.28
		TOTAL	26	1,989.18
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Raichur	Gold	3	965.08
		Quartz	2	13.73
		Total	5	978.81
	Shimoga	China clay	3	33.99
	Mary Territory (1986)	Kyanite	1	2.42
		Limestone	1	40.12
		Manganese ore	î î	526.10
		Quartz	i	16.91
		Total	7	619.54
	South Kanara	Quartz	1	1.95
		Silica sand	3	118.29
		Total	4	120.24
	Tumkur	China clay	2.	138.27
		Fire clay	2 2	388.49
		Gold	1	38.04
		Iron ore	7	794.92
		Limestone	6	227.31
		Manganese ore	7	554.04
		Ochre	1	6.07
		Quartz	6	17.59
		Steatite	2	36.37
		Total	34	2,201.10
	Udupi	Bauxite	1	28.80
		Limeshell	4	407.53
		Ochre	1	56.65
		Silica sand	14	928.36
		Total	20	1421.34
KERALA	Alapuzha	Limeshell	6	940.44
		Silica sand	42	35.43
		Total	48	975.87
	Kannur	China clay	3	11.62
		Laterite	1	0.19
		Total	4	11.81
	Kasargod	China clay	1	2.85
		Total	1	2.85
	Kollam	Bauxite	3	1.37
		China clay	3 5 3	8.75
		Sillimanite		327.35
		Total	11	337.47
				(contd.)

State	District	THE EDITION	Mineral	No. of Leases	Lease Area (Hect.)
T. July	Kottayam		Limeshell	2	556.25
			Total	2 2	556.25
	Palakkad		Limestone	1	245.69
			Total	1	245.69
	Thiruvananth	apuram	China clay	32	72.34
			Total	32	72.34
	Wynad		Quartz	2	3.21
			Total	2	3.21
MADHYA PRADESH	Badwani		Calcite	19	45.82
			Total	19	45.82
	Balaghat		Copper ore	2	479.90
	0		Dolomite	13	90.89
			Fire clay	1	2.41
			Limestone	7	73.98
			Manganese ore	23	1,358.43
			Ochre	1	16.18
			Sand (others)	1	5.50
	9•1 3.		Total	48	2,027.29
			Total	40	2,027.27
	Chhatarpur		China clay	2	20.12
			Diaspore	7	32.00
			Limestone	2	4.91
				1	48.76
			Phosphorite		
			Pyrophyllite	13	52.00
			Quartzite	1	6.10
			Steatite	2	10.36
			Total	28	174.25
	Chhindwara		Dolomite	7	63.19
			Manganese ore	1	54.13
			Total	8	117.32
	Damoh		Laterite	1	21.25
			Limestone	8	1,484.60
			Sand (others)	1	2.02
			Total	10	1,507.87
	Datia		Lead & zinc ores	s 1	11.00
			Quartz		14.09
			Total	2 3	25.09
				-	

(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Dewas	Barytes	1	3.35
S 1	a light	Silica sand	1	4.05
		Total	2	7.40
	Dhar	Limestone	18	119.78
		Ochre	1	6.31
		Total	19	126.09
	Gwalior	China clay	1	20.63
	Gwanor	Iron ore	1	20.23
		Total	2	40.86
		20002	_	
	Jabalpur	Bauxite	3	8.74
		Dolomite	4	15.33
		Fire clay	14	98.97
		Iron ore	6	90.02
		Laterite	2	10.91
		Limestone	11	1,151.87
		Ochre	1	4.14
	TA VESCO	Quartz	2	13.98
	nun i- nungiki	Steatite	3	43.34
		Total	46	1,437.30
	Jhabua	Calcite	1	2.40
		Dolomite	16	100.65
		Limestone	1	2.15
		Manganese ore	untellitä 3	34.35
		Phosphorite	3 2	11.32
		Total	23	150.87
	Katni	Bauxite	7	42.26
		Dolomite	13	73.42
		Fire clay	13	144.57
	osto.	Iron ore	1	12.59
		Laterite	2	4.94
		Limestone	84	1,492.79
		Ochre	3	7.62
		Silica sand	1	0.60
		Steatite	2	15.71
		Total	126	1,794.50
	Vhangan	Coloita		15.04
	(West Nimer)	Calcite	4	15.04
	(West Nimar)	China clay Limestone	1	0.61 4.89
		Silica sand	2 2	1.60
		Total	9	22.14
		I VIIII		22.17
				(contd.

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Mandla	Dolomite	34	97.85
		Total	34	97.85
	Mandsaur	Laterite	11	51.52
		Shale	14	173.36
		Slate	1	55.49
		Total	26	280.37
	Morena	Limestone	1	18.00
	·	Total	1	18.00
		Total		10.00
	Narsinhapur	Dolomite	3	10.07
		Fire clay	1	20.00
		Limestone	2 9	35.06
		Steatite		36.05
		Total	15	101.18
	Nimach	Laterite	5	62.11
		Limestone	6	963.09
		Total	11	1,025.20
	Panna	Diamond	2	576.51
		Limestone	1	48.39
		Total	3	624.90
	Rewa	Downite	10	
	Rewa	Bauxite	10	126.52
		Limestone	17	1,485.49
		Ochre	3	47.37
		Total	30	1659.38
	Sagar	Dolomite	2	20.36
		Phosphorite		52.80
		Pyrophyllite	2	3.21
		Total	5	76.37
	Satna	Bauxite	14	117.30
		China clay	7	52.45
		Clay (others)		1.33
		Laterite	2	179.99
930-		Limestone	93	4,368.03
		Ochre	29	426.41
		Total	154	5,145.51
	Seoni	Dolomite	7	11.00
	Sconi	Total	. 7 7	11.66
		Total	7	11.66

State	District	Mineral	No. of Leases	Lease Area (Hect.)
100000	Shahdol	Bauxite	nthouse 1	500.27
		China clay	3	20.84
		Fire clay	1	5.66
		Ochre	2	26.76
		Total	7	553.53
	Shivpuri	Diaspore	1	17.00
		Total	1	17.00
	Chyonus	Limestone	7	508.25
	Shyopur	Ochre		22.59
			2 9	
		Total	9	530.84
	Sidhi	Limestone	4	497.77
		Total	4	497.77
		Late I		
	Tikamgarh	Barytes	1	2.02
		China clay	1	5.00
		Diaspore	3	31.11
		Pyrophyllite	21	189.79
		Quartz	2	16
12,077		Total	28	243.92
	Umaria	China clay	1	11.24
	Ulliaria	Fire clay	2	19.62
		Laterite	irenal 1	17.74
		Ochre	2	14.72
		Total	6	63.32
		Total	v	03.32
MAHARASHTRA	Amravati	China clay	2	16.71
		Fire clay	1	13.26
		Total	3	29.97
	Bhandara	Chromite	1	16.22
	Duanual a	Kyanite	13	295.33
		Manganese ore	6	375.97
		Quartz	4	33.32
		Sand (others)	2	43.34
		Total	26	764.18
		endeput		
	Chandrapur	China clay	1	18.00
		Fluorite	1	32.70
		Iron ore	3	33.29
		Laterite	2	43.03
		Limestone	18	3,623.34
		Sand (others)	5	461.08
				(contd.)
		32		

tate	District	Mineral	No. of Leases	Lease Area (Hect.)
	Chandrapur (concld.)	Shale	1	41.48
	T (Canada)	Total	31	4,252.92
	Gadchiroli	Iron ore	1	9.96
	I had	Total	1	9.96
	Gondia	Iron ore	2	46.43
		Quartz	1	14.32
till 190		Total	3	60.75
	Jalna	Agate	1	40.94
	V anna	Total	1	40.94
		Total		40.54
	Kolhapur	Bauxite	15	3,865.38
	another !	Iron ore	1	143.95
		Total	16	4,009.33
	Nagpur	China clay	5	43.88
	-9/2022401.	Dolomite	10	123.17
		Manganese ore	25	526.82
		Ochre	1	12.36
		Quartz	î	1.07
		Sand (others)	4	191.88
		Total	46	899.18
F0.101	Raigad	Bauxite	3	111.70
	elinguid	Total	3	111.70
	Soungarin I			
	Ratnagiri	Bauxite	2	205.38
		Moulding sand	1	47.02
		Silica sand	7	488.08
		Total	10	740.48
	Sindhudurg	China clay	1	13.18
		Felspar	2	53.65
		Fire clay	1	5.14
		Iron ore	18	636.49
		Manganese ore	1	191.85
		Mica	1	42.06
		Quartz	2	91.15
		Quartzite	1	12.09
		Silica sand	21	911.36
		Total	48	1,956.97
	Yeotmal	Dolomite	1	61.91
		Limestone	33	2,353.36
	98134	Sand (others)	1	44.00
		Total	35	2,459.27
				(contd.)

State	District		o. of eases	Lease Area (Hect.)
MANIPUR	Chandel	Chromite	1	223.93
		Total	1	223.93
	TTI-11	Clausasita	1	206.24
	Ukhrul	Chromite Total	1 1	386.24 386.24
		Total		300.24
MEGHALAYA	Garo Hills West	Fire clay	1	221.44
		Limestone	2	470.00
		Total	3	691.44
	Jaintia Hills	Limestone	2	15.28
		Total	2 2	15.28
				^ 55
	Khasi Hills East	China clay	2 5	9.77
		Limestone Shale	1	878.77 4.90
		Total	8	893.44
	Khasi Hills West	Limestone	1	60.00
		Total	1	60.00
ORISSA	Angul	Quartz	1	8.13
0140011		Sand (others)	3	318.33
		Total	4	326.46
	Bargarh	China clay	3	103.34
	Dargarn	Graphite	12	220.68
	a Herr	Limestone	2	806.53
		Quartz	1	15.21
		Total	18	1,145.76
	Baudh	Graphite	1	28.96
	Daudii	Quartz	4	58.48
		Total	5	87.44
	10026	Q 11	~ .	1 (8 (8 -
	Bolangir	Graphite	64	1,676.25
	9. 4556	Lead & zinc ores Limestone	1 1	5.26 27.65
		Manganese ore	1	7.27
		Quartz	2	143.99
		Total	69	1,860.42
	Cuttools	Time alors	7	020.10
	Cuttack	Fire clay Total	7 7	929.19 929.19
		Total		747.17
	Dhenkanal	Chromite	2	847.48
		Graphite	3	185.70
	201	Total	5	1,033.18
				(contd.)
		34		

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Ganjam	Lime kankar	1	48.14
		Sillimanite	1	2,618.49
		Total	2	2,666.63
	1 123	takir <u>L</u> i te		
	Jajpur	Chromite	12	3,888.39
		Iron ore	1	1,812.99
		Quartz	1	7.23
		Quartzite	1	2.31
n-trage		Total	15	5,710.92
	7	D' 1		
	Jharsuguda	Fire clay	2	246.42
		Ochre	1	102.27
		Quartzite	3	121.44
		Sand (others)	1	109.20
		Total	7	579.33
	Kalahandi	Amethyst	1	27.65
	Kalananui	Corundum	1	27.65
			1	57.46
		Graphite	10	205.13
		Iolite	4	24.38
		Quartz	33	315.46
		Total	49	630.08
	Keonjhar	Asbestos	1	49.22
	•	Chromite	6	2,198.98
		Iron ore	61	22,891.90
		Magnesite	1	40.46
		Manganese ore	20	7,922.06
		Pyrophyllite	10	576.96
		Quartz	2	35.99
		Total	101	33,715.57
	Khurda	Fire clay	3	147.09
		Total	3	147.09
	Koraput	Bauxite	2	4 647 20
	Koraput	China clay	2 1	4,647.28
		Graphite	1	38.50
		Limestone	2	501.67
				1,586.22
		Manganese ore Mica	1	501.67
		Ochre	1	2.67
			1	95.50
		Quartz Total	2	22.76
		1 OTAL	11	7,396.27
				(contd.)

State	District la mix	Mineral	No. of Leases	Lease Area (Hect.)
21 22	Malkangiri	Limestone	o 1	1,694.13
	. I through	Quartz	1	2.48
		Tin	2	57.61
		Total	4	1,754.22
20.555		01.1	-	655.11
V 9	Mayurbhanj	China clay	7	655.44
		Fire clay	1	22.49
		Graphite	1	24.91
		Iron ore	7	1,204.91
		Quartz	1	1.19
		Quartzite	7	20.63
	- F	Steatite	2	136.20
		Total	26	2,065.77
BL-ROI	1 (Enauto) leina			
E.078	Nawapara	Corundani	1	33.95
		Graphite	1	20.23
		Limestone	4	410.57
		Total	6	464.75
38.45	Nayagarh	Graphite	-1	16.64
	E.C. Miles	Total	1	16.64
	Raygada	Bauxite	1	1,388.74
	THE TROP COLLECT	Graphite	7	281.82
26.36.78		Manganese ore	2	133.86
		Quartzite	1	24.89
		Total	11	1,809.31
	Sambalpur	Fire clay	1	8.84
	L	Quartz	4	103.61
		Total	5	112.45
	Sundergarh	Bauxite	1	43.07
	E later	Dolomite	8	877.21
		Fire clay	3	545.56
			33	4,823.08
		Lead & zinc ores	1	499.60
		Limestone	24	
				4,273.26 2,987.55
		Manganese ore	10	
		Quartz	7	521.70
	The state of the s	Sand (others)	2	9.90
		Steatite	1	155.93
		Total	90	14,736.86
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
RAJASTHAN	Ajmer	Asbestos	encolida 4	214.66
1. AE. HE.T		Felspar	69	2,478.17
		Garnet	3	15.00
		Lead & zinc or	res 1	480.45
		Limestone	Tomestill 1	8.57
		Magnesite	1	5.00
		Mica	35	1,351.77
		Quartz	4	127.33
		Steatite	2	131.00
		Vermiculite	1	42.22
		Wollastonite	Torrard	5.00
		Total	122	4,859.17
		maraghi.		1,000127
	Alwar	Barytes	2	41.85
		China clay	1	4.73
		Copper ore	any total 1	914.07
		Felspar	î	5.00
		Fire clay	1	3.75
		Ochre	1	60.70
		Silica sand	1	4.73
		Steatite	8	511.01
		Total	16	
		Total	10	1,545.84
	Banswara	Granhita	2	202 55
	Daliswara	Graphite Limestone	2	383.55
			1	65.82
		Manganese ore	1	80.00
		Steatite	2	713.08
		Total	6	1,242.45
	D		Dungaapa	10.00
	Barmer	China clay	2	10.00
		Gypsum	5	1,630.51
		Silica sand	5	551.09
		Total	12	2,191.60
	701		Trungur 9	
	Bharatpur	Fire clay	3	47.75
		Ochre	2	10.00
		Silica sand		1,557.11
		Total	26	1,614.86
	Bhilwara	Asbestos	9	45.00
		China clay	12	778.32
		Felspar	23	478.75
		Garnet	1	5.00
		Lead & zinc or		1,200.00
		Mica	55	1,456.02
		Ochre	1	5.00
				(contd.)

State	District	21.6	Mineral	No. of Leases	
	Bhilwara (concld.))	Quartz	2	48.16
			Steatite	10	1,519.35
			Total	114	
				11.	2,222.00
	Bikaner		Ball clay	8	773.96
	Dikanei		China clay	52	
			Fire clay	17	2,214.74
				13	
			Gypsum Total	90	3,826.86
			Total	90	11,529.69
	ין אין		C1: 1	2	100.00
	Bundi		China clay	2	109.00
			Ochre	2	99.37
			Silica sand	2	357.00
			Total	6	565.37
	Chittorgarh		China clay	26	1,296.01
			Limestone	8	3,692.81
			Ochre	11	1,254.85
			Shale	1	5.00
			Total	46	
					0,2 10107
	Dausa		China clay	1	32.37
	Dudsu		Iron ore	1	65.25
			Quartz	3	
			Silica sand	7	
	V 510 Bio II		Steatite	5	
			Total	17	990.07
	Dungarpur		Felspar	1	100.00
			Fluorite	10	
			Steatite	63	
			Total	74	4,931.37
100,711,000					
	Ganganagar		Gypsum	8	1,475.89
			Total	8	
					* *
	Hanumangarh		Gypsum	5	7,084.65
			Total	5	7,084.65
			10001		7,004.05
	Jaipur		Asbestos	marrian 1	66.50
	oathar		Calcite	1	
				7	
		•	China clay		
			Dolomite	2	92.93
			Epidote	1	
			Felspar	7	261.33
	**************************************				(contd.)
					0.5784

(dasia) .	District	Mineral	No. of Leases	Lease Area (Hect.)
	Jaipur (concld.)	Iron ore	5	484.79
		Limestone	3	1,334.90
		Mica	2	68.37
		Ochre	2	183.00
		Quartz	20	538.81
		Silica sand	18	864.90
		Steatite	9	849.98
		Total	78	6,218.06
	Jaisalmer	Doll alov		150.00
	Jaisainiei	Ball clay Dolomite	$\frac{1}{1}$	150.00
			1	32.37
		Gypsum	3	867.89
		Limestone	2	1,998.00
		Ochre	1	32.37
		Silica sand	8	385.00
		Total	16	3,465.63
	Jalore	Fluorite	4	1,075.00
		Gypsum	1	178.50
		Total	5	1,253.50
	Jhunjhunu	Calcite	3	104.94
		Copper ore	4	803.88
		Dolomite	2	66.05
		Fire clay	4	117.36
		Iron ore	5	257.54
		Ochre	1	
				33.00
		Pyrophyllite	1	42.50
		Quartz Steatite	3	212.17
		Total	5 28	432.56 2,070.00
	T 10			
	Jodhpur	Jasper	5	211.70
		Total	5	211.70
	Karauli	Silica sand	22	740.97
		Steatite	1	5.00
		Total	23	745.97
	Kota	Limestone	4	1309.52
		Total	4	1309.52
	Nagaur	Ball clay	2	10.00
		Gypsum	5	2,401.07
		Limestone	12	
		Total	12	6,700.63 9,111.70
		lmo I		-,

State	Leaso Area (in il)	District	Mineral	No. of Leases	Lease Area (Hect.)
		Pali	Asbestos	s) i lgint.	76.89
			Ball clay	7	947.73
			Felspar	2	69.87
			Limestone	11	1,114.15
			Magnesite	2	10.00
			Quartz	15	1,246.20
			Total	38	3464.84
		Rajsamand	Asbestos	13	812.11
			Felspar	and later.	5.00
			Lead & zinc ores	4	2,142.04
			Mica	2	10.00
			Pyrophyllite	2	105.00
			Quartz	30	465.02
			Steatite	32	2,602.75
			Total	84	6,141.92
		Sawai Madhopur	Ochre	1	38.43
			Quartz	2	249.45
	178.50		Silica sand	2	282.25
	GLEEL,I		Total	5	570.13
		Sikar	Barytes	undimedt.	47.51
	88.508		Calcite	7	222.79
			China clay	1	32.54
			Dolomite	3	387.93
	237.54		Felspar	7	364.83
			Iron ore	3	86.71
			Limestone	5	2,363.12
			Ochre	1	5.00
			Quartz	22	589.81
			Total	50	4,100.24
		Sirohi	Calcite	wingsbot	366.66
			Fluorite	1	167.62
			Lead & zinc ores	1	63.00
			Limestone	4	1,116.31
			Wollastonite	2	95.69
			Total	13	1,809.28
		Tonk	Felspar	310.7	70.37
			Garnet	10	320.99
			Mica	4	175.87
			Quartz	15	302.84
			Quartzite	1	5.00
			Silica sand	6	299.16
			Steatite	1	48.00
			Total	40	1,222.23
					(contd.)
			40		(********)

16339117	District District	Mineral	No. of Leases	Lease Area (Hect.)
	Udaipur	Asbestos	inik 3	230.43
	Z	Barytes	1	31.00
		Calcite	4	161.50
		China clay	i	5.00
		Lead & zinc ores	1	3,620.00
		Limestone	1	704.90
		Ochre	î	5.00
		Phosphorite	7	2,251.88
		Pyrophyllite	3	160.66
		Steatite	86	5,713.52
		Wollastonite		
			1	101.80
		Total	109	12,985.69
SIKKIM	Sikkim East	Copper ore	3	84.67
		Total	3	84.67
	Sikkim West	Dolomite		1.22
	Sikkim west		1	1.33
		Total	1	1.33
TAMIL NADU	Ariyalur	Fire clay	2	2.74
		Limestone	10	577.96
		Total		580.70
				200.70
	Chengai-Anna	Quartz	1	6.58
		Total	1	6.58
	Coimbatore	Quartz	. 5	12.65
	Combatore	Steatite	1	3.40
		Total	6	16.05
		Total	U	10.03
	Cuddalore	Fire clay	3	43.40
		Total	3	43.40
	The second second			
	Dharmapuri	Quartz	1	1.27
	Li binani	Total	1	1.27
	Dindigul	Limestone	12	35.98
		Quartz	11	9.73
		Total	23	45.71
		(B) (B) (B) (C)		
	Erode	Limestone	1	1.82
		Quartz	24	51.37
		Total	25	53.19
	Kanchipuram	Limeshell	1	190.00
	1xancmput am	Silica sand	1	4.63
		Diffea Saila	1	
		Total	2	104 (2
		Total	2	194.63

State	District	Mineral	No. of Leases	Lease Area (Hect.)
ELUEL .	Kanyakumari	Garnet	naglided 5	258.31
		Total	5	258.31
	Karur	Limestone	14	46.64
	and the state of the	Quartz	31	49.18
		Total	45	95.82
	Madurai	Graphite	1	14.51
	Madul al	Limestone		3.11
		Quartz	2 2	3.44
		Total	5	21.06
	N	G'11' 1		7.14
	Nagapattinam	Silica sand Total	1 4	7.14 7.14
		· Total	7	7.14
	Namakkal	Bauxite	2	158.46
		Limestone	11	32.52
		Quartz	14	25.33
		Total	. 27	216.31
	Perambalur	Fire clay	6	6.03
	1 Claimbaidi	Gypsum	1	159.31
		Limestone	11	151.52
		Total	18	316.86
	Periyar	Quartz	12	9.47
	Terryar	Total	12	9.47
		Total	12	2.47
	Ramnathapuram	Limeshell	1	539.05
	· Value	Total	resentario 1	539.05
	Salem	Felspar	1	39.47
	Salem	Limestone	21	89.33
		Magnesite	11	1,195.64
		Quartz	20	68.19
		Total	53	1,392.63
	1 2 2			
	Sivaganga	Graphite	4	277.11
		Total	4	277.11
	Theni (Madurai)	Limestone	3	6.77
	Them (Madural)	Total	3 3	6.77
	. Hodesan	mcs.	registrated	
	Thiruvarur	Silica sand	1	4.16
		Total	1	4.16
				(contd.)

State who I have the	District	Mineral L	No. of eases	Lease Area (Hect.)
	Tiruchirapalli	China clay	117	12.30
		Dolomite	1	62.07
		Garnet	1	19.06
		Gypsum	3	44.26
		Limestone	8	94.28
		Quartz	1	0.61
		Steatite	1	4.90
		Total	16	237.48
		Total	10	237.40
	Tirunelveli	Garnet	33	178.54
		Limestone	13	192.53
		Total	46	371.07
18.58				
	Tuticorin	Garnet	2	21.93
		Limestone	2	4.75
		Total	4	26.68
	Mallana	C44'4-		20.26
	Vellore	Steatite	1	28.26
		Vermiculite	1	23.71
		Total	2	51.97
	Villupuram	China clay	1	3.25
	· maparam	Total	1	3.25
		10001		3.23
	Virudhunagar	Limestone	7	689.56
		Total	7	689.56
UTTAR PRADESH	Allahabad	Silica sand	16	467.73
		Total	16	467.73
	Banda	Silica sand	6	173.20
		Total	6	173.20
	Hamirpur	Pyrophyllite	2	15.93
	Trainin pur	Total	3 3	15.93
		Total	3	15.93
	Jhansi	Diaspore	3	35.03
	O I MAISI	Total	3	35.03
		Total	3	33.03
	Lalitpur	Diaspore	3	70.84
		Phosphorite	1	874.00
		Pyrophyllite	4	777.75
		Total	8	1,722.59
		1044	O	1,122.33
	Sonbhadra	Limestone	4	2,706.15
	Vessella Changi	Total	4	2,706.15
412.6				_,
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
UTTARANCHAL	Almora	Steatite	1.	1.40
10.50		Total	1	1.40
	Bageshwar	Magnesite	1	53.20
	248024	Steatite	23	404.65
		Total	24	457.85
	Dehradun	Limestone	2	97.75
	Demadan	Phophorite	2	222.05
Address of the same		Total	4	319.80
	Pithoragarh	Magnesite	1	439.00
		Steatite	8	53.24
		Total	9	492.24
	Tehri Garhwal	Dolomite	1	20.23
		Gypsum	2	186.15
30.26		Limestone	1	7.69
		Total	4	214.07
WEST BENGAL	Bankura	China clay	10	62.50
WEST BENGIE		Felspar	1	2.23
		Fire clay	2	12.23
		Quartz	2	4.33
		Quartzite	1	4.70
	lese	Total	16	85.99
	Birbhum	China clay	15	210.88
		Fire clay	1	46.00
		Total	16	256.88
	Burdwan	Fire clay	6	9,882.58
	Duraman	Moulding sand	2	2.00
		Total	8	9,884.58
	Jalpaiguri	Dolomite	2	927.00
		Total	2	927.00
	Midnapur	Ochre	1	5.76
	Modelica	Total	1	5.76
	Purulia	China clay	2	332.29
		Limestone	1	0.67
		Phosphorite	1	29.13
		Quartz	3	6.37
		Sand (others)	1	44.09
		Total	8	412.55

3.2 DISTRICTWISE ANALYSIS

(i) HIGH MINERAL POTENTIAL DISTRICTS

Districtwise analysis indicates that the total number of mineral bearing districts are around 266 falling in 23 States in the country. Out of these, 16 districts in 6 States are considered as highly potential districts in each of which more than 100 mining leases are granted. There are 2,473 mining leases granted covering an area of 107,515 hectares in the country. These constitute 36% of total number of mining leases and cover around 24% of total area. Information on the number of mining leases granted in highly potential districts is furnished in Table-5.

TABLE - 5: HIGH MINERAL POTENTIAL DISTRICTS

SI. No.	District	No. of leases	No. of Minerals	Area of leases (Hect.)	States
				(11000)	
1	Anantapur	142	14	3,464.98	Andhra Pradesh
2	Cuddapah	184	16	5,002.59	Andhra Pradesh
3	Kurnool	222	14	4,582.12	Andhra Pradesh
4	Mahbubnagar	104	2	663.63	Andhra Pradesh
5	Nellore	234	10	4,328.05	Andhra Pradesh
6	Prakasam	109	6	2,466.04	Andhra Pradesh
7	South Goa	150	3	10,930.66	Goa
8	Jamnagar	182	6	5,428.87	Gujarat
9	Junagarh	118	2	2,764.65	Gujarat
10	Porbandar	302	4	3,847.78	Gujarat
11	Katni	126	9	1,794.50	Madhya Pradesh
12	Satna	154	6	5,145.51	Madhya Pradesh
13	Keonjhar	101	7	33,715.57	Orissa
14	Ajmer	122	11	4,859.17	Rajasthan
15	Bhilwara	114	9	5,535.60	Rajasthan
16	Udaipur	109	11	12,985.69	Rajasthan
	Total	2,473		107,515.41	

ii) MEDIUM MINERAL POTENTIAL DISTRICTS

Mining leases granted between 50 to 100 are considered as medium potential districts. There are 1,468 mining leases granted in 20 districts covering an area of 87,921 hectares in the country. These constitute 21% of total number of mining leases and cover over 19% of total area. Information on the number of mining leases granted in medium potential districts is furnished in Table-6.

TABLE -6: MEDIUM MINERAL POTENTIAL DISTRICTS

Sl. No.	¥5	District	No. of leases	No. of Minerals	Area of Leases (Hect.)	States
1		Nalgonda	52	3	4883.34	Andhra Pradesh
2		Rangareddi	56	7	1673.79	Andhra Pradesh
3		Vizianagaram	73	6	1,266.86	Andhra Pradesh
4		Durg	90	5	3,662.83	Chhattisgarh
5	r 1 .7	North Goa	100	2	7,235.33	Goa
6		Kachchh	69	8	1,558.44	Gujarat
7		Sabarkantha	61	9	884.30	Gujarat
8		Surendranagar	78	4	460.32	Gujarat
9		Vadodara	99	5	1,282.42	Gujarat
10		Gurgaon	66	4	4,974.23	Haryana
11		Bagalkot	54	3	3,404.18	Karnataka
12		Bellary	82	6	5,723.78	Karnataka
13		Bolangir	69	5	1,860.42	Orissa
14		Sundergarh	90	10	14,736.86	Orissa
15		Bikaner	90	4	11,529.69	Rajasthan
16		Dungarpur	74	3	4,931.37	Rajasthan
17		Jaipur	78	13	6,218.06	Rajasthan
18		Rajsamand	84	7	6,141.92	Rajasthan
19.		Sikar	50	9	4,100.24	Rajasthan
20		Salem	53	4	1,392.63	Tamil Nadu
	7	Total	1,468		87,921.01	

ii) LOW MINERAL POTENTIAL DISTRICTS

Mining leases granted below 50 are considered as low mineral potential districts. There are 3,000 mining leases granted in 230 districts covering an area of 2,58,187 hectares in the country. These account for 43% of the leases, covering 57% of the total area. Statewise distribution of low potential districts and area covered is given in Table-7.

TABLE -7: LOW MINERAL POTENTIAL DISTRICTS (BY STATE)

Sl.	State	No. of	No. of	Lease Area
No.		Districts	Lease	(Hect)
1	Andhra Pradesh	13	352	23,425.36
2	Assam	2	11	981.33
3	Bihar	3	12	2,087.77
4	Chhattisgarh	13	179	26,789.79
5	Gujarat	11	166	7,406.03
6	Haryana	5	. 74	10,059.32
7	Himachal Pradesh	5	58	2,018.58
8	Jammu & Kashmir	8	18	729.58
9	Jharkhand	15	201	28,530.38
10	Karnataka	21	256	27,455.21
11	Kerala	8	101	2,205.49
12	Madhya Pradesh	27	404	11,483.59
13	Maharashtra	12	223	15,335.65
14	Manipur	2	2	610.17
15	Meghalaya	4	14	1,660.16
16	Orissa	17	179	26,875.47
17	Rajasthan	20	338	48,193.90
18	Sikkim	2	4	86.00
19	Tamil Nadu	25	275	4,074.68
20	Uttar Pradesh	6	40	5,120.63
21	Uttaranchal	5	42	1,485.36
22	West Bengal	6	51	11,572.76
	Total	230	3,000	258,187.21

3.3 MINERALWISE ANALYSIS

The total number of naturally occurring minerals/metals for which the mining leases are granted in the country are 59 minerals. These minerals/metals are broadly classified into metallic and non-metallic minerals.

(i) METALLIC MINERALS

The metallic minerals include ferrous, non-ferrous and noble metals. The ferrous group includes iron ore, manganese ore, chromite and tungsten, where non-ferrous group consists of antimony ores, bauxite, copper, lead & zinc ore, molybdenum, nickel and vanadium. The noble metal group includes gold, silver and platinum group of metals. There are no commercial mining leases for silver and platinum group of metals at present in the country.

Metallic minerals for which mining leases are granted as on 31.3.2004 are 8 in number and the number of leases are 1,038 or 15% of the total mining leases with an area of 1,59,925 hectares (35% of the total mining lease area in the country). Out of the eight metallic minerals, the total number of mining leases granted for iron ore is placed at 474 followed by bauxite (266), manganese ore (225), chromite (29) and copper ore (17). These five minerals account for 1,011 mining leases (97% of the mining leases for metallic minerals) with an area of 1,44,897 hectares (91% of the lease area of metallic minerals). The distribution of mining leases for metallic minerals is given in Table-8.

TABLE-8: DISTRIBUTION OF MINING LEASES FOR METALLIC MINERALS

CONTRACTOR				
Sl.No.	Mineral /Metal	No. of leases executed	Area in hectares	
0.648.81	Bauxite	266	24,592.93	
2.	Chromite	29	8,548.71	
3.	Copper ore	17	10,589.86	
4.	Gold	9	6,683.12	
5.	Iron ore	474	79,041.71	
6.	Lead & zinc ore	12	8,221.35	
7.	Manganese ore	225	22,123.60	
8.	Tin	6	123.80	
NESTE:	Total	1038	159,925.08	

ii) NON-METALLIC MINERALS

There are 51 major non-metallic or industrial minerals for which leases are granted in the country. The number of mining leases granted for these minerals are placed at 5903 (85% of the total mining leases) with an area of 293,699 hectares (65% of the total lease area). Distribution of mining leases for non-metallic minerals is given in Table-9.

TABLE-9: DISTRIBUTION OF MINING LEASES FOR NON-METALLIC MINERALS

Sl. No.	eralt.	Mineral	No. of Leases	Lease Area (Hect.)
1	19 71	Agate	2	45.58
2		Amethyst	5	40.64
3		Apatite	1	13.29
2 3 4 5		Asbestos	39	1,846.89
5		Ball clay	41	2,146.19
6		Barytes	119	2,494.20
7		Calcareous sand	14	151.75
8		Calcite	57	1,593.63
9		Chalk	159	656.24
10		China clay	380	16,312.65
11	ale a serie serie se	Clay (others)	43	937.95
12		Corundum	12	145.41
1.3		Diamond	2	576.51
14		Diaspore	17	185.98
15		Dolomite	423	15,600.52
16		Dunite	1	4.45
17		Epidote	1	5.00
18		Felsite	2	5.10
19		Felspar	166	5,076.57
20		Fire clay	220	16,401.86
21		Fluorite	18	1,807.41
22		Garnet	68	1,038.83
23		Graphite	132	4,657.94
24		Gypsum	52	18,036.24
25		Iolite	4	24.38
26		Jaspar	5	211.70
27		Kyanite	23	3,056.25
28		Laterite	114	1,129.33
29		Lime kankar	24	891.14
30		Limeshell	29	3,793.13
31		Limestone	1,411	106,260.41
32		Magnesite	27	2,297.14
33		Mica	243	7,807.76
34		Moulding sand	39	738.70
35		Ochre	102	3,382.79
36		Opal	1	200.00
37		Perlite	08 1	144.65
			•	(contd.)

Table-9 (concld.)

li na Istor	Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
	38	Phosphorite	16	3,492.77
	39	Pyrite		647.50
	40	Pyrophyllite	66	2,116.04
	41	Quartz	845	12,780.42
	42	Quartzite	53	624.60
	43	Rock salt	3	53.86
	44	Sand (others)	46	4,716.79
	45	Shale	27	402.14
	46	Silica sand	417	18,721.90
	47	Sillimanite	5	9,945.84
	48	Slate	17	868.47
	49	Steatite	395	19,194.97
	50	Vermiculite	11	212.55
	51	Wollastonite	4	202.49
		Total	5903	293,698.55

The mineralwise/statewise distribution of lease and lease area as on 31.3.2004 is given in Table 10.

TABLE -10: MINERALWISE/STATEWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

Sl. No.	02.601 16.60	Mineral		State	No. of Lease	Lease Area (Hect.)	
1		Agate		Gujarat	1	4.64	
				Maharashtra	1	40.94	
				Total	2 .	45.58	
2		Amethyst		Andhra Pradesh	4	12.99	
				Orissa	1	27.65	
				Total	5	40.64	
3		Apatite		Andhra Pradesh	-1	13.29	
				Total	1	13.29	
		-12-1					
4		Asbestos		Andhra Pradesh	7	352.08	
				Orissa	1	49.22	
				Rajasthan	31	1,445.59	
	2.35			Total	39	1,846.89	
5		Ball clay		Andhra Pradesh	20	254.01	
				Gujarat	3	10.49	
				Rajasthan	18	1,881.69	
				Total	41	2,146.19	
6		Barytes		Andhra Pradesh	109	2,190.76	
				Haryana	1	79.32	
				Himachal Pradesh	2	81.39	
				Karnataka	1	17.00	
				Madhya Pradesh	2	5.37	
				Rajasthan	4	120.36	
				Total	119	2,494.20	
7		Bauxite		Chhattisgarh	12	5,640.85	
				Goa	1	40.92	
				Gujarat	149	4,040.71	
				Jharkhand	39	3,625.18	
				Karnataka	1	28.80	
				Kerala	3	1.37	
				Madhya Pradesh	35	795.09	
				Maharashtra	20	4,182.46	
	11.			Orissa	4	6,079.09	
				Tamil Nadu	2	158.46	
				Total	266	24,592.93	
8		Calcareous	sand	Gujarat	14	151.75	
				Total	14	151.75	
				51		(contd.)	

Sl. No.	40		State	No. of Lease	Lease Area (Hect.)
9		Calcite	Andhra Pradesh	5	139.20
			Gujarat	5	63.31
		The second section of the section of the second section of the section of the second section of the secti	Haryana	2	158.56
			Karnataka	1	91ag/ 17.00
			Madhya Pradesh	24	63.26
	88.33		Rajasthan	20	1,152.30
			Total	57	1,593.63
			distant huteria		
10		Chalk	Gujarat	159	656.24
	1-4.05		Total	159	656.24
11		China clay	Andhra Pradesh	57	893.40
			Chhattisgarh	5	13.16
			Gujarat	45	1,204.07
			Haryana	39	3,243.30
	12.00		Jharkhand	8	219.48
	63,014		Karnataka	13	839.51
	87.588.1		Kerala	41	95.56
			Madhya Pradesh	16	130.89
	10,420		Maharashtra	9	91.77
			Meghalaya	2	9.77
	GA187.1		Orissa managana	11	797.28
	2,146,19		Rajasthan	105	8,153.24
			Tamil Nadu	2	15.55
			West Bengal	27	605.67
	57.05		Total	380	16,312.65
12		Chromite	Karnataka	6	987.47
			Maharashtra	1	16.22
			Manipur	2	610.17
			Orissa	20	6,934.85
			Total	29	8,548.71
					officeres
13		Clay (others)	Andhra Pradesh	5	215.18
			Gujarat	35	701.21
			Karnataka	1	20.23
			Madhya Pradesh	2	1.33
			Total	43	937.95
					A.
14		Copper ore	Gujarat	1	1,402.00
		A	Jharkhand	3	6,417.69
			Karnataka	3	487.65
			Madhya Pradesh	2	479.90
			Rajasthan	5	1,717.95
			Sikkim	5 3	84.67
			Total	17	10,589.86
				* *	10,000100
					(contd.)

SI. 691A 9869 No(-15911)	Mineral 10 .0VI	State Sinte	No. of Lease Area Lease (Hect.)	
82.31 21	Corundum	Andhra Pradesh	Fire clay 6	35.93 82
16.24	4	Karnataka	4	18.07
374.70	72	Orissa Jaraju O	2	91.41
736.86		Total bnarkhand	12	145.41
390.51	3	Kamataka		1.0
291.23 21	Diamond SE	Madhya Pradesh	2	576.51
18.40	2	Maharashti	2 2	576.51
221.44	1	Meghalaya		
1,899.59	Diaspore	Madhya Pradesh	11	80.11
2,383.60	25	Uttar Pradesh	6	105.87
52.17	11	Total Wadu IruaT	17	185.98
9,940.81	6	West Bengal		20000
16,401.8681	Dolomite	Andhra Pradesh	95	1,601.85
		Chhattisgarh	82	9,062.31
31.69	2	Guiarat ISTEUL	Pluorite 86	1,225.04
32.70	1	Haryana Haryana	2	252.15
1,743.02	1.5	Jharkhand Januar	1	18.45
15,807,41	81	Karnataka faro I	14	305.10
		Madhya Pradesh	99	483.42
226,00	1.3	Maharashtra	11 Journal	185.08
340.99	14	Orissa nadlenio	8	877.21
477.84	J. \$4	Rajasthan	8	579.28
1,038.83	80)	Sikkim	1	1.33
		Tamil Nadu	1	62.07
408.86		Uttaranchal		20.23
6,274.26	9	West Bengal	2	927.00
6,683.12	6	Total	423	15,600.52
81.51	Dunite	Karnataka	Graphite	4.45
81.08	Dunite	Total Hilliggillistus	1	4.45
405.4405	Epidote	Rajasthan	1	5.00
235.0402		Total	1	5.00
3,161.99	101	Orissa	•	3.00
383.55	Felsite 2	Karnataka	2	5.10
291.62	C	Total	2	5.10
4,657.94	132	lateT	4	5.10
6.7022	Felspar	Andhra Pradesh	Gypsum, E	529.68
116.68		Gujarat	1	1.00
57.71	· ·	Haryana	3	285.06
17,465.37	40	Jnarknand	6	200.25
203.57	4	Karnataka	4	131.91
186.15	2	Maharashtra	2	53.65
18,036,24	52	Rajasthan Rajasthan	114	3,833.32
· www.outor		Tamil Nadu	1	39.47
	4	West Bengal	. 1 gilol	2.23
24.38	2	Total IsloT	166	5,076.57

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
23	Fire clay	Andhra Pradesh	24	82.31
	•	Chhattisgarh	4	16.24
		Gujarat	72	374.70
		Jharkhand	20	730.86
		Karnataka	3	390.51
		Madhya Pradesh	32	291.23
		Maharashtra	2	18.40
		Meghalaya	1	221.44
		Orissa	17	1,899.59
		Rajasthan	25	2,383.60
		Tamil Nadu	11	52.17
			9	9,940.81
		West Bengal		• •
		Total	220	16,401.86
24	Fluorite	Gujarat	2	31.69
		Maharashtra	1	32.70
		Rajasthan	15	1,743.02
		Total	18	1,807.41
25	Garnet	Andhra Pradesh	13	220.00
	Garner	Rajasthan	14	340.99
		Tamil Nadu	41	477.84
		Total	68	1,038.83
26	Gold	Andhra Pradesh	2	408.86
20	Gold		3	
		Karnataka	6	6,274.26
		Total	9	6,683.12
27	Graphite	Andhra Pradesh	4	81.51
		Chhattisgarh	3	98.79
		Jharkhand	13	405.44
		Karnataka	4	235.04
		Orissa	101	3,161.99
		Rajasthan	2	383.55
		Tamil Nadu	5	291.62
		Total	132	4,657.94
28	Gypsum	Gujarat	2	6.76
The .	-,,,	Himachal Pradesh	1	116.68
		Jammu & Kashmir	3	57.71
		Rajasthan	40	17,465.37
		Tamil Nadu		203.57
		Uttaranchal	4 2	186.15
		Total	52	18,036.24
20	Talita	Ordens	4	24.29
29	Iolite	Orissa	4	24.38
		Total	4	24.38
				(contd.)

SI. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
30	Iron ore	Andhra Pradesh	25	1,511.15
		Chhattisgarh	15	10,699.49
		Goa	187	14,002.79
		Haryana	1	80.20
		Jharkhand	25	9,675.37
		Karnataka	72	10,446.58
		Madhya Pradesh	8	122.84
		Maharashtra	25	870.12
		Orissa	102	30,732.88
		Rajasthan	14	894.29
		Total		
20,000,51		Total	474	79,041.71
31	Jasper	Rajasthan	5	211.70
		Total .	5	211.70
32	Kyanite	Jharkhand	5	2,560.22
		Karnataka	5	200.70
		Maharashtra	13	295.33
		Total	23	3,056.25
33	Laterite	Andhra Pradesh	70	(42.44
33	Laterite		78	642.44
		Karnataka	2	95.21
		Kerala	1	0.19
		Madhya Pradesh	31	348.46
		Maharashtra	2	43.03
		Total	114	1,129.33
34	Lead & zinc ore	Andhra Pradesh	1	200.00
		Madhya Pradesh	1	11.00
		Orissa	2	504.86
		Rajasthan	8	7,505.49
		Total	12	8,221.35
35	Lime kankar	Andhra Pradesh	19	137.65
10,021		Haryana	4	
		Orissa		705.35
The strains			1	48.14
		Total	24	891.14
36	Limeshell	Andhra Pradesh	5	163.38
		Karnataka	14	1,404.01
		Kerala	8	1,496.69
		Tamil Nadu	2	729.05
		Total	29	3,793.13
				(contd.)

Slass ArealS (Hect.9N	Mo, of laraniM Lease	State state	No. of Isranil/ Lease Area (E.)		
1,511.1578	Limestone	Andhra Pradesh	201 910 11011	21,484.8808	
	15	Assam againment	11	981.33	
10,699.49		Dihan	7	182.17	
14,002.79	187	Chhattisgarh	110	4,588.83	
80.20	1	Chierat			
9,675.37	25	Gujarat maddand	368	12,427.28	
10,446.58	72	Haryana Marana	. 11	592.51	
122.84	8	Himachal Pradesh	52	1,766.65	
870.12	25	Jammu & Kashmir	12	331.07	
		Jharkhand	16	1,673.81	
30,732.88	102	Karnataka	88	8,380.27	
894.29	14	Kerala Hamanasa	1	245.69	
79,041.71	\$2 July	Madhya Pradesh	264	12,259.05	
211.70		Maharashtra	51 ranged	5,976.70	
211.70	3	Megnalaya	10	1,424.05	
131-134	G	Orissa	34	8,798.36	
		Rajasthan	52	20,408.73	
2,560.22		Tamil Nadu	115 olianyol	1,926.77	
200.70	5	Uttar Pradesh	4	2,706.15	
295.33	13	Uttaranchal Galaki	3	105.44	
3,056,25	23	West Bengal 101	1	0.67	
The second section of the			1 411		
642.44	78	latoT Andlura Pradesh	1,411 sitrata.1	106,260.41	
95.2188	Magnesite	Andhra Pradesh	1	6.57	
. 01.0	Magnesite	Jammu & Kashmir	2	140.80	
	31		7		
348,46	16	Karnataka (II)	1	406.47	
43.03	<u> </u>	OrissatdsmadsM	1	40.46	
1,129.33	114	Rajasthan late1	3	15.00	
		Tamil Nadu	. 11	1,195.64	
200.00		Uttaranchal dbatA	Lead & 2ncore	492.20	
00.11	Ţ	Madhya Pr latoT	27	2,297.14	
504.86	2	Orissa		-,, -, -, -, -, -, -, -, -, -, -, -, -	
7,505,498	Manganese ore	Andhra Pradesh	42	1,124.83	
8,221.35	12	Goa fatoT	62	4,122.28	
Co Cor of the set of the	14.7.	Gujarat	1	2.95	
27 1991		Karnataka	Lime ka 26 rr	2,719.58	
137.65	19	Madhya Pradesh	27	1,446.91	
705.35	4				
48.14	1	Maharashtra	32	1,094.64	
891.14	7.4	Orissa letoT	34	11,532.41	
		Rajasthan	1	80.00	
163.38	5	Andhra Pradesh	Limeshe 225	22,123.60	
404.0104	14	Andhra Pradesh		2 1 2 2 2 1	
1,496,69	Mica 8	Andhra Pradesh	111	2,139.81	
	2	Bihar ubel/limeT	2	1,196.80	
729.05			1	400.00	
3,793,13	29	Jharkhand latoT	29	964.39	
(contd.)		Maharashtra	1	42.06	
Lance Cont.		Orissa	1	2.67	
			98		
			UX	4 (10) / (14	
		Rajasthan		3,062.03	
		Total	243	7,807.76 (contd)	

SI. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
41	Moulding sand	Andhra Pradesh	1	31.16
		Chhattisgarh	7	64.70
		Gujarat	4	6.83
		Karnataka	24	586.99
		Maharashtra	1	47.02
		West Bengal	2	2.00
		Total	39	738.70
12	Ochre	Andhra Pradesh	18	189.81
		Chhattisgarh	1	10.12
		Gujarat	5	45.35
		Jharkhand	1	5.62
		Karnataka	5	617.18
		Madhya Pradesh	44	572.10
		Maharashtra	1	12.36
		Orissa	2	197.77
1.2		Rajasthan	24	1,726.72
		West Bengal	i	5.76
		Total	102	3,382.79
13	Opal	Jammu & Kashmir	1	200.00
		Total	1	200.00
14	Perlite	Gujarat	1	144.65
67.0		Total	1	144.65
5	Phosphorite	Andhra Pradesh	1	2.83
		Madhya Pradesh	4 lax 3	112.88
		Rajasthan	7	2,251.88
		Uttar Pradesh	1	874.00
01.32-1		Uttaranchal	2	222.05
		West Bengal	1	29.13
		Total	15	3,490.57
. E4.TE1		528067		
56	Pyrite	Bihar Total	1	647.50
		Total	1	647.50
7	Pyrophyllite	Andhra Pradesh	6	169.74
		Jharkhand	1	22.50
		Madhya Pradesh	36	245.00
		Orissa	10	576.96
		Rajasthan	6	308.16
		Uttar Pradesh	7	793.68
		Total	66	2,116.04
				(contd.)

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)		
48	Quartz	Andhra Pradesh	407	5,306.28		
		Bihar	2	61.30		
		Chhattisgarh	6	18.05		
		Gujarat	31	209.26		
		Haryana	16	851.85		
		Jharkhand	18	236.36		
		Karnataka	47	454.38		
		Kerala	2	3.21		
		Madhya Pradesh	6	44.07		
		Maharashtra	8	139.86		
		Orissa				
			59	1,236.21		
		Rajasthan	116	3,971.07		
		Tamil Nadu	122	237.82		
		West Bengal	5	10.70		
		Total	845	12,780.42		
49	Quartzite	Andhra Pradesh	15	169.86		
		Chhattisgarh	16	166.00		
		Gujarat	1	19.30		
		Haryana	4	68.23		
		Karnataka	i	4.05		
		Madhya Pradesh	î	6.10		
		Maharashtra	i	12.09		
		Orissa	12	169.27		
		Rajasthan	1	5.00		
		West Bengal				
		Total	1	4.70		
		1 otal	53	624.60		
50	Rock salt	Himachal Pradesh	3	53.86		
		Total	3	53.86		
100						
51	Sand (others)	Andhra Pradesh	12	1,722.10		
	,	Jharkhand	13	1,765.35		
		Madhya Pradesh	2	7.52		
100		Maharashtra	12	740.30		
		Orissa	6	437.43		
		West Bengal	1	44.09		
		Total				
		Total	46	4,716.79		
52	Shale	Andhra Pradesh	10	177.40		
		Madhya Pradesh	14	173.36		
		Maharashtra	1	41.48		
		Meghalaya	1	4.90		
		Rajasthan	î	5.00		
	-	Total	27	402.14		
		LUM	41	~~ (1 4 4 1 4		

SI. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
53	Silica sand	Andhra Pradesh	71	1,070.85
		Gujarat	69	856.50
6		Haryana	52	7,959.30
		Karnataka	30	1,345.01
		Kerala	42	35.43
		Madhya Pradesh	4	6.25
		Maharashtra		1,399.44
		Rajasthan	92	5,391.18
		Tamil Nadu	7	17.01
		Uttar Pradesh	22	640.93
		Total	417	18,721.90
54	Silimanite	Andhra Pradesh	1	7,000.00
	9972	Kerala	3	327.35
		Orissa	1	2,618.49
	remaining the Property	Total	5	9,945.84
55	Slate	Andhra Pradesh	12	461.26
		Haryana	4	351.72
		Madhya Pradesh	1	55.49
		Total	17	868.47
56	Steatite	Andhra Pradesh	98	918.43
		Chhattisgarh	4	7.89
		Gujarat	6	22.04
		Jharkhand	3	9.41
		Karnataka	6	134.34
		Madhya Pradesh	16	105.46
		Orissa	3	292.13
		Rajasthan	224	17,209.42
		Tamil Nadu	3	36.56
		Uttaranchal	32	459.29
		Total	395	19,194.97
57	Tin	Chhattisgarh	4	66.19
		Orissa	2	57.61
	Sa Togaka	Total	6	123.80
58	Vermiculite	Andhra Pradesh	6 2	95.28
		Gujarat		25.04
		Karnataka	1	26.30
		Rajasthan	1	42.22
		Tamil Nadu	1	23.71
		Total	11	212.55
59	Wollastonite	Rajasthan	4	202.49
		Total	4	202.49

3.4 FREQUENCY DISTRIBUTION OF MINING LEASES

The number of mining leases so far granted for various minerals are classified into eight categories:

Category - I : Includes minerals for which number of mining leases

granted is between 1,001-2000;

Category - II : Includes minerals for which number of mining leases

granted are between 501 and 1,000;

Category - III : Includes minerals for which number of mining leases

granted are between 401 and 500;

Category - IV : Includes minerals for which number of mining leases

granted are between 301 and 400;

Category - V : Includes minerals for which number of mining leases

granted is between 201 and 300;

Category - VI : Includes minerals for which number of mining leases

granted are between 101 and 200;

Category - VII : Includes minerals for which number of mining leases

granted are between 51 and 100 and

Category - VIII: Includes minerals for which number of mining leases

granted are between 1 and 50.

Frequency distribution of mining leases by minerals are furnished in Table-10.

Number of minerals, their mining leases and area of leases covered category-wise are summarised as below:

Category	No. of	No. of min	ning leases	Lease area	in hects.	
62,64P	Mineral	No. of leases	Percentage	Lease area	Percentage	
I	1	1,411	20.32	1,06,260.41	23.42	
П	1	845	12.17	12,780.42	2.82	
m	3	1,314	18.93	1,13364.13	24.99	
\mathbf{IV}	2	775	11.17	35,507.62	7.83	
V	4	954	13.75	70,926.15	15.64	
VI	6	792	11.41	17,397.07	3.84	
VII	5	296	4.26	23,409.34	5.16	
VIII	38	554	7.98	73,978.49	16.31	
Total	59	6,941	100.00	4,53,623.63	100.00	

TABLE-11: FREQUENCY DISTRIBUTION OF MINING LEASES

Category	No. of Lease Granted	Mineral	No. of Mining Lease Granted	Lease Area in Hectares
I	>1000	Limestone	1,411	106,260.41
		Total	1,411	106,260.41
II	Between 501 to 1,000	Quartz	845	12780.42
		Total	845	12780.42
Ш	Between 401 to 500	Dolomite	423	15,600.52
		Iron ore	474	79,041.71
		Silica sand	417	18,721.90
		Total	1,314	113,364.13
IV	Between 301 to 400	China clay	380	16,312.65
		Steatite	395	19,194.97
		Total	775	35,507.62
V	Between 201 to 300	Bauxite	266	24592.93
		Fire clay	220	16401.86
		Manganese ore	225	22123.6
		Mica	243	7807.76
		Total	954	70,926.15
VI	Between 101 to 200	Barytes	119	2,494.20
		Chalk	159	656.24
		Felspar	166	5,076.57
		Graphite	132	4,657.94
		Laterite	114	1,129.33
		Ochre	102	3,382.79
		Total	792	17,397.07
VII	Between 51 to 100	Calcite	57	1,593.63
N. J. U.S.		Garnet	68	1,038.83
		Gypsum	52	18,036.24
		Pyrophyllite	66	2,116.04
		Quartzite	53	624.60
		Total	296	23,409.34
VIII	Between 50 to 1	Agate	2	45.58
		Amethyst	2 5	40.64
		Apatite	1	13.29
		Asbestos	39	1,846.89
		Ball clay	41	2,146.19
				(contd.)

Category	No. of Lease Granted	Mineral	No. of Mining Lease Granted	Lease Area in Hectares
VIII	Between 50 to 1	Limestone	1,411	106,260.41
	(contd.)	Calcareous sand		151.75
		Chromite	29	8,548.71
		Clay (others)	43	937.95
		Copper ore	17	10,589.86
		Corundum	12	145.41
		Diamond	2	576.51
		Diaspore	17	185.98
		Dunite	1	4.45
		Epidote	1	5.00
		Felsite	2	5.10
	No.	Fluorite	100 100 100 118	1,807.41
			9	6,683.12
19.707.61		Gold		24.38
		Iolite	4	211.70
16 165 7		Jasper	008 11 100 81 5 7711	
04 10401		Kyanite	23	3,056.25
		Lead & zinc ore		8,221.35
		Lime kankar	24	891.14
		Limeshell	29	3,793.13
		Magnesite	27	2,297.14
45.626		Moulding sand	. 39	738.70
72,070,2		Opal	1	200.00
AP. FCB. 6		Perlite	1	144.65
		Phosphorite	16	3,492.77
3,382,70		Pyrite	1	647.50
		Rock salt	3	53.86
		Sand (others)	46	4,716.79
		Shale	27	402.14
		Sillimanite	5	9,945.84
		Slate	17	868.47
		Tin	6	123.80
		Vermiculite	11	212.55
		Wollastonite	4	202.49
10000		vy onastonite	Lord R. Cartasa	202.49
(1.7.1	j	Total	554	73,978.49

3.5 MUSEUM DISTRICTS OF MINERALS

The concentration of both number and wide variety of minerals is confined to as many as 67 districts covering 12 States which have more than 4 varieties of minerals. Cuddapah, Anantapur, Kurnool, Khamam districts of Andhra Pradesh, Jaipur, Ajmer and Udaipur districts of Rajasthan are considered as museum districts of minerals.

3.6 SECTORWISE DISTRIBUTION OF MINING LEASES

Mining leases are in force both in the private and public sectors including Central and State Govt. Undertakings. Out of the total 6,941 mining leases in the country, 502 (7.23%) leases are granted in the Public Sector extending over an area of 1,64,412.56 hectares and the remaining mining leases with an area of 2,89,211.07 hectares are in the private sector. Most of the metallic minerals namely bauxite, chromite, copper ore, lead & zinc ores, gold, iron ore & manganese ore and non-metallic minerals like limestone, dolomite, pyrite, apatite, barytes, fluorite, asbestos, kyanite, magnesite, etc. are being exploited by both public and private sectors.

i) CENTRAL GOVERNMENT PUBLIC SECTOR UNDERTAKINGS

There are 205 number of mining leases granted in 18 States for different minerals, covering an area of 83,865.02 hectares. The States rich in minerals where maximum number of mining leases granted for Central Public Sector Undertakings are Maharashtra (15.20%) followed by Andhra Pradesh (14.70%), Madhya Pradesh (12.74%), Rajasthan (11.27%), Chhattisgarh (9.80%), Jharkhand & Orissa (8.82% each) and Tamil Nadu (5.88%). These eight States together account for over 87% of total leases executed and remaining States account for 13%.

The maximum mining lease area covered by different States are Jharkhand (19.34%) follwed by Chhattisgarh (16.38%), Orissa (15.33%), Rajasthan (13.86%), Karnataka (13.72%), Andhra Pradesh (7.84%) and Madhya Pradesh (6.42%). These seven States account for 93% of total lease area granted and remaining States account for 7%.

ii) STATE GOVERNMENT PUBLIC SECTOR UNDERTAKINGS

There are 297 number of mining leases granted in 19 States for different minerals, covering an area of 80,547.54 hectares. The States rich in minerals where maximum number of mining leases granted are Karnataka (18.52%) followed by Rajasthan (17.50%), Orissa & Tamil Nadu (15.82%) each, Maharashtra (5.38%), Andhra Pradesh (4.71%), Haryana (4.38%) and Gujarat (3.70%). These eight States together account for 86% of total leases granted and remaining States account for remaining 14% of mining leases of State Public Sector.

The maximum mining lease area covered by different States are Orissa (35.18%) followed by Rajasthan (32.18%), Karnataka (10.05%), Uttar Pradesh (5.40%), Gujarat (4.49%), Tamil Nadu (3.21%) and Haryana (2.41%). These seven States account for 93% of total lease area executed and remaining States account for remaining 7%.

Statewise and Sectorwise distribution of mining leases is given in Tables-12 to 14.

TABLE-12: SECTORWISE DISTRIBUTION OF MINING LEASES (as on 31/03/2004)
(Public Sector and Private Sector)

Sl.		Total		Pul	Public Sector		Private Sector	
No	State	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	
1.	Andhra Pradesh	1,528	51,756.76	44	7,719.58	1,484	44,037.18	
2.	Assam	11	981.33	2	338.00	9	643.33	
3.	Bihar	12	2,087.77	11	647.50	11	1,440.27	
4.	Chhattisgarh	269	30,452.62	27	14,392.80	242	16,059.82	
5.	Goa	250	18,165.99	ne idenzi		250	18,165.99	
6.	Gujarat	1,075	23,632.81	11	3,614.69	1,064	20,018.12	
7.	Haryana	140	15,033.55	17	2,645.88	123	12,387.67	
8.	Himachal Pradesh	58	2,018.58	5	547.76	53	1,470.82	
9.	Jammu & Kashmir	18	729.58	3	240.80	15	488.78	
10.	Jharkhand	201	28,530.38	23	16,537.39	178	11,992.99	
11.	Karnataka	392	36,583.17	62	19,597.28	JB ≥ 330	16,985.89	
12.	Kerala	101	2,205.49	5	577.26	96	1,628.23	
13.	Madhya Pradesh	684	18,423.60	32	5,498.28	652	12,925.32	
14.	Maharashtra	223	15,335.65	47	2,216.29	176	13,119.36	
15.	Manipur	2	610.17	ade lubio	- 11 House	2	610.17	
16.	Meghalaya	14	1,660.16	4	1,000.07	10	660.09	
17.	Orissa	439	77,188.32	65	41,184.15	374	36,004.17	
18.	Rajasthan	1,059	104,495.64	75	37,540.48	984	66,955.16	
19.	Sikkim	4	86.00	3	84.67	1/61	1.33	
20.	Tamil Nadu	328	5,467.31	59	3,605.87	269	1,861.44	
21.	Uttar Pradesh	40	5,120.63	9	4,387.93	31	732.70	
22.	Uttaranchal	42	1,485.36	5	811.25	37	674.11	
23.	West Bengal	51	11,572.76	3	1,224.63	48	10,348.13	
o ille rat	Total	6,941	453,623.63	502	164,412.56	6,439	289,211.07	

TABLE-13: DISTRIBUTION OF MINING LEASES IN PUBLIC SECTOR
(as on 31/03/2004)
(Central Govt and State Govt.)

SI. No	sau twa K. san oesa.	Public !	Sector (Total)	Ce	Central Govt.		te Govt.
140	State	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
1.	Andhra Pradesh	44	7,719.58	30	6,569.20	14	1,150.38
2.	Assam	2	338.00	1	171.00	1	167.00
3.	Bihar	1	647.50	1	647.50		
4.	Chhattisgarh	27	14,392.80	20	13,730.70	7	662.10
5.	Gujarat	11	3,614.69		antoli me	11	3,614.69
6.	Haryana	17	2,645.88	4	705.35	13	1,940.53
7.	Himachal Pradesh	5	547.76	5	547.76	attitett 2	
8.	Jammu & Kashmir	3	240.80	1	140.80	2	100.00
9.	Jharkhand	23	16,537.39	18	16,211.98	5	325.41
10.	Karnataka	62	19,597.28	7	11,505.40	55	8,091.88
11.	Kerala	5	577.26	2	169.71	3	407.55
12.	Madhya Pradesh	32	5,498.28	26	5,377.88	6	120.40
13.	Maharashtra	47	2,216.29	31	1,503.96	16	712.33
14.	Meghalaya	4	1,000.07	2000	<u>-</u>	4	1,000.07
15.	Orissa	65	41,184.15	18	12,847.88	47	28,336.27
16.	Rajasthan	75	37,540.48	23	11,619.43	52	25,921.05
17.	Sikkim	3	84.67	(viente)	trans.	3	84.67
18.	Tamil Nadu	59	3,605.87	12	1,020.14	47	2,585.73
19.	Uttar Pradesh	9	4,387.93	1	33.58	8	4,354.35
20.	Uttaranchal	.5	811.25	4	714.25	1	97.00
21.	West Bengal	3	1,224.63	1	348.50	2	876.13
.72	Total	502	164,412.56	205	83,865.02	297	80,547.54

TABLE-14 : SECTORWISE SUMMARY OF LEASE DISTRIBUTION
(as on 31.03.2004)
(By State/District/Mineral)

State	District	Mineral	Central Govt.		State Govt.		Total	
its fanc.	D. Start		No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)		Lease area (Hect.)
Andhra Pradesh	Adilabad	Limestone	1	839.41	1	809.38	2	1,648.79
	Anantapur	Gold	1	168.42		-	1	168.42
	Chittoor	Gold	2	240.44	114	100	2	240.44
	Cuddapah	Barytes	717	•	4	161.73	4	
	Godavari (West)	China clay	-	ty 1 . 24	2	24.39	2	
	Guntur	Lead & zinc	1	200.00	-	=	1	
	Karimnagar	Sand (others)	. 5	1,602.00	-	- 17	5	
	Khammam	Dolomite	. 1	384.61	-	-	1	
		Sand (others)	3	15.88	-1 -	-	3	
	Krishna	Limestone	1	1,295.00	-	4. j	1	-,
	Mahbubnagar	Felspar	1	17.82	-	-	1	17.82
	Prakasam	Iron ore	1	266.33	-		1	
	Rangareddi	Laterite	1	41.41	-	-	1	
		Limestone	2	868.74	-	-	2	
		Shale	1	133.07	-	-	1	
	Srikakulam	Silica sand	1	7.50	-	-	1	7.50
	Visakhapatnam	Apatite	-	-	1	13.29	1	
		Mica	-	a(5.5	2	48.68	2	
		Phosphorite	00		1	2.83	1	
		Quartz	1	3.24	-	-	1	
	Vizianagaram	Manganese of		389.50	3	90.08	8	
		Moulding sar		31.16	-	-	1	
37.34		Sand (others)		64.67		-	1	100000000000000000000000000000000000000
		Total	30	6,569.20	14	1,150.38	44	7,719.58
Assam	Karbi Anglong	Limestone	1	171.00		11.0-		171.0
ASSERTA	North Cachar Hills			-	1	167.00	Jean nee I	
		Total	1	171.00	1		2	
Bihar	Rohtas	Pyrite	1	647.50	_			647.5
		Total	1		[415	-	- 1	
Chhattisgarh	Bilaspur	Dolomite	2	1562.12	_	-		2 1,562.1
	Dantewara	Iron ore	6	6886.9	-			6,886.9
		Tin			3	58.45	(58.4
	Durg	Dolomite		-	1	22.15		1 22.1
120		Iron ore	4	2,732.62	٠			4 2,732.6
		Limestone	3	198.03	-			3 198.0
		Moulding san	nd 1	24.98	-			1 24.9
	Janjgir-Champa	Dolomite	1	122.70	-			1 122.7
	Kanker	Iron ore	1	938.06				1 938.0
	Kawardha	Bauxite	1	626.12				1 626.1
	Surguja	Bauxite	1	639.17	3			4 1,220.6
		Total	20	13,730.70	7	662.10	2	7 14,392.8

State	District	Mineral	Cen	tral Govt.	State	Govt.	Total	
cedy tensor I do 200	EVER NELDE	i agraja	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
Gujarat	Banaskantha	Copper ore	-	-	1	1,402.00	1	1,402.00
	Jamnagar	Bauxite	-	-	2	189.79	2	189.79
	Kachchh	Bauxite	_		6	486.95	6	486.95
	Surat	Limestone	_	1 1 10 10 10 10 1	1	1504.75	1	1,504.75
	Vadodara	Fluorite	-		1	31.20	1	31.20
		Total	-	(15-2	11	3,614.69	11	3,614.69
Haryana	Bhiwani	Lime kanka	r 5	705.35			5	705.25
	Faridabad	China clay	200	703.55	1	70.00	5	705.35
		Silica sand			4		1	70.00
	Gurgaon	Silica sand				1283.09	4	1,283.09
	Mahendragarh	Felspar	-		3	239.76	3	239.76
	Guin	Iron ore	-	-	1	23.61	1	23.61
Terrain I		Limestone	-		1	86.20	1	86.20
	Rewari	Slate	-	-	1	9.85	1	9.85
	rewaii	Total		=0===	2	228.02	2	228.02
		Total	4	705.35	13	1940.53	18	2,645.88
Himachal Pradesh	Mandi	Rock salt	3	53.86			2	52.06
	Sirmur	Limestone	1	255.70		-	3	53.86
	Solan	Limestone	1	238.2	ja - 15.	a subselect	1	255.70
		Total	5	547.76		artida.	1	238.20
				347.70	-		5	547.76
Jammu & Kashmir	Pulwama	Limestone		1500	1	100.00	1	100.00
	Udhampur	Magnesite	1	140.80	1	N.A.	2	
	95.	Total	1	140.80	2	100	3	140.80 240.80
Jharkhand	Garwah	Limestone		1 170 00				
	Palamau		3	1,178.92	- ·		3	1,178.92
	Ranchi	Graphite	-		1	15.18	1	15.18
		Limestone	-	-	2	239.63	2	239.63
	Singhbhum (East)	Copper ore	3	6,417.69	-	ornes inisari	3	6,417.69
	Singhhhum (III)	Kyanite	-	-	1	2.43	1	2.43
	Singhbhum (West)	Iron ore	11	6867.12	-	- Lucitor -	11	6,867.12
		Kyanite	1	1,748.25	1	68.17	2	1,816.42
		Total	18	16,211.98	5	325.41	23	16,537.39
Karnataka	Bagalkot	Dolomite			2	253.29	2	253.29
		Limestone	-	Relief P	10	2,550.36	10	2,550.36
	Bangalore	Felsper		1900	3	130.30	3	
	Belgaum	Limestone	-	num <u>i</u>	2	351.12		130.30
	Bellary	Iron ore	2	1,255.50	8		2	351.12
	Chickmagalur	Iron ore	1	4,605.00	0	782.30	10	2,037.80
	Chitradurga	Copper ore		1,005.00	2	416.03	1	4,605.00
	0.501	Limestone	_	100	1	416.83	2	416.83
	Gulbarga	Gold	-			111.30	1	111.30
		Limestone	3	120.51	1	55.75	1	55.75
	Hassan	China clay	, 3	429,51	-	-	3	429.51
	-	Chromite	-	=	2	311.60	2	311.60
		Copper ore	7		6	987.47	6	987.47
			-	7	1	70.82	1	70.82
	10 to 1	Quartz	-	=	2	18.20	2	18.20
		Steatite	-		1	80.94	1	80.94
		Vermiculite	-	-	1	26.30	1	26.30

State	District N	Ineral Co	ent	ral Govt.	State	Govt.	Tota	al
	Americal bases (Crosts) contr	No. of leases		Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
Karnataka	Kolar	Gold	1	5,215.39	-	DOMESTIC -	1	5,215.39
(contd.)	Mandya	Quartz	-	96. - 1. 1	1	15.17	1	15.17
(conta.)	Mysore	Magnesite	_		3	338.12	3	338.12
	Raichur	Gold	_	-	3	965.08	3	965.08
	Shimoga	China clay		-	3	33.99	3	33.99
	Sillinoga	Manganese ore		_	1	526.10	1	526.10
	Tumkur	Gold		10.172	1	38.04	1	38.04
		Bauxite	500	3 11 2	1	28.80	1	28.80
	Udupi		7	11,505.40	55	8,091.88	62	19,597.28
		Total	1	11,505.40	33	0,071.00	02	17,577.20
Kerala	Kollam	China clay	-		1	4.22	1	4.22
		Sillimanite	2	169.71	1	157.64	3	327.35
	Palakkad	Limestone	-		1	245.69	1	245.69
	Tulunuu	Total	2	169.71	3	407.55	5	577.26
	1 4 0 5 0 1	24, 297		450.00			2	479.90
Madhya Pradesh	Balaghat	Copper ore	2	479.90	-	-	2	
		Manganese ore		1,172.27	-	1701-1-	11	1,172.27
		Sand (others)	1	5.50			1	
	Chhattarpur	Phosphorite	-	an ami t d	1	48.76	1	
	Jabalpur	Limestone	1	89.32	j		1	
	Jhabua	Phosphorite	-	-	2	11.32	2	
	Katni	Fireclay	2	38.27	-	- Pathyana	2	38.27
		Limestone	3	1,109.09		Linear CLT-	3	
	Mandla	Dolomite	-	-	1	2.52	1	
	Nimach	Limestone	2	500.45		. <u>-</u>	2	500.45
	Panna	Diamond	2			- Correct	2	576.5
	Sagar	Phosphorite	_		1	52.80	1	52.80
	Satna	Limestone	2	1,406.57	(. 2	1,406.5
	Tikamgarh	Pyrophyllite	-		1		1	5.00
	Tikumgam	Total	26		6			5,498.2
LTDA		77				251.48		9 251.4
Maharashtra	Bhandara	Kyanite	-	275.07) ·	231.40		6 375.9
		Manganese ore				-		1 40.1
	22 2	Sand (others)	1	40.11		20.70		
	Chandrapur	Fluorite		- 461.00		32.70		
		Sand (others)	5	461.08		- 42.00		
	Gondia	Iron ore		1592.5		1 43.82		1 43.8
	Nagpur	Dolomite	5	รแบบสู่ใน		1 42.52		1 42.5
		Manganese or				 Ballage 		4 390.9
		Sand (others)	4	4 191.88				4 191.8
	Sindhudurg	Felspar		SID CENTE		1 29.27		1 29.2
		Silica sand				2 105.07		2 105.0
	Yeotmal	Limestone			1	1 207.47	7	1 207.4
		Sand (others)		1 44.00		-	- > -	1 44.0
		Total	31	1 1,503.96	1	6 712.33	3 4	7 2,216.2
Mankelen	Core IIII- III	Fire clay				1 221.4	4	1 221.4
Meghalaya	Garo Hills West			an maj		1 384.0		1 384.0
6	TZ1 ' TT''! TO :	Limestone						2 394.6
199.50	Khasi Hills East	Limestone						
3.73		Total				4 1,000.0	7	4 1,000.

State	District	Mineral	Cer	tral Govt.	State	e Govt.	Tot	al
eraciella (Reco	escures No. (assi) (assi)	i in the least	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)		Lease area (Hect.)
Orissa	Bargarh	Limestone	_		2	806.53	2	806.53
	Dhenkanal	Chromite	177		2	847.48	2	847.48
	Ganjam	Sillimanite	1	2,618.49	_	017.10	1	2,618.49
	Jajpur	Chromite		_,010,15	5	2,865.85	5	2,865.85
	200	Iron ore		_	1	1,812.99	1	1,812.99
	Kalahandi	Amethyst	-		1	27.65	1	27.65
		Corundum			1	57.46	1	57.46
	Keonjhar	Chromite		_	3	1,933.64	3	1,933.64
	1004	Iron ore	4	4,162.91	12	7,384.06	16	11,546.97
		Manganese ore		1,102.51	7	4,511.54	7	
	Koraput	Bauxite	2	4,647.28	,	4,511.54		4,511.54
9611 - 1	P	Graphite		7,077.20	1	501.67	2	4,647.28
		Limestone		-	1	501.67	1	501.67
		Manganese ore		-	2	1,586.22	2	1,586.22
	Malkangiri	Limestone	·	-	1	501.67	1	501.67
	Nawapara	Corundum	-	-	1	1,694.13	1	1,694.13
	Nawapara		-		1	33.95	1	33.95
	Daysanda	Limestone	-		3	343.00	3	343.00
	Rayagada	Bauxite	-	-	1	1,388.74	1	1,388.74
	Sundergarh	Dolomite	2	384.03	-	111	2	384.03
		Iron ore	6	487.64	3	2,039.69	9	2,527.33
		Lead & zinc ore		499.60	-	-	. 1	499.60
		Quartz	2	47.93			2,	47.93
		Total	18	12,847.88	47	28,336.27	65	41,184.15
Rajasthan	Ajmer	Lead & zinc ore	s 1	480.45		120	1	480.45
	Alwar	Copper ore	1	914.07	att making I	- Maringe	1	914.07
	Banswara	Graphite		51	2	383.55	2	383.55
	Barmer	Gypsum	2	1,100.66	2	389.85	4	1,490.51
	Bhilwara	Lead & zinc ore		1,200.00	-mon un 📝	507.05	1	1,200.00
	Bikaner	Gypsum	3	367.02	9	3,454.84	12	3,821.86
	Dungarpur	Fluorite		-	4	292.30	4	292.30
	Ganganagar	Gypsum	4	346.50	4	1,129.39		1,475.89
	Hanumangarh	Gypsum	te .	5 10.50	5	7084.65	8 5	
	Jaisalmer	Gypsum	1	501.68	2			7,084.65
		Limestone		301,08	2	366.21	3	867.89
	Jalore	Fluorite	_	_	4	1,998.00	2	1,998.00
	valore	Gypsum	<u> </u>	i i		1,075.00	4	1,075.00
	Jhunjhunu	Copper ore	1	902.00	. 1	178.50	1	178.50
	Nagaur	Gypsum	4	803.88	-		4	803.88
	Ivagaui	507	-	-	5	2,401.07	5	2,401.07
	Daigamand	Limestone	-	-	3	4,915.44	3	4,915.44
	Rajsamand Sirohi	Lead & zinc ore		2,142.04	· -	-	4	2,142.04
		Lead & zinc ore	s -	-	1	63.00	1	63.00
	Udaipur	Barytes	-	-	1	31.00	1	31.00
		Calcite	• 10		1	49.50	1	49.50
		Lead & zinc ore		3,620.00	-	-	1	3,620.00
		Phosphorite	1	143.13	6	2,108.75	7	2,251.88
		Total	23	11,619.43	52	25,921.05	75	37,540.48
	lw.i							(contd.)

State	District	Mineral	1900	Cen	tral Govt.	State	e Govt.	Tot	tal
erment lo	art usvaugas i	ku, as f	No. leas		Lease area (Hect.)	No. of leases	Lease area (Hect.)		Lease area (Hect.)
Sikkim	Sikkim East	Copper ore		-		3	84.67	3	84.67
		Total		-	-	3	84.67	3	84.67
Tamil Nadu	Ariyalur	Limestone				9/15-11 1/8/6	274.00		274.06
Tannittadu	Chengai-Anna	Quartz		-	-	4	374.06	4	
	Cuddalore Cuddalore	Fireclay			-	1	6.58	1	
	Dindigul				-	2	42.05	2	
		Quartz		-	-	2	1.47	2	
	Erode	Quartz		-		6	24.96	6	
	Kanchipuram	Limeshell		-		1	190.00	1	
	10年65年	Silica sand		-	-	1	4.63	9 1	4.63
	Kanyakumari	Garnet		5	258.31			5	258.31
	Karur	Quartz		-	-	7	19.30	7	19.30
	Namakkal	Quartz			_	3	7.92	3	7.92
	Perambalur	Limestone		-		1	110.68	1	
	Periyar	Quartz		-	-	2	3.59	2	
	Ramnathapuram	Limeshell		_	_	1	539.05	1	
	Salem	Magnesite		7	761.83	3	431.24	10	
		Quartz			701.05	2	0.97	2	
Principal Control	Sivaganga	Graphite		_	_	2	242.46	2	
	Tiruchirapalli	China clay		_	-				
	i ii deimapam	Dolomite		-		1	12.30	1	
				-		Mary Lynn I	62.07	1	
	TC' 1 11'	Limestone		-	-	1	9.95	1	
21.60/Lub 28	Tirunelvelli	Garnet		-	-	. 1	4.36	1	1100
		Limestone		-		2	27.80	2	27.80
	Vellore	Vermiculite		-	631.7	1	23.71	1	23.71
	Virudhunagar	Limestone		-	-	2	446.58	2	446.58
		Total		12	1,020.14	47	2,585.73	59	3,605.87
Uttar Pradesh	Allahabad	Silica sand		1	22.50				22.50
Ottai Traucsii	Lalitpur			1	33.58	12 5 2 150 T	074.00	1	20.00
	Lampur	Phosphorite		-	-	1	874.00	1	0,1100
	0 11 1	Pyrophyllite		-	-	3	774.20	3	
	Sonbhadra	Limestone		-		4	2,706.15	4	
	845	Total	e (8)	1	33.58	8	4,354.35	9	4,387.93
Uttaranchal	Bageshwar	Magnesite		1	53.20	11.		1	53.20
	Dehradun	Limestone		1	33.20	1	07.00	1	
	Demaddi	Phosphorite		2	222.05	1	97.00	1	
	Pithoragarh	-						2	
	Tuloragam	Magnesite		1		616 T.F.Q.) Leading	1	
70.100.1 2		Total		4	714.25	1	97.00	5	811.25
West Bengal	Burdwan	Fireclay		1	348.50	,	gi va hon, or a	1	348.50
	Jalpaiguri	Dolomite				1	847.00	1	
	Purulia	Phosphorite		Ť	-3/5	1			
	- 91 11111	Total		1	240 50		29.13	1	
		TULAI		1	348.50	2	876.13	3	1,224.63

3.7 YEARWISE STATUS OF EXPIRY OF MINING LEASES

Every mining lease is granted for a stipulated period and once this period expires the lessees shall have to apply for renewal to the respective State Governments as per the provisions under MCR, 1960. The period of leases varies from minimum 20 years to a maximum of 30 years. Further, renewal (s) are possible for period or periods not exceeding 20 years in each case. Out of the total number of leases in the Directory (6,941) more than 1,110 (10%) leases will expire between 2005 to 2009. The yearwise and Statewise break up of the position of expiry of lease are given in Tables -15 and 16.

TABLE - 15: YEARWISE STATUS OF EXPIRY OF MINING LEASES

Year	No. of leases	P	ercentage	Lease Area (Hect.)	Pe	rcentage
2005	368		2.70	24279.95		2.58
2006	337		2.47	21109.09		2.25
2007	213		1.56	14519.99		1.55
2008	115		0.84	7223.93		0.77
2009	77		0.56	5722.14		0.66
2010	110		0.81	12314.98		1.31
2011	111		0.81	8084.71		0.86

TABLE -16 :STATEWISE AND YEARWISE STATUS OF EXPIRY OF MINING LEASES (BY STATE)

7	State		2005		2006		2007		2008	1	2009	51	2010	10	2011
Š		No.	Lease area No. (Hect.)	No.	Lease area (Hect.)	No.	Lease area	No.	Lease area	No.	Lease area	No.	Lease area	No.	Lease area
-	Andhra Pradesh	52	2,055,35	30	1.805.64	15	1.831.30	7	244 73	1=	164 33	15	5		(Hect.)
C	7 Accam		+	7	150 02	-	2000			11	CC.+O1	CI		71	10.071
1	Assault	1	•	0	130.03	-	. 35	5	9	1	- A (_	40.00	G	
3	3 Bihar	2	61.30	2	232.43				•	1	•	1			
4	4 Chhattisgarh	11	981.11	11	641.28	10	3,343.42	ES	30	2	22.43	10	6 47	ii	
5	5 Goa	1	40.92	'	1	9	406.82	27	9.49	3	56	1		•	
9	6 Gujarat	55	724.65	74	741.17	48	716.72	25	379.96	10	115.74	8	77.67	10	CT 09
7	7 Haryana	3	559.80	2	665.01	2	759.22	1	•	-	•	1 7	50 50	121	100
00	8 Himachal Pradesh	6	84.29	3	8.8	4	44.42	1	1	-	0.37	1	27.83	0	241 16
6	9 Jammu & Kashmir	1	ı	•		T	1	1	1	-	140.80	2	43.56	No.	
10	10 Jharkhand	24	2,843.69	27	2,121.15	3	144.90	7	222.87	00	2,297.80	16	430.45	c	2 542 24
11	11 Karnataka	28	1,754.27	12	472.25	11	704.26	5	883.99	4	80.83	8	200.43	7	315 13
12	12 Kerala	9	241.03	5	6.72	7	11.42	4	5.93	2	8.07		0.27	2	3 37
13	13 Madhya Pradesh	71	2,033.78	48	538.04	27	254.02	4	20.16	3	94.57	14	08.00	3	123 30
14	14 Maharashtra	7	158.97	11	444.65	13	273.59	m	112.27	00	402.48	9	111.66	5	197.17
15	15 Meghalaya	1	1	-	86.00	Г	221.44	1	11.08	1	•	-	384.00	1	
16	16 Orissa	42	7,996.50	44	5,609.03	27	1,397.73	21	1,324.49	14	1787.31	19	3.570.02	20	862.95
17	17 Rajasthan	41	3,643.62	41	7,227.29	22	3,550.85	24	3,475.79	10	566.31	14	68.869.9	27	3 611 24
18	18 Tamil Nadu	7	453.78	6	197.72	12	681.12	13	533.17	3	41.11	-	7.06	-	1 82
19	19 Uttaranchal	3	165.4	1	1	7	89.43		1			1		1	
20	20 Uttar Pradesh	2	450.15	4	78.25	1	1	1	1	1	1	1	1	1	
21	21 West Bengal	4	31.34	7	82.83	2	54.33	1	•	1		-	16.19		
-	Total	368	24,279.95	337	21,109.09	213	14,519.99	115	7,223.93	77	5.722.14	110	12.314.98	111	8 084 71

4. PROSPECTING LICENCES

Under the Mines & Minerals (Development & Regulation) Act, 1957, "Prospecting Licence" (PL) means a licence granted for the purpose of undertaking "prospecting operations" with a view to exploring/locating or proving mineral deposits on surface/subsurface area. The State Governments and the Union Territories are empowered to grant/renew/revoke prospecting licences (PL) under the provisions of Mineral Concession Rules, 1960.

The area restrictions for prospecting licences have been substantially liberalized by making such restrictions applicable statewise instead of the country as a whole.

4.1 STATEWISE DISTRIBUTION OF PROSPECTING LICENCES

As per information received from the State Governments/Union Territories, 133 prospecting licences were executed covering 13,250 hectares during 2003-04 as compared with 255 prospecting licences covering 35,385 hectares during 2002-03. The Statewise distribution of prospecting licences executed during 2002-03 and 2003-04 is given in Table-17. These prospecting licences, however, exclude reconnaissance permits executed for aerial prospecting.

TABLE - 17: STATEWISE DISTRIBUTION OF PROSPECTING LICENCES EXECUTED, 2002-03 AND 2003-04

States		2	002-03	2003	-04
	4.1	No.	Area	No.	Area
			(Hects.)	yaldati 1	(Hects.)
Andhra Pradesh	113	12	1,285	10 ന്നൂറി	1,628
Chhattisgarh		14	2 37	6 500	574
Haryana		-		113/12/31/2	806
Himachal Pradesh		-	2	(America)	21
Kerala	- 1	1	++	90 901	65
Madhya Pradesh		1	2	11	195
Maharashtra		8	537	26	842
Meghalaya		-		II-d (see a) I	473
Orissa		13	427	2	78
Rajasthan		201	32,864	60	7,769
Uttaranchal		3	5	4	799
Uttar Pradesh	-12	1	24	Pyrophyline	-
West Bengal		- 1	4	Peroxoguie	-
Total		255	35385	133	13250

Area figures rounded off.

The mineral rich States where prospecting licences so far executed during 2003-04 were Rajasthan (60), Maharashtra (26), Haryana and Madhya Pradesh (11 each), Andhra Pradesh (10), Chhattisgarh (6), Uttaranchal (4), Orissa (2), and Himachal Pradesh, Kerala and Meghalaya (one each). Rajasthan alone accounted for 45% licences while remaining ten States shared 55 per cent. Areawise, Rajasthan covered 59% while the remaining States accounted for 41 percent.

4.2 MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES

Mineralwise in 2003-04, limestone accounted for maximum twelve prospecting licences executed followed by calcite (7), quartz (6), soapstone/steatite (5), dolomite (4), ochre (3), diamond, iron ore and manganese ore (2 each), amethyst quartz, barytes, bauxite, corundum, felspar, fluorite, gold & associated minerals, jasper, laterite, limeshell, moulding sand, pyrophyllite, semi-precious stones, silica sand, tin and white clay (one each). Other associated minerals accounted for 74 licences (56%) executed during 2003-04. The mineralwise distribution of prospecting licences executed during 2002-03 and 2003-04 is given in Table-18. The prospecting licences are executed for individual mineral or group of associated minerals, depending upon their nature of occurrences, such as iron and manganese ores; mica, felspar and quartz; copper, lead and zinc ores; dolomite and limestone and vice versa.

TABLE – 18: MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES EXECUTED, 2002-03 AND 2003-04

	Mineral	20	02-03	20	003-04
55 prospecting ecting houses		No.	Area	No.	Area
<u> Andreas palane</u>	of the management of the		(Hects.)		(Hects.)
	Amethyst quartz	500	osgaom laid a a mill	ista da 1 a n	n (1888)
	Barytes	3	53	1	4
	Bauxite	1	++		151
	Calcite	11	1,526	7	828
	China clay	2	428	DH I	-
	Corundum	_		1	6
	Diamond	10-20-52	_	2	225
	Dolomite	4	13	4	32
0977	Felspar	STA .	.004	1	2
	Fireclay	1	4		. 4
(,213.1H)	Fluorite	Etabli .			265
	Garnet	5 V C + 1	113	and the literature	203
	Gold & associated min	nerals 1	4,310	1	793
	Graphite		62	1	193
	Gypsum	3 2 2 3	725	[1.52] (L	_
	Iron ore	2	86		506
	Jasper	2	605	2	526
	Laterite	3	685	red at 1 the	20
		-	1.007	1	5
	Limestone	9	1,087	12	1,938
	Limeshell	-	10=	1	65
	Manganese ore	2	197	2	22
	Moulding sand	Yakal -	2420	1	11
	Ochre	3	212	3	13
	Pyrophyllite	1	59	1	138
	Pyroxenite	3	74		-
	Quartz	4	189	6	33
	Quartzite	3	9	- 1500	7
	Semi-precious stones			1	4
	Shale	- 1	2		dk.
	Silica sand	2	72	1	50
	Soapstone/steatite	10	1,123	5	329
	Tin ore	gerisla a kupan		1	24
	White clay	Barra I I I I Heate	ny zodale Panie s	î	7
	Associated minerals	183	24,356	74	7,758
refragations	Total	255	35,385	133	13,250

Area figures rounded off.

4.3 AREAWISE DISTRIBUTION OF PROSPECTING LICENCES

Areawise analysis indicated that limestone occupied the first place, covering an area of 1,938 ha. followed by calcite (828 ha.), gold & associated minerals (793 ha.), iron ore (526 ha.), soapstone/steatite (329 ha.), fluorite (265 ha.), diamond (225 ha.), bauxite (151 ha.) and pyrophyllite (138 ha.). These minerals together accounted for 39% area while other minerals like amethyst quartz, barytes, corundum, dolomite, felspar, jasper, manganese ore, limeshell, ochre, quartz, semi-precious stones, silica sand, tin ore, white clay, moulding sand and laterite covered less than 100 hectares. Other associated minerals occupied 7,758 ha. or 59% area under prospecting licences.

4.4 SECTORWISE DISTRIBUTION OF PROSPECTING LICENCES

Out of the 133 prospecting licences executed in 2003-04, public sector accounted for 5 licences or 3.75% compared with 3 licences or 1.18% of the total in previous year. The remaining 128 prospecting licences or 96.25 % were executed in private sector compared with 252 licences or 98.82% in the previous year. The sectorwise distribution of prospecting licences during 2002-03 to 2003-04 is given in Table-19.

TABLE-19: DISTRIBUTION OF PROSPECTING LICENCES IN PUBLIC AND PRIVATE SECTORS

Sector	20	002-03	2	003-04	
STEERNETS	No.	Area (Hects.)	No.	Area (Hects.)	6 1.8
Total	255	35,385	133	13,250	
Public	3	5,035	5	417	
Private	252	30,350	128	12,833	
Public%	1.18	14.23	3.75	3.14	
Private%	98.82	85.77	96.25	96.86	

5. RECONNAISSANCE PERMITS

The provision of Reconnaissance Permits (RP) was introduced with effect from 20.12.1999 under the Mines & Minerals (Development & Regulation) Act,1957 and from 18.1.2000 under the Mineral Concession Rules, 1960 and Mineral Conservation and Development Rules,1988 made under the Act. RP is a permit granted for the purpose of undertaking "reconnaissance operations" which means any operation undertaken for preliminary prospecting of a mineral through regional, aerial, geophysical or geochemical surveys and geological mapping, but it does not include pitting, trenching, drilling (except drilling boreholes on a grid specified from time to time by the Central Government) or subsurface excavation.

Approvals have been granted by the Central Government to 23 reconnaissance permits covering 31,456 sq. km. in 2003-04 distributed in Andhra Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Orissa and West Bengal for precious and high-value minerals like diamond, precious minerals, gold, silver, platinum group of metals & associated minerals; non-ferrous minerals like copper, lead & zinc ores; strategic minerals/ores like nickel, tungsten, arsenic, antimony, bismuth, cobalt, molybdenum & associated minerals and non-metallic minerals like ilmenite and garnet etc..

During 2003-04, approvals for grant of reconnaissance permits have been accorded to eight companies; viz., ACC-RIO TINTO Exploration Ltd., Anglo American Exploration (India) Pvt. Ltd., BHP Khanij Anveshan Pvt. Ltd., BHP Minerals (India) Pvt. Ltd., De Beers India Prospecting Pvt. Ltd., Geomysore Services (India) Pvt. Ltd., Metmin Finance & Holdings Pvt. Ltd., and WSIL Mineral Sand India Pvt. Ltd.,

5.1 MINERALWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2003-04, four companies were granted 18 reconnaissance permits for diamond and associated minerals covering an area of 25,864 sq. km (82%) compared with 11 reconnaissance permits covering an area of 17,427 sq. km (35%) in the previous year. One reconnaissance permit has been granted for ilmenite, garnet etc. covering an area of 1,428 sq. kms (5%) against none in the previous year, 4 reconnaissance permits have been granted for copper, lead, zinc, gold, nickel and associated minerals covering an area of 4164 sq. km. (13%), and 7 reconnaissance permits with 11,634 sq. km. (23%) in the previous year. The mineralwise reconnaissance permits granted/executed during 2002-03 and 2003-04 are given in Table-20.

TABLE-20: MINERALWISE DISTRIBUTION PERMITS, 2002-03 AND 2003-04

Mineral	20	002-03	2003	-04
's, vie De iscers India Prospecume (vv. Lui Iga ^{re} vi Lud. 1,428 sq. km. andon 1,22 and N 1,RP. Thomasica commissioned according	No.	Area (sq.km.)	No.	Area (sq. km.)
Copper, lead, zinc, gold, silver, bismuth, cadmium, nickel and associated minerals	7	11,634	ovil şal ğ ısınısı Haqansamısib ci	4164
Diamond	1	2,010	amay samoq so	esorizados-
Diamond and associated minerals	10	15,417	6/1/16	6,196
Dolomite and associated minerals	1001	1,975	q <u>-</u>	_
Gold	2	1,980	-	-
Gold and associated minerals	10	17,268	vitethalo, y	14
Diamond, Precious Stones & other associated minerals	-	lad madv.olga	12	19,668
Ilmenite, Garnet, etc.	-	500V-1	Ota Calendaria. Si Subu l at Shase	1,428
Total	31	50,284	23	31,456

5.2 STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2003-04, twenty three reconnaissance permits were approved/granted/executed covering about 31,456 sq. km. in Andhra Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Orissa and West Bengal for high-value minerals like gold, silver, copper, lead-zinc, nickel, cadmium, bismuth, diamond, precious stones and associated minerals & industrial minerals such as ilmenite and garnet. Chhattisgarh was leading in the number of RPs accounting for 7 RPs covering an area of about 11,693 sq. km. (37%) followed by 6 RPs in Andhra Pradesh 8,593 sq. km. (27%), 5 RPs in Madhya Pradesh 6,240 sq. kms (20%) and 3 RPs in Orissa covering 2,423 sq. km. (8%). These States together accounted for about 91% RPs covering 92% area. Karnataka and West Bengal States shared the remaining. The Statewise distribution of reconnaissance permits, 2002-03 and 2003-04 is given in Table-21.

TABLE-21: STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS, 2002-03 AND 2003-04

State	20	002-03	J.510 2	003-04
	No.	Area (sq. km.)	No.	Area (sq. km.)
Andhra Pradesh	4	8,725	6	8,593
Chhattisgarh	8	10,626	7	11,693
Jharkhand	1	1,870	nd Len leeville	11,075
Karnataka	8	11	Order Stand Library	2,130
Madhya Pradesh	8	1 / / 00	5	6,240
Rajasthan	2	814	25 D D 20 2	0,240
Orissa	_	-	3	2,423
West Bengal	-	-	1	377
Total	31	50,284	23	31,456

5.3 AREAWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

Areawise, M/s BHP Khanij Anveshan Pvt. Ltd. held maximum area of about 11,776 sq. km., under 7 RPs followed by M/s ACC-RIO TINTO Exploration Ltd. 8,525 sq. km. under 7 RPs, M/s BHP Minerals (India) Pvt. Ltd. 5,892 sq. km. under 3 RPs, M/s De Beers India Prospecting Pvt. Ltd., 1,643 sq. kms. under 2 RPs, M/s WSIL Mineral Sand India Pvt. Ltd. 1,428 sq. km. under 1 RP and M/s Metmin Finance Holdings Pvt. Ltd. 1,330 sq. km. under 1 RP. These six companies shared about 97 % area and the remaining two companies covered less than 1,000 sq. km. each or about 3% area. The companywise distribution of RPs during 2002-03 and 2003-04 are given in Table-22 and details of reconnaissance permits granted/executed during 2003-04 are furnished in Table-23.

TABLE – 22: AREAWISE/COMPANYWISE DISTRIBUTION OF RECONNAISSANCE PERMITS DURING 2002-03 AND 2003-04

	(1993)	20	002-03	20	003-04
SI. No.	Company	No.	Area (sq. km.)	No.	Area (sq. km.)
1.	ACC-RIO TINTO Exploration Ltd., RCD Campus, Lal Bahadur Shastri Marg, Thane-400 064.	3	7,650	7	8,525
67%	TE TE ARELIES I AT				
- 2. 50170418	Anglo American Exploration (India) Pvt. Ltd., 21, South Ex-Plaza-I, 389, Masjid Moth, South Ext-II, New Delhi-110 049.	4	8,499	1	377
3. Market 1993	BHP Khanij Anveshan Pvt. Ltd., 7/F, World Trade Tower, Barakhamba Lane, New Delhi-110 001.		Abarri belinci salei allend grassin (glad galari li sale	7	11,776
4.	BHP Minerals (India) Pvt. Ltd., 7/F, World Trade Tower, Barakhamba Lane, New Delhi-110 001.	1	2,293	3	5,892
5.	De Beers India Prospecting Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers VI, Nariman Point, Mumbai-400 021.	4	6,629	2	1,643
6.	Emperor Granite Pvt. Ltd. Bhopal	1	1,000	- And	-
7.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028.	9	8,989	1	485
					(contd.)

Table-22 (concld.)

		200	02-03		2003-04
SI. No.	Company	No.	Area (sq. km.)	No.	Area (sq. km.)
8.	Hindustan Zinc Ltd., Yashad Bhavan, Yashadgarh, Udaipur-313 001.	1	361		Baran J
9.	Hutti Gold Mines Co. Ltd., 6/13, Gurappa Avenue, Prime Rose Road Cross, Bangalore-560 005.	1	4,103		
10.	Indophil Resources Exploration Services India Pvt. Ltd., 114, 5th Cross, 3rd Main Road, Girinagar, Bangalore-560 085.	2	4,995	-	
11.	Metmin Finance & Holdings Pvt. Ltd., 161/162, Mittal Court, 'A' Wing, Nariman Point, Mumbai-400 021.	-		1	1330
12.	Minpro Corporation, 201, Gulmohor, Chitnavis Marg, Opp. Hislop College, Nagpur-440 001.	1	110		
13.	Mira Exploration Pvt. Ltd., D-11/2251 Basant Kunj, New Delhi-110 020	1	481		
14.	National Mineral Development Corporation Ltd., 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500 028.	2	3,304	-	
15.	Phelps Dodge Explortion India Pvt. Ltd B-1, Defence Colony, New Delhi- 110 024.	1	1,870	-	
16.	WSIL Mineral Sand India Pvt. Ltd., D-19, Press Enclave, Saket, New Delhi-110 024.	•		1	1428
	Total	31	50,284	23	31,456

(contd.)

TABLE-23: RECONNAISSANCE PERMITS APPROVED BY THE MINISTRY OF MINES AND GRANTED/EXECUTED BY VARIOUS STATE GOVERNMENTS, 2003-04

7	Name and address of Permit Holder		Location	Mineral (s)	Area in I	Date of	Date of	Period
o Z		State	District (s)		sq. km.	Approval/ Grant/ Permission	Execution	in Year
	ACC-RIO TINTO Exploration Ltd.	Kamataka	Gulbarga and Raichur		2130.00	2130.00 i) 30.07.2003		3
	Lal Bahadur Shastri Marg, Thane- 400 064.	121		minerals			(.1137)	
73	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Madhya Pradesh	Chhatarpur and Panna	Gold, copper, lead, zinc, silver, bismuth and cadmium	1971.69	1971.69 i) 30.06.2003 13.10.2003	13.10.2003	2002-03 No A
8	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Chhattisgarh	Raigarh, Jashpur and Surguja	Diamond, gold and associated minerals	1000.00	1000.00 i) 30.06.2003 19.12.2003	19.12.2003	m
4	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Chhattisgarh	Raigarh and Jashpur	Diamond, gold and associated minerals	1000.00 i)	1000.00 i) 30.06.2003 19.12.2003	19.12.2003	w
8	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Orissa	Bargarh, Bolangir and Navapara	Diamond and associated minerals	798.00 i)	798.00 i) 30.07.2003	to Lord's page.	m m
9	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Orissa	Bargarh and Navapara	Diamond and associated minerals	1360.00 i)	1360.00 i) 28.08.2003	a Z	m

SI.	Name and address of Permit Holder	1	Location	Mineral (s)	Area in	Date of	Date of	Period
No.		State	District (s)	,		Approval/ Grant/ Permission	Execution	in Year
_	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Orissa	Bargarh and Bolangir	Diamond and associated minerals	265.00	265.00 i) 28.08.2003	1	٣
∞	Anglo American Exploration (India) Pvt. Ltd., South Ex-Plaza, 389, Masjid Moth, South Ext-II	West Bengal	Medinapur and Purulia	Copper, nickel, and associated minerals	377.00	377.00 i) 30.07.2003 11.10.2003	11.10.2003	6 .
6	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Mahaboobnagar and Rangareddy	Diamond, precious stone, iron, copper, lead, zinc, gold and associated minerals	1984.00	1984.00 i) 30.05.2003 17.10.2003 ii) 04.07.2003	17.10.2003	8
01	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Mahaboobnagar	Diamond, precious stone, iron, copper, lead, zinc, gold and associated minerals	1846.00	1846.00 i) 30.05.2003 13.10.2003 ii) 04.07.2003	13.10.2003	e .
=	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Madhya Pradesh	Chhatarpur and Tikamgarh	Diamond, precious stone, copper, lead, zinc, nickel, gold and associated minerals	863.64	863.64 i) 02.06.2003 01.07.2003 ii) 05.06.2003	01.07.2003	ю. °
2	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Bastar	Diamond, gold and associated minerals	1700.00	1700.00 i) 30.06.2003	contd.)	3 ntd.)

S.	Name and address of Permit Holder		Location	Mineral (s)	Area in	Date of	Date of	Period
Š	S. Bernard Control	State	District (s)		sq. km.	Approval/ Grant/	Execution	in Year
			Market			Permission		
13	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamha I ane	Chhattisgarh	Bastar	Diamond, gold and associated minerals	1500.00	1500.00 i) 30.06.2003	1 .	Ю
	New Delhi- 110 001.							
41	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Bastar, Durg and Kanker	Diamond, gold, iron and other associated minerals	1800.00	1800.00 i) 30.07.2003		8
15	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane,	Chhattisgarh	Dantewara	Diamond, gold, iron and other associated minerals	2083.00	2083.00 i) 30.07.2003		ы
	New Delhi- 110 001.		Trans governoridated M	State of the state of				
16	BHP Mineral (India) Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Anantapur	Diamond, precious stone, nickel, copper, lead, zinc, gold and associated minerals		1070.00 i) 30.05.2003 13.08.2003 ii) 17.06.2003	13.08.2003	60
17	BHP Mineral (India) Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Mahaboobnagar and Rangareddy	Diamond, precious stone, nickel, copper, lead, zinc, gold and associated minerals		2212.00 i) 30.05.2003 13.08.2003 ii) 04.07.2003	13.08.2003	E.
18	BHP Mineral (India) Pvr. Ltd., 3/F, World Trade Tower,	Chhattisgarh	Dantewara	Diamond, gold, iron and other associated minerals	2610.00	2610.00 i) 30.07.2003	1	8
	baraknamba Lane, New Delhi- 110 001.							

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* *

1. INTRODUCTION

India has a total geographical area of about 328 million hectares. Of this, the mining lease area, except for fuel and atomic minerals, constitutes around 0.14% (4,53,624 hectares). The position of mining leases as on 31.3.2004 reveals that there are as many as 6,941 mining leases (compared to 9,131 in the previous year) granted in the country by the State Governments covering 59 minerals (excluding coal, lignite, petroleum, natural gas, atomic minerals and minor minerals) with a total area of 4,53,624 hectares and spread over 23 states. These 59 minerals are broadly classified into metallic and non-metallic minerals. This bulletin highlights statewise, sectorwise and districtwise distribution of mining leases, prospecting licences and reconnaissance permits etc. Though apparently negligible, this is still an important land use segment as it contributes to the economic growth of the country. Besides, it calls for environmental protection as land degradation takes place during the process of mining activities.

India is gifted with a wide variety of naturally occurring minerals. These are being exploited to cater the needs of domestic mineral based industries as well as exports to earn foreign exchange. Today, as many as 64 major Metallic and Non-metallic minerals are being exploited in the country excluding coal, atomic and some minor minerals.

The Indian mineral sector is fully opened to private sector both domestic and foreign. The Government had taken a series of new policy initiatives under the overall framework of the National Mineral Policy, 1993 for the growth of mineral sector. As per the amendment to the MMRD Act (now re-designated as MMDR Act), 1957 in December, 1999 a new entity termed 'Reconnaissance Permit' covering essentially prospecting licences over large areas has been introduced. In this amended Act, the limit of maximum areas of reconnaissance permits, prospecting licences and mining leases is 10,000 sq.kms., 25 sq.km and 10 sq.km respectively in a state. This provision may facilitate the entrepreneurs in acquiring more number of "reconnaissance permits, prospecting licences and mining leases" leading to increased mineral production. Besides, the amended Act provides powers to the State Governments for grant of prospecting licences and mining leases in areas which are not compact and contiguous in respect of minerals other than fuel and atomic minerals.

Under Rule 57 (1) of MCR,1960, a copy of every reconnaissance permit, (no provision for renewal of reconnaissance permits), prospecting licence and mining lease granted or renewed shall be supplied by each State Government within two months of such grant or renewal, to the Controller General, Indian Bureau of Mines. Besides, under Rule 57 (2) of MCR,1960 all the State Governments / Union Territories are required to submit to the Controller General, Indian Bureau of Mines, a consolidated annual return of reconnaissance permits/prospecting licences/mining leases granted or executed in proforma 'A', prospecting licences/mining leases renewed in proforma 'B', and termination of mining leases and reasons for termination in proforma 'C', for the preceding financial year ending March. The above statements for the previous financial year are required to be submitted to IBM on or before 30th June each year by the State Government. From such information received from all the State Governments under statutory provisions, the information pertaining to mining leases and prospecting licences has been processed and updated through computerization. Subsequently, the required outputs have been generated.

2. LAND USE SCENARIO

India's Geographical area is about 3,28,726 thousand hectares. The entire geographical area is broadly classified into 8 segments including mining lease areas as follows:

Sl. No.	Area/Segment	Total area in thousand hectares	Percentage of area
1.	Agricultural, Cultivable & Culturable Lands	182,845	55.63
2.	Permanent pastures & Other grazing Land	10,499	3.19
3.	Culturable Waste (Potentially Arable)	13,483	4.10
4.	Forest	69,467	21.13
5.	Barren & Un-culturable land	17,762	5.40
6.	Non-agricultural land	24,274	7.38
7.	Mining Lease area*	452	0.14
8.	Other area (No information available)	9,942	3.03
	Total	328726	100,00

Source: Directorate of Economics & Statistics, Ministry of Agriculture.

Out of the total geographical area, almost two thirds are under agricultural, cultivable, permanent pastures and grazing lands.

The mining lease area, constitutes around 0.14% (4,53,624 hectares) of the total geographical area of India. However, mining lease area continues to be an important segment and contributing factor to the economy of the country. At the same time, due attention is to be paid for environmental protection as land degradation takes place during the process of mining activities.

^{*}Directory of Mining Leases, 2004, Indian Bureau of Mines.

TABLE-2: MINERALWISE SUMMARY OF LEASE DISTRIBUTION (as on 31.03.2004)

Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
1	Agate	2	45.58
2	Amethyst	Supplemental Company of 5	40.64
- 3	Apatite Apatite	an Manadah 🚹 💎	13.29 https://
4	Asbestos	1	1,846.89
5	Ball clay	41	2,146.19
6	Barytes	119	2,494.20
4 7 -	Bauxite	266	24,592.93
- 8	Calcareous sand	14	# # # # 151.75
9	Calcite The H	57	1,593.63
10	Chalk	159	656.24
11	China clay	380	16,312.65
12	Chromite	29	8,548.71
13	Clay (others)	43	937.95
14	Copper ore	17	10,589.86
15	Corundum		145.41
16	Diamond		576.51
17	Diaspore	10 17 washib 17	185.98
18	Dolomite	423	15,600.52
19	Dunite Parker	net late	4,45
20	Epidote	wyw.) î	5.00
21	Felsite	2	5.10
22	Felspar	166	5,076.57
23	Fire clay	220	16,401.86
24	Fluorite	18	1,807.41
25	Garnet	68	1,038.83
26	Gold	9	6,683.12
27	Graphite	132	4,657.94
28	Gypsum	52	18,036.24
29	Iolite	4	24.38
30	Iron ore	474	79,041.71
31	Jaspar	5	211.70
32	Kyanite	23	3,056.25
33	Laterite	114	1,129.33
34	Lead & zinc ore	12	8,221.35
35	Lime kankar	24	891.14
36	Limeshell	29	3,793.13
37	Limestone	1,411	106,260.41
38	Magnesite	27	2,297.14
39	Manganese ore	225	22,123.60
40	Mica	243	7,807.76
41	Moulding sand	39	738.70
42	Ochre	102	3,382.79
43	Opal	102	200.00
44			144.65
7-7	1 Clinc	Į.	(contd.)
44	Perlite	1	

3. MINING LEASES

3.1 STATEWISE ANALYSIS

As on 31.3.2004, there are 6,941 number of mining leases granted by 23 State Governments for 59 different minerals, covering an area of 4,53,624 hectares in the country. States rich in minerals where maximum number of mining leases granted are Andhra Pradesh (22.01%) followed by Gujarat (15.49%), Rajasthan (15.26%), Madhya Pradesh (9.85%), Orissa (6.32%), Karnataka (5.65%), Tamil Nadu (4.73%), Chhattisgarh (3.88%), Goa (3.60%) and Maharashtra (3.21%). These ten states together account for about 90% of total leases executed and remaining thirteen states account for remaining about 10% of mining leases.

The maximum mining lease area covered by different states are Rajasthan (23.04%) followed by Orissa (17.02%), Andhra Pradesh (11.41%), Karnataka (8.06%), Chhattisgarh (6.71%), Jharkhand (6.29%), Gujarat (5.21%), Madhya Pradesh (4.06%), Goa (4.00%) and Maharashtra (3.38%). These ten states account for about 89.18% of total lease areas executed and remaining thirteen states represent 10.82%.

The statewise mining lease distribution together with lease areas as well as statewise/districtwise distribution of mining leases as on 31.03.2004 are given in Tables-1 to 4.

TABLE-1: STATEWISE SUMMARY OF LEASE DISTRIBUTION (as on 31.03.2004)

SI. No.	State	No. of Lease	Percentage	Lease Area (Hect.)	Percentage
1	Andhra Pradesh	1,528	22.01	51,756.76	11.41
2	Assam	11	0.16	981.33	0.22
3	Bihar	12	0.17	2,087.77	0.46
4	Chhattisgarh	269	3.87	30,452.62	6.71
5	Goa	250	3.60	18,165.99	4.00
6	Gujarat	1,075	15.49	23,632.81	5.21
7	Haryana	140	2.02	15,033.55	3.31
8	Himachal Pradesh	58	0.84	2,018.58	0.44
9	Jammu & Kashmir	18	0.26	729.58	0.16
10	Jharkhand	201	2.90	28,530.38	6.29
11	Karnataka	392	5.65	36,583,17	8.06
12	Kerala	101	1.46	2,205.49	0.49
13	Madhya Pradesh	684	9.85	18,423.60	4.06
14	Maharashtra	223	3.21	15,335.65	3.38
15	Manipur	Ž	0.03	610.17	0.13
16	Meghalaya	14	0.20	1,660.16	0.37
17	Orissa	439	6.32	77,188.32	17.02
18	Rajasthan	1,059	15.26	104,495.64	23.04
19	Sikkim	4	0.06	86.00	0.02
20	Tamil Nadu	328	4.72	5,467.31	1.21
21	Uttar Pradesh	40	0.58	5,120.63	1.13
22	Uttaranchal	42	0.61	1,485.36	0.33
23	West Bengal	51	0.73	11,572.76	2.55
	Total	6,941	100.00	453,623.63	100.00

			Table-2 (concld.)
Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
45	Phosphorite	16	3,492.77
46	Pyrite	1	647.50
47	Pyrophyllite	66	2,116.04
48	Quartz	845	12,780.42
49	Quartzite		624.60
50	Rock salt	53 3	53.86
51	Sand (others)	46	4,716.79
52	Shale	27	402.14
53	Silica sand	417	18,721.90
54	Sillimanite	5	9,945.84
55	Slate	17	868.47
56	Steatite	395	19,194.97
57	Tin	6	123.80
58	Vermiculite	11	212.55
59	Wollastonite	4	202.49
	Total	6,941	453,623.63

TABLE-3: STATEWISE/MINERALWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

State	Mineral	No. of Leases	Lease area (Hect.)
Andhra Pradesh	Amethyst	4	12.99
	Apatite	1	13.29
	Asbestos	7	352.08
	Ball clay	20	254.01
	Barytes	109	2,190.76
	Calcite	5	139.20
	China clay	57	893.40
	Clay (others)	5	215.18
	Corundum	6	35.93
•	Dolomite	95	1,601.85
	Felspar	34	529.68
	Fire clay	24	82.31
	Garnet	13	220.00
	Gold	3	408.86
	Graphite Graphite	4	81.51
	Iron ore	. 25	1,511.15
	Laterite	78	642.44
	Lead & zinc ore	1	200.00
	Lime kankar	19	137.65
	Lime kankar Limeshell	- 5	163.38
	Limestone	201	
	·		21,484.88
	Magnesite	1	6.57
	Manganese ore Mica	42	1,124.83
		111	2,139.81
	Moulding sand	1	31.36
	Ochre	18	189.81
	Phosphorite	1	2.83
	Pyrophyllite	6	169.74
	Quartz	407	5,306.28
	Quartzite	15	169.86
	Sand (others)	12	1,722.10
	Shale	10	177.40
	Silica sand	71	1,070.85
	Sillimanite	1	7,000.00
	Slate	12	461.26
	Steatite	98	918.43
	Vermiculite	6	95.28
	Total	1,528	51,756.96
Assam	Limestone	11	981.33
	Total	11	981.33
			(contd.)

State	Mineral	No. of Leases	Lease area
Bihar	Limestone	. 7	182.17
•	Mica	2	1,196.80
	Pyrite	1	647.50
	Quartz	2	61.30
	Total	12	2,087.77
Chhattisgarh	Bauxite	12	5,640.85
	China clay	5	13.16
	Dolomite	82	9,062.31
	Fire clay	4	16.24
	Graphite	3	98.79
	Iron ore	15	10,699.49
•	Limestone	110	4,588.83
	Moulding sand	7	64.70
	Ochre	1	10.12
	Quartz	6	18.05
·	Quartzite	. 16	166.00
•	Steatite	. 4	7.89
	Tin	: 4	66.19
	Total	269	30,452.62
Goa	Bauxite	1	40.92
Joh	Iron ore	187	14,002.79
	Manganese ore	62	4,122.28
	Total	250	18,165.99
Gujarat	Agate	1	4.64
	Ball clay	3	10.49
,	Bauxite	149	4,040.71
	Calcareous sand	14	151.75
	Calcite	5	63.31
	Chalk	159	656.24
•	China clay	45	1,204.07
·	Clay (others)	35	701.21
	Copper ore	1	1,402.00
	Dolomite	98	1,225.04
	Felspar	1	1.00
	Fire clay	72	374.70
	Fluorite	2	31.69
	Gypsum	2 2	6.76
	Limestone	368	12,427.28
	Manganese ore	1	2.95
	Moulding sand	4	6.83
	Ochre	5	45.35
	Perlite	1	144.65
		31	209.26
	Quartz	Ji	(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Gujarat (contd.)	Quartzite		
oujurur (contu.)	Silica sand	1	19.30
	Steatite	69	856.50
	Vermiculite	6	22.04
		2	25.04
	Total	1,075	23,632.81
Haryana	Barytes	1	79.32
	Calcite	2	158.56
	China clay	39	3,243.30
	Dolomite		252.15
₹	Felspar	3	285.06
	Iron ore	2 3 1	86.20
	Lime kankar	4	705.35
4	Limestone	11	592.51
	Mica	1	400.00
	Quartz	16	
	Quartzite		851.85
	Silica sand	4	68.23
	Slate	52	7,959.30
	Total	4	351.72
Himachal Pradesh		140	15,033.55
immachai i l'auesh	Barytes	2	81.39
	Gypsum	1	116.68
	Limestone	52	1766.65
	Rock Salt	3	53.86
	Total	58	2018.58
Jammu & Kashmir	Gypsum	3	57.71
	Limestone	12	331.07
	Magnesite	- 2	140.80
	Opal	1	
	Total	18	200.00 729.58
Tharkhand	Bauxite	• • • • • • • • • • • • • • • • • • • •	
mai Kuanu		39	3,625.18
	China clay	8 3	219.48
	Copper ore	3	6,417.69
	Dolomite		18.45
	Felspar	6	200.25
	Fire clay	20	730.86
	Graphite	13	405.44
	Iron ore	25	9,675.37
	Kyanite	5	2,560.22
	Limestone	16	1,673.81
	Mica	29	964.39
	Ochre	1	5.62
	Pyrophyllite	1	22.50
	Quartz	18	
	Sand (others)	13	236.36
	Steatite	3	1,765.35
	Total		9.41
	r otal	201	28,530.38

(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Karnataka	Barytes	1	17.00
**	Bauxite	1	28.80
	Calcite	1	17.00
	China clay	13	839.51
	Chromite	6	987.47
	Clay (others)	1	20.23
	Copper ore	3	487.65
	Corundum	4	18.07
	Dolomite	14	305.10
	Dunite	1	4.45
	Felsite	$\hat{2}$	5.10
	Felspar	4	131.91
	Fire clay	3	390.51
	Gold	6	6,274.26
	Graphite	4	235.04
	Iron ore	72	10,446.58
		5	200.70
	Kyanite Laterite	2	95.21
		14	1,404.01
	Limeshell		-
	Limestone	88	8,380.27
	Magnesite	7	406.47
	Manganese ore	26	2,719.58
	Moulding sand	24	586.99
	Ochre	5	617.18
	Quartz	47	454.38
	Quartzite	1	4.05
	Silica sand	30	1,345.01
	Steatite	6	134.34
	Vermiculite	1	26.30
	Total	392	36,583.17
Kerala	Bauxite	3	1.37
	China clay	41	95.56
	Laterite	1	0.19
	Limeshell	8	1,496.69
•	Limestone	1	245.69
	Quartz	2	3.21
	Silica sand	42	35.43
	Sillimanite	3	327.35
	Total	101	2,205.49
Madhya Pradesh	Barytes	2	5.37
= स्टब्स्ट्रिस्ट्र	Bauxite	35	795.09
	Calcite	24	63.26
	China clay	16	130.89
	Cimia Ciay	10	(contd.)
			(coma.)

State	Mineral	No. of Leases	Lease area (Hect.)
	Clay (others)	2	1.33
· .	Copper ore	2	479.90
	Diamond	2	576.51
•	Diaspore	. 11	80.11
	Dolomite	99	483.42
	Fire clay	32	291.23
	Iron ore	8	122.84
	Laterite	31	348.46
	Lead & zinc ore	1	11.00
	Limestone	264	12,259.05
	Manganese ore	27	1,446.91
	Ochre	44	572.10
	Phosphorite	4	112.88
	Pyrophyllite	36	245.00
	Quartz	6	44.07
	Quartzite	1	6.10
	Sand (others)	2	7.52
	Shale	14	
	Silica sand	4	173.36
	Slate	1	6.25
	Steatite	16	55.49
	Total	684	105.46 18,423.60
Maharashtra	Agate	. 1	40.94
	Bauxite	20	4,182.46
	China clay	9	91.77
	Chromite	1	16.22
	Dolomite	11	185.08
	Felspar	2	53.65
	Fire clay	$\frac{\overline{2}}{2}$	18.40
	Fluorite	ī	32.70
	Iron ore	25	870.12
	Kyanite	13	295.33
	Laterite	2	43.03
	Limestone	51	5,976.70
	Manganese ore	32	1,094.64
	Mica	1	42.06
	Moulding sand	1	47.02
	Ochre	1	12.36
	Quartz	8	139.86
	Quartzite	1	
	Sand (others)	=	12.09
	Shale	12	740.30
	Silica sand	1	41.48
	Total	28	1,399.44
	x otai	223	15,335.65
			(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Manipur	Chromite	. 2	610.17
,	Total	2	610.17
Meghalaya	China clay	2	9.77
	Fire clay		221.44
	Limestone	10	1,424.05
	- Shale	1	4.90
	Total	14	1,660.16
Orissa	Amethyst	1	27.65
	Asbestos	1	49.22
	Bauxite	4	6,079.09
	China clay .	11	797.28
	Chromite	· 20	6,934.85
	Corundum	2	91.41
	Dolomite	8	877.21
	Fire clay	17	1,899.59
	Graphite	101	3,161.99
	Iolite	4	24.38
	Iron ore	102	30,732.88
	Lead & zinc ore	2	504.86
	Lime kankar	1	48.14
	Limestone	34	8,798.36
	Magnesite	1	40.46
	Manganese ore	34	11,532.41
	Mica	1	2.67
	Ochre	2	197.77
	Pyrophyllite	10	576.96
	Quartz	59	1,236.21
	Quartzite	12	169.27
	Sand (others)	6	437.43
	Sillimanite	1	2,618.49
	Steatite	3	292.13
	Tin	2	57.61
	Total	439	77,188.32
Rajasthan	Asbestos	31	1,445.59
	Ball clay	18	1,881.69
•	Barytes	4	120.36
	Calcite	20	1,152.30
	China clay	105	8,153.24
	Copper ore	5	1,717.95
	Dolomite	8	579.28
	Epidote .	ĺ	5.00
	Felspar	114	3,833.32
			(contd.)

State	Mineral	No. of Leases	Lease area (Hect.)
Rajasthan (concld.)	Fire clay	25	2,383.60
1,.	Fluorite	15	1,743.02
	Garnet	14	340.99
	Graphite	2	383.55
	Gypsum	40	17,465.37
	Iron ore	14	894.29
	Jaspar	5	211.70
	Lead & zinc ore	8	7,505.49
	Limestone	52	20,408.73
	Magnesite	3	15.00
	Manganese ore	1	80.00
•	Mica	98	3,062.03
	Ochre	24	1,726.72
	Phosphorite	7	2,251.88
	Pyrophyllite	6	308.16
	Quartz	116	3,971.07
	Quartzite	1	5.00
•	Shale	1	5.00
	Silica sand	92	5,391.18
	Steatite	224	17,209.42
	Vermiculite	1	42.22
	Wollastonite	4	202.49
	Total	1,059	104,495.64
Sikkim	Copper ore	3	84.67
	Dolomite	1	1.33
	Total	4	86.00
Tamil Nadu	Bauxite	. 2	158.46
	China clay	$\frac{1}{2}$	15.55
	Dolomite	1 .	62.07
	Felspar	1	39.47
	Fire clay	11	52.17
	Garnet	41	477.84
	Graphite	5	291.62
	Gypsum	4	203.57
	Limeshell	2	729.05
	Limestone	115	1,926.77
	Magnesite	11	1,195.64
	Quartz	122	237.82
	Silica sand	7	17.01
	Steatite	3	36.56
	Vermiculite	1	23.71
	Total	328	5,467.31
		~-~	

State	Mineral	No. of Leases	Lease area (Hect.)
Uttar Pradesh	Diaspore	6	105.87
•	Limestone	4	2,706.15
	Phosphorite	ì	874.00
	Pyrophyllite	7	793.68
	Silica sand	22	640.93
	Total	40	5,120.63
Uttaranchal	Dolomite	1	20.23
	Gypsum	2	186.15
	Limestone	3	105.44
	Magnesite	<u>2</u> 2	492,20
	Phosphorite	2	222.05
	Steatite	32	459.29
	Total	42	1,485.36
West Bengal	China elay	27	605.67
	Delemite [*]	2	927.00
	Felspar	1	2.23
	Fire clay		9,940.81
	Limestone	9 1	0.67
	Moulding sand	2	2.00
	Ochre	2 1	5.76
	Phosphorite	1	29.13
	Quartz	5	10.70
	Quartzite	1	4.70
	Sand (others)	Į	44 . 09
	Total	51	11,572.76

TABLE - 4: STATEWISE/DISTRICTWISE/MINERALWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
Andhra Pradesh	Adilabad	China clay Laterite Limestone Manganese ore	14 1 12 9	139.76 2.84 2,685.28 346.76
	Anantapur	Barytes China clay Corundum Dolomite Felspar Gold Iron ore Laterite Limestone Ochre Pyrophyllite Quartz Shale Steatite Total	36 1 3 2 47 3 1 4 1 20 2 2 20 1 35 142	2.00 28.35 16.36 716.49 32.53 168.42 244.51 38.86 1,097.69 18.00 69.68 517.86 3.16 511.07 3,464.98
	Chittoor	China clay Felspar Gold Pyrophyllite Quartz Steatite Total	1 1 2 2 11 2 19	14.17 3.78 240.44 8.08 100.79 15.20 382.46
	Cuddapah	Asbestos Barytes China clay Clay (others) Dolomite Felspar Iron ore Laterite Limestone Magnesite Ochre Pyrophyllite	7 90 13 3 9 15 1 1 18 1 7 2	352.08 1,584.30 611.92 183.32 163.57 311.14 18.62 80.94 1,296.55 6.57 36.07 91.98 (contd.)

tate	District	Mineral	No. of Leases	Lease Area (Hect.)
	Cuddapah (contd.)	Quartz	11	186.49
	• • •	Shale	2	19.71
		Silica sand	1	1.87
		Steatite	3	57.46
		Total	184	5,002.59
	Godavari East	China clay	13	22.79
		Fire clay	22	74.22
		Graphite	1	5.00
		Laterite	13	75.53
		Total	49	177.54
	Godavari West	Ball clay	20	254.01
		China clay	5	35.51
		Clay (others)	2	31.86
		Total	27	321.38
	Guntur	Lead & zinc ores	1	200.00
		Limekankar	1	3.80
		Limestone	28	4,171.66
		Quartz	5	33.84
		Slate	5 2	80.95
		Total	37	4,490.25
	Karimnagar	Dolomite	2	32.47
		Laterite	2 2 3	8.30
	·	Limestone		804.8
		Sand (others)	6	1,626.90
		Silica sand	1	10.00
•		Total	14	2,482.47
	Khammam	Barytes	4	297.91
		Corundum	4	19.57
		Dolomite	6	423.32
		Felspar	1	1.50
·		Garnet	7	80.45
		Graphite	3	76.51
		Iron ore	5	629.68
•		Limestone	2	32.23
		Mica	2	29.83
		Quartz	3 5 2 2 9 3	37.55
		Sand (others)	3	15.88
		Total	46	1,644.43

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Krishna	Iron ore	4	19.77
		Limestone	18	2,397.58
		Quartz	3	2.86
		Total	25	2,420.21
	Kurnool	Daretsa	ger.	888 12
	Kurnooi	Barytes	6 2 3	233.16
		Calcite	4	33.68
		China clay	j 80	17.03
		Dolomite	28	246.42
		Felspar	1 7 6 67	16.87
		Iron ore	$\frac{7}{c}$	52.33
		Laterite	6	19.83
		Limestone	67	3,109.72
		Octue .	7	124.60
		Quartz	14	162.12
		Quartzite	4	31.77
		Shale	4 6 13	21.46
		Silica sand	13	178,43
		Steatite	58	334.7
		Total	222	4,502.12
	Mahbubnagar	Felspar	9	71.13
	112 000 00 00 00 00 00 00 00 00 00 00 00 0	Quartz	95	592.5
		Total	104	663,63
	Madalı	t A manatha ant	1	1 21
	Medak	Amethyst		1.31
	•	Laterite	7	41.05
		Ochre	1	5.67
		Quartz	22	194.37
		' Total	31	242.40
	Nalgonda	Laterite	4	4.82
		Limestone	28	4,694.10
•		Quartz	20	184.42
		Total	52	4,883.34
	Mollows	D.	-	
	Nellore	Barytes	3	44.87
		Felspar	4	92.73
		Garnet	1	39.68
		Iron ore	2	274.00
		Laterite	9	63.34
		Limeshell	3	150.75
		Mica	99	1,750.76
		Quartz	68	973.72
	•			(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Nellore (concld.)	Silica sand	39	842.92
		Vermiculite	6	95.28
		Total	234	4,328.05
	Nizamabad	Laterite	2	12.86
		Quartz	3	7.65
		Total	5	20.51
	Prakasam	Barytes	5	28.52
		Garnet	4	4.79
		Iron ore	2	272.24
		Quartz	72	1750.05
•		Silica sand	16	30.13
		Slate	10	380.31
		Total	109	2,466.04
	Rangareddi	Amethyst	3	11.68
		China clay	2 2	6.47
		Fire clay		8.09
		Laterite	13	138.69
		Limestone	5	1,195.27
		Quartz	30	180.52
		Shale	1	133.07
		Total	56	1,673.79
	Srikakulam	Garnet	1	95.08
		Lime kankar	1	5.85
		Limeshell	1	4.00
		Quartz	2 2	12.98
		Quartzite	2	16.02
		Silica sand	. 1	7.5
		Sillimanite	1	7,000.00
		Total	9	7,141.43
	Visakhapatnam	Apatite	1	13.29
		Calcite	3 3	105.52
		China clay		17.40
	•	Laterite	6	57.93
		Limeshell	1	8.63
		Mica	10	359.22
		Ochre	1	5.47
		Phosphorite	1	2.83
		Quartz	11	226.47
		Total	37	796.76
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Vizianagaram	Limekankar	17	128.00
	8	Manganese ore	33	778.07
		Moulding sand	1	31.16
a. ·		Quartz	11	142.09
	• •	Quartzite	9	122.07
			2	
		Sand (others)		65.47
		Total	73	1,266.86
	Warangal	Dolomite	3	19.58
		Laterite	13	97.45
		Sand (others)	1	13.85
	•	Total	17	130.88
ASSAM	Karbi Anglong	Limestone	3	185.83
		Total	3 3	185.83
	North Cachar Hills	Limestone	8	795.50
	rorth Cachar IIIIs	Total	8	795.50 7 95.50
		Total	o	/95.50
BIHAR	Monghyr	Ougarto		(1.20
/XJ1FXX	Mongnyi	Quartz	2	61.30
		Total	2	61.30
	Nawada	Mica	2	1,196.80
		Total	2	1,196.80
	Rohtas	Limestone	7	182.17
		Pyrite	1	647.50
		Total	8	829.67
CHHATTISGARH	Bastar	Limestone	18	43.89
		Quartzite	1	16.00
		Total	19	59.89
	Bilaspur	Dolomite	32	8,646.31
	zanopu.	Total	32	8,646.31
	Dantewara	Iron ore	6	6 996 DD
	- MARKETT HE SE	Tin	4	6,886.90
		Total		66.19
		TOTAL	10	6,953.09
	Durg	Dolomite	39	169.94
		Iron ore	4	2,732.62
	•	Limestone	38	679.09
		Moulding sand	4	33.1
		Quartzite	5	48.08
		Total	90	3,662.83
				(contd.)
		18		(

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Janjgir-Champa	Dolomite	6	209.38
	ounjen Champa	Limestone	3	735.14
		Total	9	944.52
	Jashpur	Quartz	1	1.36
	• • • • • • • • • • • • • • • • • • •	Total	1	1.36
	Kanker	Bauxite	3	13.22
		Iron ore	4	999.26
		Limestone	1	0.63
		Mould sand	ī	13.84
		Steatite	4	7.89
		Total	13	1,034.84
	Kawardha	Bauxite	2	664.33
	•	Dolomite	1	12.14
		Limestone	1	3.78
		Total	4	680.25
	Korba	Fire clay	1	0.46
		Total	1	0.46
	Mahasamund	Fire clay	3	15.78
		Quartz	1	2.21
		Total	4	17.99
	Raigarh	Dolomite	1	2.33
		Limestone	10	27.38
		Quartz	2 2	4.25
		Quartzite	2	54.4
		Total	15	88.36
	Raipur	Dolomite	3	22.21
		Limestone	36	3,090.65
		Total	39	3,112.86
	Rajnandgaon	China clay	5 1	13.16
		Iron ore		80.71
		Limestone	3	8.27
		Moulding sand	2	17.76
		Ochre	3 2 1 2 8	10.12
		Quartz	2	10.23
		Quartzite		47.52
		Total	22	187.77
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Surguja	Bauxite	7	4,963.30
		Graphite	7 3	98.79
		Total	10	5,062.09
GOA	North Goa	Iron ore	83	6,175.82
		Manganese ore	17	1,059.51
		Total	100	7,235.33
	South Goa	Bauxite	1	40.92
		Iron ore	104	7,826.97
		Manganese ore	45	3,062.77
•		Total	150	10,930.66
GUJARAT	Amreli	Bauxite	3	160.66
		China clay	1	3.01
		Clay (others)	1	88.54
		Limestone	5	1,864.75
		Total	10	2,116.96
	Banaskantha	Calcite	1	3.76
		Copper ore	1	1,402.00
		Limestone	9	422.64
		Vermiculite	. 1	1.84
		Total	12	1,830.24
	Bharuch	Agate	1	4.64
		Silica sand	26	442.23
		Total	27	446.87
4.7	Bhavnagar	Chalk	1	12.00
		Clay (others)	. 4	190.81
		Dolomite	3	52.99
1 1		Limestone	1	20.00
		Moulding sand	1	2.80
		Total	10	278.60
	Dahod	Fluorite	1	0.49
		Limestone	5	187.51
		Quartz	1	4.20
		Total	7	192.20
	Jamnagar	Bauxite	106	3,110.34
		Calcareous sand	14	151.75
		Chalk	8	33.56
		Clay (others)	1	20.23
		Limestone Ochre	52	2,092.96
		Total	182	20.03 5 428 87
		IVIAI	10%	5,428.87
				(contd.)
	•	20		

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Junagarh	Chalk	3	27.90
	_	Limestone	115	2,736.75
		Total	118	2,764.65
	Kheda	Bauxite	16	84.78
		Limestone	1	10.93
		Total	17	95.71
	Kutch	Ball clay	2	5.00
		Bauxite	6	486.95
		China clay	28	283.17
		Clay (others)	22	290.03
		Gypsum	1	4.95
		Limestone	4	312.18
	•	Ochre	1	2.00
		Silica sand	5	174.16
		Total	69	1,558.44
	Mehesana	China clay	. 8	241.27
		Fire clay	1	32.37
		Total	9	273.64
	Panchmahals	Manganese ore	1	2.95
		Quartz	28	198.02
		Quartzite	1	19.30
		Total	30	220.27
	Patan	Ball clay	1	5.49
		China clay	1	36.22
		Clay (others)	5	103.82
		Ochre	3	23.32
		Total	10	168.85
	Porbandar	Bauxite	5	106.69
		Chalk	125	501.97
		China clay	1	3.97
		Limestone	171	3,235.15
		Total	302	3,847.78
	Rajkot	Chalk	22	80.81
		Fire clay	6	7.02
		Gypsum	1	1.81
		Limestone	2	37.13
		Perlite	1	144.65
		Total	32	271.42
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Sabarkantha	Bauxite	13	91.29
		Calcite	3	6.58
		China clay	6	636.43
		Felspar	1	1.00
		Fire clay	14	50.36
•		Limestone	2	2.53
		Quartz	1	4.04
		Silica sand	15	70.03
		Steatite	6	22.04
		Total	61	884.30
	Surat	Limestone	1	1,504.75
		Silica sand	1	6.52
		Total	2	1,511.27
	Surendranagar	Clay (others)	2	7.78
		Fire clay	51	284.95
	•	Moulding sand	3	4.03
	•	Silica sand	22	163.56
		Total	78	460.32
	Vadodara	Calcite	1	52.97
		Dolomite	-95	1,172.05
		Fluorite	1	31.20
		Quartz	. 1	3.00
		Vermiculite	1	23.20
		Total	99	1,282.42
ARYANA	Ambala	Limestone	2	340.56
	·	Total	2	340.56
	Bhiwani	Limekankar	4	705.35
		Total	4	705.35
· ·	Faridabad	China clay	. 2	165.73
		Silica sand	29	6,208.35
		Total	31	6,374.08
	Gurgaon	China clay	37	3,077.57
		Quartz	4	97.93
		Quartzite	2	47.78
	•	Silica sand	23	1,750.95
		Total	66	4,974.23
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Mahendragarh	Barytes	1	79.32
		Calcite		158.56
		Dolomite	2 2	252.15
		Felspar	3	285.06
	•	Iron ore	1	86.20
		Limestone	. 9	251.95
		Mica	1	400.00
		Quartz	12	753.92
		Slate	1	81.35
		Total	32	2,348.51
	Rewari	Quartzite	2	20.45
		Slate	2 3	270.37
		Total	5	290.82
IMACHAL PRADESH	Bilaspur	Limestone	4	248.39
		Total	4	248.39
	Kannaur	Gypsum	1	116.68
		Total	1	116.68
	Mandi	Rock salt	3	53.86
	, ·	Total	3	53.86
	Sirmur	Barytes	2	81.39
•		Limestone	46	761.18
		Total	48	842.57
	Solan	Limestone	2	757.08
		Total	2	757.08
AMMU & KASHMIR	Anantnag	Limestone	. 9	82.15
		Total	9	82.15
	Baramula	Gypsum	1	2.71
		Total	1	2.71
	Doda	Gypsum	2 2	55.00
		Total	2	55.00
	Jammu	Limestone	1	4.67
		Total	1	4.67
	Leh	Opal	1	200.00
	·	Total	1	200.00
			·	

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Pulwama	Limestone Total	1 1	100.00 100.00
	Srinagar	Limestone Total	1 1	144.25 144.25
	Udhampur	Magnesite Total	2 2	140.80 140.80
JHARKHAND	Deogarh	Felspar Total	1 1	0.91 0.91
	Dhanbad	Fire clay Limestone Quartz Sand (others) Total	2 1 1 13 17	114.18 17.40 5.18 1,765.35 1,902.1 1
	Dumka	Quartz Total	1 1	0.88 0.88
e	Garwah	Limestone Total	3 3	1,178.92 1,178.92
	Giridih	Felspar Mica Steatite Total	3 3 1 7	194.96 190.72 3.64 389.32
	Gumla	Bauxite Total	21 21	2,346.18 2,346.18
	Hazaribagh	Felspar Fire clay Limestone Mica Pyrophyllite Total	1 3 2 1 1 8	3.13 211.12 117.05 197.00 22.50 550.80
	Kodarma	Mica Quartz Total	25 3 28	576.67 79.73 656.40
	Latehar	Bauxite China clay Fire clay 24	2 1 15	478.35 8.25 405.56 (contd.)

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State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Latehar (concld.)	Graphite	1	17.81
		Iron ore	1	2.04
	•	Quartz	11	142.32
		Total	31	1,054.33
	Lohardaga	Bauxite	16	800.65
		Total	16	800.65
	Palamau	Dolomite	1	18.45
		Felspar	i	1.25
		Graphite	12	387.63
		Iron ore	4	58.06
		Limestone	1	25.97
		Steatite	ĺ	2.52
		Total	20	493.88
	Ranchi	Limestone	4	286.17
		Total	4	286.17
	Sahebganj	China clay	2	12.25
		Total	2 2	12.25
	Singhbhum (East)	Copper ore	3	6,417.69
		Kyanite	1	2.43
	,	Total	4	6,420.12
	Singhbhum (West)	China clay	5	198.98
		Iron ore	20	9,615.27
		Kyanite	4	2,557.79
	•	Limestone	5	48.30
		Ochre	1	5.62
		Quartz	2	8.25
		Steatite	1	3.25
		Total	38	12,437.46
KARNATAKA	Bagalkot	Dolomite	11	290.52
		Iron ore	2	69.99
		Limestone	41	3,043.67
		Total	54	3,404.18
	Bangalore	China clay	1	48.56
		Felspar	4	131.91
		Fire clay	1	2.02
		Silica sand Total	1 7	41.83 224.3 2
		4 0 1994	,	
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
,	Belgaum	Calcite	1.	17.00
	_	China clay	1	6.58
		Dolomite	3 2	14.58
		Laterite		95.21
		Limestone	15	593.55
		Manganese ore	1	2.33
		Moulding sand	3	31.57
		Quartz	2	5.67
		Quartzite	1	4.05
		Silica sand	2	3.25
		Total	31	773.79
	Bellary	Iron ore	56	4,543.01
		Manganese ore	4	489.29
		Moulding sand	5	51.68
		Ochre	2	532.61
		Quartz	13	102.30
		Steatite	2	4.89
		Total	82	5,723.78
	Bidar	Ochre	1	21.85
		Total	1	21.85
	Chickmagalur	Dunite	1	4.45
		Iron ore	2 3	4,647.70
		Total	3	4,652.15
	Chitradurga	Barytes	. 1	17.00
		Copper ore	2 5	416.83
		Iron ore		390.96
		Kyanite	1	169.96
		Limestone	13	1,622.54
		Manganese ore	10	619.21
		Quartz	3	81.60
		Total	35	3,318.10
	Coorg	Corundum	1	0.80
		Total	1	0.80
	Dawangere	Manganese ore	2 5 3	64.61
		Moulding sand	5	113.82
		Quartz		12.14
		Total	10	190.57
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Dharwar	Clay (others)	1	20.23
		Total	1	20.23
	Gulbarga	Gold	1	55.75
	-	Limestone	9	2,606.46
		Moulding sand	1	6.50
4		Quartz	2	39.61
		Total	13	2,708.32
	Hassan	China clay	2	311.60
		Chromite	6	987.47
		Copper ore	1	70.82
		Quartz	3	68.69
		Steatite	1	80.94
		Vermiculite	. 1	26.30
		Total	14	1,545.82
	Haveri	Moulding sand	8	246.44
		Total	8	246.44
	Kolar	China clay	4	300.51
		Gold	1	5,215.39
		Total	5	5,515.90
	Koppal	Quartz	7	64.16
	· · · · · · · · · · · · · · · · · · ·	Total	7	64.16
	Mandya	Corundum	1	1.64
	•	Felsite	1	1.61
		Quartz	. 2	27.31
		Total	4	30.56
	Mysore	Corundum	2	15.63
	*	Felsite	. 1	3.49
		Graphite	4	235.04
		Kyanite	3	28.32
		Limestone	1	110.00
		Magnesite	7	406.47
		Quartz	1	0.90
		Steatite	1	12.14
		Total	20	811.99
	North Kanara	Limeshell	10	996.48
		Limestone	2	136.62
		Manganese ore	1	464.00
		Moulding sand	2	136.98
		Quartz	1	1.82
		Silica sand	10	253.28
		Total	26	1,989.18
				(contd.)

(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Raichur	Gold Quartz Total	3 2 5	965.08 13.73 978.81
	Shimoga	China clay Kyanite Limestone	3 1 1	33.99 2.42 40.12
		Manganese ore Quartz Total	1 1 7	526.10 16.91 619.54
	South Kanara	Quartz Silica sand Total	1 3 4	1.95 118.29 120.24
	Tumkur	China clay Fire clay Gold	2 2 1	138.27 388.49 38.04
		Iron ore Limestone Manganese ore Ochre Quartz Steatite	7 6 7 1 6 2	794.92 227.31 554.04 6.07 17.59 36.37
	Udupi	Total Bauxite Limeshell Ochre Silica sand Total	1 4 1 14 20	2,201.10 28.80 407.53 56.65 928.36
KERALA	Alapuzha	Limeshell Silica sand Total	6 42 48	940.44 35.43 975.8 7
	Kannur	China clay Laterite Total	3 1 4	11.62 0.19 11.81
	Kasargod	China clay Total	1 1	2.85 2.85
	Kollam	Bauxite China clay Sillimanite Total	3 5 3 11	1.37 8.75 327.35 337.47 (contd.)

State	District		Mineral	No. of Leases	Lease Area (Hect.)
	Kottayam		Limeshell	2	556.25
			Total	2	556.25
	Palakkad		Limestone	1	245.69
			Total	1	245.69
	Thiruvananth	apuram	China clay	32	72.34
		•	Total	32	72.34
	Wynad		Quartz	2	3.21
	•		Total	2	3.21
MADHYA PRADESH	Badwani		Calcite	19	45.82
			Total	19	45.82
	Balaghat	# 1N	Copper ore	2	479.90
	Daiagnat		Dolomite	13	90.89
			Fire clay	1	2,41
		$\{\lambda_i\}_i \lambda_j$	Limestone	7	73.98
			Manganese ore	23	1,358.43
			Ochre	1	16.18
		+ 2 + 2 + 2 + 4 + 4	Sand (others)	î	5.50
	•	4 2 2 2 3 3	Total		2,027.29
			Lyuu	40	2,021.27
	Chhatan		Ohio alaa	2	20.12
	Chhatarpur	Carlot Andrews	China clay	2	20.12
			Diaspore	7	32.00
	•	and Salvage	Limestone	2	4.91
			Phosphorite	1	48.76
		Estay 1995	Pyrophyllite	13	52.00
	•	ing Albahara	Quartzite	1	6.10
			Steatite	. 2	10.36
			Total	28	174.25
4 A	Chhindwara	E.T. Established	Dolomite	7	63.19
	•		Manganese ore	1	54.13
			Total	8	117.32
	Damoh		Laterite	1	21.25
		•	Limestone	8	1,484.60
				1	2.02
			Total	10	1,507.87
		(3, 1)	4 V SMA	10	1,507,107
	Datia		Lead & zinc ores	1	11.00
•			Quartz	2	14.09
			Total	3	25.09

(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Dewas	Barytes	. 1	3.35
		Silica sand	1	4.05
		Total	2	7.40
192	Dhar	Limestone	18	119.78
		Ochre	1	6.31
		Total	19	126.09
	Gwalior	China clay	1	20.63
		Iron ore	1	20.23
		Total	2	40.86
	Jabalpur	Bauxite	3	8.74
	-	Dolomite	4	15.33
		Fire clay	14	98.97
		Iron ore	6	90.02
		Laterite	2	10.91
		Limestone	11	1,151.87
		Ochre	1	4.14
		Quartz	2	13.98
	·	Steatite	3	43.34
		Total	46	1,437.30
	Jhabua	Calcite	1	2.40
		Dolomite	16	100.65
		Limestone	1	2.15
		Manganese ore	3 2	34,35
		Phosphorite		11.32
	•	Total	23	150.87
	Katni	Bauxite	7	42.26
		Dolomite	13	73.42
		Fire clay	13	144.57
		Iron ore	1	12.59
		Laterite	2	4.94
		Limestone	84	1,492.79
		Ochre	3	7.62
		Silica sand	1	0.60
		Steatite	2	15.71
		Total	126	1,794.50
	Khargon	Calcite	4	15.04
	(West Nimar)	China clay	1	0.61
		Limestone	. 2	4.89
		Silica sand	. 2	1.60
		Total	9	22.14
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Mandla	Dolomite	34	97.85
		Total	34	97.85
	Mandsaur	Laterite	11	51.52
		Shale	14	173.36
		Slate	1	55.49
		Total	26	280.37
	Morena	Limestone	1	18.00
		Total	î	18.00
	Narsinhapur	Dolomite	3	10.07
	1 100 000000000000000000000000000000000	Fire clay	1	20.00
		Limestone	$\overset{1}{2}$	
		Steatite	9	35.06
	•	Total	15	36.05 101.18
	76.T	*		
	Nimach	Laterite	5	62.11
		Limestone	6	963.09
		Total	11	1,025.20
	Panna	Diamond	2	576.51
		Limestone	1	48.39
	· .	Total	3	624.90
	Rewa	Bauxite	10	126.52
		Limestone	17	1,485.49
		Ochre	3	47.37
		Total	30	1659.38
	Sagar	Dolomite		20.26
	ougu:	Phosphorite	2 1	20.36
		Pyrophyllite		52.80
		Total	. 2 5	3.21 76.3 7
	Satna	Bauxite	4.4	
	Sama		14	117.30
		China clay	7	52.45
		Clay (others)	2 9	1.33
•		Laterite		179.99
		Limestone	93	4,368.03
		Ochre	29	426.41
		Total	154	5,145.51
	Seoni	Dolomite	. 7	11.66
		Total		11.66
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Shahdol	Bauxite	1	500.27
		China clay	3	20.84
		Fire clay	1	5.66
		Ochre	2	26.76
		Total	7	553.53
	Shivpuri	Diaspore	1	17.00
	•	Total	1	17.00
	Shyopur	Limestone	7	508.25
		Ochre	2	22.59
		Total	9	530.84
	Sidhi	Limestone	4	497.77
		Total	4	497.77
	Tikamgarh	Barytes	1	2.02
es		China clay	1	5.00
		Diaspore	3	31.11
***		Pyrophyllite	21	189.79
		Quartz	2	16
		Total	28	243.92
	Umaria	China clay	1	11.24
		Fire clay	2	19.62
	•	Laterite	, · · 1	17.74
		Ochre	2	14.72
		Total	6	63.32
MAHARASHTRA	Amravati	China clay	2	16.71
		Fire clay	1	13.26
		Total	3	29.97
	Bhandara	Chromite	1	16.22
		Kyanite	13	295.33
•		Manganese ore	6	375.97
		Quartz	4	33.32
	•	Sand (others)	2	43.34
		Total	26	764.18
	Chandrapur	China clay	1	18.00
		Fluorite	1	32.70
		Iron ore	3	33.29
		Laterite	2	43.03
		Limestone	18	3,623.34
		Sand (others)	5	461.08
		22		(contd.)
		32	•	

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Chandrapur (concld.)	Shale Total	1 31	41.48 4,252.92
	Gadchiroli	Iron ore Total	1	9.96 9.96
	Gondia Andrews	Iron ore Quartz Total	2 1 3	46.43 14.32 60.75
	Jalna Advanda	Agate Total	1	40.94 40.9 4
	Kolhapur	Bauxite Iron ore Total	15 1 16	3,865.38 143.95 4,009.33
	Nagpur	China clay Dolomite Manganese ore Ochre Quartz Sand (others) Total	5 10 25 1 1 4 46	43.88 123.17 526.82 12.36 1.07 191.88 899.18
	Raigad	Bauxite Total	3 3	111.70 111.70
	Ratnagiri	Bauxite Moulding sand Silica sand Total	2 1 7 10	205.38 47.02 488.08 740.48
	Sindhudurg Annyais An	China clay Felspar Fire clay Iron ore Manganese ore Mica Quartz Quartzite Silica sand Total	1 2 1 18 1 1 2 1 21 48	13.18 53.65 5.14 636.49 191.85 42.06 91.15 12.09 911.36 1,956.97
	Yeotmal	Dolomite Limestone Sand (others) Total	1 33 1 35	61.91 2,353.36 44.00 2,459.2 7
4 °	3	3		(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
MANIPUR	Chandel	Chromite	1	223.93
		Total	1	223.93
	Ukhrul	Chromite	1	386.24
		Total	1	386.24
MEGHALAYA	Garo Hills West	Fire clay	1	221.44
		Limestone	2 3	470.00
		Total	3	691.44
	Jaintia Hills	Limestone	2 2	15.28
		Total	2	15.28
	Khasi Hills East	China clay	2	9.77
		Limestone	5	878.77
		Shale	1	4.90
		Total	8	893.44
	Khasi Hills West	Limestone	1	60.00
		Total	1	60.00
ORISSA	Angul	Quartz	1	8.13
		Sand (others)	3	318.33
		Total	. 4	326.46
	Bargarh	China clay	3	103.34
	•	Graphite	12	220.68
		Limestone	2	806.53
	•	Quartz	1	15.21
		Total	18	1,145.76
	Baudh	Graphite	1	28.96
		Quartz	4 5	58.48
		Total	5	87.44
	Bolangir	Graphite	64	1,676.25
		Lead & zinc ores	1	5.26
		Limestone	1	27.65
		Manganese ore	1 2	7.27 143.99
		Quartz Total	69	1,860.42
	Cuttoals	Tina also	7	·
	Cuttack	Fire clay Total	7 7	929.19 929.19
		* P *		
	Dhenkanal	Chromite	2 3	847.48
		Graphite		185.70
		Total	5	1,033.18
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Ganjam	Lime kankar	1	48.14
		Sillimanite	1	2,618.49
		Total	2	2,666.63
	Jajpur	Chromite	12	3,888.39
		Iron ore	1	1,812.99
		Quartz	1	7.23
		Quartzite	1	2.31
		Total	15	5,710.92
	Jharsuguda	Fire clay	2	246.42
		Ochre	1	102.27
		Quartzite	3	121.44
		Sand (others)	1	109.20
		Total	7	579.33
	Kalahandi	Amethyst	1	27.65
	·	Corundum	1	57.46
	•	Graphite	10	205.13
	1.34	Iolite	4	24.38
		Quartz	33	315.46
		Total	49	630.08
	Keonjhar	Asbestos	1	49.22
		Chromite	6	2,198.98
		Iron ore	61	22,891.90
4 - 32		Magnesite	1	40.46
		Manganese ore	20	7,922.06
	•	Pyrophyllite	10	576.96
		Quartz	2	35.99
•		Total	101	33,715.57
	Khurda	Fire clay	3	147.09
e e	•	Total	3	147.09
	Koraput	Bauxite	2	4,647.28
		China clay	1	38.50
	No. of	Graphite	1	501.67
		Limestone	2	1,586.22
	14	Manganese ore	1	501.67
		Mica	1	2.67
		Ochre	1	95.50
		Quartz	2	22.76
		Total	11	7,396.27
				(contd.)

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	Malkangiri	Limestone	1	1,694.13
		Quartz	1	2.48
•		Tin	2	57.61
		Total	4	1,754.22
e	Mayurbhanj	China clay	7	655.44
	12	Fire clay	1	22.49
	A. 4	Graphite	1	24.91
		Iron ore	7	1,204.91
•		Quartz	1	1.19
•	4 (1 4 A)	Quartzite	7	20.63
		Steatite	2	136.20
	na de la National National Participation	Total	26	2,065.77
	Nawapara	Corundum	1	33.95
		Graphite	. 1	20.23
	ANG NA	Limestone	4	410.57
e de la companya de La companya de la co		Total	6	464.75
*	Nayagarh	Graphite	-1	16.64
		Total	1	16.64
1. 1. 4. 4. A.				
	Raygada	Bauxite	1	1,388.74
		Graphite	7	281.82
		Manganese ore	2	133.86
TANK TO THE STATE OF THE STATE		Quartzite	1	24.89
	1884 1944 1	Total	11	1,809.31
	Sambalpur	Fire clay	1	8.84
	- Carrie	Quartz	4	103.61
		Total	5	112.45
	Sundergarh	Bauxite	1	43.07
	- market Park II	Dolomite	8	877.21
		Fire clay	3	545.56
		Iron ore	33	4,823.08
	+ 7	Lead & zinc ores	1	499.60
	Ä	Limestone	24	4,273.26
	+ 1 v ±	Manganese ore	10	2,987.55
	·	Quartz	7	521.70
		Sand (others)	2	9.90
	·	Steatite	1	155.93
		Total	90	14,736.86
			•	(contd.)

State House No Grand	District	Mineral	No. of Leases	Lease Area (Hect.)
RAJASTHAN	Ajmer	Asbestos	4	214.66
		Felspar	69	2,478.17
		Garnet	3	15.00
		Lead & zinc ores	1	480.45
A.		Limestone	1	8.57
		Magnesite	1	5.00
		Mica	35	1,351.77
		Quartz	4	127.33
		Steatite	2	131.00
		Vermiculite	1	42.22
		Wollastonite	visitifi 1	5.00
· 图图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图		Total	122	4,859.17
AN A CONTRACT	:	e win e		•
· 医角膜 医二氏病	Alwar	Barytes	2	41.85
		China clay	. 1	4.73
· · · · · · · · · · · · · · · · · · ·		Copper ore	1	914.07
The state of the s		Felspar	1	5.00
		Fire clay	. 1	3.75
		Ochre	1	60.70
	$\mathcal{L}_{\mathcal{A}} = \mathcal{L}_{\mathcal{A}} = $	Silica sand	. 1	4.73
		Steatite	8	511.01
		Total	16	1,545.84
	Banswara	Graphite Graphite	2	383.55
		Limestone	1	65.82
		Manganese ore	1	80.00
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		Steatite	2	713.08
		Total	6	1,242.45
			Telkery (
	Barmer	China clay	2	10.00
		Gypsum	5	1,630.51
		Silica sand	5	551.09
		Total	12	2,191.60
		The state of the s	et et eget skilde	•
	Bharatpur	Fire clay	3	47.75
		Ochre	2	10.00
			am with 21	1,557.11
		Total	26	1,614.86
	Bhilwara	Asbestos	 	45.00
	्राच्या प्रस्ति । स्टब्स्ट स्ट	China clay	12	778.32
		Felspar	23	478.75
		Garnet	1	5.00
· · · · · · · · · · · · · · · · · · ·		Lead & zinc ores		1,200.00
		Mica	55	1,456.02
		Ochre	1	5.00
+ + \sqrt{1}		•	-	(contd.)
				()

State	District	Mineral	No. of Leases	Lease Area (Hect.)
	D19 (11)		^	40.16
	Bhilwara (concld.)	Quartz	2	48.16
		Steatite	10	1,519.35
		Total	114	5,535.60
	Bikaner	Ball clay	8	773.96
		China clay	52	4,714.13
		Fire clay	17	2,214.74
		Gypsum	13	3,826.86
		Total	90	11,529.69
	75. 11	C11 : 1	•	100.00
	Bundi	China clay	2	109.00
	•	Ochre	2 2	99.37
		Silica sand		357.00
		Total	- 6	565.37
	Chittorgarh	China clay	26	1,296.01
	9	Limestone	8	3,692.81
		Ochre	11	1,254.85
		Shale	1	5.00
		Total	46	6,248.67
建变物	Dausa	China clay	1	32.37
	Dadda	Iron ore	1	65.25
		Quartz	3	191.28
	: 	Silica sand	7	348.97
		Steatite	5	352.20
		Total	1 7	990.07
		I Other	1,	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>
	Dungarpur	Felspar	1	100.00
		Fluorite	10	500.40
		Steatite	63	4,330.97
		Total	74	4,931.37
·	Ganganagar	Gypsum	8	1,475.89
	g	Total	8	1,475.89
•	Hanumangarh	Gancian	5	7,084.65
	rramumangai n	Gypsum Total	5	7,084.65
		LUIAI	3	7,004.03
	Jaipur	Asbestos	1	66.50
		Calcite	1	296.41
	•	China clay	7	1,171.14
		Dolomite	2	92.93
		Epidote	1	5.00
		Felspar	7	261.33
			٠	(contd.)

State	erok egykezet erok	District	Mineral	No. of Leases	Lease Area (Hect.)
		Jaipur (concld.)	Iron ore	5	484.79
			Limestone	3	1,334.90
			Mica	2	68.37
	W. Halling		Ochre	2	183.00
			Quartz	20	538.81
			Silica sand	18	864.90
			Steatite	9	849.98
			Total	78	6,218.06
		Jaisalmer	Ball clay	1	150.00
			Dolomite	1	32.37
			Gypsum	3	867.89
			Limestone	2	1,998.00
1			Ochre	1	32.37
			Silica sand	8	385.00
	a Arabana an Arabana Arabana an Arabana Arabana an Arabana		Total	16	3,465.63
		Jalore	Fluorite	4	1,075.00
			Gypsum	1	178.50
			Total	5	1,253.50
		Jhunjhunu	Calcite	3	104.94
			Copper ore	4	803.88
			Dolomite	2	66.05
			Fire clay	4	117.36
			Iron ore	5	257.54
			Ochre	1	33.00
			Pyrophyllite	1	42.50
			Quartz	3	212.17
			Steatite	5	432.56
			Total	28	2,070.00
		Jodhpur	Jasper	5	211.70
			Total	5	211.70
					· ·
		Karauli	Silica sand	22	740.97
			Steatite	1	5.00
			Total	23	745.97
		Kota	Limestone	4	1309.52
			Total	4	1309.52
				•	1007.02
		Nagaur	Ball clay	2	10.00
			Gypsum	5	2,401.07
			Limestone	12	6,700.63
			Total	19	9,111.70
			200	-	(contd.)
	i territorio (V.	39		

State	es year?	District	Mineral	No. of Leases	Lease Area (Hect.)
		Pali .	Asbestos	1	76.89
		,	Ball clay	7	947.73
			Felspar	2	69.87
			Limestone	11	1,114.15
			Magnesite	2	10.00
			Quartz	15	1,246.20
			Total	38	3464.84
	. + 4	Rajsamand	Asbestos	13	812.11
			Felspar	1	5.00
			Lead & zinc ores	4	2,142.04
			Mica Mica		10.00
			Pyrophyllite	2 2	105.00
				30	465.02
			Quartz	30	
			Steatite		2,602.75
			Total	84	6,141.92
		Sawai Madhoj	pur Ochre	1 3000	38.43
			Quartz	2	249.45
			Silica sand	2	282.25
			Total	5	570.13
		Sikar	Barytes	najohas.	47.51
	THE CANAL AND A	DIRAL	Calcite	7	222.79
			China clay	1	32.54
				2	
			Dolomite	3	387.93
			Felspar	7	364.83
			Iron ore	3	86.71
			Limestone	5	2,363.12
			Ochre	1	5.00
			Quartz	22	589.81
			Total	50	4,100.24
		Sirohi	Calcite	5 Stant.	366.66
	e Argantina 🗽 🖰		Fluorite	1	167.62
			Lead & zinc ores	1	63.00
			Limestone	4	1,116.31
			Wollastonite	2	95.69
		The state of the s	Total	2 13	1,809.28
		Tonk	Felspar	3 + 9.	70.37
			Garnet	10	320.99
			Mica	4	175.87
	The state of the s		A Visit is Quartz	1 5 and	302.84
			Quartzite	1	5.00
			Silica sand	6	299.16
	· · · · · · · · · · · · · · · · · · ·		Steatite Total	1	48.00
			Total	40	1,222.23
			40		(contd.)

State ***********************************	District	a saata Sakalii	Mineral	No. of Leases	Lease Area (Hect.)
	Udaipur		Asbestos	3	230.43
	. "		Barytes	1	31.00
			Calcite	4	161.50
Alian in the second			China clay	1	5.00
			Lead & zinc ores	ī	3,620.00
			Limestone	1	704.90
			Ochre	î	5.00
			Phosphorite	7	2,251.88
				3	160.66
			Pyrophyllite		
	Control of the second		Steatite	86	5,713.52
		of Albert	Wollastonite	1	101.80
			Total	109	12,985.69
CITZIZIM	Sikkim East	4340	C		04.67
SIKKIM	Sikkim East	CONT.	Copper ore	3	84.67
			Total	3	84.67
	~	1111			
	Sikkim West		Dolomite	The Art of the Control of the Contro	1.33
		a a ureku ura bega. Alik	Total	1	1.33
		14 (14) 11 (14)			
TAMIL NADU	Ariyalur	A 4 4 4 1	Fire clay	2	2.74
			Limestone	10	5 77.96
		mid migi	Total	12	580.70
	Chengai-Ann	18 💮 🗀	Quartz	1	6.58
			Total	1	6.58
	Coimbatore	arsii wa	Quartz	5	12.65
			Steatite	1	3.40
			Total	6	16.05
			x 0441	•	10.03
	Cuddalore		Fire clay	V. 1. 1. 2	43.40
	Cudualore		Total	3	
			10(2)	3	43.40
	D			Balan A. T	1.07
	Dharmapuri		Quartz	<u>.</u>	1.27
			Total	1	1.27
		and A	· ·		
	Dindigul		Limestone	12	35.98
			Quartz	11	9.73
			Total	23	45.71
		19 11 11 1 21 11 11 11 1			
	Erode		Limestone	1	1.82
	villa villa 1994.	. \	Quartz	24	51.37
		A PARTIE OF A	Total	25	53.19
		east Co	* *		1
	Kanchipuran	n :	Limeshell	1	190.00
			Silica sand	î	4.63
saasini, indi in			Total	2	194.63
				2	174.03
					(0044)
					(contd.)

tate District	Mineral	No. of Leases	Lease Area (Hect.)
Kanyakuma	ari Garnet	. 5	258.31
•	Total	5	258.31
Karur	Limestone	14	46.64
	Quartz	31	49.18
	Total	45	95.82
Madurai	Graphite	1	14.51
# . # . * . · . · . · . · . · . · . · . · . ·	Limestone		3.11
	Quartz	2 2 5	3.44
	Total	5	21.06
Nagapattin	am Silica sand	· 4	7.14
1 tuguputun	Total	4	7.14
Namakkal	Bauxite	2	158.46
1 (00.111.001.111.111	Limestone	11	32.52
	Quartz	14	25.33
	Total	27	216.31
Perambalur	Fire clay	6	6.03
1 Classical	Gypsum	1	159.31
	Limestone	11	151.52
·	Total	18	316.86
Periyar	Quartz	12	9.47
1011,41	Total	12	9.47
Ramnathap	ouram Limeshell	1	539.05
	Total	1	539.05
Salem	Felspar	1	39.47
	Limestone	21	89.33
	Magnesite	11	1,195.64
	Quartz	20	68.19
	Total	53	1,392.63
Sivaganga	Graphite	4	277.11
~66	Total	4	277.11
Theni (Mac	durai) Limestone	3	6.77
2.77 (1,281	Total	3	6.77
Thiruvarur	Silica sand	1	4.16
A SAIA TH 7 692 THE	Total	1	4.16

State wastel	District	Mineral	No. of Leases	Lease Area (Hect.)
	Tiruchirapalli	China clay	. 1	12.30
		Dolomite	1	62.07
		Garnet	1	19.06
	TO TAXANG E	Gypsum	3	44.26
And the second		Limestone	8	94.28
		Quartz	1	0.61
		Steatite	1	4.90
		Total (1984)	16	237.48
医多种性 医多种性	Tirunelveli	Garnet	33	178.54
		Limestone	13	192.53
		Total	46	371.07
				1 V
10 May 10	Tuticorin	Garnet	2	21.93
		Limestone	2	4.75
		Total	4	26.68
		· · · · · ·		
	Vellore	Steatite	1	28.26
	化气管 医电影 医蜂毒二二	Vermiculite	1	23.71
		Total	2	51.97
	andra (1945). The first of the Alberta (1945). The first of the first	<i>α</i>	rando de la julia	
	Villupuram	China clay	1	3.25
		Total	1	3.25
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	T *	-	coo e c
	Virudhunagar	Limestone	7	689.56
		Total	7	689.56
UTTAR PRADES	H Allahabad	Silica sand	16	467.72
UTTAK FRADES	н Апапарац	Total	16 16	467.73
기원병 출천 시작 (1997년 1922년) 기계용 기원 시작 (1997년)		Total	10	467.73
	Banda	Silica sand	6	173.20
	Banua	Total	6	173.20 173.20
		IVIAI	majik (* V No.	173.20
	Hamirpur	Pyrophyllite	3	15.93
	Amm pu	Total	3 3	15.93
		Autus		13.73
	Jhansi	Diaspore	3	35.03
		Total	3 3	35.03
		Total	de de	33.03
	Lalitpur	Diaspore	3	70.84
and the way of the second of t		Phosphorite		874.00
		Pyrophyllite	4	777.75
		Total	8	1,722.59
			•	_,. ====
	Sonbhadra	Limestone	4	2,706.15
		Total	4	2,706.15
				(contd.)

State Mark No.	District	Mineral	No. of Leases	Lease Area (Hect.)
UTTARANCHAL	Almora	Steatite	1	1.40
		Total	1	1.40
	Bageshwar	Magnesite	1	53.20
		Steatite	23	404.65
٠.		Total	24	457.85
	Dehradun	Limestone	. 2	97.75
		Phophorite	2	222.05
		Total	4	319.80
in the second se	Pithoragarh	Magnesite	1	439.00
		Steatite	8	53.24
	The CANAGO	Total	9	492.24
14.00 (C)	Tehri Garhwal	Dolomite	1	20.23
	20000	Gypsum	2	186.15
		Limestone	1	7.69
	english si bilandi. Salah salah	Total	4	214.07
WEST BENGAL	Bankura	China clay	10	62.50
		Felspar	1	2.23
		Fire clay	2	12.23
		Quartz	2	4.33
		Quartzite	. 1	4.70
		Total	16	85.99
an ing ta	Birbhum	China clay	15	210.88
		Fire clay	1	46.00
		Total	16	256.88
	Burdwan	Fire clay	6	9,882.58
		Moulding sand	2	2.00
		Total	8	9,884.58
	Jalpaiguri	Dolomite	2	927.00
	e e e e e e e e e e e e e e e e e e e	Total	2 2	927.00
	Midnapur	Ochre	1	5.76
	tille patient.	Total Cartification	1	5.76
	Purulia	China clay	2	332.29
AND THE REAL PROPERTY.		Limestone	1	0.67
		Phosphorite	. 1	29.13
		Quartz	3	6.37
		Sand (others)	1	44.09
		Total	8	412.55

3.2 DISTRICTWISE ANALYSIS

(i) HIGH MINERAL POTENTIAL DISTRICTS

Districtwise analysis indicates that the total number of mineral bearing districts are around 266 falling in 23 States in the country. Out of these, 16 districts in 6 States are considered as highly potential districts in each of which more than 100 mining leases are granted. There are 2,473 mining leases granted covering an area of 107,515 hectares in the country. These constitute 36% of total number of mining leases and cover around 24% of total area. Information on the number of mining leases granted in highly potential districts is furnished in Table-5.

TABLE - 5: HIGH MINERAL POTENTIAL DISTRICTS

Sl. No.	District	No. of leases	No. of Minerals	Area of leases (Hect.)	States
1	Anantapur	142	14	3,464.98	Andhra Pradesh
2	Cuddapah	184	16	5,002.59	Andhra Pradesh
3	Kurnool	222	14	4,582.12	Andhra Pradesh
4	Mahbubnagar	104	2	663.63	Andhra Pradesh
5	Nellore	234	10	4,328.05	Andhra Pradesh
6	Prakasam	109	6	2,466.04	Andhra Pradesh
7	South Goa	150	3	10,930.66	Goa
8	Jamnagar	182	6	5,428.87	Gujarat
9	Junagarh	118	2	2,764.65	Gujarat
10	Porbandar	302	4	3,847.78	Gujarat
11	Katni	126	9	1,794.50	Madhya Pradesh
12	Satna	154	6	5,145.51	Madhya Pradesh
13	Keonjhar	101	7	33,715.57	Orissa
14	Ajmer	122	11 11 m	4,859.17	Rajasthan
15	Bhilwara	114	9	5,535.60	Rajasthan
16	Udaipur	109	11	12,985.69	Rajasthan
1.213	Total	2,473		107,515.41	. v. k. ii

ii) MEDIUM MINERAL POTENTIAL DISTRICTS

Mining leases granted between 50 to 100 are considered as medium potential districts. There are 1,468 mining leases granted in 20 districts covering an area of 87,921 hectares in the country. These constitute 21% of total number of mining leases and cover over 19% of total area. Information on the number of mining leases granted in medium potential districts is furnished in Table-6.

TABLE -6: MEDIUM MINERAL POTENTIAL DISTRICTS

Sl. No.	District	No. of leases	No. of Minerals	Area of Leases (Hect.)	States
-1	Nalgonda	52	3	4883.34	Andhra Pradesh
2	Rangareddi	56	7	1673.79	Andhra Pradesh
3	Vizianagaram	73	6	1,266.86	Andhra Pradesh
4	Durg	90	5	3,662.83	Chhattisgarh
5 .	North Goa	100	2	7,235.33	Goa
6	Kachchh	69	8	1,558.44	Gujarat
7	Sabarkantha	61	9	884.30	Gujarat
8	Surendranagar	78	4	460.32	Gujarat
9	Vadodara	99	5	1,282.42	Gujarat
10	Gurgaon	66	4	4,974.23	Haryana
11	Bagalkot	54	3	3,404.18	Karnataka
12	Bellary	82	6	5,723.78	Karnataka
13	Bolangir	69	5	1,860.42	Orissa
14	Sundergarh	90	. 10	14,736.86	Orissa
15	Bikaner	90	4	11,529.69	Rajasthan
16	Dungarpur	74	3	4,931.37	Rajasthan
17	Jaipur	78	13	6,218.06	Rajasthan
18	Rajsamand	84	7	6,141.92	Rajasthan
19.	Sikar	50	. 9	4,100.24	Rajasthan
20	Salem	53	4	1,392.63	Tamil Nadu
	Total	1,468		87,921.01	

ii) LOW MINERAL POTENTIAL DISTRICTS

Mining leases granted below 50 are considered as low mineral potential districts. There are 3,000 mining leases granted in 230 districts covering an area of 2,58,187 hectares in the country. These account for 43% of the leases, covering 57% of the total area. Statewise distribution of low potential districts and area covered is given in Table-7.

TABLE -7: LOW MINERAL POTENTIAL DISTRICTS (BY STATE)

Sl. No.	State	No. of Districts	No. of Lease	Lease Area (Hect)
110.		Districts	Lease	(Heet)
1	Andhra Pradesh	13	352	23,425.36
2	Assam	2	11	981.33
3	Bihar	3	12	2,087.77
4	Chhattisgarh	13	179	26,789.79
5	Gujarat	. 11	166	7,406.03
6	Haryana	5	74	10,059.32
7	Himachal Pradesh	5	58	2,018.58
8 .	Jammu & Kashmir	. 8	18	729.58
9	Jharkhand	15	201	28,530.38
10	Karnataka	21	256	27,455.21
11	Kerala	8	101	2,205.49
12	Madhya Pradesh	27	404	11,483.59
13	Maharashtra	12	223	15,335.65
14	Manipur	2	2	610.17
15	Meghalaya	4	14	1,660.16
16	Orissa	17	179	26,875.47
17	Rajasthan	20	338	48,193.90
18	Sikkim	. 2	4	86.00
19	Tamil Nadu	25	275	4,074.68
20	Uttar Pradesh	6	40	5,120.63
21	Uttaranchal	5	42	1,485.36
22	West Bengal	6	51	11,572.76
	Total	230	3,000	258,187.21

3.3 MINERALWISE ANALYSIS

The total number of naturally occurring minerals/metals for which the mining leases are granted in the country are 59 minerals. These minerals/metals are broadly classified into metallic and non-metallic minerals.

(i) METALLIC MINERALS

The metallic minerals include ferrous, non-ferrous and noble metals. The ferrous group includes iron ore, manganese ore, chromite and tungsten, where non-ferrous group consists of antimony ores, bauxite, copper, lead & zinc ore, molybdenum, nickel and vanadium. The noble metal group includes gold, silver and platinum group of metals. There are no commercial mining leases for silver and platinum group of metals at present in the country.

Metallic minerals for which mining leases are granted as on 31.3.2004 are 8 in number and the number of leases are 1,038 or 15% of the total mining leases with an area of 1,59,925 hectares (35% of the total mining lease area in the country). Out of the eight metallic minerals, the total number of mining leases granted for iron ore is placed at 474 followed by bauxite (266), manganese ore (225), chromite (29) and copper ore (17). These five minerals account for 1,011 mining leases (97% of the mining leases for metallic minerals) with an area of 1,44,897 hectares (91% of the lease area of metallic minerals). The distribution of mining leases for metallic minerals is given in Table-8.

TABLE-8: DISTRIBUTION OF MINING LEASES FOR METALLIC MINERALS

∜Sl.No.	Mineral /Metal	No. of leases executed	Area in hectares
1	Bauxite	266	24,592.93
2.	Chromite	29	8,548.71
3.	Copper ore	17	10,589.86
4.	Gold	9	6,683.12
5.	Iron ore	474	79,041.71
6.	Lead & zinc ore	12	8,221.35
· 7.	Manganese ore	225	22,123.60
8.	Tin	6	123.80
	Total	1038	159,925.08

ii) NON-METALLIC MINERALS

There are 51 major non-metallic or industrial minerals for which leases are granted in the country. The number of mining leases granted for these minerals are placed at 5903 (85% of the total mining leases) with an area of 293,699 hectares (65% of the total lease area). Distribution of mining leases for non-metallic minerals is given in Table-9.

TABLE-9: DISTRIBUTION OF MINING LEASES FOR NON-METALLIC MINERALS

SI. No.	Mineral	No. of Leases	Lease Area (Hect.)
1	Agate	2 5	45.58
2 3	Amethyst	5	40.64
	Apatite	1	13.29
4	Asbestos	39	1,846.89
5	Ball clay	41	2,146.19
6	Barytes	119	2,494.20
7	Calcareous sand	14	151.75
8	Calcite	57	1,593.63
9	Chalk	159	656.24
10	China clay	380	16,312.65 (hepale)
11	Clay (others)	43	937.95
12	Corundum	12	145.41
13	Diamond	2	576.51
14	Diaspore	17	185.98
15	Dolomite	423	15,600.52
16	Dunite	1	4.45
17	Epidote	1	5.00
18	Felsite	2	5.10
19	Felspar	166	5,076.57
20	Fire clay	220	16,401.86
21	Fluorite	18	1,807.41
22	Garnet	68	1,038.83
23	Graphite	132	4,657.94
24	Gypsum	52	18,036.24
25	Iolite	4	24.38
26	Jaspar	5	211.70
27	Kyanite	23	3,056.25
28	Laterite	114	1,129.33
29	Lime kankar	24	891.14
30	Limeshell	29	3,793.13
31	Limestone	1,411	106,260.41
32	Magnesite	27	2,297.14
33	Mica	243	7,807.76
34	Moulding sand	39	738.70
35	Ochre	102	3,382.79
36	Opal	1	200.00
37	Perlite	1	144.65
J I	1 CHIC	ĭ	(contd.)

Table-9 (concld.)

Sl. No.	Mineral	No. of Leases	Lease Area (Hect.)
38	Phosphorite	16	3,492.77
39	Pyrite	1	647.50
40	Pyrophyllite	66	2,116.04
41	Quartz	845	12,780.42
42	Quartzite	53	624.60
43	Rock salt	3	53.86
44	Sand (others)	46	4,716.79
45	Shale `	27	402.14
46	Silica sand	417	18,721.90
47	Sillimanite	5	9,945.84
48	Slate	17	868,47
49	Steatite	395	19,194.97
50	Vermiculite	11	212.55
51	Wollastonite	4	202.49
	Total	5903	293,698.55

The mineralwise/statewise distribution of lease and lease area as on 31.3.2004 is given in Table 10.

TABLE -10: MINERALWISE/STATEWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31.03.2004)

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
1	Agate	Gujarat	1	4.64
	•	Maharashtra	1	40.94
		Total	2 .	45.58
2	Amethyst	Andhra Pradesh	4	12.99
		Orissa	1	27.65
		Total	5	40.64
3	Apatite	Andhra Pradesh	1	13.29
		Total	1	13.29
4	Asbestos	Andhra Pradesh	7	352.08
		Orissa	1	49.22
		Rajasthan	31	1,445.59
	•	Total	39	1,846.89
5	Ball clay	Andhra Pradesh	20	254.01
		Gujarat	3	10.49
		Rajasthan	18	1,881.69
		Total	41	2,146.19
6	Barytes	Andhra Pradesh	109	2,190.76
		Haryana	1	79.32
		Himachal Pradesh	2	81.39
		Karnataka	1	17.00
		Madhya Pradesh	2	5.37
		Rajasthan	4	120.36
		Total	119	2,494.20
7	Bauxite	Chhattisgarh	12	5,640.85
		Goa	1	40.92
		Gujarat	149	4,040.71
		Jharkhand	39	3,625.18
	•	Karnataka	1	28.80
	The second secon	Kerala	3	1.37
		Madhya Pradesh	35	795.09
		Maharashtra	√ 20	4,182.46
		Orissa	4	6,079.09
		Tamil Nadu	2	158.46
		Total	266	24,592.93
8	Calcareous sand	Gujarat	14	151.75
		Total	14	151.75
		-51		(contd.)

SI. No.	243	Mineral	State All All All All All All All All All Al	No. of Lease	Lease Area (Hect.)
9		Calcite	Andhra Pradesh	5	139.20
	1440		Gujarat	5	63.31
	+ +	i kalanda da d	Haryana	2	158.56
			Karnataka	1	17.00
			Madhya Pradesh	24	63.26
	3 15		Rajasthan	20	1,152.30
	1 1		Total	57	1,593.63
)	in the second se	Chalk	Gujarat	159	656.24
	;	e de la companya de La companya de la co	Total	159	656.24
[China clay	Andhra Pradesh	57	893.40
			Chhattisgarh	5	13.16
			Gujarat	45	1,204.07
			Haryana	39	3,243.30
			Jharkhand	8	219.48
	Sec.	•	Karnataka	13	839.51
	Conjunt		Kerala	41	95.56
			Madhya Pradesh	16	130.89
	47.	·	Maharashtra	9	91.77
		*	Meghalaya	2	9.77
	100		Orissa	11	797.28
	* 1.55 C.C.	: <u>1</u> : #	Rajasthan	105	8,153.24
			Tamil Nadu	2	15.55
	\$4.A		West Bengal	. 27	605.67
	1 4 S		Total	380	16,312.65
2		Chromite	Karnataka	6	987.47
		50 s	Maharashtra	1	16.22
	* *		Manipur	2	610.17
	287,350	1 N N N N N N N N N N N N N N N N N N N	Orissa	20	6,934.85
	54 V)		Total	29	8,548.71
3	·	Clay (others)	Andhra Pradesh	5	215.18
		1.4	Gujarat	35	701.21
	÷.		Karnataka	1	20.23
			Madhya Pradesh	2	1.33
	* **		Total	43	937.95
4	4.1	Copper ore	Gujarat	N. 1	1,402.00
	114.		Jharkhand		6,417.69
	1.7		Karnataka	3 3 2	487.65
		3 (**)	Madhya Pradesh	2	479.90
			Rajasthan	5	1,717.95
			Sikkim	3	84.67
			Total	17	10,589.86
	•				(contd.)

SI. TOTA SPECE.	Mineral 0 4490	State Significant	No. of Lease	Lease Area (Hect.)
15 <u>() </u>	Corundum	Andhra Pradesh	6 (200 300)	35.93
(-C.01)	ija.	Karnataka	4	18.07
WAVE		Orissa (III)	2	91.41
738.74		Total omnibusii	12	145.41
390.51	e de la companya de La companya de la co	A Comment of the Comm	1	
16 (1.00)	Diamond	Madhya Pradesh	2	576.51
1.00 1.00	<u> </u>	Total weathings /	2	576.51
14.3 (2010) 1	35.	The same		
17 TENNOSE - THILEBELS	Diaspore	Madhya Pradesh	11	80.11
52.10		Uttar Pradesh	6	105.87
12 (114) (2	ž	Total workings	17	185.98
18 (0) (0)	Dolomite	Andhra Pradesh	95	1,601.85
		Chhattisgarh	82	9,062.31
		Gujarat	98	1,225.04
MAE	<u>.</u>	Haryana	2	252.15
		Jharkhand Jharkhand	1	18.45
4.7 (in), f		Karnataka Hari	14	305.10
10 OSS	CI.	Madhya Pradesh	99	483.42
	4a 32.≨	Maharashtra	11 Pore?	185.08
WALLEY	**************************************	Orissa managada	. 8	877.21
48.860.0		Rajasthan and I	8	579.28
.x2(*2*; (*)3/4.	59 W.	Sikkim	. 1	1.33
408,80		Tamil Nadu		62.07
6,274,26	Š	Uttaranchal	1	20.23
11,880.4	(*) (*)	West Bengal	2	927.00
		Total	423	15,600.52
19 20	Dunite	Karnataka	i minden i k	4.45
1 2 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	:	Total Wastersoil	1	4.45
20 0 8 8	Epidote	Kajasthan	1	5.00
92.101,83		Total (want)	1	5.00
14 FMF 1	$v_{ij} = 4 \cdot \cdots \cdot v_{i-1}$	Karnataka	_	
21	Felsite		2	5.10
\$4,573,4	1581	Total	2	5.10
22 (7)	Felspar	Andhra Pradesh	34	529.68
40.011		Gujarat	i - Janear (1)	1.00
	\$ \$	нагуапа	3	285.06
一、"不是我们的。" "我是我们的	· ()}-	Jharkhand	` 6	200.25
16 AC		Karnataka	4	131.91
21.08i	<u> </u>	Maharashtra	2	53.65
SAMORE.		Rajasthan	114	3,833.32
		Tamil Nadu	1	39.47
50.4C	· · · · · · · · · · · · · · · · · · ·	West Bengal	1 1 (6)	2.23
40.6C	÷.	Total (min f	166	5,076.57
(14600)	•			(contd.)

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
23	Fire clay	Andhra Pradesh	24	82.31
	1 11 4 4111,	Chhattisgarh	4	16.24
		Gujarat	72	374.70
		Jharkhand	20	730.86
		Karnataka	3	390.51
		Madhya Pradesh	32	291.23
		Maharashtra	2	18.40
		Meghalaya	1	221.44
		Orissa	17	1,899.59
		Rajasthan	25	2,383.60
		Tamil Nadu	11	52.17
		West Bengal	9	9,940.81
		Total	220	16,401.86
24	Fluorite	Gujarat	2	31.69
	1 140110	Maharashtra	1	32.70
		Rajasthan	15	1,743.02
		Total	18	1,807.41
25	Garnet	Andhra Pradesh	13	220.00
	- Carnet	Rajasthan	14	340.99
		Tamil Nadu	41	477.84
		Total	68	1,038.83
26	Gold	Andhra Pradesh	3	408.86
	3016	Karnataka	6	6,274.26
		Total	ğ	6,683.12
27	Graphite	Andhra Pradesh	4	81.51
_ •		Chhattisgarh	3	98.79
		Jharkhand	13	405.44
		Karnataka	4	235.04
		Orissa	101	3,161.99
		Rajasthan	2	383.55
		Tamil Nadu	5	291.62
		Total	132	4,657.94
28	Gypsum	Gujarat	2	6.76
	- v 1	Himachal Pradesh	$\overline{1}$	116.68
		Jammu & Kashmir	3	57.71
		Rajasthan	40	17,465.37
		Tamil Nadu		203.57
		Uttaranchal	4 2	186.15
		Total	52	18,036.24
29	Iolite	Orissa	4	24.38
	* * *** * *	Total	4	24.38
		- m Athe	•	(contd.)

Sl. No.	Mineral (**)	State	No. of Lease	Lease Area (Hect.)
30	Iron ore	Andhra Pradesh	25	1,511.15
		Chhattisgarh	15	10,699.49
		Goa	187	14,002.79
		Haryana	1	80.20
		Jharkhand	25	9,675.37
		Karnataka	72	10,446.58
		Madhya Pradesh	- 8	122.84
		Maharashtra	25	870.12
		Orissa	102	30,732.88
		Rajasthan	14	894.29
•		Total	474	79,041.71
31	Jasper	Rajasthan	5	211.70
		Total .	5	211.70
32	Kyanite	Jharkhand	5	2,560.22
		Karnataka	5	200.70
		Maharashtra	13	295.33
		Total	23	3,056.25
33	Laterite	Andhra Pradesh	78	642.44
		Karnataka	2	95.21
		Kerala	1	0.19
		Madhya Pradesh	31	348.46
		Maharashtra	2	43.03
		Total	114	1,129.33
34	Lead & zinc ore	Andhra Pradesh	1	200.00
		Madhya Pradesh	1	11.00
		Orissa	2	504.86
		Rajasthan	8	7,505.49
	•	Total	12	8,221.35
35	Lime kankar	Andhra Pradesh	19	137.65
	•	Haryana	4	705.35
		Orissa	1	48.14
		Total	24	891.14
36	Limeshell	Andhra Pradesh	、 5	163.38
		Karnataka	14	1,404.01
	•	Kerala	8	1,496.69
		Tamil Nadu	8 2	729.05
		Total	29	3,793.13
		The State of the S		(contd.)

Sl. 1972 3860. No. 19944	Mineral (1) 1986	State seek	No. of arranged l Lease	Lease Area / (Hect.)
37-61121	Limestone	Andhra Pradesh	201	21,484.88
44,066,01		Assam (Section of)	11	981.33
3		Ribor	7	182.17
at 1,000,4d	: 781	Chhattisgarh	110	4,588.83
机铁路		Guiarat	368	12,427.28
9,675.3	2.5	Gujarat Sousibliosii	11	592.51
10,446 5	2 - 7.	Haryana	-	
3.851	8	Himachal Pradesh	52	1,766.65
	Control of the contro	Jammu & Kashmir	12	331.07
30,732,81	101	Jharkhand	. 16	1,673.81
-0.408	· · · · · · · · · · · · · · · · · · ·	Karnataka	88	8,380.27
(T, (14), (f)		Kerala	1	245.69
5 5 5 \$ APRIL 5 5	\$1.6 € \$1.00 €	Madhya Pradesh	264	12,259.05
		Maharashtra	51	5,976.70
	*	Meghalaya	10	1,424.05
211,71	Pro-	Orissa Hasari	34	8,798.36
		Rajasthan	52	20,408.73
2,560,2	â.	Tamil Nadu	115	1,926.77
N. (40S)	8	Uttar Pradesh		
295.3	á		4	2,706.15
20.6差数。 20.6差数。		Uttaranchal (1)	3	105.44
લી કેડ∮કેરી જે∌કો.	€.&-	West Bengal 40/4	1	0.67
A CAS	X	Total Azəbəri sədha	1,411	106,260.41
38 130	Magnesite	Andhra Pradesh	1	6.57
(1,0)	111161100110	Jammu & Kashmir	$\dot{\hat{\mathbf{z}}}$	140.80
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	To the second se	Karnataka (1901)	7	406.47
H ED		Orissa (demorial/4	1	40.46
	± 1. 2° 7		3	
	1. 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Rajasthan (1977)		15.00
		Tamil Nadu	. 11	1,195.64
41()()[į	Uttaranchal disease	930 311 <mark>2</mark> : 2 1003.1	492.20
.'),[]	Ţ	Total # systest/i	27	2,297.14
· M [M] [2]	No.	aprint i		
39 4 202 7	. Manganese ore	Andhra Pradesh	42	1,124.83
-5.122.3	A particular of the second of	Goa well'	62	4,122.28
2.2 (2.1/ 24)		Gujarat	1	2.95
*A_\$\{\bar{\}\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Q1	Karnataka alla 17	: u 26 a A a cot 1	2,719.58
	L.	Madhya Pradesh	27	1,446.91
705		Maharashtra 200	32	1,094.64
. C. S. S.		^ '	34	11,532.41
1.368	Å.		1	80.00
		Rajasthan Total		
(f. f.)		Total are undbut.	225 01/2011/15	22,123.60
40 0000	Mica 🐰	Andhra Pradesh	111	2,139.81
1,496 6	5 - 7	Bihar Abaki idasa T	2	1,196.80
729.6	S	Harvana	1	400.00
年1.重要的,怎	#\$	Jharkhand (1997)	29	964.39
(<u>6</u> ≸157311)}		Maharashtra	1	42.06
•		Orissa	1	2.67
		Rajasthan	98	
				3,062.03
		Total	243	7,807.76
		5.6		(contd)

No. Lease (Hec	6 70 83 99 92 90 10 1 2 5
Chhattisgarh 7 64. Gujarat 4 6.3 Karnataka 24 586.5 Maharashtra 1 47.0 West Bengal 2 2.0 Total 39 738.7 42 Ochre Andhra Pradesh 18 189.8 Chhattisgarh 1 10.1 Gujarat 5 45.3 Jharkhand 1 5.6 Karnataka 5 617.1 Madhya Pradesh 44 572.1 Maharashtra 1 12.3 Orissa 2 197.7 Rajasthan 24 1,726.7 West Bengal 1 5.7 Total 102 3,382.7 43 Opal Jammu & Kashmir 1 200.0 44 Perlite Gujarat 1 144.6 Total 1 200.0 44 Perlite Gujarat 1 144.6 Total 1 2.8 Madhya Pradesh 4 112.8 Rajasthan 7 2,251.8 Rajasthan 1 22.2 West Bengal 1 29.1	70 33 99 92 90 90 11 22 55
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Gujarat	33 99 92 90 90 10 12 5
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Maharashtra 1 47.0 West Bengal 2 2.0 Total 39 738.5 42 Ochre Andhra Pradesh 18 189.8 Chhattisgarh 1 10.1 Gujarat 5 45.5 Jharkhand 1 5.6 Karnataka 5 617.1 Madhya Pradesh 44 572.1 Maharashtra 1 12.3 Orissa 2 197.7 Rajasthan 24 1,726.7 West Bengal 1 5.7 Total 102 3,382.7 43 Opal Jammu & Kashmir 1 200.0 44 Perlite Gujarat 1 144.6 Total 1 144.6 45 Phosphorite Andhra Pradesh 1 2.8 Madhya Pradesh 4 112.8 Rajasthan 7 2,251.8 Uttar Pradesh 1 874.0 Uttar Pradesh 1 29.1 West Bengal 1 29.1	2 0 0 1 2 5
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Madhya Pradesh 36 245.0	
Orissa 10 576.9	
Rajasthan 6 308.1	
Uttar Pradesh 7 793.6	
Total 66 2,116.0	
(contd.	ţ

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
48	Quartz	Andhra Pradesh	407	5,306.28
		Bihar	2	61.30
		Chhattisgarh	6	18.05
		Gujarat	31	209.26
		Haryana	16	851.85
	•	Jharkhand	18	236.36
		Karnataka	47	454.38
		Kerala	2	3.21
		Madhya Pradesh	. 6	44.07
		Maharashtra	8	139.86
		Orissa	59	1,236.21
		Rajasthan	116	3,971.07
		Tamil Nadu	122	237.82
		West Bengal	5	10.70
		Total	845	12,780.42
49	Quartzite	Andhra Pradesh	15	169.86
		Chhattisgarh	16	166.00
		Gujarat	1	19.30
	1	Haryana	4	68.23
		Karnataka	1	4.05
		Madhya Pradesh	1	6.10
		Maharashtra	· 1	12.09
		Orissa	12	169.27
		Rajasthan	1	5.00
		West Bengal	1	4.70
		Total	53	624.60
50	Rock salt	Himachal Pradesh	3	53.86
-		Total	3	53.86
51	Sand (others)	Andhra Pradesh	12	1,722.10
		Jharkhand	13	1,765.35
		Madhya Pradesh	2	7.52
		Maharashtra	12	740.30
		Orissa	6	437.43
		West Bengal	1	44.09
		Total	46	4,716.79
52	Shale	Andhra Pradesh	10	177.40
		Madhya Pradesh	14	173.36
		Maharashtra	1	41.48
		Meghalaya	1	4.90
		Rajasthan	. 1	5.00
	•	Total	27	402.14
E **				(contd.)

Sl. No.	Mineral	State	No. of Lease	Lease Area (Hect.)
53	Silica sand	Andhra Pradesh	71	1,070.85
		Gujarat	69	856.50
		Haryana	52	7,959.30
		Karnataka	30	1,345.01
		Kerala	42	35.43
		Madhya Pradesh	4	6.25
		Maharashtra	28	1,399.44
		Rajasthan	92	5,391.18
		Tamil Nadu	7	17.01
		Uttar Pradesh	22	640.93
		Total	417	18,721.90
54	Silimanite	Andhra Pradesh	. 1	7,000.00
	•	Kerala		327.35
		Orissa	3 1	2,618.49
		Total Lagrange	5	9,945.84
55	Slate	Andhra Pradesh	12	461,26
		Haryana	4	351.72
		Madhya Pradesh	1	55.49
		Total	17	868.47
		e for great the object to the	\$1. For	
56	Steatite	Andhra Pradesh	98	918.43
		Chhattisgarh	4	7.89
		Gujarat	6	22.04
		Jharkhand	3	9.41
		Karnataka	6	134.34
		Madhya Pradesh	16	105.46
		Orissa	3	292.13
	•	Rajasthan	224	17,209.42
		Tamil Nadu	3	36.56
		Uttaranchal	32	450.00
		Total	395	459.29 19,194.97
57	Tin	Chhattisgarh	4	66.19
	•	Orissa	2	57.61
		Total	6	123.80
58	Vermiculite	Andhra Pradesh	6	95.28
		Gujarat	2	25.04
		Karnataka	1	26.30
		Rajasthan	1 .	42.22
		Tamil Nadu	1	23.71
		Total	11	212.55
59	Wollastonite	Rajasthan	4	202.49
		Total	4	202.49

3.4 FREQUENCY DISTRIBUTION OF MINING LEASES

The number of mining leases so far granted for various minerals are classified into eight categories:

Category - I : Includes minerals for which number of mining leases

granted is between 1,001-2000;

Category - II : Includes minerals for which number of mining leases

granted are between 501 and 1,000;

Category - III : Includes minerals for which number of mining leases

granted are between 401 and 500;

Category - IV : Includes minerals for which number of mining leases

granted are between 301 and 400;

Category - V : Includes minerals for which number of mining leases

granted is between 201 and 300;

Category - VI : Includes minerals for which number of mining leases

granted are between 101 and 200;

Category - VII : Includes minerals for which number of mining leases

granted are between 51 and 100 and

Category - VIII: Includes minerals for which number of mining leases

granted are between 1 and 50.

Frequency distribution of mining leases by minerals are furnished in Table-10.

Number of minerals, their mining leases and area of leases covered category-wise are summarised as below:

Category	No. of	No. of mir	ing leases	Lease area	in hects.
	Mineral	No. of leases	Percentage	Lease area	Percentage
I	1	1,411	20.32	1,06,260.41	23.42
\mathbf{n}	1	845	12.17	12,780.42	2.82
\mathbf{III}_{41} 2 3	3	1,314	18.93	1,13364.13	24.99
IV	2	775	11.17	35,507.62	7.83
V	4	954	13.75	70,926.15	15.64
VI	. 6	792	11,41	17,397.07	3.84
VII	5	296	4.26	23,409.34	5.16
VIII	38	554	7.98	73,978.49	16.31
Total	59	6,941	100.00	4,53,623.63	100.00

TABLE-11: FREQUENCY DISTRIBUTION OF MINING LEASES

Category	No. of Lease Granted	Mineral	No. of Mining Lease Granted	Lease Area in Hectares
I	>1000	Limestone	1,411	106,260.41
		Total	1,411	106,260.41
П	Between 501 to 1,000	Quartz	845	12780.42
		Total	845	12780.42
Ш	Between 401 to 500	Dolomite	423	15,600.52
	·	Iron ore	474	79,041.71
		Silica sand	417	18,721.90
		Total	1,314	113,364.13
IV	Between 301 to 400	China clay	380	16,312.65
		Steatite	395	19,194.97
		Total	775	35,507.62
\mathbf{v}	Between 201 to 300	Bauxite	266	24592.93
		Fire clay	220	16401.86
	1.0 A.S.	Manganese ore	2 25	22123.6
		Mica	243	7807.76
		Total	954	70,926.15
VI	Between 101 to 200	Barytes	119	2,494.20
		Chalk	159	656.24
		Felspar	166	5,076.57
		Graphite	132	4,657.94
		Laterite	114	1,129.33
		Ochre	102	3,382.79
		Total	792	17,397.07
VII	Between 51 to 100	Calcite	57	1,593.63
-		Garnet	68	1,038.83
		Gypsum	52	18,036.24
		Pyrophyllite	66	2,116.04
		Quartzite	53	624.60
		Total	296	23,409.34
VIII	Between 50 to 1	Agate	- 2	45.58
		Amethyst	5 1	40.64
		Apatite	1	13.29
		Asbestos	39	1,846.89
		Ball clay	41	2,146.19
				(contd.)

Category	No. of Lease Granted	Mineral	No. of Mining Lease Granted	Lease Area in Hectares
VIII	Between 50 to 1	Limestone	1,411	106,260.41
	(contd.)	Calcareous sand	14	151.75
		Chromite	29	8,548.71
		Clay (others)	43	937.95
		Copper ore	17	10,589.86
	ė.	Corundum	12	145.41
	•	Diamond	2	576.51
	·	Diaspore	17	185.98
		Dunite	1	4.45
4		Epidote	1	5.00
		Felsite	2	5.10
		Fluorite	18	1,807.41
		Gold	9	6,683.12
		Iolite	4	24.38
		Jasper 3	5	211.70
		Kyanite	23	3,056.25
		Lead & zinc ore	12	8,221.35
		Lime kankar	24	891.14
	Set 18	Limeshell	29	3,793.13
	V. 13.	Magnesite	27	2,297.14
e de la companya de l		Moulding sand	39	738.70
in the state of th		Opal	1	200.00
		Perlite	1	144.65
-		Phosphorite	16	3,492.77
		Pyrite	1	647.50
		Rock salt	3	53.86
		Sand (others)	46	4,716.79
		Shale	27	402.14
		Sillimanite	5	9,945.84
		Slate	17	868.47
		Tin	6	123.80
		Vermiculite	11	212.55
		Wollastonite	4	202.49
***************************************		Total	554	73,978.49

3.5 MUSEUM DISTRICTS OF MINERALS

The concentration of both number and wide variety of minerals is confined to as many as 67 districts covering 12 States which have more than 4 varieties of minerals. Cuddapah, Anantapur, Kurnool, Khamam districts of Andhra Pradesh, Jaipur, Ajmer and Udaipur districts of Rajasthan are considered as museum districts of minerals.

3.6 SECTORWISE DISTRIBUTION OF MINING LEASES

Mining leases are in force both in the private and public sectors including Central and State Govt. Undertakings. Out of the total 6,941 mining leases in the country, 502 (7.23%) leases are granted in the Public Sector extending over an area of 1,64,412.56 hectares and the remaining mining leases with an area of 2,89,211.07 hectares are in the private sector. Most of the metallic minerals namely bauxite, chromite, copper ore, lead & zinc ores, gold, iron ore & manganese ore and non-metallic minerals like limestone, dolomite, pyrite, apatite, barytes, fluorite, asbestos, kyanite, magnesite, etc. are being exploited by both public and private sectors.

i) CENTRAL GOVERNMENT PUBLIC SECTOR UNDERTAKINGS

There are 205 number of mining leases granted in 18 States for different minerals, covering an area of 83,865.02 hectares. The States rich in minerals where maximum number of mining leases granted for Central Public Sector Undertakings are Maharashtra (15.20%) followed by Andhra Pradesh (14.70%), Madhya Pradesh (12.74%), Rajasthan (11.27%), Chhattisgarh (9.80%), Jharkhand & Orissa (8.82% each) and Tamil Nadu (5.88%). These eight States together account for over 87% of total leases executed and remaining States account for 13%.

The maximum mining lease area covered by different States are Jharkhand (19.34%) follwed by Chhattisgarh (16.38%), Orissa (15.33%), Rajasthan (13.86%), Karnataka (13.72%), Andhra Pradesh (7.84%) and Madhya Pradesh (6.42%). These seven States account for 93% of total lease area granted and remaining States account for 7%.

ii) STATE GOVERNMENT PUBLIC SECTOR UNDERTAKINGS

There are 297 number of mining leases granted in 19 States for different minerals, covering an area of 80,547.54 hectares. The States rich in minerals where maximum number of mining leases granted are Karnataka (18.52%) followed by Rajasthan (17.50%), Orissa & Tamil Nadu (15.82%) each, Maharashtra (5.38%), Andhra Pradesh (4.71%), Haryana (4.38%) and Gujarat (3.70%). These eight States together account for 86% of total leases granted and remaining States account for remaining 14% of mining leases of State Public Sector.

The maximum mining lease area covered by different States are Orissa (35.18%) followed by Rajasthan (32.18%), Karnataka (10.05%), Uttar Pradesh (5.40%), Gujarat (4.49%), Tamil Nadu (3.21%) and Haryana (2.41%). These seven States account for 93% of total lease area executed and remaining States account for remaining 7%.

Statewise and Sectorwise distribution of mining leases is given in Tables-12 to 14.

TABLE-12: SECTORWISE DISTRIBUTION OF MINING LEASES (as on 31/03/2004)

(Public Sector and Private Sector)

Sl.		Т	'otal	Pul	blic Sector	Priva	ite Sector
No	State	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
1.	Andhra Pradesh	1,528	51,756.76	44	7, 719.58	1,484	44,037.18
2.	Assam	11	981.33	2	338.00	9	643.33
3.	Bihar	12	2,087.77	1	647.50	11	1,440.27
4.	Chhattisgarh	269	30,452.62	27	14,392.80	242	16,059.82
5.	Goa	250	18,165.99			250	18,165.99
6.	Gujarat	1,075	23,632.81	11	3,614.69	1,064	20,018.12
7.	Haryana	140	15,033.55	17	2,645.88	123	12,387.67
8.	Himachal Pradesh	58	2,018.58	5	547.76	53	1,470.82
9.	Jammu & Kashmir	18	729.58	3	240.80	15	488.78
10.	Jharkhand	201	28,530.38	23	16,537.39	178	11,992.99
11.	Karnataka	392	36,583.17	62	19,597.28	_{Jit} ≥ 330	16,985.89
12.5	Kerala	101	2,205.49	5	577.26	96	1,628.23
13.	Madhya Pradesh	684	18,423.60	32	5,498.28	652	12,925.32
14.	Maharashtra	223	15,335.65	47	2,216.29	176	13,119.36
15.	Manipur	2	610.17		* * * *	2	610.17
16.	Meghalaya	14	1,660.16	4	1,000.07	10	660.09
17.	Orissa	439	77,188.32	65	41,184.15	374	36,004.17
18.	Rajasthan	1,059	104,495.64	75	37,540.48	984	66,955.16
19.	Sikkim	4	86.00	3	84.67	1	1.33
20.	Tamil Nadu	328	5,467.31	59	3,605.87	269	1,861.44
21.	Uttar Pradesh	40	5,120.63	9	4,387.93	31	732.70
22.	Uttaranchal	42	1,485.36	5	811.25	37	674.11
23.	West Bengal	51	11,572.76	3	1,224.63	48	10,348.13
	Total	6,941	453,623.63	502	164,412.56	6,439	289,211.07

4.4

TABLE-13: DISTRIBUTION OF MINING LEASES IN PUBLIC SECTOR (as on 31/03/2004)
(Central Govt and State Govt.)

SI. No		Public S	Sector (Total)	Ce	ntral Govt.	Sta	te Govt.
140	State	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
1.	Andhra Pradesh	44	7,719.58	30	6,569.20	14	1,150.38
2.	Assam	2	338.00	1	171.00	1	167.00
3.	Bihar	1	647.50	1	647.50		
4.	Chhattisgarh	27.	14,392.80	20	13,730.70	7	662.10
5.	Gujarat	-11	3,614.69			11	3,614.69
6.	Haryana	17	2,645.88	4	705.35	13	1,940.53
7.	Himachal Pradesh	5	547.76	5	547.76	titus ile	
8.	Jammu & Kashmir	. 3	240.80	1	140.80	- 2	100.00
9.	Jharkhand	23	16,537.39	18	16,211.98	5	325.41
10.	Karnataka	62	19,597.28	7	11,505.40	55	8,091.88
11.	Kerala	5	577.26	2	169.71	3	407.55
12.	Madhya Pradesh	32	5,498.28	26	5,377.88	6	120.40
13.	Maharashtra	47	2,216.29	31	1,503.96	16	712.33
14.	Meghalaya	4	1,000.07			4	1,000.07
15.	Orissa	65	41,184.15	18	12,847.88	47	28,336.27
16.	Rajasthan	. 75	37,540.48	23	11,619.43	52	25,921.05
17.	Sikkim	3	84.67		. · · · ·	3	84.67
18.	Tamil Nadu	59	3,605.87	12	1,020.14	47	2,585.73
19.	Uttar Pradesh	9	4,387.93	1	33.58	8	4,354.35
20.	Uttaranchal	.5	811.25	4	714.25	1	97.00
21.	West Bengal	3	1,224.63	1	348.50	2	876.13
	Total	502	164,412.56	205	83,865.02	297	80,547.54

TABLE-14: SECTORWISE SUMMARY OF LEASE DISTRIBUTION
(as on 31.03.2004)
(By State/District/Mineral)

State	District	Mineral	Cen	tral Govt.	State	e Govt.	Tot	al
			No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)		Lease area (Hect.)
Andhra Pradesh	Adilabad	Limestone	1	839.41	1	809.38	2	1,648.79
	Anantapur	Gold	1	168.42	-	-	1	168.42
	Chittoor	Gold	2	240.44	-	-	2	240.44
	Cuddapah	Barytes	-	- ·	4	161.73	4	161.73
	Godavari (West)	China clay	-	-	2	24.39	2	24.39
	Guntur	Lead & zinc	1	200.00	-	-	1	200.00
	Karimnagar	Sand (others)) , 5	1,602.00	-	-	5	1,602.00
	Khammam	Dolomite	1	384.61	-	-	1	384.61
		Sand (others)) 3	15.88	-	-	3	15.88
	Krishna	Limestone	1	1,295.00	-	-	1	1,295.00
	Mahbubnagar	Felspar	1	17.82	-	-	1	17.82
	Prakasam	Iron ore	1	266.33	-	-	1	266.33
	Rangareddi	Laterite	1	41.41	-	-	1	41.41
		Limestone	2	868.74	_	-	2	868.74
•		Shale	1	133.07	-	-	1	133.07
	Srikakulam	Silica sand	1	7.50	-	-	1	7.50
•	Visakhapatnam	Apatite	•		1	13.29	1	13.29
	-	Mica		· .	2	48.68	2	48.68
		Phosphorite	-		1	2.83	1	2.83
	•	Quartz	1	3,24	_	-	1	3.24
	Vizianagaram	Manganese of	ore 5	389.50	3	90.08	8	479.58
	_	Moulding sa	and 1	31.16	-	-	1	31.16
		Sand (others)) 1	64.67		-	1	64.67
		Total	30	6,569.20	14	1,150.38	44	7,719.58
Assam	Karbi Anglong	Limestone	1	171.00	-		1	171.00
	North Cachar Hills	Limestone			. 1	167.00	1	167.00
		Total	1	171.00	1	167	2	
Bihar	Rohtas	Pyrite	1	647.50	-	_	.]	647.50
		Total	1		-	-	1	
Chhattisgarh	Bilaspur	Dolomite	. 2	2 1562.12	_	-	4	2 1,562.12
-	Dantewara	Iron ore	(6886.9	-	. <u>-</u>	(6,886.90
		Tin	,		3	58.45	(58.45
	Durg	Dolomite		-	1	22.15		22.15
•	_	Iron ore	4	2,732.62	-		4	2,732.62
		Limestone		3 198.03	-			198.03
		Moulding sa		24.98	-	. <u>-</u>		24.98
	Janjgir-Champa	Dolomite		1 122.70	-			122.70
	Kanker	Iron ore		938.06				938.06
	Kawardha	Bauxite		626.12	-			626.12
	Surguja	Bauxite		1 639.17	3	581.50		4 1,220.67
	- •	Total	26		7			•
				•				(contd.)

State	District	Mineral	Cen	tral Govt.	State	Govt.	Tot	al
and the second s			No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
Gujarat	Banaskantha	Copper or	e -		1	1,402.00	1	1,402.00
	Jamnagar	Bauxite	-	-	2	189.79	2	189.79
	Kachchh	Bauxite	-	-	6	486.95	6	486.95
\ .	Surat	Limestone			i	1504.75	1	1,504.75
	Vadodara	Fluorite	_	•	1	31.20	1	31.20
:		Total	-	-	11	3,614.69	11	3,614.69
Haryana	Bhiwani	Lime kanka	ar 5	705.35			_	
•	Faridabad	China clay	_	105.55	- 1	70.00	5	705.35
	- 41.44.544	Silica sand		-	1	70.00	1	70.00
	Gurgaon	Silica sand		-	4	1283.09	4	1,283.09
	Mahendragarh			•	3	239.76	3	239.76
	Manendragam	Felspar	-	-	1	23.61	1	23.61
		Iron ore	-	-	1	86.20	1	86.20
	n '	Limestone	-	-	1	9.85	1	9.85
	Rewari	Slate	-	-	2	228.02	2	228.02
		Total	4	705.35	13	1940.53	18	2,645.88
Himachal Pradesh	Mandi	Rock sait	3	53.86	_	_	3	53.86
	Simur	Limestone	1	255.70	_	_	1	
•	Solan	Limestone	1	238.2	_			255.70
	•	Total	5	547.76	-		1 5	238.20 547.76
ammu & Kashmir	Pulwama	Limestone						
	Udhampur			* 40.00	1	100.00	1	100.00
•	Omampu	Magnesite		140.80	1	N.A.	2	140.80
		Total	1	140.80	2	100	3	240.80
harkhand	Garwah	Limestone	3	1,178.92			3	1,178.92
	Palamau	Graphite	-	-	1	15.18	1	15.18
	Ranchi	Limestone	_	_	2	239.63	2	239.63
	Singhbhum (East)	Copper ore	3	6,417.69	_	4,00,00	3	
	e suite y	Kyanite	-	-,	1	2.43	1	6,417.69 2.43
	Singhbhum (West)	Iron ore	11	6867.12	•	2.73	_	
	,	Kyanite	1	1,748.25	1	£0 17	11	6,867,12
		Total	18	16,211.98	5	68.17 3 25.41	2 23	1,816.42 16,537.39
Karnataka	Bagalkot	Dolomite			_			
	Dagarkot		-	-	2	253.29	2	253.29
	Dancolone	Limestone	-	=	10	2,550.36	10	2,550.36
	Bangalore	Felsper	-	.	3	130,30	3	130.30
	Belgaum	Limestone	•	-	2	351.12	2	351.12
	Bellary	Iron ore	2	1,255.50	8	782,30	10	2,037.80
	Chickmagalur	Iron ore	1	4,605.00	-	-	1	4,605.00
	Chitradurga	Copper ore	-	-	2	416.83	2	416.83
		Limestone	-	₹ ,	1	111.30	1	111.30
	Gulbarga	Gold	•	-	1	55.75	1	55.75
		Limestone	3	429,51	-		3	429.51
	Hassan	China clay	-	-	2	311.60	2	311.60
		Chromite	•	-	6	987.47	6	987.47
•		Copper ore	-		Ĭ	70.82	1	
		Quartz	_		-	18.20	·=·	70.82
		Steatite	-	.	2 1		2	18.20
		Vermiculite	_	5	-	80.94	1	80.94
		· wassement	-	-	1	26.30	1	26.30

State	District N	lineral C	en	tral Govt.	State	Govt.	Tota	al
tally sterning	ing and a stage of the stage of	No. e		Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
Karnataka	Kolar	Gold	1	5,215.39	-	-	1	5,215.39
(contd.)	Mandya	Quartz	-	_	1	15.17	1	15.17
(contain)	Mysore	Magnesite	_	-	3	338.12	3	338.12
	Raichur	Gold	_	-	3	965.08	3	965.08
	Shimoga	China clay	_	-	3	33.99	3	33.99
	211111111111111111111111111111111111111	Manganese ore		•	1	526.10	1	526.10
	Tumkur	Gold	_	_	1	38,04	1	38.04
	Udupi	Bauxite	_	. <u>-</u>	1	28,80	1	28.80
	C map.	Total	7	11,505.40	55	8,091.88	62	19,597.28
Kerala	Kollam	China clay		. <u>-</u>	1	4.22	1	
		Sillimanite	2	169.71	1	157.64	3	
	Palakkad	Limestone	-	. <u>-</u>	1	245.69	1	
		Total	2	169.71	3	407.55	5	577.26
Madhya Pradesh	Balaghat	Copper ore	2	2 479.90	**	_	2	
	C	Manganese or	e 11	1,172.27	-		11	
		Sand (others)	1		-	-	1	
	Chhattarpur	Phosphorite		-	1	48.76	1	
	Jabalpur	Limestone	1	89.32	-	-	1	
	Jhabua	Phosphorite		-	2	11.32	2	
	Katni	Fireclay	2	2 38.27	-	-		2 : 38.27
		Limestone	3	3 1,109.09	•	. -	2	•
	Mandla	Dolomite		· -	1	2.52]	2.52
	Nimach	Limestone	2	2 500.45	-		2	2 500.45
	Panna	Diamond		2 576.51			2	2 576.51
	Sagar	Phosphorite		_ <i>_</i>	1	. 52.80	:	52.80
	Satna	Limestone	:	2 1,406.57	() : 0		2 1,406.57
	Tikamgarh	Pyrophyllite			1	5.00		5.00
		Total	2	6 5,377.88	6	120.40	32	5,498.28
Maharashtra	Bhandara	Kyanite			g	251.48		9 251.48
		Manganese or	e	6 375.97				6 375.97
		Sand (others)		1 40.11		_ ,		1 40.11
	Chandrapur	Fluorite				1 32.70		1 32.70
	-	Sand (others)		5 461.08				5 461.08
	Gondia	Iron ore				1 43.82		1 43.82
	Nagpur	Dolomite		-		1 42.52		1 42.52
	•	Manganese of	re 1	4 390.92		-		4 390.92
		Sand (others)		4 191.88		-		4 191.88
	Sindhudurg	Felspar		-		1 29.2		1 29.27
		Silica sand				2 105.0		2 105.07
	Yeotmal	Limestone			*	1 207.4	7	1 207.47
		Sand (others) Total		1 44.00 1 1,503.96	1	- 6 712.3	- 3 4	1 44.00 7 2,216.2 9
			•		•			
Meghalaya	Garo Hills West	Fire clay				1 221.4		1 221.4
Çe.		Limestone		-		1 384.0		1 384.00
S	Khasi Hills East	Limestone				2 394.6		2 394.65 4 1,000.0
•		Total				4 1,000.0	-	4 1,000.0

(contd.)

State	District	Mineral	Cer	tral Govt.	State	e Govt.	Tot	al
			No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)		Lease area (Hect.)
Orissa	Bargarh	Limestone	-		2	806.53	2	806.53
	Dhenkanal	Chromite	-	_	2	847.48	2	
	Ganjam	Sillimanite	1	2,618.49	-	•	1	2,618.49
	Jajpur	Chromite	-		5	2,865.85	5	2,865.85
		Iron ore	-	_	1	1,812.99	1	1,812.99
	Kalahandi	Amethyst	-		. 1	27.65	1	27.65
		Corundum	-	_	1	57.46	1	57.46
	Keonjhar	Chromite	-	-	3	1,933.64	3	1,933.64
		Iron ore	4	4,162.91	12	7,384.06	16	11,546.97
		Manganese ore	-	-	7	4,511.54	7	4,511.54
	Koraput	Bauxite	2	4,647.28	_	_	2	4,647.28
	• • •	Graphite	٠ -		1	501.67	1	501.67
		Limestone		•	2	1,586.22	2	1,586.22
	•	Manganese ore	٠.	-	1	501.67	1	501.67
	Malkangiri	Limestone		_	1	1,694.13	1	1,694.13
	Nawapara	Corundum	-	_	î	33.95	1	33.95
	-	Limestone	_	-	3	343.00	3	343.00
	Rayagada	Bauxite	_	-	1	1,388.74	1	1,388.74
	Sundergarh	Dolomite	2	384.03		1,000	2	384.03
	•	Iron ore	6	487.64	3	2,039.69	9	2,527.33
		Lead & zinc ore		499.60	_		1	499.60
		Quartz	2	47.93	•	_	2,	
	•	Total	18	12,847.88	47	28,336.27	65	41,184.15
Rajasthan	Ajmer	Lead & zinc ore	s 1	480.45		_:^	1	480.45
•	Alwar	Copper ore	1	914.07	-			914.07
	Banswara	Graphite		-	2	383.55	2	383.55
	Barmer	Gypsum	2	1,100.66	2	389.85	4	1,490.51
	Bhilwara	Lead & zinc ore		1,200.00	_	505.05	1	1,200.00
	Bikaner	Gypsum	3	367.02	9	3,454.84	12	3,821.86
	Dungarpur	Fluorite	_	507.02	4	292.30	4	292.30
	Ganganagar	Gypsum	4	346.50		1,129.39	_	
	Hanumangarh	Gypsum	_	5-10.50	4 5	7084.65	8 5	1,475.89 7,084.65
	Jaisalmer	Gypsum	1	501.68	2	366.21	3	7,064.03 867.89
		Limestone		501.00	2	1,998.00	2	1,998.00
	Jalore	Fluorite	_	_	4	1,075.00	4	
		Gypsum		_	1	1,075.00	1	1,075.00 178.50
	Jhunjhunu	Copper ore	4	803.88	*	176.50	_	
	Nagaur	Gypsum	_	005.00	5	2,401.07	4	803.88
	- · · · G · · · · ·	Limestone	_	_	3	4,915.44	5	2,401.07
	Rajsamand	Lead & zinc ore	s 4	2,142.04	3	4,913.44		4,915.44
	Sirohi	Lead & zinc ores		2,142.04	· •	67.00	4	2,142.04
	Udaipur	Barytes	, -	•	1	63.00	1	63.00
	- Campui	Calcite	•	-	1	31.00	1	31.00
		Lead & zinc ore:	- 3 1	3,620.00	1	49.50	1	49.50
		Phosphorite		-	-	1 100 mc	1	3,620.00
		Total	1 23	143.13	6	2,108.75	7	2,251.88
		ıvaı	23	11,619.43	52	25,921.05	75	37,540.48
	•							(contd.)

Total	State	District	Mineral	Cei	itral Govt.	State	e Govt.	Tot	al
Total			e e egite e La elektronia						
Tamil Nadu	Sikkim	Sikkim East	Copper ore			3	84.67	3	84.67
Chengai-Anna Quartz			Total	٠.		3	84.67	3	84.67
Chengai-Anna Quartz	Tamil Nadu	Ariyalur	Limestone			4	374.06	4	374.06
Cuddalore Fireclay -		Chengai-Anna	Quartz	,		1			
Dindigul Quartz -			Fireclay		· -	2		2	
Erode	•	Dindigul	Quartz		. <u>.</u>		1.47		
Kanchipuram Limeshell -		Erode	Quartz						
Silica sand		Kanchipuram	Limeshell			1			
Kanyakumari Gamet 5 258.31 - 5 258.31 7 19.30			Silica sand			1			
Karur Quartz -	•	Kanyakumari	Garnet	4	258.31	-	-		
Namakkal Quartz -		Karur	Quartz			7	19.30		
Perambalur Limestone - 1 110.68 1 110.68 1 110.68 1 110.68 1 110.68 1 110.68 1 110.68 1 110.68 1 110.68 2 3.59 2 3.59		Namakkal	Quartz						
Periyar Quartz -	,	Perambalur	Limestone						
Ramnathapuram Limeshell		Periyar	Quartz						
Salem Magnesite 7 761.83 3 431.24 10 1,193.00		Ramnathapuram	Limeshell						
Sivaganga Graphite - - 2 2,097		Salem	Magnesite	7	761.83				
Sivaganga Graphite -			_						•
Tiruchirapalli		Sivaganga	-		· <u>-</u>				
Dolomite			_						
Limestone - 1 9.95 1 9.95 1 9.95 1 9.95 1 9.95 1 9.95 1 9.95 1 4.36 1								-	
Tirunelvelli Garnet 1 4,36 1 4.3 Limestone 2 27,80 2 27.8 Vellore Vermiculite - 1 23,71 1 23,7 Virudhunagar Limestone - 2 446,58 2 446,5 Total 12 1,020,14 47 2,585,73 59 3,605,8 Uttar Pradesh Allahabad Silica sand 1 33,58 1 33,5 Lalitpur Phosphorite 1 874,00 1 874,0 Pyrophyllite 3 774,20 3 774,2 Sonbhadra Limestone 4 2,706,15 4 2,706,1 Total 1 33,58 8 4,354,35 9 4,387,9 Uttaranchal Bageshwar Magnesite 1 53,20 1 53,2 Dehradun Limestone 1 97,00 1 97,0 Phosphorite 2 222,05 2 222,0 Pithoragarh Magnesite 1 439,00 1 439,0 Total 4 714,25 1 97,00 5 811,2 West Bengal Burdwan Fireclay 1 348,50 1 348,5 Jalpaiguri Dolomite 1 847,00 1 847,0 Phosphorite 1 847,00 1 847,0 Purulia Phosphorite 1 29,13 1 29,1						-		-	
Vellore Vermiculite - - 2 27.80 2 2 2 2 2 2 2 2 2		Tirunelvelli			_	-			
Vellore Vermiculite -	*							_	
Virudhunagar Limestone - - 2 2 2 2 2 2 2 2		Vellore							
Uttar Pradesh Allahabad Lalitpur Silica sand Phosphorite 1 33.58 - 1 874.00 1 874.00 Pyrophyllite 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 1 874.00 2 774.20 3 774.20					_			-	
Lalitpur Phosphorite 1 874.00 1 874.00 Pyrophyllite 3 774.20 3 774.20 Sonbhadra Limestone 4 2,706.15 4 2,706.15 Total 1 33.58 8 4,354.35 9 4,387.9 Uttaranchal Bageshwar Magnesite 1 53.20 1 53.2 Dehradun Limestone 1 97.00 1 97.0 Phosphorite 2 222.05 2 222.0 Pithoragarh Magnesite 1 439.00 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Fireclay 1 348.50 1 348.5 Jalpaiguri Dolomite 1 847.00 1 847.0 Purulia Phosphorite 1 29.13 1 29.1				12	1,020.14				
Lalitpur Phosphorite 1 874.00 1 874.00 Pyrophyllite 3 774.20 3 774.20 Sonbhadra Limestone 4 2,706.15 4 2,706.15 Total 1 33.58 8 4,354.35 9 4,387.9 Uttaranchal Bageshwar Magnesite 1 53.20 1 53.2 Dehradun Limestone 1 97.00 1 97.0 Phosphorite 2 222.05 2 222.0 Pithoragarh Magnesite 1 439.00 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Fireclay 1 348.50 1 348.5 Jalpaiguri Dolomite 1 847.00 1 847.0 Purulia Phosphorite 1 29.13 1 29.1	Littan Duadash	Allababad	Otto I		22.50				
Pyrophyllite	Ottar Frauesn				33.58	•		-	
Sonbhadra Limestone - 4 2,706.15 4 2,706.1 Total 1 33.58 8 4,354.35 9 4,387.9 Uttaranchal Bageshwar Magnesite 1 53.20 - 1 53.2 Dehradun Limestone - 1 97.00 1 97.0 Phosphorite 2 222.05 - 2 222.0 Pithoragarh Magnesite 1 439.00 - 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Fireclay 1 348.50 - 1 348.5 Jalpaiguri Dolomite - 1 847.00 1 847.0 Purulia Phosphorite - 1 29.13 1 29.1		Lampur		•	-	ļ			
Uttaranchal Bageshwar Dehradun Magnesite 1 53.20 - - 1 53.2 Dehradun Limestone - - 1 97.00 1 97.0 Phosphorite 2 222.05 - - 2 222.0 Pithoragarh Magnesite 1 439.00 - - 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Jalpaiguri Fireclay 1 348.50 - - 1 348.5 Jalpaiguri Dolomite - - 1 847.00 1 847.0 Purulia Phosphorite - - 1 29.13 1 29.1		0 11 1	-: * * *	•	-				
Uttaranchal Bageshwar Dehradun Magnesite 1 53.20 - - 1 53.2 pr. 0 Dehradun Limestone - - 1 97.00 1 97.0 pr. 0 Phosphorite 2 222.05 - - 2 222.0 pr. 0 Pithoragarh Magnesite 1 439.00 - - 1 439.0 pr. 0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Fireclay 1 348.50 - - 1 348.5 pr. 1 Jalpaiguri Dolomite - - 1 847.00 1 847.0 pr. 1 Purulia Phosphorite - - 1 29.13 1 29.1		Sonbhadra							-
Dehradun Limestone - 1 97.00 1			Total	1	33.58	8	4,354.35	9	4,387.93
Dehradun Limestone - 1 97.00	Uttaranchal		Magnesite	. 1	53.20	-	-	1	53.20
Pithoragarh Phosphorite 2 222.05 - - 2 222.0 Magnesite 1 439.00 - - 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Jalpaiguri Dolomite Fireclay 1 348.50 - - 1 847.00 1 847.0 Purulia Phosphorite - - 1 29.13 1 29.1		Dehradun	Limestone			1	97.00		
Pithoragarh Magnesite 1 439.00 - - 1 439.0 Total 4 714.25 1 97.00 5 811.2 West Bengal Burdwan Fireclay 1 348.50 - - 1 348.5 Jalpaiguri Dolomite - - 1 847.00 1 847.0 Purulia Phosphorite - - 1 29.13 1 29.1		ű.	Phosphorite	. 2	222.05	_	-		
West Bengal Burdwan Jalpaiguri Purulia Fireclay Phosphorite 1 348.50 - 1 847.00 1 847.00 1 29.13 1 29.1		Pithoragarh	Magnesite	1	439.00		•		
Jalpaiguri Dolomite - - 1 847.00 1 847.0 Purulia Phosphorite - - 1 29.13 1 29.1	•		Total	4	714.25	1	97.00		
Jalpaiguri Dolomite - - 1 847.00 1 847.0 Purulia Phosphorite - - 1 29.13 1 29.1	West Bengal	Burdwan	Fireclav	1	348 50			1	346 50
Purulia Phosphorite 1 29.13 1 29.1			•	•	. 570.50		847.00		
27,12				•	. -				
1 340.30 2 8/0.13 3 1,224.6		• 44 4114	-	1	240 #6				
	***		I VIAU	1	348.50	2	876.13	3	1,224.63

3.7 YEARWISE STATUS OF EXPIRY OF MINING LEASES

Every mining lease is granted for a stipulated period and once this period expires the lessees shall have to apply for renewal to the respective State Governments as per the provisions under MCR, 1960. The period of leases varies from minimum 20 years to a maximum of 30 years. Further, renewal (s) are possible for period or periods not exceeding 20 years in each case. Out of the total number of leases in the Directory (6,941) more than 1,110 (10%) leases will expire between 2005 to 2009. The yearwise and Statewise break up of the position of expiry of lease are given in Tables -15 and 16.

TABLE - 15: YEARWISE STATUS OF EXPIRY OF MINING LEASES

Year	No. of leases	Percentage	Lease Area (Hect.)	Percentage
2005	368	2.70	24279.95	2.58
2006	337	2.47	21109.09	2.25
2007	213	1.56	14519.99	1.55
2008	115	0,84	7223,93	0.77
2009	77	0.56	5722.14	0.66
2010	110	0.81	12314.98	1.31
2011	111	0.81	8084.71	0.86

TABLE -16 :STATEWISE AND YEARWISE STATUS OF EXPIRY OF MINING LEASES (BY STATE)

		-										1		÷	٠. :
7	State		2005		2006		2007		2008		2009		2010		2011
No		No.	83	Š	2	No.	eя	No.	Lease area	No.	Lease area	No.	Lease area	No.	Lease area
		_			(Hect.)		(Hect.)		(Hect.)		(Hect.)		(Hect.)		(Hect.)
-	Andhra Pradesh	52	2,055.35	30	1,805.64	15	1,831.30	7	244.73	Ξ	164.33	15		12	125.61
7	2 Assam	1	1	9	150.83	1	35			•	•		40.00		
m	3 Bihar	2	61.30	2	232.43	•			ŧ		1	1		<u> </u>	
4	4 Chhattisgarh	11	981.11		641.28	10	3,343.42	ľ	ı	2	22.43		647	•	
Ś	5 Goa	1	40.92	•	•	9	406.82	-	9.49	•	t		•	,	WHAT THE PARTY OF
9	6 Gujarat	55	724.65	74	741.17	48	716.72	25	379.96	10	115.74	8	77.67	6	CL 09
7	7 Haryana	3	559.80	2	665.01	2	759.22	-	•	1	•		50.50		7:00
∞	8 Himachal Pradesh	6	84.29	3	8.8	4	44.42	•		-	0.37		27.83	C	241 16
9,	9 Jammu & Kashmir		1	1	•	1	1	•			140.80	2	43.56	1	2
≘	10 Jharkhand	24	2,843.69	27	2,121.15	3	144.90	7	222.87	8	2.297.80	16	430.45	~	2 542 74
=	11 Karnataka	28	1,754.27	12	472.25	Ξ	704.26	5	883.99	4	80.83	000	200.43	, [-	315 13
121	12 Kerala	9	241.03	5	6.72	7	11.42	4	5.93	2	8.07	-	0.27		3 37
13]	13 Madhya Pradesh	7.1	2,033.78	48	538.04	27	254.02	4	20.16	m	94.57	14	00 86	1 6	123.30
14	14 Maharashtra	7	158.97	=	444.65	13	273.59	60	112.27	∞	402.48	9	111.66	3 5	197 17
151	15 Meghalaya	1		_	86.00	1	221.44	П	11.08	r	•	-	384.00	1	
91	16 Orissa	42	7,996.50	44	5,609.03	27	1,397.73	21	1,324.49	14	1787.31	19	3.570.02	20	862.95
17]	17 Rajasthan	41	3,643.62	41	7,227.29	22	3,550.85	24	3,475.79	10	566.31	14	68.869.9	27	361124
 81	18 Tamil Nadu	7	453.78	6	197.72	12	681.12	13	533.17	m	41.1	-	7.06	-	1 82
161	19 Uttaranchal	3	165.4	7	•	2	89.43	1	•	i	•		ī	+-,	70.1
201	20 Uttar Pradesh	2	450.15	4	78.25	-	1	-		-	1	ľ	-		
21,	21 West Bengal	4	31.34	7	82.83	2	54.33		1	1	-	-	16.19	-	
	Total	368	24,279.95	337	21,109.09	213	14,519.99	115	7,223.93	77	5,722.14	110	12,314.98	=	8.084.71

4. PROSPECTING LICENCES

Under the Mines & Minerals (Development & Regulation) Act, 1957, "Prospecting Licence" (PL) means a licence granted for the purpose of undertaking "prospecting operations" with a view to exploring/locating or proving mineral deposits on surface/subsurface area. The State Governments and the Union Territories are empowered to grant/renew/revoke prospecting licences (PL) under the provisions of Mineral Concession Rules, 1960.

The area restrictions for prospecting licences have been substantially liberalized by making such restrictions applicable statewise instead of the country as a whole.

4.1 STATEWISE DISTRIBUTION OF PROSPECTING LICENCES

以此 自己 经分分 电双对磁性 锰管电管的复数法 克里伯斯曼德美

As per information received from the State Governments/Union Territories, 133 prospecting licences were executed covering 13,250 hectares during 2003-04 as compared with 255 prospecting licences covering 35,385 hectares during 2002-03. The Statewise distribution of prospecting licences executed during 2002-03 and 2003-04 is given in Table-17. These prospecting licences, however, exclude reconnaissance permits executed for aerial prospecting.

TABLE - 17: STATEWISE DISTRIBUTION OF PROSPECTING LICENCES EXECUTED, 2002-03 AND 2003-04

States	2	002-03		2003-	04
	No.	Area	No.		Area
		(Hects.)			(Hects.)
Andhra Pradesh	12	1,285	10	. 440	1,628
Chhattisgarh	14	2 37	6	7. (574
Haryana	_	_	11		806
Himachal Pradesh	•	_	1		21
Kerala	1		ī		65
Madhya Pradesh	1	2	11		195
Maharashtra	8	537	26		842
Meghalaya	_	-	1	. :	473
Orissa	13	427	-2	17.5	78
Rajasthan	201	32,864	60		7,769
Uttaranchal	3	5	4	4.5	799
Uttar Pradesh	1	24	·	+ + 4	
West Bengal	. 1	4	<u>-</u>		-
Total	255	35385	133		13250

Area figures rounded off.

The mineral rich States where prospecting licences so far executed during 2003-04 were Rajasthan (60), Maharashtra (26), Haryana and Madhya Pradesh (11 each), Andhra Pradesh (10), Chhattisgarh (6), Uttaranchal (4), Orissa (2), and Himachal Pradesh, Kerala and Meghalaya (one each). Rajasthan alone accounted for 45% licences while remaining ten States shared 55 per cent. Areawise, Rajasthan covered 59% while the remaining States accounted for 41 percent.

4.2 MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES

Mineralwise in 2003-04, limestone accounted for maximum twelve prospecting licences executed followed by calcite (7), quartz (6), soapstone/steatite (5), dolomite (4), ochre (3), diamond, iron ore and manganese ore (2 each), amethyst quartz, barytes, bauxite, corundum, felspar, fluorite, gold & associated minerals, jasper, laterite, limeshell, moulding sand, pyrophyllite, semi-precious stones, silica sand, tin and white clay (one each). Other associated minerals accounted for 74 licences (56%) executed during 2003-04. The mineralwise distribution of prospecting licences executed during 2002-03 and 2003-04 is given in Table-18. The prospecting licences are executed for individual mineral or group of associated minerals, depending upon their nature of occurrences, such as iron and manganese ores; mica, felspar and quartz; copper, lead and zinc ores; dolomite and limestone and vice versa.

TABLE - 18: MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES EXECUTED, 2002-03 AND 2003-04

$(x_1, \dots, x_n, M_{n-1}, x_n)$	Mineral	20	002-03	20	003-04
i ki in fulfodos (1913) Prima in filozofos Prima in filozofos	The wind party party of the Alberta Party and the Committee of the Committ	No.	Area (Hects.)	No.	Area (Hects.)
	Amethyst quartz	~ ·	· · · · · · · · · · · · · · · · · · ·	1	1
	Barytes	3	53	ī	4
	Rauvite	. 1	++	î	151
	Calcite	11	1,526	Ź	828
	China clay	2	428	<u>.</u>	-
	Corundum	-		1	6
	Diamond	_		$\tilde{2}$	225
	Dolomite	4	13	$\frac{\overline{4}}{4}$	32
1 -	Felspar	_	-	i	32 2
1.0	Fireclay	1	4	-	
	Fluorité	_	· •	1	265
	Garnet	1	113	.	203
	Gold & associated minerals	1	4,310	1	793
	Graphite	3	62		755
	Gypsum	2	725	-	-
	Iron ore	3 2 2 3	86	2	526
	Jasper	3	685	ĩ	20
	Laterite	_	•	ī	5
	Limestone	9	1,087	12	1,938
	Limeshell	-	•	1	65
	Manganese ore	2	197	$\bar{2}$	22
	Moulding sand	-	-	ĩ	11
	Ochre	3	212	$\tilde{\mathfrak{z}}$	i 3
	Pyrophyllite	1	59	ĺ	138
	Pyroxenite	3	74		
	Quartz	4	189	6	33
	Quartzite	3	9	-	-
	Semi-precious stones	-	= =	1	4
	Shale	1	2	-	· -
	Silica sand	2	$7\overline{2}$	1	50
	Soapstone/steatite	$1\overline{0}$	1,123	<u> 5</u>	329
	Tin ore	-	-	ī	24
	White clay	-	•	i	~7
• • • • • • • • • • • • • • • • • • •	Associated minerals	183	24,356	74	7,758
	Total	255	35,385	133	13,250

Area figures rounded off.

4.3 AREAWISE DISTRIBUTION OF PROSPECTING LICENCES

Areawise analysis indicated that limestone occupied the first place, covering an area of 1,938 ha. followed by calcite (828 ha.), gold & associated minerals (793 ha.), iron ore (526 ha.), soapstone/steatite (329 ha.), fluorite (265 ha.), diamond (225 ha.), bauxite (151 ha.) and pyrophyllite (138 ha.). These minerals together accounted for 39% area while other minerals like amethyst quartz, barytes, corundum, dolomite, felspar, jasper, manganese ore, limeshell, ochre, quartz, semi-precious stones, silica sand, tin ore, white clay, moulding sand and laterite covered less than 100 hectares. Other associated minerals occupied 7,758 ha. or 59% area under prospecting licences.

4.4 SECTORWISE DISTRIBUTION OF PROSPECTING LICENCES

Out of the 133 prospecting licences executed in 2003-04, public sector accounted for 5 licences or 3.75% compared with 3 licences or 1.18% of the total in previous year. The remaining 128 prospecting licences or 96.25 % were executed in private sector compared with 252 licences or 98.82% in the previous year. The sectorwise distribution of prospecting licences during 2002-03 to 2003-04 is given in Table-19.

TABLE-19: DISTRIBUTION OF PROSPECTING LICENCES IN PUBLIC AND PRIVATE SECTORS

	Sector		2002-03		2003-04
		No.	Area (Hects.)	No.	Area (Hects.)
2 10	Total	255	35,385	133	13,250
	Public	3	5,035		19 14 18 417 19 14 14 19 14 15 15 15 15 15 15 15 15 15 15 15 15 15
	Private	252	30,350	128	12,833
	Public%	1.18	14.23	3.75	3.14
	Private%	98.82	85.77	96.25	96.86

5. RECONNAISSANCE PERMITS PROPERTY OF THE PERMITS AND ADDRESS OF THE PERMIT

The provision of Reconnaissance Permits (RP) was introduced with effect from 20.12.1999 under the Mines & Minerals (Development & Regulation) Act, 1957 and from 18.1.2000 under the Mineral Concession Rules, 1960 and Mineral Conservation and Development Rules, 1988 made under the Act. RP is a permit granted for the purpose of undertaking "reconnaissance operations" which means any operation undertaken for preliminary prospecting of a mineral through regional, aerial, geophysical or geochemical surveys and geological mapping, but it does not include pitting, trenching, drilling (except drilling boreholes on a grid specified from time to time by the Central Government) or subsurface excavation.

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Approvals have been granted by the Central Government to 23 reconnaissance permits covering 31,456 sq. km. in 2003-04 distributed in Andhra Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Orissa and West Bengal for precious and high-value minerals like diamond, precious minerals, gold, silver, platinum group of metals & associated minerals; non-ferrous minerals like copper, lead & zinc ores; strategic minerals/ores like nickel, tungsten, arsenic, antimony, bismuth, cobalt, molybdenum & associated minerals and non-metallic minerals like ilmenite and garnet etc..

का पुरुष्या प्राप्त के पर कर के प्रोप्त कर के बहु है है । इस साम का की की है है

During 2003-04, approvals for grant of reconnaissance permits have been accorded to eight companies; viz., ACC-RIO TINTO Exploration Ltd., Anglo American Exploration (India) Pvt. Ltd., BHP Khanij Anveshan Pvt. Ltd., BHP Minerals (India) Pvt. Ltd., De Beers India Prospecting Pvt. Ltd., Geomysore Services (India) Pvt. Ltd., Metmin Finance & Holdings Pvt. Ltd., and WSIL Mineral Sand India Pvt. Ltd.,

5.1 MINERALWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2003-04, four companies were granted 18 reconnaissance permits for diamond and associated minerals covering an area of 25,864 sq. km (82%) compared with 11 reconnaissance permits covering an area of 17,427 sq. km (35%) in the previous year. One reconnaissance permit has been granted for ilmenite, garnet etc. covering an area of 1,428 sq. kms (5%) against none in the previous year, 4 reconnaissance permits have been granted for copper, lead, zinc, gold, nickel and associated minerals covering an area of 4164 sq. km. (13%), and 7 reconnaissance permits with 11,634 sq. km. (23%) in the previous year. The mineralwise reconnaissance permits granted/executed during 2002-03 and 2003-04 are given in Table-20.

TABLE-20: MINERALWISE DISTRIBUTION PERMITS, 2002-03 AND 2003-04

Mineral Additional Add		2002-03	2	003-04
	No.	Area (sq.km.)	No.	Area (sq. km.)
Copper, lead, zinc, gold, silver, bismuth, cadmium, nickel and associated minerals	7	11,634	4	4164
Diamond	1	2,010		n e ste a vilotaran. •
Diamond and associated minerals	10	25 7 26 <mark>15,417</mark>	A. 477 (4 6	6,196
Dolomite and associated minerals	1	1,975	:	-
Gold	2	1,980	-	
Gold and associated minerals	10	17,268	.:t <u>.</u> f÷	•
Diamond, Precious Stones & other associated minerals	-	<u>-</u>	12	19,668
Ilmenite, Garnet, etc.		-	.1	1,428
Total	31	50,284	23	31,456

5.2 STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2003-04, twenty three reconnaissance permits were approved/granted/executed covering about 31,456 sq. km. in Andhra Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Orissa and West Bengal for high-value minerals like gold, silver, copper, lead-zinc, nickel, cadmium, bismuth, diamond, precious stones and associated minerals & industrial minerals such as ilmenite and garnet. Chhattisgarh was leading in the number of RPs accounting for 7 RPs covering an area of about 11,693 sq. km. (37%) followed by 6 RPs in Andhra Pradesh 8,593 sq. km. (27%), 5 RPs in Madhya Pradesh 6,240 sq. kms (20%) and 3 RPs in Orissa covering 2,423 sq. km. (8%). These States together accounted for about 91% RPs covering 92% area. Karnataka and West Bengal States shared the remaining. The Statewise distribution of reconnaissance permits, 2002-03 and 2003-04 is given in Table-21.

TABLE-21: STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS, 2002-03 AND 2003-04

State	2(002-03		2003-04
	No.	Area (sq. km.)	No.	Area (sq. km.)
Andhra Pradesh	4	8,725	6	8,593
Chhattisgarh	8	10,626	7	11,693
Jharkhand	ī	1,870	and the second second	11,095
Karnataka	8	11,626	1	2,130
Madhya Pradesh	8	16,623	5	6,240
Rajasthan	2	814		0,240
Orissa	-	•	3	2,423
West Bengal	-	-	1	377
Total	31	50,284	23	31,456

5.3 AREAWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

Areawise, M/s BHP Khanij Anveshan Pvt. Ltd. held maximum area of about 11,776 sq. km., under 7 RPs followed by M/s ACC-RIO TINTO Exploration Ltd. 8,525 sq. km. under 7 RPs, M/s BHP Minerals (India) Pvt. Ltd. 5,892 sq. km. under 3 RPs, M/s De Beers India Prospecting Pvt. Ltd., 1,643 sq. kms. under 2 RPs, M/s WSIL Mineral Sand India Pvt. Ltd. 1,428 sq. km. under 1 RP and M/s Metmin Finance Holdings Pvt. Ltd. 1,330 sq. km. under 1 RP. These six companies shared about 97% area and the remaining two companies covered less than 1,000 sq. km. each or about 3% area. The companywise distribution of RPs during 2002-03 and 2003-04 are given in Table-22 and details of reconnaissance permits granted/executed during 2003-04 are furnished in Table-23.

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TABLE - 22: AREAWISE/COMPANYWISE DISTRIBUTION OF RECONNAISSANCE PERMITS DURING 2002-03 AND 2003-04

		2	002-03	200	3-04
SI. No.	Company	No.	Area (sq. km.)	No.	Area (sq. km.)
1.	ACC-RIO TINTO Exploration Ltd., RCD Campus, Lal Bahadur Shastri Marg, Thane-400 064.	3	7,650	7	8,525
2.	Anglo American Exploration (India) Pvt. Ltd., 21, South Ex-Plaza-I, 389, Masjid Moth, South Ext-II, New Delhi-110 049.		8,499		
3.				e je v _a i 7 ji. Geografija	11,776
4.	BHP Minerals (India) Pvt. Ltd., 7/F, World Trade Tower, Barakhamba Lane, New Delhi-110 001.	1	2,293		5,892
5.	De Beers India Prospecting Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers VI, Nariman Point, Mumbai-400 021.	4	6,629	2	1,643
6.	Emperor Granite Pvt. Ltd. Bhopal	l	1,000	-	-
7.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028.	9	8,989	1	485
					(contd.)

Table-22 (concld.)

		200	2-03		2003-04
Sl. No.	Company	No.	Area (sq. km.)	No.	Area (sq. km.)
8.	Hindustan Zinc Ltd., Yashad Bhavan, Yashadgarh, Udaipur-313 001.	1	361	•	
9.	Hutti Gold Mines Co. Ltd., 6/13, Gurappa Avenue, Prime Rose Road Cross, Bangalore-560 005.	1	4,103	.	<u>-</u> 1
10.	Indophil Resources Exploration Services India Pvt. Ltd., 114, 5th Cross, 3rd Main Road, Girinagar, Bangalore-560 085.	2	4,995	•	
11.	Metmin Finance & Holdings Pvt. Ltd., 161/162, Mittal Court, 'A' Wing, Nariman Point, Mumbai-400 021.		-	1	1330
12.	Minpro Corporation, 201, Gulmohor, Chitnavis Marg, Opp. Hislop College, Nagpur-440 001.	1	110	-	
13.	Mira Exploration Pvt. Ltd., D-11/2251 Basant Kunj, New Delhi-110 020	1	481	-	•
14.	National Mineral Development Corporation Ltd., 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500 028.	2	3,304	-	- -
15.	Phelps Dodge Explortion India Pvt. Ltd B-1, Defence Colony, New Delhi- 110 024.	1	1,870	-	-
16.	WSIL Mineral Sand India Pvt. Ltd., D-19, Press Enclave, Saket, New Delhi-110 024.	-	• .	· 1	1428
	Total	31	50,284	23	31,456

TABLE-23: RECONNAISSANCE PERMITS APPROVED BY THE MINISTRY OF MINES AND GRANTED/EXECUTED BY VARIOUS STATE GOVERNMENTS, 2003-04

ACC-RIO TINTO Exploration Ltd. ACC-RIO TINTO Exploration Ltd.	<u>N</u>	Name and address of Permit Holder		Location	Mineral (s)	Area in	Date of	Date of	Period
ACC-RIO TINTO Exploration Ltd. Ramataka Gulbarga and Raichur Diamond and associated Thane-at00 064. ACC-RIO TINTO Exploration Ltd. ACC-RIO TINTO Exploratio	;]		State	District (s)		sq. km.	Approval/ Grant/ Permission	Execution	in Year
Thane-400 664. ACC-RIO TINTO Exploration Ltd. Chhattisgarh Raigarh, Jashpur and Jashpur and Jashpur and Jashpur Bainerals ACC-RIO TINTO Exploration Ltd.	+	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg,	Kamataka	Gulbarga and Raichur		2130.00	i) 30.07.2003	1	
ACC-RIO TINTO Exploration Ltd. Chhattisgarh Raigarh, Jashpur and Bahadur Shastri Marg, Thane-400 664. ACC-RIO TINTO Exploration Ltd. Chhattisgarh Raigarh and Jashpur Rassociated minerals Lal Bahadur Shastri Marg, Thane-400 664. ACC-RIO TINTO Exploration Ltd. ACC-RIO TINTO Exploration Ltd. ACC-RO TINTO Exploration Ltd. ACC-RO TINTO Exploration Ltd. Raigarh and Navapara Minerals ACC-RO TINTO Exploration Ltd. AC	2	Thane- 400 064. ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Madhya Pradesh	Chhatarpur and Panna	Gold, copper, lead, zinc, silver, bismuth and cadmium	1971.69	i) 30.06.2003	13.10.2003	。 の (投稿) いまった。
ACC-RIO TINTO Exploration Ltd. Raigarh and Jashpur Diamond, gold and Raigarh and Jashpur Diamond, gold and Raigarh and Jashpur Diamond, gold and Rasociated minerals Lal Bahadur Shastri Marg, Thane- 400 064. ACC-RIO TINTO Exploration Ltd. ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064. ACC-RIO TINTO Exploration Ltd. ACC-RIO TINTO Explora	€0	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Chhattisgarh	Raigarh, Jashpur and Surguja	Diamond, gold and associated minerals	1000.00	i) 30.06.2003	19.12.2003	e។ ភ
ACC-RIO TINTO Exploration Ltd. Orissa Bargarh, Bolangir Diamond and associated 798.00 i) 30.07.2003 Lal Bahadur Shastri Marg, Thane- 400 664. ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064. Thane- 400 064.	4	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Chhattisgarh	Raigarh and Jashpur	Diamond, gold and associated minerals	1000.00	i) 30.06.2003	19.12.2003	m
tion Ltd. Orissa Bargarh and Navapara Diamond and associated 1360.00 1) 28.08.2003		ACC-RIO TINTO Exploration Ltd. RCD Campus, Lai Bahadur Shastri Marg,	Orissa - 447, 1	Bargarh, Bolangir and Navapara	Diamond and associated minerals	798.00	i) 30.07.2003	+ · · · · · · · · · · · · · · · · · · ·	m
	9	tion Ltd.	Original Control	Bargarh and Navapara	Diamond and associated minerals	1360.00	() 28.08.2003	ara Aras Aras	w

ili e

(contd.)

is S	Name and address of Permit Holder	State	Location District (s)	Mineral (s)	Area in sq. km.		Date of Execution	Period in Year
						Permission		
7	ACC-RIO TINTO Exploration Ltd. RCD Campus, Lal Bahadur Shastri Marg, Thane- 400 064.	Orissa	Bargarh and Bolangir	Diamond and associated minerals	265.00	265.00 i) 28.08.2003	1	m
∞	Anglo American Exploration (India) Pvt. Ltd., South Ex-Plaza, 389, Masjid Moth, South Ext-II New Delhi-110 049.	West Bengal	Medinapur and Purulia	Copper, nickel, and associated minerals	377.00	377.00 i) 30.07.2003 11.10.2003	11.10.2003	« ·
6	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Mahaboobnagar and Rangareddy	Diamond, precious stone, iron, copper, lead, zinc, gold and associated minerals	1984.00	1984.00 i) 30.05.2003 17.10.2003 ii) 04.07.2003	17.10.2003	en .
01	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 1.10 001.	Andhra Pradesh	Mahaboobnagar	Diamond, precious stone, iron, copper, lead, zinc, gold and associated minerals	1846.00	1846.00 i) 30.05.2003 13.10.2003 ii) 04.07.2003	13.10.2003	m
=	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Madhya Pradesh	Chhatarpur and Tikamgarh	Diamond, precious stone, copper, lead, zinc, nickel, gold and associated minerals	863.64	863.64 i) 02.06.2003 01.07.2003 ii) 05.06.2003	01.07.2003	m
77	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lanc, New Delhi- 110 001.	Chhattisgarh	Bastar	Diamond, gold and associated minerals	1700.00	1700.00 i) 30.06.2003	,	m /

3. 3. 3.0 7. (contd.)

S.	St. Name and address of Permit Holder		Location	Mineral (s)	Area in	Date of	Date of	Period
, o V		State	District (s)		sg. km.	Approval/ Grant/ Permission	Execution	in Year
8	BHP Khanij Anveshan Pvt. Ltd., 3/F., World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Bastar	Diamond, gold and associated minerals	1500.00	1500.00 i) 30.06.2003	1	e .
4	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Bastar, Durg and Kanker	Diamond, gold, iron and other associated minerals	1800.00	1800.00 i) 30.07.2003	.	8
15	BHP Khanij Anveshan Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Dantewara	Diamond, gold, iron and other associated minerals	2083.00	2083.00 i) 30.07.2003	.	М
16	BHP Mineral (India) Pvr. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Anantapur	Diamond, precious stone, nickel, copper, lead, zinc, gold and associated minerals	1070.00 i	1070.00 i) 30.05.2003 13.08.2003 ii) 17.06.2003	13.08.2003	ю
11	BHP Mineral (India) Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Andhra Pradesh	Mahaboobnagar and Rangareddy	Diamond, precious stone, nickel, copper, lead, zinc, gold and associated minerals	2212.00 i	2212.00 i) 30.05.2003 13.08.2003 ii) 04.07.2003	13.08.2003	
8	BHP Mineral (India) Pvt. Ltd., 3/F, World Trade Tower, Barakhamba Lane, New Delhi- 110 001.	Chhattisgarh	Dantewara	Diamond, gold, iron and other associated minerals	2610.00	2610.00 i) 30.07.2003		

S. S.	1 5	20	21	22	23
Name and address of Permit Holder	De Beer India Prospecting Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers VI, Narman Point, Mumbai-400 021.	De Beer India Prospecting Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers VI, Narman Point, Mumbai-400 021.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Matin Tyvagaraja Nagar, Bangolore-560 028.	Metmin Finance & Holding Pvt. Ltd., 161/162, Mittal Court, 'A' Wing Narman Point, Mumbai-400 021.	23 WSIL Mineral Sand India (Pvt.) Ltd., D-19, Press Enclave, Saket, New Delhi- 110 024
	**************************************	Me	×	×.	An
State	Andhra Pradesh	Madhya Pradesh Rewa	Madhya Pradesh Betul	Madhya Pradesh Betul	Andhra Pradesh
Distr	Kumool	Rewa	Betil	Betul	Guntur and Prakasam
District (9)					
Mineral (s)	Diamond and associated minerals	Diamond and associated minerals	Gold, copper, lead, zinc, silver, nickel, tungsten, antimony, bismuth, cobalt, molybdenum, platinium etc.	Gold, copper, lead, zinc, silver, nickel and associted minerals	Ilmenite, garnet etc.
Ann.				d, zinc, s	etc.
sq. km.	53.00 i) 30.0 ii) 05.0	1590.00	485.00	1330.00 i)	1428.00
Approval/ Grant/ Permission	15.2003	2.2003	485.00 1) 30.06.2003 13.08.2003 3	1330.00 i) 3005.2003 06.10.2003	1428.00 i) 01.01.2004 ii) 24.01.2004
Date of Execution			13.08.2003	06.10.2003	
in Year	.	w	1	1	
			w.		

Approved by Central Government Granted by State Government

Note: