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

Bulletin of Mining Leases & Prospecting Licences, 2003

(Excluding Atomic Minerals, Coal, 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 the 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 sixth 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 31.3.2003. The Directory of Mining Leases as on 31.3.2003 incorporates the list of mining leases so far granted/executed up to March, 2003 by the various State Governments. Information contained in the Directory of Mining Leases has been analysed with different parameters, and distribution of mining leases, state-wise, district-wise, mineral-wise and sector-wise 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 upto 5,000 sq km in individual cases.

For updation of the Directory of Mining Leases as on 31.3.2003, 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.

The setting up of databases, including mining leases under Indo-BRGM Co-operation based on Oracle RDBMS packages provided a further boost to the already existing computer based data management system in IBM. The main advantage of this system is to retrieve query based outputs involving not only intra-database manipulation, but also inter-database manipulation. This is an added advantage in meeting the data required by entrepreneurs on inventory and other database information.

Indian Bureau of Mines is thankful to State Government Departments for furnishing information on mining leases, prospecting licences and reconnaissance permits and continue to solicit their spontaneous co-operation in future.

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 : 25.3.05

(S.S.DAS)
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 0.20% (6,20,372 hectares). The position of mining leases as on 31.3.2003 reveals that there are as many as 9,131 mining leases (compared to 8,872 in the previous year) granted in the country by the State Governments covering 63 minerals including lignite (but excluding coal, petroleum, natural gas, atomic minerals and minor minerals) with a total area of 6,20,372 hectares and spread over 24 States. These 63 minerals are broadly classified into metallic and non-metallic minerals. This bulletin highlights state-wise, sector-wise and district-wise distribution of mining leases, prospecting licences and reconnaissance permits frequency distribution of mining leases, 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 328 million hectares. The entire geographical area is broadly classified into 8 segments including mining lease areas as follows:

Sl. No.	Area/Segment	Total area in Million hectares	Percentage of area
1.	Agricultural (Gross cropped areas)	186.60	56.76
2.	Permanent pastures & other grazing land	11.10	3.38
3.	Culturable waste (Potentially Arable)	14.10	4.29
4.	Forest	68.80	20.93
5.	Barren & Un-culturable land	19.00	5.78
6.	Non-agricultural land	22.40	6.82
7.	Mining Lease area	0.62*	0.19
8.	Other area (No information available)	06.08	1.84
	Total	**328.70**	**100.00**

Source : **"Indian Agriculture in Brief" by Directorate of Economics & Statistics, Department of Agriculture and Co-operation, Ministry of Agriculture, 27th Edition Data 1995-96, (Report published in January, 2000).**

***Directory of Mining leases 2003, 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 0.20% (6,20,372 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. From the table above it may be seen that the total mining lease area is negligible in the total geographical area.

3. MINING LEASES

3.1 STATEWISE ANALYSIS

As on 31.3.2003, there are 9,131 number of mining leases granted by 24 State Governments for 63 different minerals, covering an area of 6,20,372.34 hectares in the country. States rich in minerals where maximum number of mining leases granted are Gujarat (17.40%) followed by Andhra Pradesh (16.23%), Rajasthan (14.37%), Madhya Pradesh (12.64%), Orissa (6.89%), Tamil Nadu (5.87%), Karnataka (5.63%), Goa (4.34%) and Jharkhand (4.20 %). These nine States together account for about 87.57% of total leases executed and remaining fifteen States account for 12.43% of mining leases.

The maximum mining lease area covered by different States are Rajasthan (21.73 %) followed by Orissa (15.40%), Karnataka (8.21%), Andhra Pradesh (7.72%), Jharkhand (7.28%), Tamil Nadu (6.72%), Gujarat (6.04%), Madhya Pradesh (5.40%),Chhattisgarh (4.90%) and Goa (4.89%). These ten States account for 88.29% of total lease areas executed and remaining fourteen States represent 11.71%. The state-wise mining lease distribution together with lease areas as well as state-wise/district-wise distribution of mining leases as on 31.03.2003 are given in Tables -1 to 4.

Total mining leases as on 31.3.2003 increased by 2.92% over the previous year and whereas corresponding lease areas decreased by 0.60% during the same year.

TABLE-1 : STATEWISE SUMMARY OF LEASE DISTRIBUTION (as on 31/03/2003)

Sl. No	State	No. of Lease	Percentage	Lease area (Hect.)	Percentage
1.	Andhra Pradesh	1482	16.23	47905.15	7.72
2.	Assam	16	0.18	1294.36	0.21
3.	Bihar	51	0.56	5421.91	0.87
4.	Chhattisgarh	259	2.84	30352.53	4.90
5.	Delhi	4	0.04	486.37	0.08
6.	Goa	396	4.34	30324.63	4.89
7.	Gujarat	1589	17.40	37457.39	6.04
8.	Haryana	148	1.62	16890.24	2.72
9.	Himachal Pradesh	53	0.58	2368.23	0.38
10.	Jammu & Kashmir	25	0.27	1312.42	0.21
11.	Jharkhand	384	4.21	45185.19	7.28
12.	Karnataka	514	5.63	50902.35	8.21
13.	Kerala	96	1.05	2193.14	0.35
14.	Madhya Pradesh	1154	12.64	33464.92	5.40
15.	Maharashtra	220	2.41	15988.10	2.58
16.	Manipur	2	0.02	610.17	0.10
17.	Meghalaya	24	0.26	4176.69	0.67
18.	Orissa	629	6.89	95531.75	15.40
19.	Rajasthan	1312	14.37	134831.46	21.73
20.	Sikkim	4	0.04	86.00	0.01
21.	Tamil Nadu	536	5.87	41666.79	6.72
22	Uttar Pradesh	99	1.08	6740.94	1.09
23.	Uttaranchal	56	0.61	2757.15	0.44
24.	West Bengal	78	0.85	12424.46	2.00
	Total	9131	100.00	620372.34	100.00

TABLE-2 : MINERAL WISE SUMMARY OF LEASE DISTRIBUTION (as on 31/03/2003)
(ALL INDIA)

Mineral	No. of leases	lease area (hect.)
Agate	10	431.13
Amethyst	5	40.64
Apatite	1	1040.07
Asbestos	65	3890.06
Ball clay	38	1915.59
Barytes	118	2411.01
Bauxite	371	28862.42
Calcareous sand	15	274.68
Calcite	80	1808.50
Chalk	179	722.05
China clay	515	23118.69
Chromite	33	8971.66
Clay (others)	107	2175.92
Copper ore	17	10589.86
Corundum	19	368.52
Diamond	2	576.51
Diaspore	23	436.43
Dolomite	458	17958.06
Dunite	1	4.45
Emerald	1	129.50
Epidote	2	51.68
Felsite	3	20.07
Felspar	214	7306.75
Fireclay	432	23061.42
Fluorite	21	2566.67
Garnet	67	1039.87
Gold	9	6708.34
Graphite	173	6619.55
Gypsum	96	25379.38
Iolite	4	24.38
Iron ore	601	95028.65
Jasper	22	1217.86
Kaolin	3	15.00
Kyanite	25	3307.12
Laterite	123	1243.80
Lead & zinc ore	12	8221.35
Lignite	12	35905.78
Lime kankar	21	863.22
Limeshell	38	4458.39
Limestone	1910	138153.86
Magnesite	31	3810.56
Manganese ore	394	37362.02
Mica	312	17864.46
Moulding sand	83	1811.08
Ochre	154	4185.93
Opal	1	200.00
Perlite	1	144.65
Phosphorite	14	3642.87
Pyrites	2	847.50
Pyrophyllite	89	2619.54

TABLE-2 (contd.)

TABLE-2 (concld.)

Mineral	No. of leases	Lease area (hect.)
Quartz	885	15410.97
Quartzite	74	1198.18
Rock salt	3	53.86
Sand (others)	61	5727.89
Serpentine	1	2.00
Shale	33	738.48
Silica sand	569	23834.82
Sillimanite	11	5146.47
Slate	15	704.36
Steatite	533	27647.71
Tin	3	65.35
Vermiculite	13	237.26
Wollastonite	3	197.49
Total	**9131**	**620372.34**

TABLE-3 : MINERAL WISE SUMMARY OF LEASE DISTRIBUTION (BY STATE AND MINERALS)

State	Mineral	No. of leases	Lease area (hect.)
Andhra Pradesh	Amethyst	4	12.99
	Apatite	1	1040.07
	Asbestos	9	607.44
	Ball clay	20	254.01
	Barytes	107	2029.64
	Calcite	7	158.08
	China clay	64	1132.82
	Clay (others)	5	215.18
	Corundum	6	35.93
	Dolomite	84	1481.77
	Felspar	31	470.77
	Fireclay	25	88.88
	Garnet	12	211.46
	Gold	3	434.08
	Graphite	4	81.51
	Iron ore	27	1519.17
	Laterite	73	633.19
	Lead & zinc ore	1	200.00
	Lime kankar	16	109.73
	Limeshell	6	432.78
	Limestone	207	21893.67
	Manganese ore	50	1210.41
	Mica	113	4627.07
	Moulding sand	1	31.16
	Ochre	15	122.96
	Phosphorite	1	2.83
	Pyrophyllite	5	138.46
	Quartz	355	4282.47
	Quartzite	16	179.36
	Sand (others)	14	1733.54

TABLE-3 (contd.)

TABLE-3 (contd.)

State	Mineral	No. of leases	lease area (hect.)
Andhra Pradesh (concld.)	Shale	11	189.86
	Silica sand	68	1023.20
	Slate	8	275.44
	Steatite	107	949.94
	Vermiculite	6	95.28
	Total	**1482**	**47905.15**
Assam	Limestone	15	1290.33
	Quartz	1	4.03
	Total	**16**	**1294.36**
Bihar	Chinaclay	1	15.16
	Fireclay	2	24.49
	Fluorite	1	9.96
	Limestone	23	1813.19
	Mica	4	2670.53
	Pyrites	1	647.50
	Quartz	3	84.30
	Quartzite	11	84.12
	Slate	1	9.57
	Steatite	4	63.09
	Total	**51**	**5421.91**
Chhattisgarh	Bauxite	12	5640.85
	China clay	5	13.16
	Dolomite	82	9062.31
	Fireclay	4	16.24
	Graphite	3	98.79
	Iron ore	14	10681.22
	Limestone	106	4569.22
	Moulding sand	7	64.70
	Ochre	1	10.12
	Quartz	5	16.69
	Quartzite	16	166.43
	Steatite	3	5.06
	Tin	1	7.74
	Total	**259**	**30352.53**
Delhi	China clay	4	486.37
	Total	**4**	**486.37**
Goa	Bauxite	4	1791.09
	Iron ore	222	17025.55
	Manganese ore	169	11477.94
	Steatite	1	30.05
	Total	**396**	**30324.63**
Gujarat	Agate	9	390.19
	Ball clay	3	10.49
	Bauxite	205	4843.41
	Calcareous sand	15	274.68
	Calcite	20	198.35
	Chalk	179	722.05
	China clay	78	1857.87
	Clay (others)	94	1839.37
	Copper ore	1	1402.00
	Dolomite	102	1286.44

TABLE-3 (contd.)

TABLE-3 (contd.)

State	Mineral	No. of leases	lease area (hect.)
Gujarat (concld.)	Felspar	3	17.59
	Fireclay	192	968.98
	Fluorite	3	758.39
	Graphite	2	5.39
	Gypsum	11	159.04
	Laterite	1	90.53
	Lignite	8	5426.73
	Limestone	438	15053.75
	Manganese ore	4	18.13
	Moulding sand	10	29.79
	Ochre	5	45.55
	Perlite	1	144.65
	Quartz	58	580.92
	Quartzite	1	19.30
	Silica sand	136	1259.66
	Steatite	8	29.10
	Vermiculite	2	25.04
	Total	**1589**	**37457.39**
Haryana	Barytes	1	79.32
	Calcite	1	40.56
	China clay	42	4364.33
	Dolomite	2	252.15
	Felspar	2	152.56
	Iron ore	1	86.20
	Lime kankar	4	705.35
	Limestone	11	592.51
	Mica	2	899.05
	Quartz	17	940.17
	Quartzite	4	68.23
	Silica sand	57	8358.09
	Slate	4	351.72
	Total	**148**	**16890.24**
Himachal Pradesh	Gypsum	2	609.09
	Limestone	48	1705.28
	Rock salt	3	53.86
	Total	**53**	**2368.23**
Jammu & Kashmir	Bauxite	1	272.30
	China clay	3	65.06
	Gypsum	4	90.39
	Limestone	14	543.87
	Magnesite	2	140.80
	Opal	1	200.00
	Total	**25**	**1312.42**
Jharkhand	Bauxite	46	4184.80
	China clay	33	1533.98
	Chromite	1	16.59
	Copper ore	3	6417.69
	Dolomite	2	220.80
	Felspar	11	214.35

TABLE-3 (contd.)

TABLE-3 (contd)

State	Mineral	No. of leases	Lease area (hect.)
Jharkhand (concld.)	Fireclay	38	2480.19
	Graphite	23	1450.36
	Iron ore	53	13805.52
	Kyanite	7	2634.79
	Limestone	45	5052.31
	Manganese ore	1	21.25
	Mica	58	4616.18
	Ochre	1	5.62
	Pyrophyllite	1	22.50
	Quartz	27	307.53
	Quartzite	2	26.53
	Sand (others)	22	1988.52
	Steatite	10	185.68
	Total	**384**	**45185.19**
Karnataka	Asbestos	1	129.50
	Barytes	1	17.00
	Bauxite	2	88.03
	Calcite	1	17.00
	China clay	21	883.59
	Chromite	6	987.47
	Clay (others)	4	46.93
	Copper ore	3	487.65
	Corundum	10	205.50
	Dolomite	10	366.57
	Dunite	1	4.45
	Felsite	3	20.07
	Felspar	5	160.24
	Fireclay	4	392.67
	Gold	6	6274.26
	Graphite	4	235.04
	Iron ore	90	13818.63
	Kyanite	6	347.19
	Limeshell	22	1677.78
	Limestone	88	11324.34
	Magnesite	7	406.47
	Manganese ore	48	8054.04
	Moulding sand	58	1497.32
	Ochre	5	617.18
	Quartz	62	876.18
	Quartzite	1	4.05
	Sand (others)	1	8.09
	Silica sand	34	1682.54
	Steatite	9	246.27
	Vermiculite	1	26.30
	Total	**514**	**50902.35**
Kerala	Bauxite	3	1.37
	China clay	40	91.01
	Laterite	1	0.19
	Limeshell	7	1492.49
	Limestone	1	245.69
	Quartz	2	3.21

TABLE-3 (contd.)

TABLE-3 (contd.)

State	Mineral	No. of leases	Lease area (hect.)
Kerala (concld.)	Silica sand	39	31.83
	Sillimanite	3	327.35
	Total	**96**	**2193.14**
Madhya Pradesh	Asbestos	2	37.91
	Barytes	3	7.81
	Bauxite	67	1218.75
	Calcite	28	105.11
	China clay	29	463.33
	Clay (others)	2	1.33
	Copper ore	2	479.90
	Diamond	2	576.51
	Diaspore	14	229.84
	Dolomite	131	690.59
	Felspar	1	8.28
	Fireclay	59	641.29
	Graphite	1	16.18
	Iron ore	10	163.30
	Laterite	47	487.44
	Lead & zinc ore	1	11.00
	Limestone	503	24409.81
	Manganese ore	39	1624.05
	Ochre	97	1226.21
	Phosphorite	3	110.68
	Pyrophyllite	46	330.93
	Quartz	11	84.28
	Quartzite	1	6.10
	Sand (others)	3	8.34
	Shale	16	197.49
	Silica sand	11	102.63
	Slate	2	67.63
	Steatite	23	158.20
	Total	**1154**	**33464.92**
Maharashtra	Agate	1	40.94
	Bauxite	17	3581.09
	China clay	9	91.77
	Chromite	1	16.22
	Dolomite	12	213.75
	Felspar	2	53.65
	Fireclay	2	18.40
	Fluorite	1	32.70
	Iron ore	26	963.10
	Kyanite	11	269.65
	Limestone	50	6991.86
	Manganese ore	31	1070.97
	Mica	1	42.06
	Moulding sand	1	47.02
	Ochre	1	12.36
	Quartz	9	152.19
	Quartzite	1	12.09
	Sand (others)	11	700.19

TABLE-3 (contd.)

TABLE-3 (contd.)

State	Mineral	No. of leases	Lease area (hect.)
Maharashtra (Concld.)	Shale	1	41.48
	Silica sand	32	1636.61
	Total	**220**	**15988.10**
Manipur	Chromite	2	610.17
	Total	**2**	**610.17**
Meghalaya	China clay	2	9.77
	Fireclay	1	221.44
	Limestone	12	1735.05
	Shale	2	9.80
	Sillimanite	7	2200.63
	Total	**24**	**4176.69**
Orissa	Amethyst	1	27.65
	Asbestos	2	166.57
	Bauxite	7	6405.45
	China clay	18	1442.19
	Chromite	23	7341.21
	Corundum	3	127.09
	Dolomite	13	1744.05
	Fireclay	40	4809.06
	Graphite	129	4057.91
	Iolite	4	24.38
	Iron ore	140	35695.10
	Kyanite	1	55.49
	Lead & zinc ore	2	504.86
	Lime kankar	1	48.14
	Limestone	49	10974.36
	Magnesite	1	40.46
	Manganese ore	51	13805.23
	Mica	2	30.23
	Ochre	2	197.77
	Pyrophyllite	11	630.76.
	Quartz	89	2493.98
	Quartzite	19	622.27
	Sand (others)	7	554.28
	Shale	1	289.85
	Silica sand	1	69.81
	Sillimanite	1	2618.49
	Steatite	9	697.50
	Tin	2	57.61
	Total	**629**	**95531.75**
Rajasthan	Asbestos	51	2948.64
	Ball clay	15	1651.09
	Barytes	6	277.24
	Calcite	23	1289.40
	China clay	118	9294.79
	Clay (others)	2	73.11
	Copper ore	5	1717.95
	Dolomite	14	1620.10
	Emerald	1	129.50
	Epidote	2	51.68

TABLE-3 (contd.)

TABLE-3 (contd.)

State	Mineral	No. of leases	Lease area (hect.)
Rajasthan (Concld.)	Felspar	153	6063.91
	Fireclay	30	3091.26
	Fluorite	16	1765.62
	Garnet	9	343.53
	Graphite	2	382.75
	Gypsum	51	22158.97
	Iron ore	18	1270.86
	Jasper	22	1217.86
	Kaolin	3	15.00
	Laterite	1	32.45
	Lead & zinc ore	8	7505.49
	Lignite	3	4579.05
	Limestone	49	19726.84
	Magnesite	3	15.00
	Manganese ore	1	80.00
	Mica	132	4979.34
	Ochre	25	1902.60
	Phosphorite	6	2404.18
	Pyrites	1	200.00
	Pyrophyllite	14	688.42
	Quartz	99	4498.40
	Quartzite	1	5.00
	Sand (others)	1	481.81
	Serpentine	1	2.00
	Shale	2	10.00
	Silica sand	109	7532.43
	Steatite	311	24585.48
	Vermiculite	1	42.22
	Wollastonite	3	197.49
	Total	**1312**	**134831.46**
Sikkim	Copper ore	3	84.67
	Dolomite	1	1.33
	Total	**4**	**86.00**
Tamil Nadu	Bauxite	7	835.28
	China clay	8	542.42
	Dolomite	1	62.07
	Felspar	4	160.87
	Fireclay	23	250.95
	Garnet	46	484.88
	Graphite	5	291.62
	Gypsum	25	2144.99
	Lignite	1	25900.00
	Limeshell	3	855.34
	Limestone	238	7097.52
	Magnesite	13	1794.84
	Quartz	140	1061.04
	Silica sand	9	29.90
	Steatite	10	106.65
	Vermiculite	3	48.42
	Total	**536**	**41666.79**

TABLE-3 (contd.)

TABLE-3 (concld.)

State	Mineral	No. of leases	Lease area (hect.)
Uttar pradesh	Diaspore	9	206.59
	Limestone	4	2706.15
	Ochre	1	39.80
	Phosphorite	1	874.00
	Pyrophyllite	11	806.28
	Silica sand	73	2108.12
	Total	**99**	**6740.94**
Uttaranchal	Dolomite	2	29.13
	Gypsum	3	216.90
	Limestone	6	285.39
	Magnesite	5	1412.99
	Phosphorite	2	222.05
	Steatite	38	590.69
	Total	**56**	**2757.15**
West Bengal	China clay	40	831.07
	Dolomite	2	927.00
	Felspar	2	4.53
	Fireclay	12	10057.57
	Limestone	3	142.72
	Moulding sand	6	141.09
	Ochre	1	5.76
	Phosphorite	1	29.13
	Pyrophyllite	1	2.19
	Quartz	7	25.58
	Quartzite	1	4.70
	Sand (others)	2	253.12
	Total	78	12424.46

TABLE-4 : STATEWISE/DISTRICTWISE DISTRIBUTION OF LEASES AND LEASE AREA (as on 31/03/2003)

District	Mineral	No. of Leases	Lease area (hect.)
(i) ANDHRA PRADESH			
Adilabad	China clay	16	208.97
	Laterite	1	2.84
	Limestone	12	2,,685.28
	Manganese ore	9	326.76
	Total	**38**	**3,243.85**
Anantapur	Barytes	2	8.96
	China clay	4	33.20
	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	24	1,146.49
	Ochre	2	18.00
	Pyrophyllite	2	69.68
	Quartz	20	517.86
	Shale	1	3.16
	Steatite	36	511.18
	Total	**149**	**3,525.70**
Chittoor	China clay	1	14.17
	Felspar	1	3.78
	Gold	2	265.66
	Pyrophyllite	2	8.08
	Quartz	11	115.18
	Steatite	2	15.20
	Total	**19**	**422.07**
Cuddapah	Asbestos	9	607.44
	Barytes	87	1,277.54
	China clay	14	618.66
	Clay (others)	3	183.32
	Dolomite	6	82.07
	Felspar	14	281.22
	Iron ore	1	18.62
	Laterite	1	80.94
	Limestone	20	1,320.56
	Ochre	5	17.81
	Pyrophyllite	1	60.70
	Quartz	11	186.49
	Shale	2	19.71
	Silica sand	1	1.87
	Steatite	3	57.46
	Total	**178**	**4,814.41**
Godavari East	China clay	14	24.40
	Fire clay	24	84.83
	Graphite	1	5.00
	Laterite	13	75.53
	Total	**52**	**234.27**
Godavari West	Ball clay	20	254.01
	China clay	7	186.00
	Clay (others)	2	31.86
	Total	**29**	**471.87**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Guntur	China clay	1	8.13
	Lead & zinc ores	1	200.00
	Lime kankar	1	3.80
	Limestone	24	3,910.91
	Quartz	4	32.01
	Slate	1	40.47
	Total	**32**	**4,191.45**
Karimnagar	Dolomite	2	32.47
	Laterite	2	8.30
	Limestone	2	682.52
	Sand (others)	7	1,626.90
	Silica sand	1	10.00
	Total	**14**	**2,380.19**
Khammam	Barytes	4	297.91
	Corundum	4	19.57
	Dolomite	6	423.32
	Felspar	1	1.50
	Garnet	6	71.91
	Graphite	3	76.51
	Iron ore	5	629.68
	Limestone	2	32.23
	Mica	2	29.83
	Quartz	9	37.55
	Sand (Others)	3	15.68
	Steatite	1	0.81
	Total	**46**	**1,636.50**
Krishna	Iron ore	4	19.77
	Lime Kankar	1	6.77
	Limestone	18	2,397.58
	Quartz	2	2.82
	Total	**25**	**2,426.94**
Kurnool	Barytes	7	234.61
	Calcite	2	33.68
	China clay	2	15.42
	Dolomite	20	207.84
	Felspar	1	16.87
	Iron ore	10	66.26
	Laterite	8	28.55
	Limestone	70	3,429.90
	Ochre	7	81.68
	Quartz	17	224.60
	Quartzite	5	41.27
	Shale	7	33.92
	Silica sand	14	205.44
	Steatite	65	365.29
	Total	**235**	**4,985.33**
Mahbubnagar	Felspar	8	56.14
	Quartz	88	544.91
	Total	**96**	**601.05**
Medak	Amethyst	1	1.31
	Laterite	7	47.93
	Quartz	22	224.83
	Total	**30**	**274.07**
Nalgonda	Limestone	30	5,092.93
	Quartz	17	175.49
	Total	**47**	**5,268.42**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Nellore	Barytes	3	44.87
	Felspar	3	78.73
	Garnet	1	39.68
	Iron ore	2	274.00
	Laterite	8	59.66
	Limeshell	4	420.15
	Mica	100	4,205.65
	Quartz	65	946.79
	Silica sand	33	667.90
	Vermiculite	6	95.28
	Total	**225**	**6,832.71**
Nizamabad	Laterite	1	8.00
	Quartz	1	2.30
	Total	**2**	**10.30**
Prakasam	Barytes	4	165.75
	Garnet	4	4.79
	Iron ore	1	266.33
	Manganese ore	1	6.84
	Quartz	38	764.47
	Silica sand	18	130.49
	Slate	7	234.97
	Total	**73**	**1,573.64**
Rangareddi	Amethyst	3	11.68
	China clay	2	6.47
	Fire clay	1	4.05
	Laterite	12	127.20
	Limestone	5	1,195.27
	Quartz	28	176.32
	Shale	1	133.07
	Total	**52**	**1,654.06**
Srikakulam	Garnet	1	95.08
	Limeshell	1	4.00
	Quartz	1	6.07
	Quartzite	2	16.02
	Silica sand	1	7.50
	Total	**6**	**128.67**
Visakhapatnam	Apatite	1	1,040.07
	Calcite	5	124.40
	China clay	3	17.40
	Laterite	6	57.93
	Limeshell	1	8.63
	Mica	11	391.59
	Ochre	1	5.47
	Phosphorite	1	2.83
	Quartz	10	205.03
	Total	**39**	**1,853.35**
Vizianagaram	Lime kankar	14	99.16
	Manganese ore	40	856.81
	Moulding sand	1	31.16
	Quartz	11	119.75
	Quartzite	9	122.07
	Sand (others)	1	0.80
	Total	**76**	**1,229.75**
Warangal	Dolomite	3	19.58
	Laterite	13	97.45
	Sand (others)	3	70.16
	Total	**19**	**187.19**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
(ii) ASSAM			
Kamrup	Quartz	1	4.03
	Total	**1**	**4.03**
Karbi Anglong	Limestone	5	426.83
	Total	**5**	**426.83**
North Cachar Hills	Limestone	10	863.50
	Total	**10**	**863.50**
(iii) BIHAR			
Bhagalpur	Fire clay	1	22.84
	Steatite	3	53.42
	Total	**4**	**76.26**
Jahanabad	China clay	1	15.16
	Fire clay	1	1.65
	Total	**2**	**16.81**
Lakhisarai	Quartz	1	23.00
	Total	**1**	**23.00**
Monghyr	Fluorite	1	9.96
	Quartz	2	61.30
	Quartzite	11	84.12
	Slate	1	9.57
	Steatite	1	9.67
	Total	**16**	**174.62**
Nawada	Mica	4	2,670.53
	Total	**4**	**2,670.53**
Rohtas	Limestone	23	1813.19
	Pyrite	1	647.50
	Total	**24**	**2,460.69**
(iv) CHHATTISGARH			
Bastar	Dolomite	2	1,562.12
	Limestone	17	40.53
	Quartzite	1	16.00
	Total	**20**	**1,618.65**
Bilaspur	Dolomite	30	7,084.19
	Total	**30**	**7,084.19**
Dantewara	Iron ore	6	6,886.90
	Tin	1	7.74
	Total	**7**	**6,894.64**
Durg	Dolomite	39	169.94
	Iron ore	4	2,732.62
	Limestone	37	674.97
	Moulding sand	4	33.10
	Quartzite	5	48.08
	Total	**89**	**3,658.71**
Janjgir-Champa	Dolomite	6	209.38
	Limestone	3	735.14
	Total	**9**	**944.52**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Kanker	Bauxite	3	13.22
	Iron ore	3	980.99
	Limestone	1	0.63
	Moulding sand	1	13.84
	Steatite	3	5.06
	Total	**11**	**1,013.74**
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
	Quartzite	1	2.21
	Total	**4**	**17.99**
Raigarh	Dolomite	1	2.33
	Limestone	10	27.38
	Quartz	2	4.25
	Quartzite	2	54.83
	Total	**15**	**88.79**
Raipur	Dolomite	3	22.21
	Limestone	35	3,080.18
	Total	**38**	**3,102.39**
Rajnandgaon	China clay	5	13.16
	Iron ore	1	80.71
	Limestone	2	6.61
	Moulding sand	2	17.76
	Ochre	1	10.12
	Quartz	2	10.23
	Quartzite	8	47.52
	Total	**21**	**186.11**
Surguja	Bauxite	7	4,963.30
	Graphite	3	98.79
	Total	**10**	**5,062.09**
(v) DELHI			
Delhi	China clay	4	486.37
	Total	**4**	**486.37**
(vi) GOA			
North Goa	Iron ore	94	7,145.78
	Manganese ore	44	3,298.11
	Total	**138**	**10,443.89**
South Goa	Bauxite	4	1,791.09
	Iron ore	128	9,879.77
	Manganese ore	125	8,179.83
	Steatite	1	30.05
	Total	**258**	**19,880.74**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
(vii) GUJARAT			
Amreli	Bauxite	3	160.66
	Calcite	4	23.50
	China clay	1	1.30
	Clay (others)	1	88.54
	Limestone	8	2,447.20
	Total	**17**	**2,721.20**
Banaskantha	Calcite	1	3.76
	Copper ore	1	1,402.00
	Limestone	13	808.29
	Vermiculite	1	1.84
	Total	**16**	**2,215.89**
Bharuch	Agate	9	390.19
	Calcite	4	6.48
	Dolomite	1	2.00
	Lignite	2	327.57
	Limestone	1	31.47
	Silica sand	29	297.09
	Total	**46**	**1,054.80**
Bhavnagar	Chalk	1	12.00
	Clay (others)	7	371.91
	Dolomite	3	52.99
	Lignite	1	1,355.00
	Limestone	1	20.00
	Moulding sand	1	2.80
	Total	**14**	**1,814.70**
Dahod	Felspar	1	4.05
	Fluorite	1	0.49
	Limestone	5	187.51
	Quartz	10	168.65
	Total	**17**	**360.70**
Jamnagar	Bauxite	138	3,528.45
	Calcareous sand	15	274.68
	Calcite	3	68.69
	Chalk	8	68.09
	Clay (others)	1	20.23
	Limestone	58	2,355.04
	Moulding sand	2	9.29
	Ochre	1	20.23
	Total	**226**	**6,344.70**
Junagarh	Bauxite	1	6.05
	Calcite	1	21.04
	Chalk	3	27.90
	Limestone	140	3,272.76
	Total	**145**	**3,327.75**
Kheda	Bauxite	24	139.42
	Limestone	4	264.96
	Total	**28**	**404.38**
Kutch	Ball clay	2	5.00
	Bauxite	8	644.53
	Calcite	3	47.66
	China clay	45	381.98
	Clay (others)	77	1,207.09

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Kutch (Contd.)	Gypsum	10	157.23
	Lignite	4	2,208.16
	Limestone	7	398.18
	Ochre	1	2.00
	Silica sand	24	332.87
	Total	**181**	**5,384.70**
Mehesana	China clay	13	312.65
	Fire clay	1	32.37
	Limestone	2	25.19
	Total	**16**	**370.21**
Navasari	Bauxite	1	8.09
	Fire clay	6	28.40
	Total	**7**	**36.49**
Panchmahals	Dolomite	1	40.32
	Fire clay	1	40.46
	Manganese ore	4	18.13
	Quartz	47	408.23
	Quartzite	1	19.30
	Silica sand	3	78.61
	Steatite	2	7.06
	Total	**59**	**612.11**
Patan	Ball clay	1	5.49
	China clay	2	72.44
	Clay (others)	6	143.82
	Ochre	3	22.96
	Total	**12**	**244.71**
Porbandar	Bauxite	9	228.75
	Chalk	143	529.82
	China clay	1	3.97
	Laterite	1	90.53
	Limestone	193	3,697.37
	Total	**347**	**4,550.44**
Rajkot	Chalk	24	84.24
	Fire clay	54	269.53
	Gypsum	1	1.81
	Limestone	2	37.13
	Perlite	1	144.65
	Silica sand	2	44.47
	Total	**84**	**581.83**
Sabarkantha	Bauxite	21	127.46
	Calcite	4	27.22
	China clay	16	1,085.53
	Felspar	2	13.54
	Fire clay	14	31.69
	Limestone	2	2.53
	Quartz	1	4.04
	Silica sand	19	107.04
	Steatite	6	22.04
	Total	**85**	**1,421.09**
Surat	Lignite	1	1,536.00
	Limestone	1	1,504.75
	Silica sand	1	6.52
	Total	**3**	**3,047.27**
Surendranagar	Clay (others)	2	7.78
	Fire clay	116	566.53

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Surendranagar (Contd.)	Moulding sand	7	17.70
	Silica sand	58	393.06
	Total	**183**	**985.07**
Vadodara	Dolomite	97	1,191.13
	Fluorite	2	757.90
	Graphite	2	5.39
	Limestone	1	1.37
	Vermiculite	1	23.20
	Total	**103**	**1,978.99**
(viii) HARYANA			
Ambala	Limestone	2	340.56
	Total	**2**	**340.56**
Bhiwani	Lime kankar	4	705.35
	Total	**4**	**705.35**
Faridabad	China clay	5	457.93
	Silica sand	32	5,679.41
	Total	**37**	**6,137.34**
Gurgaon	China clay	37	3,906.40
	Quartz	4	97.93
	Quartzite	2	47.78
	Silica sand	25	2,678.68
	Total	**68**	**6,730.79**
Mahendragarh	Barytes	1	79.32
	Calcite	1	40.56
	Dolomite	2	252.15
	Felspar	2	152.56
	Iron ore	1	86.20
	Limestone	9	251.95
	Mica	2	899.05
	Quartz	13	842.24
	Slate	1	81.35
	Total	**32**	**2,685.38**
Rewari	Quartzite	2	20.45
	Slate	3	270.37
	Total	**5**	**290.82**
(ix) HIMACHAL PRADESH			
Bilaspur	Limestone	4	248.21
	Total	**4**	**248.21**
Kannaur	Gypsum	2	609.09
	Total	**2**	**609.09**
Mandi	Rock salt	3	53.86
	Total	**3**	**53.86**
Sirmur	Limestone	42	699.99
	Total	**42**	**699.99**
Solan	Limestone	2	757.08
	Total	**2**	**757.08**

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
(x) JAMMU & KASHMIR			
Anantnag	China clay	1	4.06
	Limestone	10	279.15
	Total	**11**	**283.21**
Baramula	Gypsum	1	2.71
	Total	**1**	**2.71**
Doda	Gypsum	3	87.68
	Total	**3**	**87.68**
Jammu	Limestone	1	4.67
	Total	**1**	**4.67**
Leh	Opal	1	200.00
	Total	**1**	**200.00**
Poonch	Limestone	1	15.80
	Total	**1**	**15.80**
Pulwama	Limestone	1	100.00
	Total	**1**	**100.00**
Srinagar	Limestone	1	144.25
	Total	**1**	**144.25**
Udhampur	Bauxite	1	272.30
	China clay	2	61.00
	Magnesite	2	140.80
	Total	**5**	**474.10**
(xi) JHARKHAND			
Bokaro	Sand (others)	1	7.51
	Total	**1**	**7.51**
Deoghar	Felspar	3	5.94
	Total	**3**	**5.94**
Dhanbad	Fire clay	6	410.16
	Limestone	1	17.40
	Quartz	1	5.18
	Sand (others)	21	1,981.01
	Total	**29**	**2,413.75**
Dumka	Felspar	2	7.47
	Quartz	1	0.88
	Total	**3**	**8.35**
Garwah	Dolomite	1	202.35
	Limestone	3	1,178.92
	Total	**4**	**1,381.27**
Giridih	Felspar	3	194.96
	Mica	6	384.17
	Steatite	5	84.89
	Total	**14**	**664.02**
Godda	Quartz	1	7.28
	Total	**1**	**7.28**

District	Mineral	No. of Leases	Lease area (hect.)
Gumla	Bauxite	23	2,560.61
	Total	**23**	**2,560.61**
Hazaribagh	Felspar	1	3.13
	Fire clay	7	721.83
	Limestone	5	242.73
	Mica	2	209.95
	Pyrophyllite	1	22.50
	Total	**16**	**1,200.14**
Kodarma	Mica	50	4,022.06
	Quartz	4	80.13
	Total	**54**	**4,102.19**
Latehar	Bauxite	2	478.35
	China clay	1	8.25
	Fire clay	25	1,348.20
	Graphite	1	17.81
	Iron ore	2	16.08
	Limestone	1	99.50
	Quartz	13	156.90
	Total	**45**	**2,125.09**
Lohardaga	Bauxite	21	1,145.84
	Total	**21**	**1,145.84**
Palamau	Dolomite	1	18.45
	Felspar	2	2.85
	Graphite	22	1,432.55
	Iron ore	10	211.68
	Limestone	4	1,135.97
	Steatite	2	7.29
	Total	**41**	**2,808.79**
Ranchi	China clay	3	431.49
	Limestone	6	1,335.49
	Total	**9**	**1,766.98**
Sahebganj	China clay	12	215.48
	Total	**12**	**215.48**
Singhbhum (East)	Copper ore	3	6,417.69
	Kyanite	1	2.43
	Total	**4**	**6,420.12**
Singhbhum (West)	China clay	17	878.76
	Chromite	1	16.59
	Iron ore	41	13,577.76
	Kyanite	6	2,632.36
	Limestone	25	1,042.30
	Manganese ore	1	21.25
	Ochre	1	5.62
	Quartz	7	57.16
	Quartzite	2	26.53
	Steatite	3	93.50
	Total	**104**	**18,351.83**
(xii) KARNATAKA			
Bagalkot	Dolomite	6	287.24
	Limestone	23	3,041.01
	Total	**29**	**3,328.25**

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Bangalore	China clay	1	48.56
	Corundum	4	44.14
	Felspar	5	160.24
	Fire clay	1	2.02
	Quartz	3	52.60
	Silica sand	1	41.83
	Total	15	349.39
Belgaum	Bauxite	1	59.23
	Calcite	1	17.00
	China clay	7	35.23
	Clay (others)	2	24.68
	Dolomite	4	79.33
	Fire clay	1	2.16
	Iron ore	1	20.23
	Limestone	11	1,564.92
	Manganese ore	1	2.33
	Moulding sand	8	110.14
	Quartz	2	5.67
	Quartzite	1	4.05
	Sand (others)	1	8.09
	Silica sand	2	3.25
	Total	**43**	**1,936.31**
Bellary	Iron ore	69	7,775.44
	Manganese ore	4	489.29
	Moulding sand	7	69.88
	Ochre	2	532.61
	Quartz	14	269.03
	Steatite	2	4.89
	Total	**98**	**9,141.14**
Bidar	Ochre	1	21.85
	Total	**1**	**21.85**
Bijapur	Limestone	16	1,440.75
	Total	**16**	**1,440.75**
Chickmagalur	Dunite	1	4.45
	Iron ore	3	4,716.49
	Manganese ore	1	80.94
	Quartz	1	19.65
	Total	**6**	**4,821.53**
Chitradurga	Barytes	1	17.00
	Copper ore	2	416.83
	Iron ore	5	390.96
	Kyanite	2	174.81
	Limestone	15	2,579.63
	Manganese ore	14	1,104.92
	Moulding sand	8	202.91
	Quartz	4	104.83
	Steatite	1	8.09
	Total	**52**	**4,999.98**
Coorg	Corundum	1	0.80
	Total	**1**	**0.80**
Dawangere	Manganese ore	1	32.31
	Quartz	2	10.12
	Total	**3**	**42.43**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Dharwar	China clay	1	4.10
	Clay (others)	1	20.23
	Moulding sand	23	529.46
	Total	**25**	**553.79**
Gulbarga	Gold	1	55.75
	Limestone	10	2,114.36
	Moulding sand	7	250.98
	Quartz	2	39.61
	Total	**20**	**2,460.70**
Hassan	Asbestos	1	129.50
	China clay	2	311.60
	Chromite	6	987.47
	Copper ore	1	70.82
	Quartz	3	68.69
	Steatite	2	169.78
	Vermiculite	1	26.30
	Total	**16**	**1,764.16**
Kolar	China clay	4	300.51
	Clay (others)	1	2.02
	Gold	1	5,215.39
	Quartz	2	3.58
	Total	**8**	**5,521.50**
Koppal	Quartz	6	42.72
	Total	**6**	**42.72**
Mandya	Corundum	1	1.64
	Felsite	1	1.61
	Moulding sand	1	20.23
	Quartz	3	54.02
	Total	**6**	**77.50**
Mysore	Corundum	4	158.92
	Felsite	2	18.46
	Graphite	4	235.04
	Kyanite	3	169.96
	Limestone	2	146.44
	Magnesite	7	406.47
	Moulding sand	1	152.57
	Quartz	2	13.04
	Steatite	1	12.14
	Total	**26**	**1,313.04**
North Kanara	Limeshell	18	1,270.25
	Limestone	2	136.62
	Manganese ore	11	3,876.83
	Moulding sand	2	144.96
	Quartz	1	1.82
	Silica sand	11	259.06
	Total	**45**	**5,689.54**
Raichur	Gold	3	965.08
	Quartz	5	104.77
	Total	**8**	**1,069.85**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Shimoga	China clay	4	45.32
	Iron ore	2	47.76
	Kyanite	1	2.42
	Limestone	1	40.12
	Manganese ore	6	1,765.67
	Quartz	3	22.70
	Total	**17**	**1,923.99**
South Kanara	Limeshell	2	349.64
	Silica sand	8	718.54
	Total	**10**	**1,068.18**
Tumkur	China clay	2	138.27
	Fire clay	2	388.49
	Gold	1	38.04
	Iron ore	10	867.75
	Limestone	8	260.49
	Manganese ore	10	701.75
	Moulding sand	1	16.19
	Ochre	1	6.07
	Quartz	9	63.33
	Steatite	3	51.37
	Total	**47**	**2,531.75**
Udupi	Bauxite	1	28.80
	Limeshell	2	57.89
	Ochre	1	56.65
	Silica sand	12	659.86
	Total	**16**	**803.20**
(xiii) KERALA			
Alapuzha	Limeshell	5	936.24
	Silica sand	39	31.83
	Total	**44**	**968.07**
Kannur	China clay	3	10.73
	Laterite	1	0.19
	Total	**4**	**10.92**
Kasargod	China clay	1	2.64
	Total	**1**	**2.64**
Kollam	Bauxite	3	1.37
	China clay	5	8.75
	Sillimanite	3	327.35
	Total	**11**	**337.47**
Kottayam	Limeshell	2	556.25
	Total	**2**	**556.25**
Palakkad	Limestone	1	245.69
	Total	**1**	**245.69**
Thiruvanan-thapuram	China clay	31	68.89
	Total	**31**	**68.89**
Wynad	Quartz	2	3.21
	Total	**2**	**3.21**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
(xiv) MADHYA PRADESH			
Badwani	Calcite	22	81.61
	Total	**22**	**81.61**
Balaghat	Bauxite	1	40.46
	Copper ore	2	479.90
	Dolomite	20	140.68
	Fire clay	1	2.41
	Limestone	7	73.98
	Manganese ore	35	1,535.57
	Ochre	1	16.18
	Quartz	2	16.39
	Sand (others)	1	5.50
	Silica sand	1	16.18
	Total	**71**	**2,327.25**
Betul	China clay	1	54.38
	Total	**1**	**54.58**
Chhatarpur	China clay	2	20.12
	Diaspore	7	32.00
	Dolomite	1	10.00
	Limestone	2	4.91
	Ochre	2	19.55
	Phosphorite	1	48.76
	Pyrophyllite	18	83.99
	Quartz	1	14.24
	Quartzite	1	6.10
	Steatite	2	10.36
	Total	**37**	**250.03**
Chhindwara	Dolomite	9	79.03
	Fire clay	1	9.45
	Manganese ore	1	54.13
	Quartz	1	3.00
	Total	**12**	**145.61**
Damoh	Laterite	1	21.25
	Limestone	9	3,174.00
	Sand (others)	1	2.02
	Total	**11**	**3,197.27**
Datia	China clay	1	0.93
	Lead & zinc ores	1	11.00
	Quartz	2	14.09
	Total	**4**	**26.02**
Dewas	Barytes	2	5.79
	Laterite	1	10.00
	Silica sand	1	4.05
	Total	**4**	**19.84**
Dhar	Limestone	36	332.73
	Ochre	1	6.31
	Total	**37**	**339.04**
Gwalior	China clay	2	111.28
	Iron ore	3	60.69
	Ochre	2	32.36
	Quartz	1	6.58
	Total	**8**	**210.91**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Hoshangabad	Limestone	1	1.16
	Total	**1**	**1.16**
Jabalpur	Bauxite	9	63.24
	Dolomite	12	56.05
	Felspar	1	8.28
	Fire clay	22	149.52
	Graphite	1	16.18
	Iron ore	6	90.02
	Laterite	2	10.91
	Limestone	20	1,190.73
	Ochre	3	14.67
	Quartz	2	13.98
	Steatite	3	43.24
	Total	**81**	**1,656.92**
Jhabua	Calcite	1	8.09
	Dolomite	18	133.01
	Limestone	2	10.24
	Manganese ore	3	34.35
	Phosphorite	1	9.12
	Total	**25**	**194.81**
Katni	Bauxite	19	281.04
	Dolomite	19	108.04
	Fire clay	22	222.86
	Iron ore	1	12.59
	Laterite	4	60.70
	Limestone	175	7,460.12
	Ochre	3	7.62
	Silica sand	1	0.60
	Steatite	6	43.35
	Total	**250**	**8,196.92**
Khargon	Calcite	5	15.41
	China clay	2	1.02
	Limestone	4	8.17
	Silica sand	3	1.90
	Total	**14**	**26.50**
Mandla	Dolomite	37	102.35
	Total	**37**	**102.35**
Mandsaur	Laterite	25	199.38
	Shale	16	197.49
	Slate	2	67.63
	Total	**43**	**464.50**
Morena	Limestone	1	18.00
	Total	**1**	**18.00**
Narsinhapur	Asbestos	1	7.16
	Dolomite	3	10.07
	Fire clay	3	38.92
	Limestone	2	35.06
	Steatite	10	44.14
	Total	**19**	**135.35**
Nimach	Laterite	6	72.82
	Limestone	7	997.32
	Total	**13**	**1,070.14**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Panna	Diamond	2	576.51
	Fire clay	2	7.77
	Limestone	1	48.39
	Ochre	1	8.09
	Total	**6**	**640.76**
Rewa	Bauxite	12	137.92
	China clay	1	16.24
	Limestone	27	1,521.32
	Ochre	6	75.83
	Silica sand	4	68.37
	Total	**50**	**1,819.68**
Sagar	Dolomite	2	20.36
	Limestone	2	55.40
	Phosphorite	1	52.80
	Pyrophyllite	2	3.21
	Steatite	1	1.40
	Total	**8**	**133.17**
Satna	Bauxite	22	184.71
	China clay	15	222.28
	Clay (others)	2	1.33
	Dolomite	1	16.18
	Laterite	8	112.38
	Limestone	189	8,383.89
	Ochre	70	967.20
	Sand (others)	1	0.82
	Total	**308**	**9,888.79**
Sehore	Limestone	3	27.13
	Silica sand	1	11.53
	Total	**4**	**38.66**
Seoni	Dolomite	9	14.82
	Total	**9**	**14.82**
Shahdol	Bauxite	1	500.27
	China clay	3	20.84
	Fire clay	2	167.85
	Ochre	5	53.09
	Total	**11**	**742.05**
Shivpuri	Diaspore	3	42.73
	Pyrophyllite	1	12.00
	Total	**4**	**54.73**
Shyopur	Limestone	10	544.86
	Ochre	1	10.59
	Total	**11**	**555.45**
Sidhi	Bauxite	3	11.11
	Limestone	5	522.40
	Steatite	1	15.61
	Total	**9**	**549.12**
Tikamgarh	Asbestos	1	30.75
	Barytes	1	2.02
	China clay	1	5.00
	Diaspore	4	155.11
	Pyrophyllite	25	231.73
	Quartz	2	16.00
	Total	**34**	**440.61**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Umaria	China clay	1	11.24
	Fire clay	6	42.51
	Ochre	2	14.72
	Total	**9**	**68.47**

(xv) MAHARASHTRA

District	Mineral	No. of Leases	Lease area (hect.)
Amravati	China clay	2	16.71
	Fire clay	1	13.26
	Total	**3**	**29.97**
Bhandara	Chromite	1	16.22
	Kyanite	11	269.65
	Manganese ore	6	375.97
	Quartz	5	45.65
	Sand (others)	1	3.23
	Total	**24**	**710.72**
Chandrapur	China clay	1	18.00
	Dolomite	1	26.59
	Fluorite	1	32.70
	Iron ore	3	33.29
	Limestone	19	4,653.92
	Sand (others)	5	461.08
	Shale	1	41.48
	Total	**31**	**5,267.06**
Gadchiroli	Iron ore	1	9.96
	Total	**1**	**9.96**
Gondia	Iron ore	1	43.82
	Total	**1**	**43.82**
Jalna	Agate	1	40.94
	Total	**1**	**40.94**
Kolhapur	Bauxite	13	3,213.30
	Iron ore	1	143.95
	Total	**14**	**3,357.25**
Nagpur	China clay	5	43.88
	Dolomite	10	125.25
	Manganese ore	24	503.15
	Ochre	1	12.36
	Quartz	2	15.39
	Sand (others)	4	191.88
	Total	**46**	**891.91**
Raigad	Bauxite	2	161.20
	Total	**2**	**161.20**
Ratnagiri	Bauxite	2	206.59
	Moulding sand	1	47.02
	Silica sand	8	538.91
	Total	**11**	**792.52**
Sindhudurg	China clay	1	13.18
	Felspar	2	53.65
	Fire clay	1	5.14
	Iron ore	20	732.08
	Manganese ore	1	191.85
	Mica	1	42.06

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Sindhudurg (Contd.)	Quartz	2	91.15
	Quartzite	1	12.09
	Silica sand	24	1,097.70
	Total	**53**	**2,238.90**
Yeotmal	Dolomite	1	61.91
	Limestone	31	2,337.94
	Dand (others)	1	44.00
	Total	**33**	**2,443.85**

(xvi) MANIPUR

District	Mineral	No. of Leases	Lease area (hect.)
Chandel	Chromite	1	223.93
	Total	**1**	**223.93**
Ukhrul	Chromite	1	386.24
	Total	**1**	**386.24**

(xvii) MEGHALAYA

District	Mineral	No. of Leases	Lease area (hect.)
Garo Hills West	Fire clay	1	221.44
	Limestone	2	470.00
	Total	**3**	**691.44**
Jaintia Hills	Limestone	2	15.28
	Total	**2**	**15.28**
Khasi Hills East	China clay	2	9.77
	Limestone	7	1,189.77
	Shale	2	9.80
	Total	**11**	**1,199.54**
Khasi Hills West	Limestone	1	60.00
	Sillimanite	7	2,200.63
	Total	**8**	**2,260.63**

(xviii) ORISSA

District	Mineral	No. of Leases	Lease area (hect.)
Angul	Fire clay	1	119.51
	Quartz	1	8.13
	Sand (others)	4	435.18
	Total	**6**	**562.82**
Bargarh	China clay	4	122.22
	Fire clay	1	74.27
	Graphite	22	685.40
	Limestone	3	903.81
	Quartz	1	15.21
	Total	**31**	**1,800.91**
Baudh	Graphite	1	28.96
	Quartz	4	58.48
	Total	**5**	**87.42**
Bolangir	Graphite	79	2,056.55
	Lead & zinc ores	1	5.26
	Limestone	1	27.65
	Manganese ore	1	7.27
	Quartz	8	294.86
	Total	**90**	**2,391.59**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Cuttack	Fire clay	13	1,563.80
	Silica sand	1	69.81
	Total	**14**	**1,633.61**
Dhenkanal	Chromite	3	960.79
	Graphite	3	185.70
	Total	**6**	**1,146.49**
Ganjam	Lime kankar	1	48.14
	Sillimanite	1	2,877.76
	Steatite	1	3.64
	Total	**3**	**2,929.54**
Jajpur	Chromite	14	4,181.44
	Iron ore	1	1,812.99
	Quartz	3	103.81
	Quartzite	1	2.31
	Total	**19**	**6,100.55**
Jharsuguda	Fire clay	6	564.33
	Ochre	1	102.27
	Quartz	1	83.65
	Quartzite	5	494.84
	Sand (others)	1	109.20
	Total	**14**	**1,354.29**
Kalahandi	Amethyst	1	27.65
	Corundum	2	93.14
	Graphite	12	220.54
	Iolite	4	24.38
	Quartz	43	372.21
	Total	**62**	**737.92**
Keonjhar	Asbestos	1	49.22
	Chromite	6	2,198.98
	Iron ore	85	25,236.36
	Magnesite	1	40.46
	Manganese ore	24	8,301.36
	Pyrophyllite	11	630.76
	Quartz	4	127.80
	Total	**132**	**36,584.94**
Khurda	Fire clay	4	180.97
	Total	**4**	**180.97**
Koraput	Bauxite	2	4,647.28
	China clay	1	38.50
	Graphite	2	537.16
	Limestone	2	1,586.22
	Manganese ore	1	501.67
	Mica	2	30.23
	Ochre	1	95.50
	Quartz	2	22.76
	Quartzite	1	25.26
	Total	**14**	**7,484.68**
Malkangiri	Limestone	1	1,694.13
	Quartz	1	2.48
	Tin	2	57.61
	Total	**4**	**1,754.22**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Mayurbhanj	Asbestos	1	117.35
	China clay	12	1,241.00
	Fire clay	1	22.49
	Graphite	1	24.91
	Iron ore	11	3,304.39
	Kyanite	1	55.49
	Quartz	1	1.19
	Quartzite	9	38.57
	Shale	1	289.85
	Steatite	5	423.41
	Total	**43**	**5,518.65**
Nawapara	Corundum	1	33.95
	Graphite	1	20.23
	Limestone	4	410.57
	Total	**6**	**464.75**
Nayagarh	Graphite	1	16.64
	Total	**1**	**16.64**
Raygada	Bauxite	1	1,388.74
	Graphite	7	281.82
	Manganese ore	3	135.97
	Quartzite	1	24.89
	Total	**12**	**1,831.42**
Sambalpur	China clay	1	40.47
	Fire clay	2	41.81
	Quartz	5	157.97
	Quartzite	1	12.14
	Steatite	1	4.05
	Total	**10**	**256.44**
Sundargarh	Bauxite	4	369.43
	Dolomite	13	1,744.05
	Fire clay	12	2,241.88
	Iron ore	43	5,341.36
	Lead & zinc ores	1	499.60
	Limestone	38	6,351.98
	Manganese ore	22	4,858.96
	Quartz	15	1,245.45
	Quartzite	1	24.16
	Sand (others)	2	9.90
	Steatite	2	266.40
	Total	**153**	**22,953.17**

(xix) RAJASTHAN

Ajmer	Asbestos	10	502.06
	Felspar	111	4,478.59
	Garnet	3	15.00
	Lead & zinc ores	1	480.45
	Limestone	1	8.57
	Magnesite	1	5.00
	Mica	61	2,223.01
	Quartz	16	570.88
	Steatite	4	265.36
	Vermiculite	1	42.22
	Total	**209**	**8,591.14**
Alwar	Barytes	4	198.73
	China clay	1	4.73
	Copper ore	1	914.07

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Alwar (Contd.)	Felspar	1	32.37
	Fire clay	3	257.37
	Ochre	2	100.70
	Pyrophyllite	1	48.75
	Silica sand	1	178.00
	Steatite	9	603.85
	Total	**23**	**2,338.57**
Banswara	Dolomite	2	358.00
	Graphite	2	382.75
	Limestone	4	505.36
	Manganese ore	1	80.00
	Steatite	4	1,118.61
	Total	**13**	**2,444.72**
Barmer	China clay	2	10.00
	Clay (others)	2	73.11
	Gypsum	6	2,030.51
	Lignite	1	2,655.70
	Silica sand	7	699.84
	Total	**18**	**5,469.16**
Bharatpur	Fire clay	2	42.75
	Ochre	1	5.00
	Silica sand	21	1,786.33
	Steatite	1	69.88
	Total	**25**	**1,903.96**
Bhilwara	Asbestos	10	50.00
	China clay	19	1,300.25
	Felspar	21	551.25
	Garnet	1	5.00
	Kaolin	2	10.00
	Lead & zinc ores	1	1,200.00
	Mica	60	2,367.79
	Quartz	3	81.16
	Steatite	34	2,920.42
	Total	**151**	**8,485.87**
Bikaner	Ball clay	11	1,105.94
	China clay	47	3,927.40
	Fire clay	20	2,573.78
	Gypsum	15	4,947.41
	Lignite	1	860.00
	Total	**94**	**13,414.53**
Bundi	China clay	1	48.00
	Ochre	2	99.37
	Silica sand	2	358.00
	Total	**5**	**505.37**
Chittorgarh	China clay	27	1,555.91
	Fire clay	1	94.40
	Kaolin	1	5.00
	Laterite	1	32.45
	Limestone	8	3,692.81
	Ochre	14	1,612.16
	Shale	2	10.00
	Total	**54**	**7,002.73**
Dausa	Dolomite	1	32.37
	Iron ore	2	125.68
	Quartz	3	191.28
	Silica sand	8	323.83
	Steatite	3	104.68
	Total	**17**	**777.84**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Dungarpur	Felspar	1	100.00
	Fluorite	11	599.99
	Steatite	64	4,510.41
	Total	**76**	**5,210.40**
Ganganagar	Gypsum	13	8,788.35
	Total	**13**	**8,788.35**
Hanumangarh	Gypsum	3	302.17
	Total	**3**	**302.17**
Jaipur	Asbestos	1	66.50
	Calcite	1	296.41
	China clay	9	1,365.97
	Dolomite	3	363.61
	Epidote	2	51.68
	Felspar	6	288.08
	Iron ore	7	760.93
	Limestone	3	1,334.90
	Mica	3	101.17
	Ochre	1	5.00
	Quartz	11	596.14
	Silica sand	28	1,796.78
	Steatite	13	1,016.29
	Total	**90**	**8,043.46**
Jaisalmer	Ball clay	1	150.00
	Dolomite	1	32.37
	Gypsum	7	2,359.89
	Limestone	2	1,998.00
	Ochre	1	32.37
	Phosphorite	1	400.00
	Silica sand	9	492.50
	Total	**22**	**5,465.13**
Jalore	Fluorite	4	1,075.00
	Gypsum	1	300.00
	Total	**5**	**1,375.00**
Jhalawar	Sand (others)	1	481.81
	Total	**1**	**481.81**
Jhunjhunu	Calcite	2	55.00
	Copper ore	4	803.88
	Dolomite	2	66.05
	Fire clay	3	106.37
	Iron ore	5	292.54
	Ochre	1	33.00
	Pyrophyllite	2	53.49
	Quartz	3	212.17
	Steatite	4	400.06
	Total	**26**	**2,022.56**
Jodhpur	Jasper	22	1,217.86
	Total	**22**	**1,217.86**
Karauli	Steatite	1	5.00
	Total	**1**	**5.00**
Kota	Limestone	4	613.10
	Total	**4**	**613.10**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Nagaur	Ball clay	1	5.00
	China clay	1	5.00
	Gypsum	5	3,269.09
	Limestone	12	6,700.56
	Total	**19**	**9,979.65**
Pali	Asbestos	2	176.89
	Ball clay	2	390.15
	Calcite	1	32.37
	China clay	5	557.58
	Felspar	4	126.65
	Gypsum	1	161.55
	Limestone	6	1,091.43
	Magnesite	2	10.00
	Quartz	19	1,448.68
	Steatite	2	161.87
	Total	**44**	**4,157.17**
Rajsamand	Asbestos	14	1,054.17
	China clay	1	35.00
	Felspar	1	5.00
	Lead & zinc ores	4	2,142.04
	Mica	2	10.00
	Pyrophyllite	2	105.00
	Quartz	9	230.10
	Steatite	33	2,999.91
	Total	**66**	**6,581.22**
Sawai Madhopur	China clay	4	171.62
	Felspar	1	34.40
	Fire clay	1	16.59
	Quartz	2	267.65
	Silica sand	25	1,300.43
	Steatite	7	660.63
	Total	**41**	**3,657.72**
Sikar	Barytes	1	47.51
	Calcite	7	268.21
	Dolomite	3	387.93
	Felspar	4	377.20
	Garnet	1	32.54
	Iron ore	4	91.71
	Limestone	4	1,547.49
	Mica	1	39.00
	Ochre	1	5.00
	Pyrite	1	200.00
	Quartz	19	625.13
	Silica sand	1	36.00
	Total	**47**	**3,657.72**
Sirohi	Calcite	7	470.91
	Fluorite	1	90.63
	Lead & zinc ores	1	63.00
	Limestone	4	1,529.72
	Wollastonite	2	95.69
	Total	**15**	**2,249.95**
Tonk	Felspar	3	70.37
	Garnet	4	290.99
	Mica	5	238.37
	Quartz	11	242.84
	Quartzite	1	5.00
	Silica sand	7	560.72
	Steatite	1	48.00
	Total	**32**	**1,456.29**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Udaipur	Asbestos	14	1,099.02
	Barytes	1	31.00
	Calcite	5	166.50
	China clay	1	313.33
	Dolomite	2	379.77
	Emerald	1	129.50
	Lead & zinc ores	1	3,620.00
	Lignite	1	1,063.35
	Limestone	1	704.90
	Ochre	2	10.00
	Phosphorite	5	2,004.18
	Pyrophyllite	9	481.18
	Quartz	1	32.37
	Serpentine	1	2.00
	Steatite	131	9,700.51
	Wollastonite	1	101.80
	Total	**177**	**19,839.41**
(xx) SIKKIM			
Sikkim East	Copper ore	3	84.67
	Total	**3**	**84.67**
Sikkim West	Dolomite	1	1.33
	Total	**1**	**1.33**
(xxi) TAMIL NADU			
Ariyalur	Fire clay	2	2.74
	Limestone	13	983.93
	Total	**15**	**986.67**
Chengai-Anna	Quartz	1	6.58
	Total	**1**	**6.58**
Coimbatore	China clay	1	324.12
	Gypsum	7	44.30
	Limestone	10	573.81
	Quartz	5	12.65
	Steatite	1	3.40
	Total	**24**	**958.28**
Cuddalore	China clay	1	2.72
	Fire clay	11	91.51
	Lignite	1	25,900.00
	Total	**13**	**25,994.23**
Dharmapuri	Limestone	1	132.68
	Quartz	4	75.09
	Total	**5**	**207.77**
Dindigul	Bauxite	1	388.66
	Limestone	19	892.78
	Quartz	14	497.78
	Total	**34**	**1,779.22**
Erode	Limestone	1	1.82
	Quartz	24	51.37
	Total	**25**	**53.19**
Kanchipuram	Limeshell	2	316.29
	Silica sand	1	4.63
	Total	**3**	**320.92**

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Kanyakumari	Garnet	5	258.31
	Total	**5**	**258.31**
Karur	Limestone	14	46.64
	Quartz	31	49.18
	Total	**45**	**96.82**
Madurai	Graphite	1	14.51
	Limestone	3	39.79
	Quartz	3	164.36
	Total	**7**	**218.66**
Nagapattinam	Silica sand	5	7.88
	Total	**5**	**7.88**
Namakkal	Bauxite	5	255.71
	Felspar	1	3.64
	Limestone	26	169.02
	Magnesite	2	599.20
	Quartz	14	25.33
	Steatite	2	34.19
	Total	**50**	**1,087.09**
Perambalur	Fire clay	9	153.47
	Gypsum	8	1,156.02
	Limestone	13	166.57
	Total	**30**	**1,476.06**
Periyar	Quartz	14	10.67
	Total	**14**	**10.67**
Ramnathapuram	Limeshell	1	539.05
	Limestone	4	279.16
	Total	**5**	**818.21**
Salem	Bauxite	1	190.91
	Felspar	2	139.37
	Limestone	54	623.89
	Magnesite	11	1,195.65
	Quartz	26	98.19
	Steatite	5	35.90
	Total	**99**	**2,283.90**
Sivaganga	Graphite	4	277.11
	Gypsum	1	257.09
	Total	**5**	**534.20**
Theni	Limestone	3	6.77
	Total	**3**	**6.77**
Thiruvallur	China clay	2	6.81
	Quartz	1	28.35
	Total	**3**	**35.16**
Thiruvarur	Silica Sand	1	4.16
	Total	**1**	**4.16**
Tiruchirapalli	China clay	2	167.67
	Dolomite	1	62.07
	Felspar	1	17.86
	Garnet	1	19.06
	Gypsum	7	611.87
	Limestone	20	319.95

(TABLE-4 contd.)

(TABLE-4 contd.)

District	Mineral	No. of Leases	Lease area (hect.)
Tiruchirapalli (Concld.)	Quartz	1	0.61
	Steatite	1	4.90
	Total	**34**	**1,203.99**
Tirunelveli	Garnet	38	185.58
	Gypsum	2	75.71
	Limestone	39	805.11
	Vermiculite	1	1.00
	Total	**80**	**1,067.40**
Tuticorin	Garnet	2	21.93
	Limestone	4	108.09
	Total	**6**	**130.02**
Vellore	Quartz	2	40.88
	Steatite	1	28.26
	Vermiculite	2	47.42
	Total	**5**	**116.56**
Villupuram	China clay	2	41.10
	Fire clay	1	3.23
	Silica sand	1	12.15
	Total	**4**	**56.48**
Virudhunagar	Limestone	14	1,947.51
	Total	**14**	**1,947.51**

(xxii) UTTARANCHAL

Almora	Steatite	2	6.20
	Total	**2**	**6.20**
Bageshwar	Magnesite	1	53.20
	Steatite	26	500.51
	Total	**27**	**553.71**
Dehradun	Limestone	2	97.75
	Phosphorite	2	222.05
	Total	**4**	**319.80**
Nainital	Gypsum	1	30.75
	Limestone	1	161.87
	Total	**2**	**192.62**
Pithoragarh	Magnesite	4	1,359.79
	Steatite	10	83.98
	Total	**14**	**1443.77**
Tehri Garhwal	Dolomite	2	29.13
	Gypsum	2	186.15
	Limestone	3	25.77
	Total	**7**	**241.05**

(xxiii) UTTAR PRADESH

Allahabad	Silica sand	59	1,623.39
	Total	**59**	**1,623.39**
Banda	Ochre	1	39.80
	Silica sand	13	397.32
	Total	**14**	**437.12**

(TABLE-4 contd.)

(TABLE-4 concld.)

District	Mineral	No. of Leases	Lease area (hect.)
Hamirpur	Diaspore	2	28.22
	Pyrophyllite	6	20.54
	Total	**8**	**48.76**
Jhansi	Diaspore	4	107.53
	Total	**4**	**107.53**
Lalitpur	Diaspore	3	70.84
	Phosphorite	1	874.00
	Pyrophyllite	5	785.74
	Total	**9**	**1,730.58**
Mirzapur	Silica sand	1	87.41
	Total	**1**	**87.41**
Sonbhadra	Limestone	4	2,706.15
	Total	**4**	**2,706.15**
(xxiv) WEST BENGAL			
Bankura	China clay	15	154.89
	Felspar	2	4.53
	Fire clay	3	36.71
	Quartz	3	9.09
	Quartzite	1	4.70
	Total	**24**	**209.92**
Birbhum	China clay	23	343.89
	Fire clay	2	137.09
	Total	**25**	**480.98**
Burdwan	Fire clay	6	9,882.58
	Moulding sand	3	120.29
	Total	**9**	**10,002.87**
Jalpaiguri	Dolomite	2	927.00
	Limestone	1	129.50
	Total	**3**	**1,056.50**
Midnapur	Ochre	1	5.76
	Total	**1**	**5.76**
Purulia	China clay	2	332.29
	Fire clay	1	1.19
	Limestone	2	13.22
	Moulding sand	3	20.80
	Phosphorite	1	29.13
	Pyrophyllite	1	2.19
	Quartz	4	16.49
	Sand (others)	2	253.12
	Total	**16**	**668.43**

3.2 DISTRICTWISE ANALYSIS

(i) HIGH MINERAL POTENTIAL DISTRICTS

District-wise analysis indicates that the total number of mineral bearing districts are around 280 falling in 24 States in the country. Out of these, 20 districts in 7 States are considered as highly potential districts in each of which more than 100 mining leases granted. There are 3,852 mining leases granted covering an area 2,05,947 hectares in the country. These constitute 42% of total number of mining leases and cover around 33% of total area. Information on the number of mining leases granted in these 20 districts is furnished in Table-5.

TABLE - 5 : HIGH MINERAL POTENTIAL DISTRICTS

Sl.No.	District	No. of leases granted	No. of minerals	Area in hectares	States
1.	Anantapur	149	14	3,525.70	Andhra Pradesh
2.	Cuddapah	178	15	4,814.41	Andhra Pradesh
3.	Kurnool	235	14	4,985.33	Andhra Pradesh
4.	Nellore	225	10	6,832.71	Andhra Pradesh
5.	North Goa	138	2	10,443.89	Goa
6.	South Goa	258	4	19,880.74	Goa
7.	Jamnagar	226	8	6,344.70	Gujarat
8.	Junagarh	145	4	3,327.75	Gujarat
9.	Kutch	181	10	5,384.70	Gujarat
10.	Porbandar	347	5	4,550.44	Gujarat
11.	Surendranagar	183	4	985.07	Gujarat
12.	Vadodara	103	5	1,978.99	Gujarat
13.	Singhbhum (West)	104	10	18,351.83	Jharkhand
14.	Katni	250	9	8,196.92	Madhya Pradesh
15.	Satna	308	8	9,888.79	Madhya Pradesh
16.	Keonjhar	132	7	36,584.94	Orissa
17.	Sundergarh	153	11	22,953.17	Orissa
18.	Ajmer	209	10	8,591.14	Rajasthan
19.	Bhilwara	151	9	8,485.87	Rajasthan
20.	Udaipur	177	16	19,839.41	Rajasthan
	Total	**3,852**		**2,05,946.50**	

(ii) MEDIUM MINERAL POTENTIAL DISTRICTS

Mining leases granted between 51 to 100 is considered as medium potential districts. There are 2,013 mining leases granted in 28 districts covering an area 93,983 hectares in the country. These constitute 22% of total number of mining leases and cover over 15% of total area. Districtwise information is furnished in Table-6.

TABLE -6 : MEDIUM MINERAL POTENTIAL DISTRICTS

Sl.No.	District	No. of leases granted	No. of minerals	Area in hectares	States
1.	Godavari (East)	52	4	189.76	Andhra Pradesh
2.	Mehbubnagar	96	2	601.05	Andhra Pradesh
3.	Prakasam	73	6	1,573.64	Andhra Pradesh
4.	Rangareddy	52	7	1,654.06	Andhra Pradesh
5.	Vizianagaram	76	6	1,229.75	Andhra Pradesh
6.	Durg	89	5	3,658.71	Chhattisgarh
7.	Panchamahal	59	7	612.11	Gujarat
8.	Rajkot	84	6	581.83	Gujarat
9.	Sabarkantha	85	9	1,421.09	Gujarat
10.	Gurgaon	68	4	6,730.79	Haryana
11.	Kodarma	54	2	4,102.19	Jharkhand
12.	Bellary	98	6	9,141.14	Karnataka
13.	Chitradurga	52	9	4,999.98	Karnataka
14.	Balaghat	71	10	2,327.25	Madhya Pradesh
15.	Jabalpur	81	11	1,656.92	Madhya Pradesh
16.	Rewa	50	5	1,819.68	Madhya Pradesh
17.	Sindhudurg	53	9	2,238.90	Maharashtra
18.	Bolangir	90	5	2,391.59	Orissa
19.	Kalahandi	62	4	737.92	Orissa
20.	Bikaner	94	5	13,414.53	Rajasthan
21.	Chittorgarh	54	7	7,002.73	Rajasthan
22.	Dungarpur	76	3	5,210.40	Rajasthan
23.	Jaipur	90	13	8,043.46	Rajasthan
24	Rajasmand	66	8	6,581.22	Rajasthan
25.	Namakal	50	6	1,087.09	Tamil Nadu
26.	Salem	99	6	2,283.90	Tamil Nadu
27.	Tirunelveli	80	4	1,067.40	Tamil Nadu
28.	Allahabad	59	1	1,623.39	Uttar Pradesh
	Total	**2,013**		**93,982.48**	

(iii) LOW MINERAL POTENTIAL DISTRICTS

Mining leases granted between 1 to 50 is considered as low mineral potential districts. There are 3,266 mining leases granted in 232 districts covering an area 3,20,443 hectares in the country. These account for 36% of the leases, covering 52% of the total area. State-wise distribution in low potential districts and area covered is given in Table-7.

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

Sl. No.	State	No. of District	No. of leases granted	Lease area (Hect.)
1.	Andhra Pradesh	13	346	22,498.74
2.	Assam	3	16	1,294.36
3.	Bihar	6	51	5,421.91
4.	Chhattisgarh	12	170	26,693.82
5.	Delhi	1	4	486.37
6.	Gujarat	10	176	12,270.71
7.	Himachal Pradesh	5	53	2,368.23
8.	Haryana	6	80	10,159.45
9.	Jammu & Kashmir	9	25	1,312.42
10.	Jharkhand	15	226	22,731.17
11.	Karnataka	21	364	36,761.23
12.	Kerala	8	96	2,193.14
13.	Madhya Pradesh	27	394	9,575.36
14.	Maharashtra	11	167	13,749.20
15.	Manipur	2	2	610.17
16.	Meghalaya	4	24	4,176.69
17.	Orissa	16	192	32,864.13
18.	Rajasthan	21	395	57,662.70
19.	Sikkim	2	4	86.00
20.	Tamil Nadu	23	307	37,228.40
21.	Uttar Pradesh	6	40	5,117.55
22.	Uttaranchal	6	56	2,757.15
23.	West Bengal	6	78	12,424.46
	Total	**232**	**3,266**	**3,20,443.36**

3.3 MINERALWISE ANALYSIS

There are 62 naturally occurring minerals/metals for which the mining leases are granted in the country. 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, whereas non-ferrous group consists of antimony ores, bauxite, copper, lead & zinc ores, molybdenum ore and nickel ore. The noble metal group includes gold, silver and platinum group of metals. At present, there are no commercial mining leases for silver and platinum group of metals in the country.

Metallic minerals for which mining leases are granted as on 31.3.2003 are eight in number and the number of leases are 1,440 or 15.77% of the total mining leases with an area of 1,95,809.65 hectares (31.56% of the total mining area in the country). Out of the eight metallic minerals, the total number of mining leases granted for iron ore is placed at 601 followed by manganese ore (394), bauxite (371), chromite (33) and copper ore (17). These 5 minerals accounts for 1,406 mining leases (98.33%) of the mining leases for metallic minerals with an area of 1,80,814.61 hectares (92.34%) 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	No. of leases executed	Area in hectares
1.	Bauxite	371	28,862.42
2.	Chromite	33	8,971.66
3.	Copper ore	17	10,589.86
4.	Gold	9	6,708.34
5.	Iron ore	601	95,028.65
6.	Lead & zinc ore	12	8,221.35
7.	Manganese ore	394	37,362.02
8.	Tin	3	65.35
	Total	**1,440**	**1,95,809.65**

(ii) NON-METALLIC MINERALS

There are 55 major non-metallic or industrial minerals, for which leases are granted in the country. In all, there are 7,691(84.22%) of the total mining leases granted for these minerals with an area of 4,24,562.69 hectares (68.43%) 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.	Mineral	No. of leases executed	Area in hectares
1.	Agate	10	431.13
2.	Amethyst	5	40.64
3.	Apatite	1	1,040.07
4.	Asbestos	65	3,890.06
5.	Ball clay	38	1,915.59
6.	Barytes	118	2,411.01
7.	Calcareous sand	15	274.68
8.	Calcite	80	1,808.50
9.	Chalk	179	722.05
10.	China clay	515	23,118.69
11.	Clay (others)	107	2,175.92
12.	Corundum	19	368.52
13.	Diamond	2	576.51
14.	Diaspore	23	436.43
15.	Dolomite	458	17,958.06
16.	Dunite	1	4.45
17.	Emerald	1	129.50
18.	Epidote	2	51.68
19.	Felsite	3	20.07
20.	Felspar	214	7,306.75
21.	Fireclay	432	23,061.42
22.	Fluorite	21	2,566.67
23.	Garnet	67	1,039.87
24.	Graphite	173	6,619.55
25.	Gypsum	96	25,379.38
26.	Iolite	4	24.38
27.	Jasper	22	1,217.86
28.	Kaolin	3	15.00
29.	Kyanite	25	3,307.12
30.	Laterite	123	1,243.80
31.	Lignite	12	35,905.78
32.	Lime kankar	21	863.22
33.	Limeshell	38	4,458.39
34.	Limestone	1,910	1,38,153.86

Table - 9 (contd.)

TABLE-9 (concld.)

Sl.No.	Mineral	No. of leases executed	Area in hectares
35.	Magnesite	31	3,810.56
36.	Mica	312	17,864.46
37.	Moulding sand	83	1,811.08
38.	Ochre	154	4,185.93
39.	Opal	1	200.00
40.	Perlite	1	144.65
41.	Phosphorite	14	3,642.87
42.	Pyrites	2	847.50
43.	Pyrophyllite	89	2,619.54
44.	Quartz	885	15,410.97
45.	Quartzite	74	1,198.18
46.	Rock salt	3	53.86
47.	Sand (others)	61	5,727.89
48.	Serpentine	1	2.00
49.	Shale	33	738.48
50.	Silica sand	569	23,834.82
51.	Sillimanite	11	5,146.47
52.	Slate	15	704.36
53.	Steatite	533	27,647.71
54.	Vermiculite	13	237.26
55.	Wollastonite	3	197.49
	Total	**7,691**	**4,24,562.69**

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 .

TABLE-10 : FREQUENCY DISTRIBUTION OF MINING LEASES

Category	No. of leases granted	Minerals	No. of mining leases granted	Area covered in hectares
I	**Between 1,001 to 20000**	Limestone	1910	138153.86
		Total	**1910**	**138153.86**
II	**Between 501 to 1,000**	China clay	515	23118.69
		Iron ore	601	95028.65
		Quartz	885	15410.97
		Silica sand	569	23834.82
		Steatite	533	27647.71
		Total	**3103**	**185040.84**
III	**Beteen 401 to 500**	Dolomite	458	17958.06
		Fireclay	432	23061.42
		Total	**890**	**41019.48**

TABLE-10 (contd.)

TABLE-10 (contd.)

Category	No. of leases granted	Minerals	No. of mining leases granted	Area covered in hectares
IV	**Between 301 to 400**	Bauxite	371	28,862.42
		Manganese ore	394	37,362.02
		Mica	312	17,864.46
		Total	**1077**	**84,088.90**
V	**Between 201 to 300**	Felsper	214	7,306.12
		Total	**214**	**7,306.12**
VI	**Between 101 to 200**	Barytes	118	2,411.01
		Chalk	179	722.05
		Clay (others)	107	2,175.92
		Graphite	173	6,619.55
		Laterite	123	1,243.80
		Ochre	154	4,185.93
		Total	**854**	**17,358.26**
VII	**Between 51 to 100**	Asbestos	65	3,890.06
		Calcite	80	1,808.50
		Garnet	67	1,039.87
		Gypsum	96	25,379.38
		Moulding sand	83	1,811.08
		Pyrophyllite	89	2,619.54
		Quartzite	74	1,198.18
		Sand (others)	61	5,727.89
		Total	**615**	**43,474.50**
VIII	**Between 1 to 50**	Agate	10	431.13
		Amethyst	5	40.64
		Apatite	1	1,040.07
		Ball clay	38	1,915.59
		Calcareous sand	15	274.68
		Chromite	33	8,971.66
		Copper ore	17	10,589.86
		Corundum	19	368.52
		Diamond	2	576.51
		Diaspore	23	436.43
		Dunite	1	4.45
		Emerald	1	129.50
		Epidote	2	51.68
		Felsite	3	20.07
		Fluorite	21	2,566.67

TABLE-10 (contd.)

TABLE-10 (concld.)

Category	No. of leases granted	Minerals	No. of mining leases granted	Area covered in hectares
VIII	Between 1 to 50 (contd.)	Gold	9	6,708.34
		Iolite	4	24.38
		Jasper	22	1,217.86
		Kaolin	3	15.00
		Kyanite	25	3,307.12
		Lead & zinc ore	12	8,221.35
		Lignite	12	35,905.78
		Lime kankar	21	863.22
		Limeshell	38	4,458.39
		Magnesite	31	3,810.56
		Opal	1	200.00
		Perlite	1	144.65
		Phosphorite	14	3,642.87
		Pyrites	2	847.50
		Rock salt	3	53.86
		Serpentine	1	2.00
		Shale	33	738.48
		Sillimanite	11	5,146.47
		Slate	15	704.36
		Tin	3	65.35
		Vermiculite	13	237.26
		Wollastonite	3	197.49
		Total	**468**	**1,03,929.77**

Number of minerals, their mining leases and area of leases covered categorywise are given below :

Category	No. of Mineral	No. of mining leases		Lease area in hects.	
		No. of leases	Percentage	Lease area	Percentage
I	1	1910	20.92	1,38,153.86	22.27
II	5	3,103	33.98	1,85,040.84	29.83
III	2	890	9.75	41,019.48	6.61
IV	3	1,077	11.79	84,088.90	13.55
V	1	214	2.34	7,306.75	1.18
VI	6	854	9.35	17,358.26	2.80
VII	8	615	6.74	43,474.50	7.01
VIII	37	468	5.13	1,03,929.75	16.75
Total	**63**	**9131**	**100.00**	**6,20,372.34**	**100.00**

3.5 MUSEUM DISTRICTS OF MINERALS

The concentration of both number and wide variety of minerals is confined to as many as 20 districts covering 7 States which have more varieties of minerals. The districts and occurrences of wide variety have been listed in Table-5. Cuddapah district of Andhra Pradesh and Udaipur district of Rajasthan are considered as museum districts of minerals . These two are endowed with as many as 15 and 16 varieties of minerals respectively.

3.6 SECTORWISE DISTRIBUTION OF MINING LEASES

Mining leases are in force both in the private and public sectors including Central and State Undertakings. Out of the total 9,131 mining leases in the country 632 (6.92%) leases are granted in the public sector extending over an area of 2,27,507 hectares (36.67%) and the remaining mining leases with an area of 3,92,866 hectares (63.33%) are in the private sector. Most of the metallic minerals namely copper ore, lead & zinc ores, and gold are in the public sector and other metallic minerals such as iron ore, manganese ore, chromite and the industrial 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 224 number of mining leases granted in 19 States for different minerals, covering an area of 1,17,871 hectares. The States rich in minerals where maximum number of mining leases granted for Central public sector undertakings are Maharashtra (13.39%) followed by Madhya Pradesh (12.94%), Andhra Pradesh (12.05%), Rajasthan (11.61%), Jharkhand (10.71%), Chhattisgarh (8.93%) and Orissa (8.48%). These seven States together account for over 78.11% of total leases executed and remaining States account for 21.89%.

The maximum mining lease area covered by different states are Tamil Nadu (22.84%) followed by Jharkhand (16.00%), Chhattisgarh (11.64%), Rajasthan (11.04%), Orissa (11.00%) and Karnataka (10.79%). These six States account for 83.31% of total lease area executed and remaining States account for 16.69%.

ii) STATE GOVERNMENT PUBLIC SECTOR UNDERTAKINGS

There are 408 number of mining leases granted in 21 States for different minerals, covering an area of 1,09,635 hectares. The States rich in minerals where maximum number of mining leases granted are Karnataka (20.09%) followed by Rajasthan (19.60%), Tamil Nadu (16.42%), Orissa (12.99%), Gujarat (4.41%), Andhra Pradesh (4.16%), and Jharkhand (3.92%). These seven States together account for over 81.59% of total leases executed and remaining States account for remaining 18.41% of mining leases of public sector.

The maximum mining lease area covered by different States are Rajasthan (31.30%) followed by Orissa (26.72%), Karnataka (14.07%), Gujarat (6.02%) and Tamil Nadu (4.82%). These five States account for 82.94% of total lease area executed and remaining states account for remaining 17.06%.

State-wise and Sector-wise distribution of mining leases is given in Tables- 11 to 13.

TABLE-11 : SECTOR WISE DISTRIBUTION OF MINING LEASES
(as on 31/03/2003)
(Public Sector and Private Sector)

Sl. No.	State	Total		Public Sector		Private Sector	
		No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
1.	Andhra Pradesh	1,482	47,905.15	44	8802.21	1438	39,102.94
2.	Assam	16	1,294.36	4	375.03	12	919.33
3.	Bihar	51	5,421.91	4	2,028.13	47	3,393.78
4.	Chhattisgarh	259	30,352.53	25	14,337.55	234	16,010.14
5.	Delhi	4	486.37	1	184.68	3	301.69
6.	Goa	396	30,324.63	-	-	396	30,324.63
7.	Gujarat	1,589	37,457.39	18	6,606.72	1571	30,850.67
8.	Haryana	148	16,890.24	17	2,645.88	131	14,244.36
9.	Himachal Pradesh	53	2,368.23	5	547.76	48	1,820.47
10.	Jammu & Kashmir	25	1,312.42	5	277.54	20	1,034.88
11.	Jharkhand	384	45,185.19	40	23,131.90	344	22,053.29
12.	Karnataka	514	50,902.35	89	28,150.02	425	22,752.33
13.	Kerala	96	2,193.14	5	577.26	91	1,615.88
14.	Madhya Pradesh	1,154	33,464.92	39	6,310.20	1115	27,154.72
15.	Maharashtra	220	15,988.10	46	2,176.18	174	13,811.92
16.	Manipur	2	610.17	-	-	2	610.17
17.	Meghalaya	24	4,176.69	9	2,723.70	15	1,452.99
18.	Orissa	629	95,531.75	72	42,263.84+	557	53,267.91
19.	Rajasthan	1,312	1,34,831.46	106	47,336.11	1206	87,495.35
20.	Sikkim	4	86.00	3	84.67	1	1.33
21.	Tamil Nadu	536	41,666.79	80	32,213.32	456	9,453.47
22.	Uttar Pradesh	99	6,740.94	9	4,387.93	90	2,353.01
23.	Uttaranchal	56	2,757.15	5	811.25	51	1,945.90
24.	West Bengal	78	12,424.46	6	1,534.87	72	10,889.59
	Total	**9,131**	**6,20,372.34**	**632**	**2,27,506.75**	**8,499**	**3,92,865.59**

TABLE-12 : DISTRIBUTION OF MINING LEASES IN PUBLIC SECTOR
(as on 31/03/2003)
(Central and State Govts.)

Sl. No.	State	Public Sector(Total)		Central Govt.		State Govt.	
		No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)	No. of leases	Lease area (Hect.)
1.	Andhra Pradesh	44	8,802.21	27	6,519.21	17	2,283.00
2.	Assam	4	375.03	1	171.00	3	204.03
3.	Bihar	4	2,028.13	3	691.63	1	1,336.50
4.	Chhattisgarh	25	14,337.55	20	13,730.70	5	606.85
5.	Delhi	1	184.68	-	-	1	184.68
6.	Gujarat	18	6,606.72	-	-	18	6,606.72
7.	Himachal Pradesh	5	547.76	5	547.76	-	-
8.	Haryana	17	2,645.88	4	705.35	13	1,940.53
9.	Jammu & Kashmir	5	277.54	1	140.80	4	136.74
10.	Jharkhand	40	23,131.90	24	18,856.62	16	4,275.28
11.	Karnataka	89	28,150.02	7	12,722.16	82	15,427.86
12.	Kerala	5	577.26	2	169.71	3	407.55
13.	Madhya Pradesh	39	6,310.20	29	6,132.13	10	178.07
15.	Maharashtra	46	2,176.18	30	1,463.85	16	712.33
16.	Meghalaya	9	2,723.70	5	1,723.63	4	1,000.07
17.	Orissa	72	42,263.84	19	12,965.32	53	29,298.52
18.	Rajasthan	106	47,336.11	26	13,014.73	80	34,321.38
19.	Sikkim	3	84.67	-	-	3	84.67
20.	Tamil Nadu	80	32,213.32	13	26,920.14	67	5,293.18
22.	Uttar Pradesh	9	4,387.93	1	33.58	8	4,354.35
23.	Uttaranchal	5	811.25	4	714.25	1	97.00
24.	West Bengal	6	1,534.87	3	648.62	3	886.25
	Total	**632**	**2,27,506.75**	**224**	**1,17,871.19**	**408**	**1,09,635.56**

TABLE-13 : DISTRIBUTION OF MINING LEASES IN PUBLIC SECTOR
(as on 31/03/2003)
(BY STATE/DISTRICT/MINERAL)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
1.	**Andhra Pradesh**	Adilabad	Limestone	1	839.41	1	809.38
		Anantapur	Gold	1	168.42	-	-
		Chittoor	Gold	2	265.66	-	-
		Cuddapah	Barytes	-	-	6	160.42
		Godavari (West)	China clay	-	-	3	131.54
		Guntur	Lead & zinc	1	200.00	-	-
		Karimnagar	Sand (others)	5	1,602.00	-	-
		Khammam	Dolomite	1	384.61	-	-
			Sand (others)	1	5.34	-	-
		Krishna	Limestone	1	1,295.00	-	-
		Mahbubnagar	Felspar	1	17.82	-	-
		Prakasam	Iron ore	1	266.33	-	-
		Rangareddi	Laterite	1	41.41	-	-
			Limestone	2	868.74	-	-
			Shale	1	133.07	-	-
		Srikakulam	Silica sand	1	7.50	-	-
		Visakhapatnam	Apatite	-	-	1	1,040.07
			Mica	-	-	2	48.68
			Phosphorite	-	-	1	2.83
			Quartz	1	3.24	-	-
		Vizianagaram	Manganese ore	5	389.50	3	90.08
			Moulding sand	1	31.16	-	-
			Total	**27**	**6,519.21**	**17**	**2,283.00**
2.	**Assam**	Kamrup	Quartz	-	-	1	4.03
		Karbi Anglong	Limestone	1	171.00	-	-
		North Cachar Hills	Limestone	-	-	2	200.00
			Total	**1**	**171.00**	**3**	**204.03**
3.	**Bihar**	Monghyr	Quartzite	2	44.13	-	-
		Nawadha	Mica	-	-	1	1,336.50
		Rohtas	Pyrite	1	647.50	-	-
			Total	**3**	**691.63**	**1**	**1,336.50**
4.	**Chhattisgarh**	Bastar	Dolomite	2	1,562.12	-	-
		Dantewara	Iron ore	6	6,886.90	-	-
		Durg	Dolomite	-	-	1	22.15
			Iron ore	4	2,732.62	-	-
			Limestone	3	198.03	-	-
			Moulding sand	1	24.98	-	-
		Janjgir-Champa	Dolomite	2	122.70	-	-
		Kanker	Bauxite	-	-	1	3.20
			Iron ore	1	938.06	-	-
		Kawardha	Bauxite	1	626.12	-	-
		Surguja	Bauxite	1	639.17	3	581.50
			Total	**20**	**13,730.70**	**5**	**606.85**

TABLE-13(contd.)

TABLE-13 (contd.)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
5.	**Delhi**	Delhi	China clay	-	-	1	184.68
			Total	-	-	**1**	**184.68**
6.	**Gujarat**	Banaskantha	Copper ore	-	-	1	1,402.00
		Bharuch	Lignite	-	-	2	327.87
		Bhavnagar	Lignite	-	-	1	1,355.00
		Jamnagar	Bauxite	-	-	2	189.49
		Kutch	Bauxite	-	-	7	534.46
			Lignite	-	-	3	2,040.00
		Vadodara	Fluorite	-	-	2	757.90
			Total	-	-	**18**	**6,606.72**
7.	**Haryana**	Bhiwani	Lime kankar	4	705.35	-	-
		Faridabad	China clay	-	-	1	70.00
			Silica sand	-	-	4	1,283.09
		Gurgaon	Silica sand	-	-	3	239.76
		Mahendragarh	Felspar	-	-	1	23.61
			Iron ore	-	-	1	86.20
			Limestone	-	-	1	9.85
		Rewari	Slate	-	-	2	228.02
			Total	**4**	**705.35**	**13**	**1,940.53**
8.	**Himachal Pradesh**	Mandi	Rock salt	3	53.86	-	-
		Sirmur	Limestone	1	255.70	-	-
		Solan	Limestone	1	238.20	-	-
			Total	**5**	**547.76**	-	-
9.	**Jammu & Kashmir**	Anantnag	China clay	-	-	1	4.06
		Doda	Gypsum	-	-	1	32.68
		Pulwama	Limestone	-	-	1	100.00
		Udhampur	Magnesite	1	140.80	1	n.a.
			Total	**1**	**140.80**	**4**	**136.74**
10.	**Jharkhand**	Dhanbad	Fireclay	1	138.83	-	-
			Sand (others)	1	21.52	-	-
		Garwah	Dolomite	1	202.35	-	-
			Limestone	3	1,178.92	-	-
		Hazaribagh	Limestone	-	-	1	64.78
		Kodarma	Mica	-	-	1	2,128.51
		Latehar	Iron ore	-	-	1	14.04
		Palamau	Graphite	-	-	7	693.55
			Limestone	-	-	1	1,043.83
		Ranchi	Limestone	-	-	2	239.63
		Singhbhum (East)	Copper ore	3	6,417.69	-	-
			Kyanite	-	-	1	2.43
		Singhbhum (West)	Iron ore	13	9,149.06	-	-
			Kyanite	1	1,748.25	2	88.51
			Total	**24**	**18,856.62**	**16**	**4,275.28**

Table-13 (contd.)

TABLE-13 (contd.)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
11.	**Karnataka**	Bagalkot	Dolomite	-	-	2	269.06
			Limestone	-	-	11	2,918.36
		Bangalore	Corundum	-	-	1	14.16
			Felsper	-	-	4	158.63
		Belgaum	China clay	-	-	1	7.68
			Limestone	-	-	2	351.12
		Bellary	Iron ore	2	2,660.85	9	1,269.88
		Bijapur	Limestone	-	-	3	991.91
		Chickmagalur	Iron ore	1	4,605.00	-	-
		Chitradurga	Copper ore	-	-	2	416.83
			Limestone	-	-	2	1,029.95
		Gulbarga	Gold	-	-	1	55.75
			Limestone	3	240.92	-	-
		Hassan	Asbestos	-	-	1	129.50
			China clay	-	-	2	311.60
			Chromite	-	-	6	987.47
			Copper ore	-	-	1	70.82
			Quartz	-	-	2	18.20
			Steatite	-	-	1	80.94
			Vermiculite	-	-	1	26.30
		Kolar	Clay (others)	-	-	1	2.02
			Gold	1	5,215.39	-	-
		Mandya	Quartz	-	-	1	15.17
		Mysore	Corundum	-	-	1	72.87
			Kyanite	-	-	1	97.12
			Magnesite	-	-	3	338.12
		North Kanara	Manganese ore	-	-	7	2,911.02
		Raichur	Gold	-	-	3	965.08
		Shimoga	China clay	-	-	4	45.32
			Iron ore	-	-	1	40.47
			Manganese ore	-	-	6	1,765.67
		Tumkur	Gold	-	-	1	38.04
		Udupi	Bauxite	-	-	1	28.80
			Total	**7**	**12,722.16**	**82**	**15,427.86**
12.	**Kerala**	Kollam	China clay	-	-	1	4.22
			Sillimanite	2	169.71	1	157.64
		Palakkad	Limestone	-	-	1	245.59
			Total	**2**	**169.71**	**3**	**407.55**
13.	**Madhya Pradesh**	Balaghat	Copper ore	2	479.90	-	-
			Manganese ore	11	1,172.27	-	-
			Sand (others)	1	5.50	-	-
		Chhattarpur	Phosphorite	-	-	1	48.76
		Jabalpur	Felspar	1	8.28	-	-
			Fireclay	1	0.82	-	-
			Limestone	1	89.32	-	-
		Jhabua	Phosphorite	-	-	1	9.12
		Katni	Fireclay	2	38.27	-	-
			Limestone	3	1,109.09	-	-

TABLE-13 (contd.)

Table-13 (contd.)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
	Madhya Pradesh (Contd.)	Mandla	Dolomite	-	-	1	2.52
		Nimach	Limestone	2	500.45	-	-
		Panna	Diamond	2	576.51	-	-
		Rewa	Silica sand	-	-	1	23.91
		Sagar	Phosphorite	-	-	1	52.80
		Satna	Limestone	3	2,151.72	2	22.33
		Shivpuri	Diaspore	-	-	1	4.73
		Tikamgarh	Pyrophyllite	-	-	2	13.90
			Total	**29**	**6,132.13**	**10**	**178.07**
14.	**Maharashtra**	Bhandara	Manganese ore	6	375.97	-	-
			Kyanite	-	-	9	251.48
		Chandrapur	Fluorite	-	-	1	32.70
			Sand (others)	5	461.08	-	-
		Gondia	Iron ore	-	-	1	43.82
		Nagpur	Dolomite	-	-	1	42.52
			Manganese ore	14	390.92	-	-
			Sand (others)	4	191.88	-	-
		Sindhudurg	Felspar	-	-	1	29.27
			Silica sand	-	-	2	105.07
		Yeotmal	Limestone	-	-	1	207.47
			Sand (others)	1	44.00	-	-
			Total	**30**	**1463.85**	**16**	**712.33**
15.	**Meghalaya**	Gara Hills West	Fire clay	-	-	1	221.44
			Limestone	-	-	1	384.00
			Sillimanite	5	1723.63	-	-
		Khasi Hills East	Limestone	-	-	2	394.63
			Total	**5**	**1,723.63**	**4**	**1,000.07**
16.	**Orissa**	Bargarh	Limestone	-	-	2	806.53
		Dhenkanal	Chromite	-	-	2	847.48
		Ganjam	Sillimanite	1	2618.49	-	-
		Jajpur	Chromite	-	-	6	3,051.66
			Iron ore	-	-	1	1,812.99
		Kalahandi	Amethyst	-	-	1	27.65
			Corundum	-	-	1	93.14
		Keonjhar	Chromite	-	-	3	1,933.64
			Iron ore	4	4,162.91	12	7,384.06
			Manganese ore	-	-	9	4,819.75
		Koraput	Bauxite	2	4647.28	-	-
			Graphite	-	-	1	501.67
			Limestone	-	-	2	1,586.22
			Manganese ore	-	-	1	501.67
		Malkangiri	Limestone	-	-	1	1,694.13
		Mayurbhanj	China clay	-	-	1	142.70
			Shale	-	-	1	289.85
		Nawapara	Corundum	-	-	1	33.95
			Limestone	-	-	3	343.00
		Rayagada	Bauxite	-	-	1	1,388.74

Table-13 (contd.)

TABLE-13 (contd.)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
	Orissa (contd.)	Sundergarh	Bauxite	1	117.44	-	-
			Dolomite	2	384.03	-	-
			Iron ore	6	487.64	3	2,039.69
			Lead & zinc ores	1	- 499.60	-	-
			Quartz	2	47.93	-	-
			Total	**19**	**12,965.32**	**53**	**29,298.52**
17.	Rajasthan	Ajmer	Lead & zinc ores	1	480.45	-	-
		Alwar	Copper ore	1	914.07	-	-
		Banswara	Dolomite	-	-	1	300.00
			Graphite	-	-	2	382.75
			Limestone	-	-	3	439.54
		Barmer	Clay (others)	-	-	2	73.11
			Gypsum	2	1,100.66	3	789.85
			Lignite	-	-	1	2,655.70
		Bhilwara	Lead & zinc ores	1	1,200.00	-	-
		Bikaner	Gypsum	3	367.02	11	4,575.39
			Lignite	1	860.00	-	-
		Dungarpur	Fluorite	-	-	6	396.89
			Steatite	-	-	4	237.82
		Ganganagar	Gypsum	4	346.50	9	8,441.85
		Hanumangarh	Gypsum	-	-	3	302.17
		Jaisalmer	Gypsum	1	501.68	6	1,858.21
			Limestone	-	-	2	1,998.00
			Phosphorite	-	-	1	400.00
			Silica sand	-	-	1	107.50
		Jalore	Fluorite	-	-	4	1,075.00
			Gypsum	-	-	1	300.00
		Jhunjhunu	Copper ore	4	803.88	-	-
		Nagaur	Gypsum	-	-	4	1,278.69
			Limestone	1	335.30	3	4,915.44
		Pali	Gypsum	-	-	1	161.55
		Rajsamand	Lead & zinc ores	4	2,142.04	-	-
			Steatite	-	-	1	93.62
		Sikar	Pyrite	1	200.00	-	-
		Sirohi	Fluorite	-	-	1	90.63
			Lead & zinc ores	-	-	1	63.00
		Udaipur	Barytes	-	-	1	31.00
			Calcite	-	-	1	49.50
			Dolomite	-	-	2	379.77
			Lead & zinc ores	1	3,620.00	-	-
			Lignite	-	-	1	1,063.35
			Phosphorite	1	143.13	4	1,861.05
			Total	**26**	**13,014.73**	**80**	**34,321.38**
18.	Sikkim	Sikkim East	Copper ore	-	-	3	84.67
			Total	-	-	**3**	**84.67**

TABLE-13 (contd.)

TABLE-13 (concld)

Sl. No.	State	District	Mineral	Central Govt.		State Govt.	
				No. of leases	Area (Hect.)	No. of leases	Area (Hect.)
19.	**Tamil Nadu**	Ariyalur	Limestone	-	-	5	614.67
		Chengai-Anna	Quartz	-	-	1	6.58
		Cuddalore	Fireclay	-	-	3	46.05
			Lignite	1	25,900.00	-	-
		Dharmpuri	Limestone	-	-	1	132.68
		Dindigul	Quartz	-	-	2	1.47
		Erode	Quartz	-	-	6	24.96
		Kanchipuram	Limeshell	-	-	1	190.00
			Silica sand	-	-	1	4.63
		Kanyakumari	Garnet	5	258.31	-	-
		Karur	Quartz	-	-	7	19.30
		Namakkal	Quartz	-	-	3	7.92
		Perambalur	Gypsum	-	-	4	734.62
			Limestone	-	-	2	124.18
		Periyar	Quartz	-	-	2	3.59
		Ramnathapuram	Limeshell	-	-	1	539.05
		Salem	Magnesite	7	761.83	3	431.24
			Quartz	-	-	2	0.97
		Sivaganga	Graphite	-	-	2	242.46
			Gypsum	-	-	1	257.09
		Tiruchirapalli	China clay	-	-	1	12.30
			Dolomite	-	-	1	62.07
			Gypsum	-	-	1	65.00
			Limestone	-	-	1	9.95
		Tirunelvelli	Garnet	-	-	1	4.36
			Gypsum	-	-	2	75.71
			Limestone	-	-	6	88.18
		Vellore	Vermiculite	-	-	1	23.71
		Villupuram	Silica sand	-	-	1	12.15
		Virudhunagar	Limestone	-	-	5	1,558.29
			Total	**13**	**29,920.14**	67	**5,293.18**
20.	**Uttar Pradesh**	Allahabad	Silica sand	1	33.58	-	-
		Lalitpur	Phosphorite	-	-	1	874.00
			Pyrophyllite	-	-	3	774.20
		Sonbhadra	Limestone	-	-	4	2,703.15
			Total	**1**	**33.58**	8	**4,354.35**
21.	**Uttaranchal**	Bageshwar	Magnesite	1	53.20	-	-
		Dehradun	Limestone	-	-	1	97.00
			Phosphorite	2	222.05	-	-
		Pithoragarh	Magnesite	1	439.00	-	-
			Total	**4**	**714.25**	1	**97.00**
22.	**West Bengal**	Birbhum	Fireclay	1	91.09	-	-
		Burdwan	Fireclay	1	348.50	-	-
		Jalpaiguri	Dolomite	-	-	1	847.00
		Purulia	Phosphorite	-	-	1	29.13
			Quartz	-	-	1	10.12
			Sand (others)	1	209.03	-	-
			Total	**3**	**648.62**	3	886.25

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 (9,131), more than 1,787 leases will expire between 2004 to 2010. The year -wise break up of expiry of leases and State-wise and year-wise break up of expiry of leases are given in Tables-14 and 15.

Table-14 : YEAR -WISE STATUS OF EXPIRY OF MINING LEASES

Year	No. of leases	Percentage	Area covered in Hectares	Percentage
2004	442	3.40	24,059.60	2.64
2005	424	3.26	30,383.20	3.33
2006	385	2.96	22,831.61	2.50
2007	246	1.89	15,760.08	1.73
2008	115	0.88	7,699.83	0.84
2009	77	0.59	7,510.69	0.82
2010	98	0.75	11,745.61	1.29

TABLE -15 : STATEWISE AND YEARWISE STATUS OF EXPIRY OF MINING LEASES (BY STATE)

Sl. No.	State	2004		2005		2006		2007		2008		2009		2010	
		No.	Lease Area (Hect.)	No.	Lease Area (Hect.)	No.	Lease Area (Hect.)	No.	Lease Area (Hect.)	No.	Lease Area (Hect.)	No.	Lease Area (Hect.)	No.	Lease Area (Hect.)
1.	Andhra Pradesh	52	1,248.98	56	2,121.07	30	1,803.60	13	1,822.09	7	244.73	9	89.56	10	299.96
2.	Assam	-	-	1	33.00	6	150.83	1	35.00	-	-	-	-	1	40.00
3.	Bihar	1	25.90	2	61.30	2.0	232.43	-	-	-	-	-	-	-	-
4.	Chhattisgarh	1	3.69	11	981.11	11	641.28	10	3,343.42	-	-	2	22.43	1	6.47
5.	Delhi	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Goa	2	91.30	-	-	26	1,785.54	-	-	1	9.49	-	-	-	-
7.	Gujarat	119	1,162.79	69	810.96	97	1,154.29	55	796.93	28	1,019.53	11	55.56	8	27.67
8.	Haryana	5	471.60	3	559.80	2	665.01	1	626.72	-	-	-	-	1	55.50
9.	Himachal Pradesh	7	63.91	8	75.19	2	5.56	3	40.14	-	-	1	0.47	1	27.83
10.	Jammu & Kashmir	-	-	-	-	-	-	-	-	-	-	1	140.8	2	43.56
11.	Jharkhand	26	1,268.93	26	5,173.79	29	2,474.77	3	144.90	7	222.87	8	2,297.80	16	430.45
12.	Karnataka	32	1,332.26	29	2,175.98	13	504.62	11	704.26	4	812.17	4	80.93	4	117.90
13.	Kerala	21	126.81	6	241.03	5	6.72	7	11.42	2	4.09	1	3.87	1	0.27
14.	Madhya Pradesh	46	1,085.48	73	3,078.75	49	539.37	27	254.02	4	20.16	3	94.57	13	89.91
15.	Maharashtra	14	1,910.33	7	158.86	11	444.65	12	259.01	4	118.09	7	231.54	6	111.66
16.	Manipur	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17.	Meghalaya	-	-	-	-	1	86.00	1	221.44	1	11.08	-	-	1	384.00
18.	Orissa	27	4,104.31	43	8,031.99	44	5,609.04	27	1,397.73	21	1,324.49	14	1,787.31	19	3,570.02
19.	Rajasthan	76	10,371.28	72	5,688.29	62	7,945.61	32	3,481.62	24	3,448.51	13	2,664.85	12	6,522.16
20.	Sikkim	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21.	Tamil Nadu	10	742.20	7	453.78	9	197.72	12	681.12	12	464.42	3	41.10	1	7.06
22.	Uttaranchal	2	112.27	3	165.40	-	-	2	89.43	-	-	-	-	-	-
23.	Uttar Pradesh	-	-	2	450.12	4	78.25	-	-	-	-	-	-	-	-
24.	West Bengal	3	28.86	4	31.34	8	291.86	3	65.29	-	-	-	-	1	16.19
	Total	442	24,059.60	424	30,383.20	385	22,831.61	246	15,760.08	115	7,699.83	77	7,510.69	98	11,745.61

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 State-wise instead of the country as a whole.

4.1 STATEWISE DISTRIBUTION OF PROSPECTING LICENCES

As per information received from the State Governments/Union Territories, 255 prospecting licences were executed covering 35,385 hectares during 2002-03 as compared with 247 prospecting licences covering 34,610 hectares during 2001-02. The Statewise distribution of prospecting licences executed during 2001-02 and 2002-03 is given in Table-16. These prospecting licences, however, exclude reconnaissance permits executed for aerial prospecting.

The States rich in minerals, where prospecting licences so far executed during the year 2002-03, are Rajasthan (201), followed by Chhattisgarh (14), Orissa (13), Andhra Pradesh (12), Maharashtra (8), Uttaranchal (3), Kerala, Madhya Pradesh, Uttar Pradesh and West Bengal (one each). Rajasthan alone accounted for 79% licences while remaining nine States shared 21 percent. Areawise, Rajasthan covered 93% while the remaining nine States accounted for just 7 percent. (Table-16).

TABLE –16 : STATE-WISE DISTRIBUTION OF PROSPECTING LICENCES* EXECUTED, 2001-02 AND 2002-03

States	2001-02		2002-03	
	No.	Area in Hects.	No.	Area in Hects.
Andhra Pradesh	23	5,002	12	1,285
Chhattisgarh	6	64	14	237
Gujarat	4	941	-	-
Haryana	1	413	-	-
Himachal Pradesh	2	875	-	-
Karnataka	5	1,459	-	-
Kerala	1	++	1	++
Madhya Pradesh	1	1	1	2
Maharashtra	20	1,323	8	537
Orissa	17	602	13	427
Rajasthan	152	23,899	201	32,864
Uttaranchal	15	31	3	5
Uttar Pradesh	-	-	1	24
West Bengal	-	-	1	4
Total	**247**	**34,610**	**255**	**35,385**

Area figures rounded off.
++ Negligible
** Excluding, those over large areas.*

4.2 MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES

Mineralwise, in 2002-03, calcite accounted for maximum eleven prospecting licences executed followed by soapstone / steatite (10), limestone (9), dolomite and quartz (4 each) ,barytes, graphite, jasper, ochre, pyroxenite and quartzite (3 each), china clay, gypsum, iron ore, manganese ore and silica sand (2 each), bauxite, fireclay, garnet, gold & associated minerals, pyrophyllite and shale (1 each). Other minerals in association accounted for 183 licences or (72%) executed during 2002-03.

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. The mineral-wise distribution of prospecting licences executed during 2001-02 and 2002-03 is given in Table 17.

Table – 17 : MINERALWISE DISTRIBUTION OF PROSPECTING LICENCES EXECUTED, 2001-02 AND 2002-03

Mineral	2001-02		2002-03	
	No.	Area in Hects.	No.	Area in Hects.
Barytes	7	568	3	53
Bauxite	-	-	1	++
Calcite	8	1,250	11	1,526
China clay	2	112	2	428
Chromite	1	92	-	-
Crystal quartz	1	++	-	-
Diamond	3	325	-	-
Dolomite	7	113	4	13
Dunite	1	50	-	-
Fireclay	3	23	1	4
Garnet	-	-	1	113
Gold & associated minerals	-	-	1	4,310
Graphite	3	52	3	62
Gypsum	1	375	2	725
Iron ore	-	-	2	86
Jasper	-	-	3	685
Limestone	17	4,616	9	1,087
Manganese ore	-	-	2	197
Mica	1	263	-	-
Ochre	1	4	3	212
Pyrophyllite	2	154	1	59
Pyroxenite	-	-	3	74
Quartz	6	176	4	189
Quartzite	1	6	3	9
Semi-precious stone	1	875	-	-
Shale	1	1	1	2
Silica sand	-	-	2	72
Soapstone/steatite	29	1,724	10	1,123
Tin ore	2	50	-	-
White clay	1	2	-	-
White quartz	2	14	-	-
Wollastonite	1	72	-	-
Minerals in association	145	23,693	183	24,356
Total	**247**	**34,610**	**255**	**35,385**

Area figures rounded off.

++ *Negligible*

4.3 AREA-WISE DISTRIBUTION OF PROSPECTING LICENCES

Areawise analysis indicated that gold & associated minerals occupied the first place, covering an area of 4,310 hectares followed by calcite (1,526 hectares), soapstone/steatite (1,123 hectares), limestone (1,087 hectares), gypsum (725 hectares), jasper (685 hectares), china clay (428 hectares), ochre (212 hectares), manganese ore (197 hectares), quartz (189 hectares) and garnet (113 hectares). These minerals together accounted for 30% area while other minerals like barytes, dolomite, fireclay, graphite, iron ore, pyrophyllite, pyroxenite, quartzite, shale and silica sand covered less than 100 hectares. The other associated minerals occupied 24,356 hectares or 69 % area under prospecting licences.

4.4 SECTOR-WISE DISTRIBUTION OF PROSPECTING LICENCES

Out of the 255 prospecting licences executed in 2002-03, public sector accounted for 3 licences or 1.18% compared with 9 licences or 3.64% of the total in previous year. The remaining 252 prospecting licences or 98.82 % were executed in private sector compared with 238 licences or 99.36% in the previous year. The sector-wise distribution of prospecting licences during 2001-02 to 2002-03 is given in Table-18.

TABLE-18 : DISTRIBUTION OF PROSPECTING LICENCES IN PUBLIC AND PRIVATE SECTORS

Sector	2001-02		2002-03	
	No.	Area in Hects.	No.	Area in Hects.
Total	**247**	**34,610**	**255**	**35,385**
Public	9	2,072	3	5,035
Private	238	32,538	252	30,350
Public %	3.64	5.99	1.18	14.23
Private%	96.36	94.01	98.82	85.77

5. RECONNAISSANCE PERMITS

The provision of Reconnaissance Permit (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 bore-holes on a grid specified from time to time by the Central Government) or subsurface excavation.

Approvals have been granted by the Central Government to 31 reconnaissance permits covering 50,284 sq. km. in 2002-03 distributed in Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh and Rajasthan for precious and high-value minerals like diamond, 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 dolomite and associated minerals.

During 2002-03, approvals for grant of reconnaissance permits have been accorded to thirteen companies; viz., M/s ACC-RIO TINTO Exploration Ltd., M/s Anglo American Exploration (India) Pvt. Ltd., M/s BHP Minerals (India) Pvt. Ltd., M/s De Beers India Prospecting Pvt. Ltd., M/s Emperor Granite Pvt. Ltd., M/s Geomysore Services (India) Pvt. Ltd., M/s Hindustan Zinc Ltd., M/s Hutti Gold Mines Co. Ltd., M/s Indophil Resources Exploration Services (India) Pvt. Ltd., M/s Minpro Corporation, M/s Mira Exploration Pvt. Ltd., M/s National Mineral Development Corporation Ltd., and M/s Phelps Dodge Exploration India Pvt. Ltd.

5.1 MINERALWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2002-03, four companies were granted 7 reconnaissance permits for copper, lead, zinc, gold, nickel and associated minerals, covering 11,634 sq.km. (23%) compared with 13 reconnaissance permits covering 16,804 sq. km. (42%) in the previous year. Only one reconnaissance permit has been granted for diamond, covering 2,010 sq. km. (4%) compared with 481 sq. km. (1%) in the previous year. Ten reconnaissance permits were granted exclusively for diamond and associated minerals, covering 15,417 sq. km. (31%) compared with 13 reconnaissance permits with 19,118 sq. km. (48%) in the previous year and one reconnaissance permit for dolomite and associated minerals covering 1,975 sq. km. (4%) against none in the previous year. Two reconnaissance permit for gold, covering 1,980 sq. km. (4%) compared with 702 sq. kms (2%) in the previous year. Ten reconnaissance permits have been granted for gold and associated minerals, covering 17,268 sq. km. (34%) against six reconnaissance permits covering 2,733 sq. km. (7%) in the previous year. The mineral-wise, reconnaissance permits granted/executed during 2001-02 and 2002-03 are given in Table-19.

TABLE – 19 : MINERALWISE DISTRIBUTION OF RECONNAISSANCE PERMITS, 2001-02 AND 2002-03

Mineral	2001-02		2002-03	
	No.	Area in sq. km.	No.	Area in sq. km.
Copper, lead, zinc, gold, silver, bismuth, cadmium, nickel and associated minerals	13	16,804	7	11,634
Diamond	1	481	1	2,010
Diamond and associated minerals	13	19,118	10	15,417
Dolomite and associated minerals	-	-	1	1,975
Gold	1	702	2	1,980
Gold and associated minerals	6	2,733	10	17,268
Total	**34**	**39,838**	**31**	**50,284**

5.2 STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

During 2002-03 thirty-one reconnaissance permits were approved/granted/executed covering about 50,284 sq. km. in Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh and Rajasthan for high-value minerals like gold, silver, copper, lead-zinc, nickel, cadmium, bismuth, diamond and associated minerals. Chhattisgarh, Karnataka and Madhya Pradesh were the leading States in the number of reconnaissance permits (8 each) covering 10,626 sq.km (21%); 11,626 sq.km (23%) and 16,623 sq.km, (33%) respectively, followed by Andhra Pradesh with 4 reconnaissance permits covering an area of 8,725 sq.km. (17%). These States together accounted about 90% reconnaissance permits covering 94% area. Jharkhand and Rajasthan States covered the remaining area. The State-wise distribution of reconnaissance permits is given in Table - 20.

TABLE – 20 : STATEWISE DISTRIBUTION OF RECONNAISSANCE PERMITS, 2001-02 AND 2002-03

State	2001-02		2002-03	
	No.	Area (sq. km.)	No.	Area (sq. km.)
Andhra Pradesh	9	7,289	4	8,725
Chhattisgarh	-	-	8	10,626
Jharkhand	-	-	1	1,870
Karnataka	11	14,932	8	11,626
Madhya Pradesh	-	-	8	16,623
Rajasthan	14	17,617	2	814
Total	34	39,838	31	**50,284**

5.3 AREAWISE DISTRIBUTION OF RECONNAISSANCE PERMITS

Areawise, M/s Geomysore Services (India) Pvt. Ltd. held maximum area of about 8,989 sq. km., under 9 RPs followed by M/s Anglo American Exploration (India) Pvt. Ltd. 8,499 sq. km. under 4 RPs; M/s ACC-RIO TINTO Exploration Ltd. 7,650 sq. km. under 3 RPs; M/s De Beers India Prospecting Pvt. Ltd., 6,629 sq. km. under 4 RPs; M/s Indophil Resources Exploration Services India Pvt. Ltd. 4,995 sq. km. under 2 RPs; M/s Hutti Gold Mines Co. Ltd. 4,103 sq. km. under 1 RP, M/s National Mineral Development Corporation Ltd. 3,304 sq. km. under 2 RP; M/s BHP Minerals (India) Pvt. Ltd. 2,293 sq. km. under 1 RP. These eight companies shared about 92 % area and the remaining five companies covered less than 2,000 sq. km. each or about 8% area. The company-wise distribution of RPs are given in Table-21 and details of reconnaissance permits granted/executed during 2002-03 are furnished in Table-22.

TABLE – 21 : AREAWISE/COMPANYWISE DISTRIBUTION OF RECONNAISSANCE PERMITS DURING 2001-02 AND 2002-03

Sl. No.	Company	2001-02		2002-03	
		No.	Area (sq. km.)	No.	Area (sq. km.)
1.	ACC-RIO TINTO Exploration Ltd., RCD- CRS Complex, Lal Bahadur Shastri Marg, Thane-400 604.	3	4,060	3	7,650
2.	AMIL Mining India Pvt. Ltd., D-19, Press Enclave, Saket, New Delhi-110 017.	5	5,494	-	-
3.	Anglo American Exploration (India) Pvt. Ltd., 214, South Ex-Plaza-I, 389, Masjid Moth, South Ext-II, New Delhi-110 049.	1	461	4	8,499
4.	BHP Minerals (India) Pvt. Ltd., 7/F, World Trade Tower, Barakhamba Lane, New Delhi-110 001.	-	-	1	2,293
5.	De Beers India Prospecting Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers VI, Nariman Point, Mumbai-400 021.	2	3,971	4	6,629
6.	Diamond Prospecting Pvt. Ltd.,	3	5,409	-	-
7.	Emperor Granite Pvt. Ltd. Bhopal	-	-	1	1,000
8.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028.	4	975	9	8,989

(Table-21 contd.)

(Table-21 concld.)

Sl. No.	Company	2001-02 No.	2001-02 Area (sq. km.)	2002-03 No.	2002-03 Area (sq. km.)
9.	Hindustan Zinc Ltd., Yashad Bhavan, Yashadgarh, Udaipur-313 001.	3	1,484	1	361
10.	Hutti Gold Mines Co. Ltd., 6/13, Gurappa Avenue, Prim Rose Road Cross, Bangalore-560 025.	-	-	1	4,103
11.	Indophil Resources Exploration Services India Pvt. Ltd., 114, 5th Cross, 3rd Main Road, Girinagar, Bangalore-560 085.	-	-	2	4,995
12.	Lake Resources Holdings India Pvt. Ltd., Himalaya House, 23, Kasturba Gandhi Marg, New Delhi- 110 001.	3	4,500	-	-
13.	Metmin Finance & Holdings Pvt. Ltd., 161/162, Mittal Court, 'A' Wing, Nariman Point, Mumbai-400 021.	3	1,808	-	-
14.	Minpro Corporation, 201, Gulmohor, Chitnavis Marg, Opp. Hislop College, Nagpur-440 001.	-	-	1	110
15.	Mira Exploration Pvt. Ltd., D-11/2251 Basant Kunj, New Delhi 110 020	-	-	1	481
16.	National Mineral Development Corporation Ltd., 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500 028.	1	702	2	3,304
17.	Pasminco Exploration India Pvt. Ltd., A/320, Defence Colony, New Delhi -110 024.	3	7,300	-	-
18.	Phelps Dodge Exploration India Pvt. Ltd., B-1, Defence Colony, New Delhi-110 024.	3	3,674	1	1870
	Total	**34**	**39,838**	**31**	**50,284**

TABLE- 22 : RECONNAISSANCE PERMITS APPROVED BY THE MINISTRY OF MINES AND GRANTED/ EXECUTED BY VARIOUS STATE GOVERNMENTS DURING 2002-03

Sl. No.	Name and address of the permit holder	Location		Mineral (s)	Area (In sq. km.)	Date of approval/ grant/ permission	Date of execution	Period in years
		State	District (s)					
1.	ACC-RIO TINTO Exploration Ltd., RCD –CRS Complex, Lal Bahadur Shastri (LBS) Marg, Thane-400 604	Madhya Pradesh	Chhatarpur, Damoh, Sagar & Tikamgarh	Diamond and associated minerals	2,450.00	i) 12.06.2002 ii) 19.06.2002	23.07.2002	03
2.	ACC-RIO TINTO Exploration Ltd., RCD –CRS Complex, Lal Bahadur Shastri (LBS) Marg, Thane-400 604	Madhya Pradesh	Chhatarpur & Panna	Diamond and associated minerals	2,600.00	i) 24.10.2002 ii) 11.11.2002	07.01.2003	03
3.	ACC-RIO TINTO Exploration Ltd., RCD –CRS Complex, Lal Bahadur Shastri (LBS) Marg, Thane-400 604	Madhya Pradesh	Chhatarpur, Damoh & Tikamgarh	Diamond and associated minerals	2,600.00	i) 24.10.2002 ii) 11.11.2002	07.01.2003	03
4.	Anglo American Exploration (India) Pvt. Ltd., 214, South Ex. Plaza-1, 389, Masjid Moth, South Extn. Part-II, New Delhi – 110 049.	Andhra Pradesh	Prakasam	Copper, nickel & associated minerals	2,701.00	i) 26.06.2002 ii) 13.08.2002	19.10.2002	03
5.	Anglo American Exploration (India) Pvt. Ltd., 214, South Ex. Plaza-1, 389, Masjid Moth, South Extn. Part-II, New Delhi – 110 049.	Andhra Pradesh	Prakasam	Copper, nickel & associated minerals	2,858.00	i) 19.04.2002 ii) 03.05.2002	-	03

(contd.)

Sl. No.	Name and address of the permit holder	Location		Mineral (s)	Area (In sq. km.)	Date of approval/ grant/ permission	Date of execution	Period in years
		State	District (s)					
6.	Anglo American Exploration (India) Pvt. Ltd., 214, South Ex. Plaza-1, 389, Masjid Moth, South Extn. Part-II, New Delhi – 110 049.	Andhra Pradesh	Guntur	Copper, nickel & associated minerals	2,487.00	i) 19.04.2002 ii) 03.05.2002	-	03
7.	Anglo American Exploration (India) Pvt. Ltd., 214, South Ex. Plaza-1, 389, Masjid Moth, South Extn. Part-II, New Delhi – 110 049.	Rajasthan	Ajmer & Bhilwara	Lead, zinc, copper, gold & associated minerals	453.00	i) 20.05.2002 ii) 15.06.2002	08.07.2002	03
8.	BHP Minerals India Pvt. Ltd., 7F, World Trade Tower, Barakhamba Lane, New Delhi – 110 001.	Madhya Pradesh	Chhindwara, Hoshangabad & Narsingpur	Copper, nickel, lead, zinc, gold & associated minerals	2,293.00	i) 31.05.2002 ii) 19.06.2002	31.07.2002	03
9.	De Beers India Survey Pvt. Ltd., Advanced Business Centre, 83, Maker Chambers, VI, Nariman Point, Mumbai – 400 021	Andhra Pradesh	Kurnool	Diamond and associated minerals	679.00	i) 20.05.2002 ii) 06.06.2002	-	03
10.	De Beers India Survey Pvt. Ltd., Advanced Business Center, 83, Maker Chambers, VI, Nariman Point, Mumbai – 400 021	Chhattisgarh	Durg	Diamond & gold	1,975.00	i) 23.09.2002	14.01.2003	03
11.	De Beers India Survey Pvt. Ltd., Advanced Business Center, 83, Maker Chambers, VI, Nariman Point, Mumbai – 400 021	Chhattisgarh	Dhamtari, Durg & Raipur	Diamond & gold	2,000.00	i) 23.09.2002	20.12.2002	03

(contd.)

Sl. No.	Name and address of the permit holder	Location		Mineral (s)	Area (In sq. km.)	Date of approval/ grant/ permission	Date of execution	Period in years
		State	District (s)					
12.	De Beers India Survey Pvt. Ltd., Advanced Business Center, 83, Maker Chambers, VI, Nariman Point, Mumbai – 400 021	Chhattisgarh	Rajnandgaon	Dolomite & associated minerals	1,975.00	i) 23.09.2002	14.01.2003	03
13.	Emperor Granite Pvt. Ltd., Bhopal	Chhattisgarh	Kanker	Diamond & gold	1,000.00	i) 17.10.2002	03.12.2002	03
14.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Chhattisgarh	Jaspur	Gold and associated minerals	1,475.00	i) 23.10.2002	-	03
15.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Chhattisgarh	Kanker	Gold and associated minerals	1,220.00	i) 23.09.2002	28.11.2002	03
16.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Chhattisgarh	Rajnandgaon	Gold and associated minerals	500.00	i) 23.09.2002	27.11.2002	03
17.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Karnataka	Chitradurga & Davangere	Diamond, gold & associated minerals	639.00	i) 26.06.2002 ii) 23.10.2002	-	03
18.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Karnataka	Chickmagalur & Davangere	Diamond, gold & associated minerals	180.00	i) 26.06.2002 ii) 23.10.2002	-	03

(contd.)

Sl. No.	Name and address of the permit holder	Location		Mineral (s)	Area (in sq. km.)	Date of approval/ grant/ permission	Date of execution	Period in years
		State	District (s)					
19.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Karnataka	Mandya &Tumkur	Gold & associated minerals	305.00	i) 19.04.2002 ii) 23.10.2002	-	03
20.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Madhya Pradesh	Jabalpur & Katni	Gold, copper, lead, zinc, silver, nickel, tungsten, antimony, bismuth, arsenic, cobalt, molybdenum, and platinum group of metals	1,480.00	i) 01.10.2002 ii) 10.10.2002	30.11.2002	03
21.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Madhya Pradesh	Shahdol & Umaria	Gold, copper, lead, zinc, silver, nickel, tungsten, antimony, bismuth, arsenic, cobalt, molybdenum, and platinum group of metals	490.00	i) 01.10.2002 ii) 10.10.2002	30.11.2002	03
22.	Geomysore Services (India) Pvt. Ltd., 120/45, 3rd Block, 6th Cross, 6th 'A' Main, Thyagaraja Nagar, Bangalore-560 028	Madhya Pradesh	Sidhi	Gold, copper, lead, zinc, silver, nickel, tungsten, antimony, bismuth, arsenic, cobalt, molybdenum, and platinum group of metals	2,700.00	i) 01.10.2002 ii) 10.10.2002	30.11.2002	03
23.	Hindustan Zinc Ltd., Yashad Bhavan, Udaipur-313 001	Rajasthan	Bhilwara	Copper, lead, zinc, gold & associated minerals	361.19	i) 13.08.2002 ii) 25.09.2002	-	03
24.	Hutti Gold Mines Co. Ltd., 6/13, Gurappa Avenue, Prim Rose Road Cross, Bangalore-560 025	Karnataka	Bellary, Davangere, Haveri, & Shimoga	Gold and associated minerals	4,102.80	i) 19.12.2001 ii) 03.10.2002	21.02.2003	03

(contd.)

Sl. No.	Name and address of the permit holder	Location		Mineral (s)	Area (In sq. km.)	Date of approval/ grant/ permission	Date of execution	Period in years
		State	District (s)					
25.	Indophil Resources Exploration Services (India) Ltd., 114, 5 th Cross, 3 rd Main Road, Girinagar, Bangalore- 560 085	Karnataka	Belgaum,Dharwar, Gadag, Haveri & Uttar Kannada	Gold and associated minerals	3,453.00	i) 16.04.2002 ii) 17.10.2002	-	03
26.	Indophil Resources Exploration Services (India) Ltd., 114, 5 th Cross, 3 rd Main Road, Girinagar, Bangalore- 560 085	Karnataka	Dharwar, Haveri, Shimoga & Uttar Kannada	Gold and associated minerals	1542.20	i) 1 6.04.2002 ii) 23.10.2002	-	03
27.	Minpro Corporation, 201 Gulmohar, Chitnavis Marg, Opposite Hislop College, Civil Lines, Nagpur- 440 001	Karnataka	Tumkur	Gold	110.00	i) 12.06.2002 ii) 11.11.2002	-	03
28.	Mira Exploration Pvt. Ltd., D-11/2251 Basant Kunj, New Delhi -110 020	Chhattisgarh	Rajanandgaon	Copper & associated minerals	481.25	i) 23.02.2002	30.12.2002	03
29.	National Mineral Development Corporation Ltd., 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500 028.	Madhya Pradesh	Panna & Satna	Diamond	2,010.00	i) 01.10.2002 ii) 10.10.2002	06.01.2003	03
30.	National Mineral Development Corporation Ltd., 10-3-311/A, Castle Hills, Masab Tank, Hyderabad-500 028.	Karnataka	Bellary & Chitradurga	Diamond, gold & associated minerals	1293.82	i) 19.04.2002 ii) 17.10.2002	-	03
31.	Phelps Dodge Exploration India Pvt. Ltd., B-1, Defence Colony, New Delhi-110 024	Jharkhand	East Singhbhum	Gold	1,869.68	i) 02.04.2002	-	03

Note : *i) Approval by Central Government.*
ii) Grant by State Government.