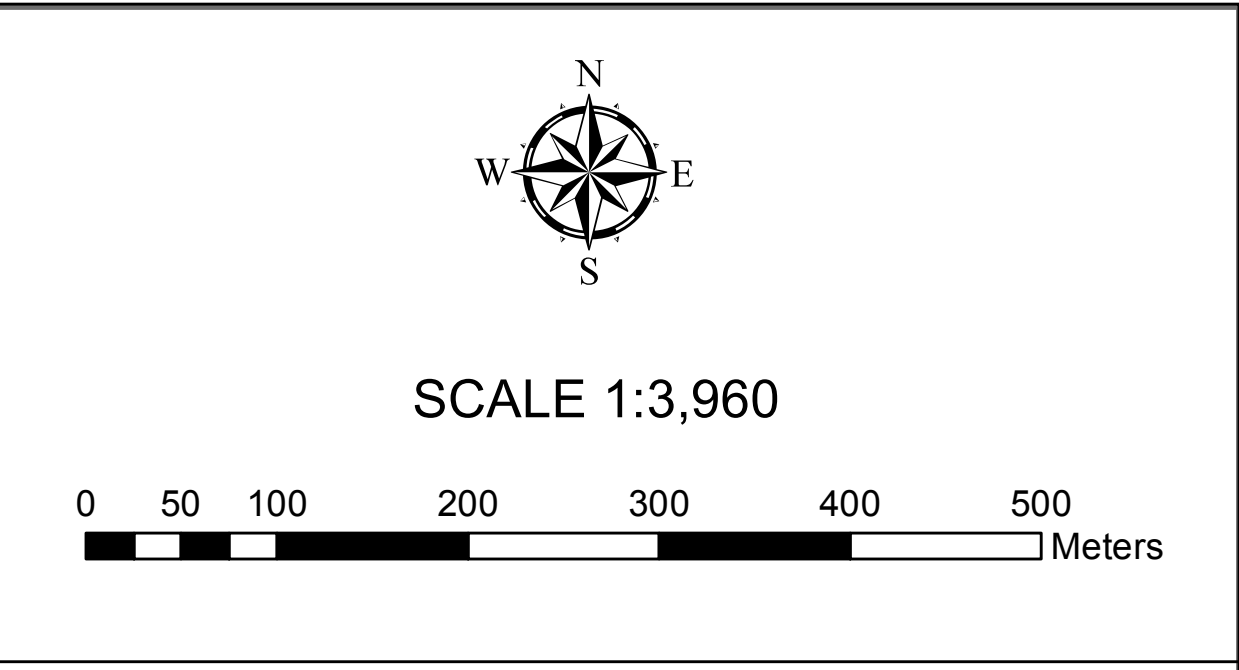
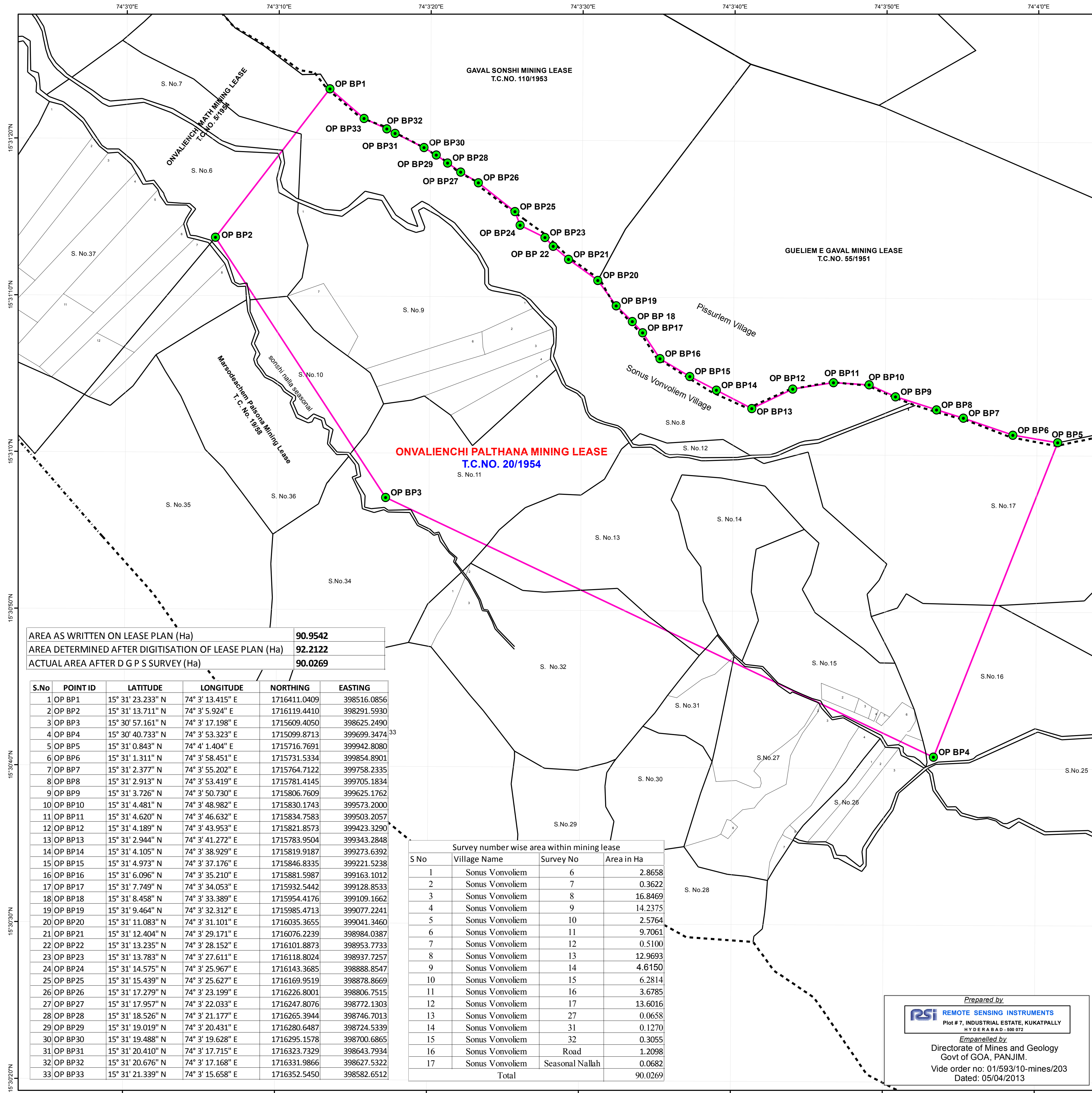
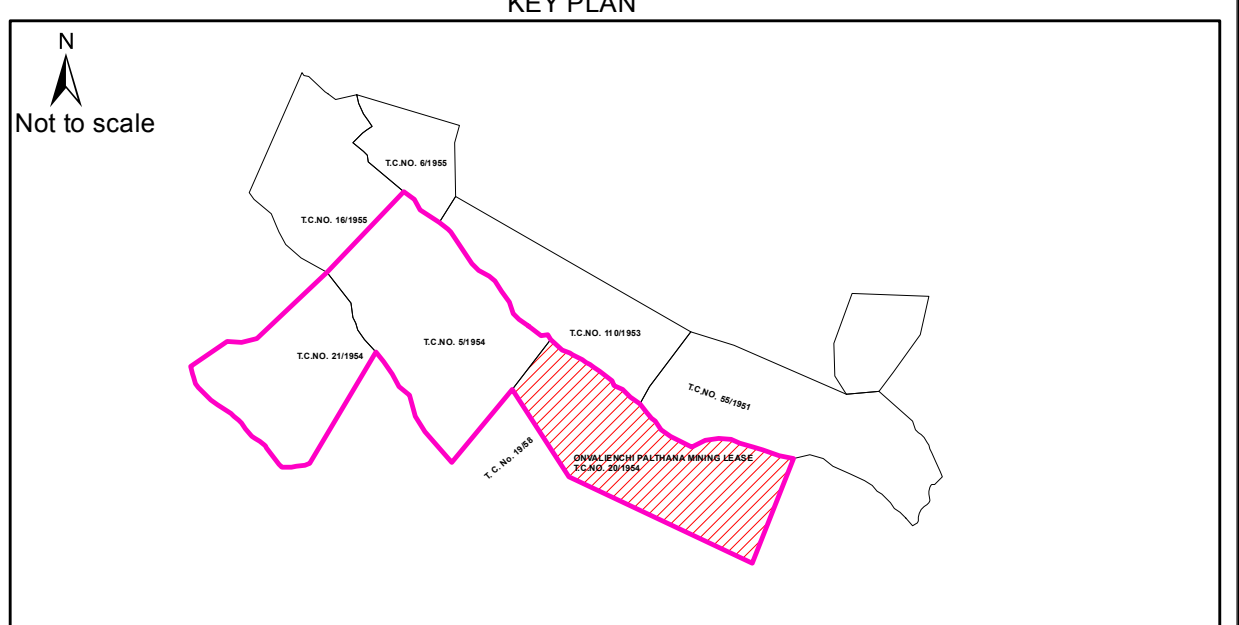


Geo Referenced Cadastral Map of Onvalienchi Palthana Mining Lease, bearing T.C. No. 20 of 1954, situated in Sonus Vonvoliem Village of Sattari Taluka, North Goa District. Goa State

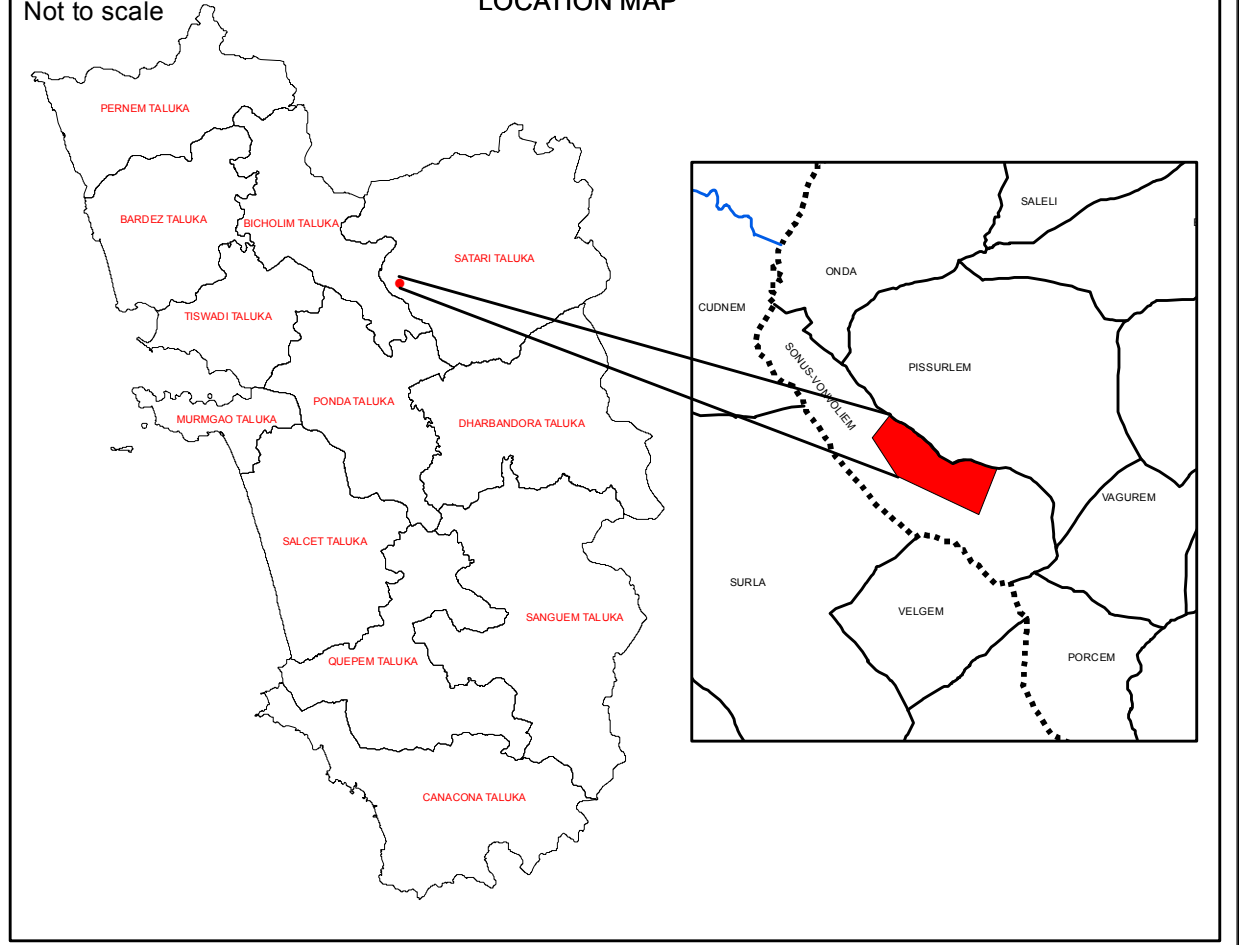


Legend

- DGPS POINT OF LEASE BOUNDARY
- LEASE BOUNDARY AS PER DGPS SURVEY
- ADJACENT LEASE BOUNDARY
- SURVEY No BOUNDARY
- SUB-DIVISION OF THE SURVEY No
- TALUKABOUNDARY
- VILLAGE BOUNDARY



DATUM : WGS 84
PROJECTION : UTM_Zone_43N



AREA AS WRITTEN ON LEASE PLAN (Ha)	90.9542
AREA DETERMINED AFTER DIGITISATION OF LEASE PLAN (Ha)	92.2122
ACTUAL AREA AFTER D G P S SURVEY (Ha)	90.0269

S.No	POINT ID	LATITUDE	LONGITUDE	NORTHING	EASTING
1	OP BP1	15° 31' 23.233" N	74° 3' 13.415" E	1716411.0409	398516.0856
2	OP BP2	15° 31' 13.711" N	74° 3' 5.924" E	1716119.4410	398291.5930
3	OP BP3	15° 30' 57.161" N	74° 3' 17.198" E	1715609.4050	398625.2490
4	OP BP4	15° 30' 40.733" N	74° 3' 53.323" E	1715099.8713	399699.3474
5	OP BP5	15° 31' 0.843" N	74° 4' 1.404" E	1715716.7691	399942.8080
6	OP BP6	15° 31' 1.311" N	74° 3' 58.451" E	1715731.5334	399854.8901
7	OP BP7	15° 31' 2.377" N	74° 3' 55.202" E	1715764.7122	399758.2335
8	OP BP8	15° 31' 2.913" N	74° 3' 53.419" E	1715781.4145	399705.1834
9	OP BP9	15° 31' 3.726" N	74° 3' 50.730" E	1715806.7609	399625.1762
10	OP BP10	15° 31' 4.481" N	74° 3' 48.982" E	1715830.1743	399573.2000
11	OP BP11	15° 31' 4.620" N	74° 3' 46.632" E	1715834.7583	399503.2057
12	OP BP12	15° 31' 4.189" N	74° 3' 43.953" E	1715821.8573	399423.3290
13	OP BP13	15° 31' 2.944" N	74° 3' 41.272" E	1715783.9504	399343.2848
14	OP BP14	15° 31' 4.105" N	74° 3' 38.929" E	1715819.9187	399273.6392
15	OP BP15	15° 31' 4.973" N	74° 3' 37.176" E	1715846.8335	399221.5238
16	OP BP16	15° 31' 6.096" N	74° 3' 35.210" E	1715881.5987	399163.1012
17	OP BP17	15° 31' 7.749" N	74° 3' 34.053" E	1715932.5442	399128.8533
18	OP BP18	15° 31' 8.458" N	74° 3' 33.389" E	1715954.4176	399109.1662
19	OP BP19	15° 31' 9.464" N	74° 3' 32.312" E	1715985.4713	399077.2241
20	OP BP20	15° 31' 11.083" N	74° 3' 31.101" E	1716035.3655	399041.3460
21	OP BP21	15° 31' 12.404" N	74° 3' 29.171" E	1716076.2239	398984.0387
22	OP BP22	15° 31' 13.235" N	74° 3' 28.152" E	1716101.8873	398953.7733
23	OP BP23	15° 31' 13.783" N	74° 3' 27.611" E	1716118.8024	398937.7257
24	OP BP24	15° 31' 14.575" N	74° 3' 25.967" E	1716143.3685	398888.8547
25	OP BP25	15° 31' 15.439" N	74° 3' 25.627" E	1716169.9519	398878.8669
26	OP BP26	15° 31' 17.279" N	74° 3' 23.199" E	1716226.8001	398806.7515
27	OP BP27	15° 31' 17.957" N	74° 3' 22.033" E	1716247.8076	398772.1303
28	OP BP28	15° 31' 18.526" N	74° 3' 21.177" E	1716265.3944	398746.7013
29	OP BP29	15° 31' 19.019" N	74° 3' 20.431" E	1716280.6487	398724.5339
30	OP BP30	15° 31' 19.488" N	74° 3' 19.628" E	1716295.1578	398700.6865
31	OP BP31	15° 31' 20.410" N	74° 3' 17.715" E	1716323.7329	398643.7934
32	OP BP32	15° 31' 20.676" N	74° 3' 17.168" E	1716331.9866	398627.5322
33	OP BP33	15° 31' 21.339" N	74° 3' 15.658" E	1716352.5450	398582.6512

Survey number wise area within mining lease

S.No	Village Name	Survey No	Area in Ha
1	Sonus Vonvoliem	6	2.8658
2	Sonus Vonvoliem	7	0.3622
3	Sonus Vonvoliem	8	16.8469
4	Sonus Vonvoliem	9	14.2375
5	Sonus Vonvoliem	10	2.5764
6	Sonus Vonvoliem	11	9.7061
7	Sonus Vonvoliem	12	0.5100
8	Sonus Vonvoliem	13	12.9693
9	Sonus Vonvoliem	14	4.6150
10	Sonus Vonvoliem	15	6.2814
11	Sonus Vonvoliem	16	3.6785
12	Sonus Vonvoliem	17	13.6016
13	Sonus Vonvoliem	27	0.0658
14	Sonus Vonvoliem	31	0.1270
15	Sonus Vonvoliem	32	0.3055
16	Sonus Vonvoliem	Road	1.2098
17	Sonus Vonvoliem	Seasonal Nallah	0.0682
Total			90.0269

Prepared by
RSI REMOTE SENSING INSTRUMENTS
 Plot # 7, INDUSTRIAL ESTATE, KUKATPALLY
 HYDERABAD - 500 072
 Empanelled by
 Directorate of Mines and Geology
 Govt of GOA, PANJIM.
 Vide order no: 01/593/10-mines/203
 Dated: 05/04/2013

CERTIFICATE

This is to certify that the lease boundary pillars of T.C. No.20 of 1954 have been surveyed using DGPS (Differential Global Positioning System) and is based upon the Total Station survey conducted earlier.

Mr. B.K.Prusty
 (Mines Manager)

Note:
 Surfa-Sonshi Iron Ore Mine is consisting of 3 Contiguous Leases bearing T. C. Nos. 5/1954, 20/1954 & 21/1954

CERTIFICATE

This is to certify that the lease boundary pillars of T.C. No. 20 of 1954, shown by Mr. B.K.Prusty (Mines Manager) has been surveyed by our team led by Shri. Ch.Sivaiah using DGPS (Differential Global Positioning System) instruments. The lease map and pillar locations have been verified, survey conducted and plans prepared as per requirement of IBM Circular No. 2/2010 dated 6-4-2010

For Remote Sensing Instruments
 Shri. B.V Ramana Kumar
 (General Manager)

Directorate of Mines and Geology - Panaji -Goa	Checked by	Certified by
Surveying officer	Director of Mines and Geology	