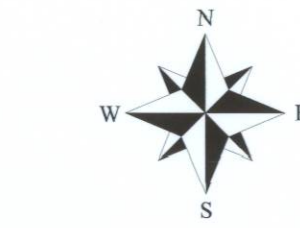
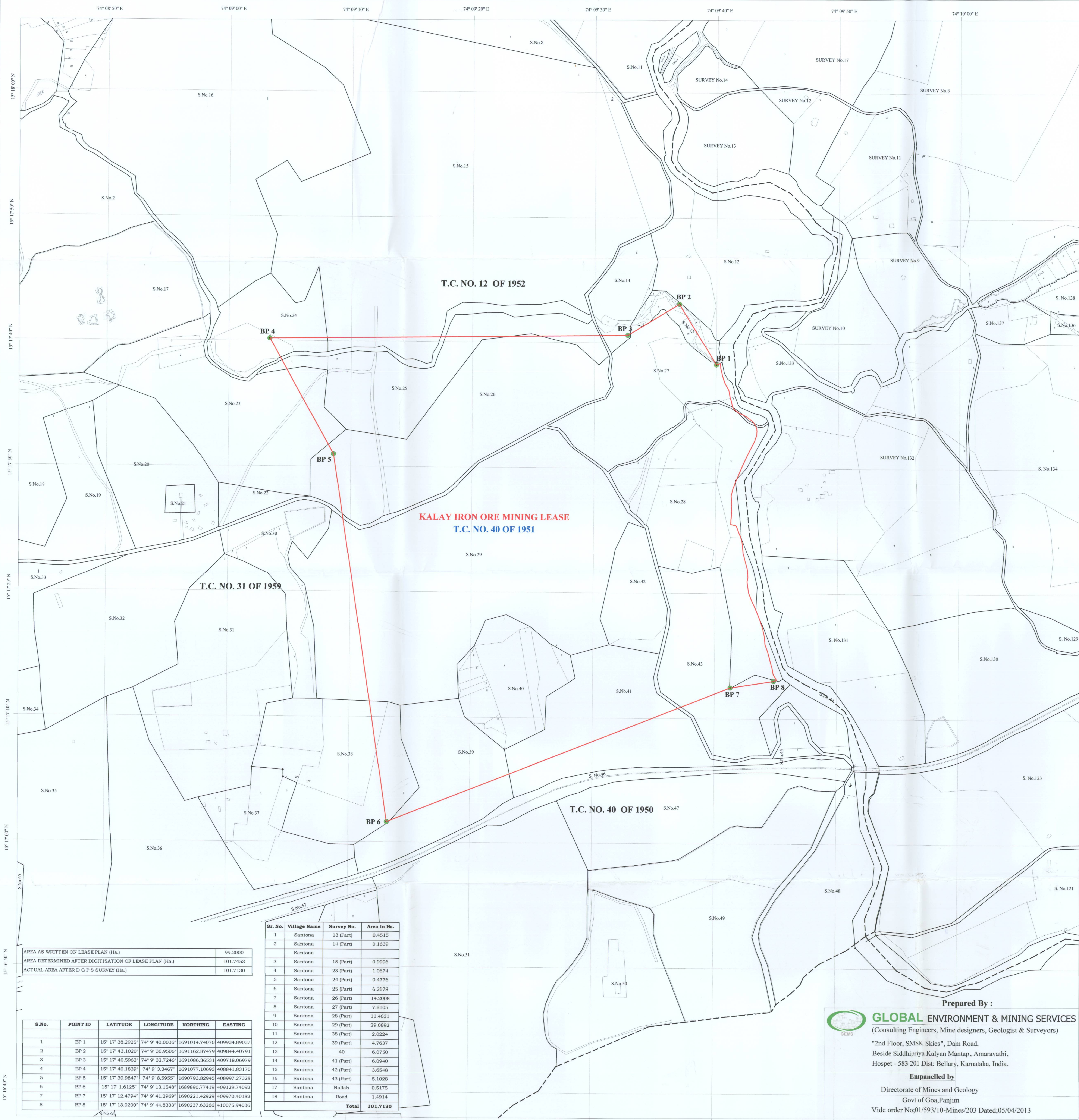


Geo Referenced Cadastral Map of Kalay Iron Ore Mining Lease, bearing T. C. No. 40 of 1951, Lessee N.S. Narvekar, situated in Santona Village of Sanguem Taluka, South Goa District. Goa State



SCALE 1 : 3960



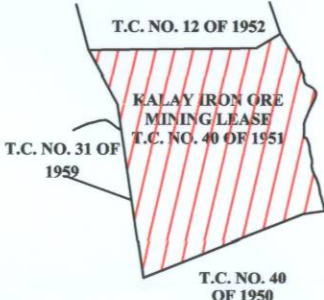
LEGEND

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

KEY PLAN



Not to scale

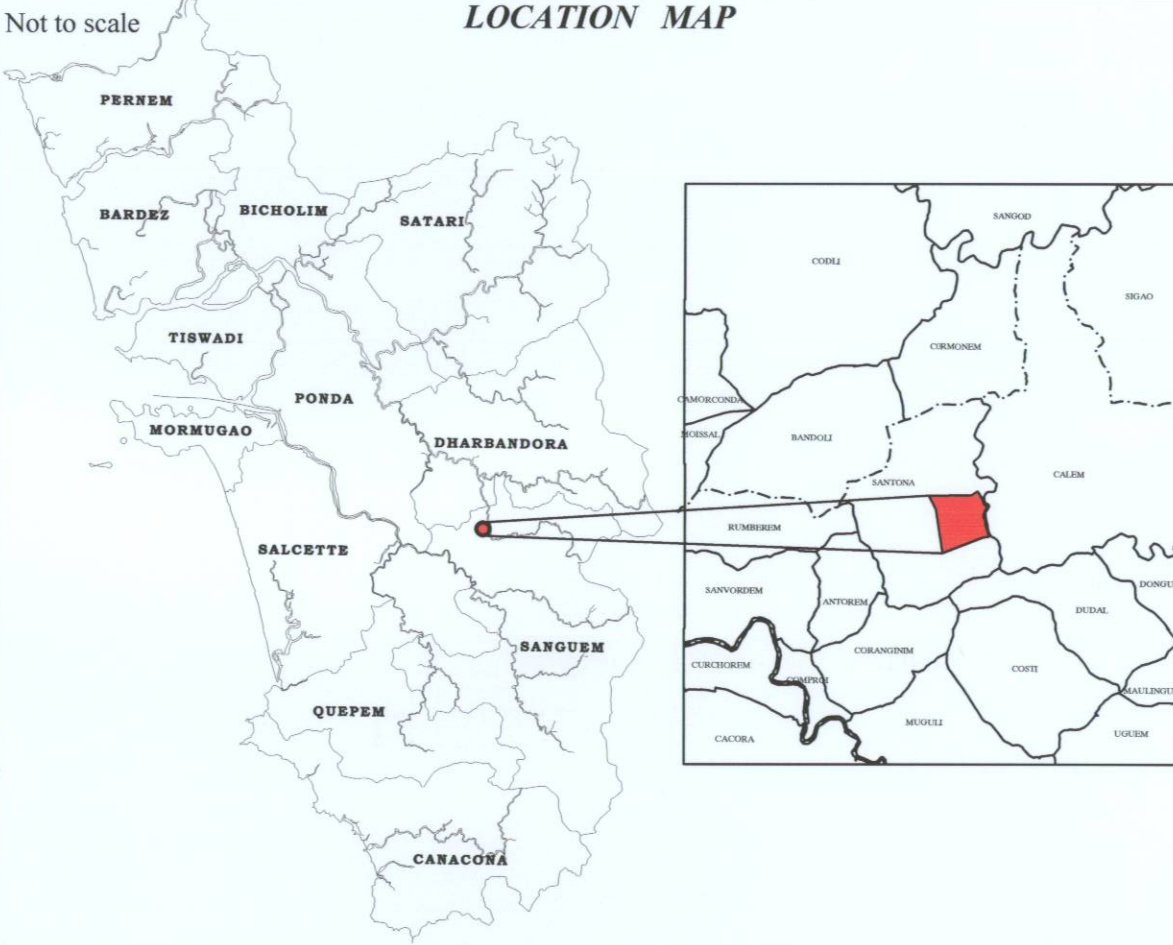


DATUM: WGS 84

PROJECTION : UTM_Zone_43 N

LOCATION MAP

Not to scale



CERTIFICATE

This is to certify that the lease boundary pillars of T. C. No. 40 of 1951 of N. S. Narvekar have been surveyed using DGPS (Differential Global Positioning System) and is based upon the Total Station survey conducted earlier.

Sanjay Kumar
Shri. Sanjay Kumar
(Mines Manager)

CERTIFICATE BY ACCREDITED AGENCY

This is to certify that the lease boundary pillars of T.C.No.40 of 1951, shown by Shri. Sanjay Kumar, Mines Manager has been surveyed by our team led by Shri Nitin R Mantri, 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.

Nitin R Mantri
Nitin R Mantri
Surveyor

Dr. D.N. Gulhane
Dr. D.N. Gulhane
Key person

S.Kameswara Rao
S.Kameswara Rao
Authorized Signatory

DIRECTORATE OF MINES AND GEOLOGY - PANAJI - GOA

Checked by

Certified by

Surveying Officer

Director of Mines and Geology

Prepared By :



GLOBAL ENVIRONMENT & MINING SERVICES

(Consulting Engineers, Mine designers, Geologist & Surveyors)

"2nd Floor, SMSK Skies", Dam Road,
Beside Siddhipriya Kalyan Mantap, Amaravathi,
Hospet - 583 201 Dist: Bellary, Karnataka, India.

Empanelled by

Directorate of Mines and Geology

Govt of Goa, Panjim

Vide order No:01/593/10-Mines/203 Dated:05/04/2013

Date of DGPS Survey: 27-05-2013

Sr. No.	Village Name	Survey No.	Area in Ha.
1	Santona	13 (Part)	0.4515
2	Santona	14 (Part)	0.1639
3	Santona	15 (Part)	0.9996
4	Santona	23 (Part)	1.0674
5	Santona	24 (Part)	0.4776
6	Santona	25 (Part)	6.2678
7	Santona	26 (Part)	14.2008
8	Santona	27 (Part)	7.8105
9	Santona	28 (Part)	11.4631
10	Santona	29 (Part)	29.0892
11	Santona	38 (Part)	2.0224
12	Santona	39 (Part)	4.7637
13	Santona	40	6.0750
14	Santona	41 (Part)	6.0940
15	Santona	42 (Part)	3.6548
16	Santona	43 (Part)	5.1028
17	Santona	Nallah	0.5175
18	Santona	Road	1.4914
Total			101.7130

AREA AS WRITTEN ON LEASE PLAN (Ha.)	99.2000
AREA DETERMINED AFTER DIGITISATION OF LEASE PLAN (Ha.)	101.7453
ACTUAL AREA AFTER D G P S SURVEY (Ha.)	101.7130

S.No.	POINT ID	LATITUDE	LONGITUDE	NORTHING	EASTING
1	BP 1	15° 17' 38.2925"	74° 9' 40.0036"	1691014.74070	409934.89037
2	BP 2	15° 17' 43.1020"	74° 9' 36.9506"	1691162.87479	409844.40791
3	BP 3	15° 17' 40.5962"	74° 9' 32.7246"	1691086.36531	409718.06979
4	BP 4	15° 17' 40.1839"	74° 9' 3.3467"	1691077.10693	408841.83170
5	BP 5	15° 17' 30.9847"	74° 9' 8.5955"	1690793.82945	408997.27328
6	BP 6	15° 17' 1.6125"	74° 9' 13.1548"	1689890.77419	409129.74092
7	BP 7	15° 17' 12.4794"	74° 9' 41.2969"	1690221.42929	409970.40182
8	BP 8	15° 17' 13.0200"	74° 9' 44.8333"	1690237.63266	410075.94036