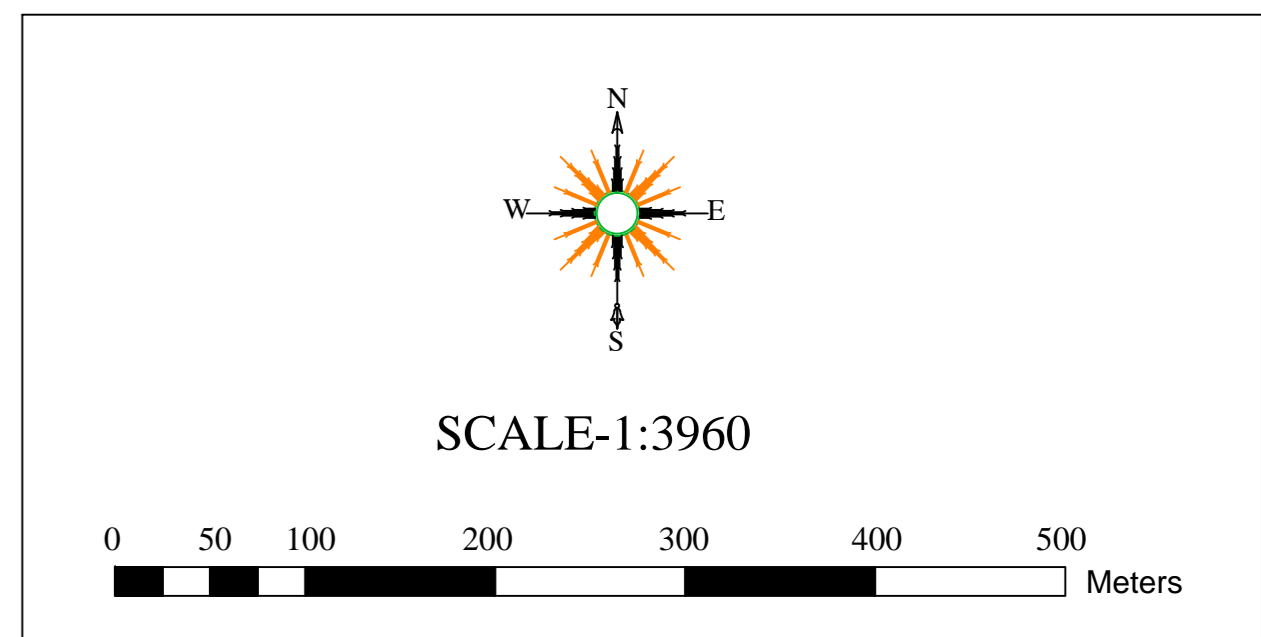
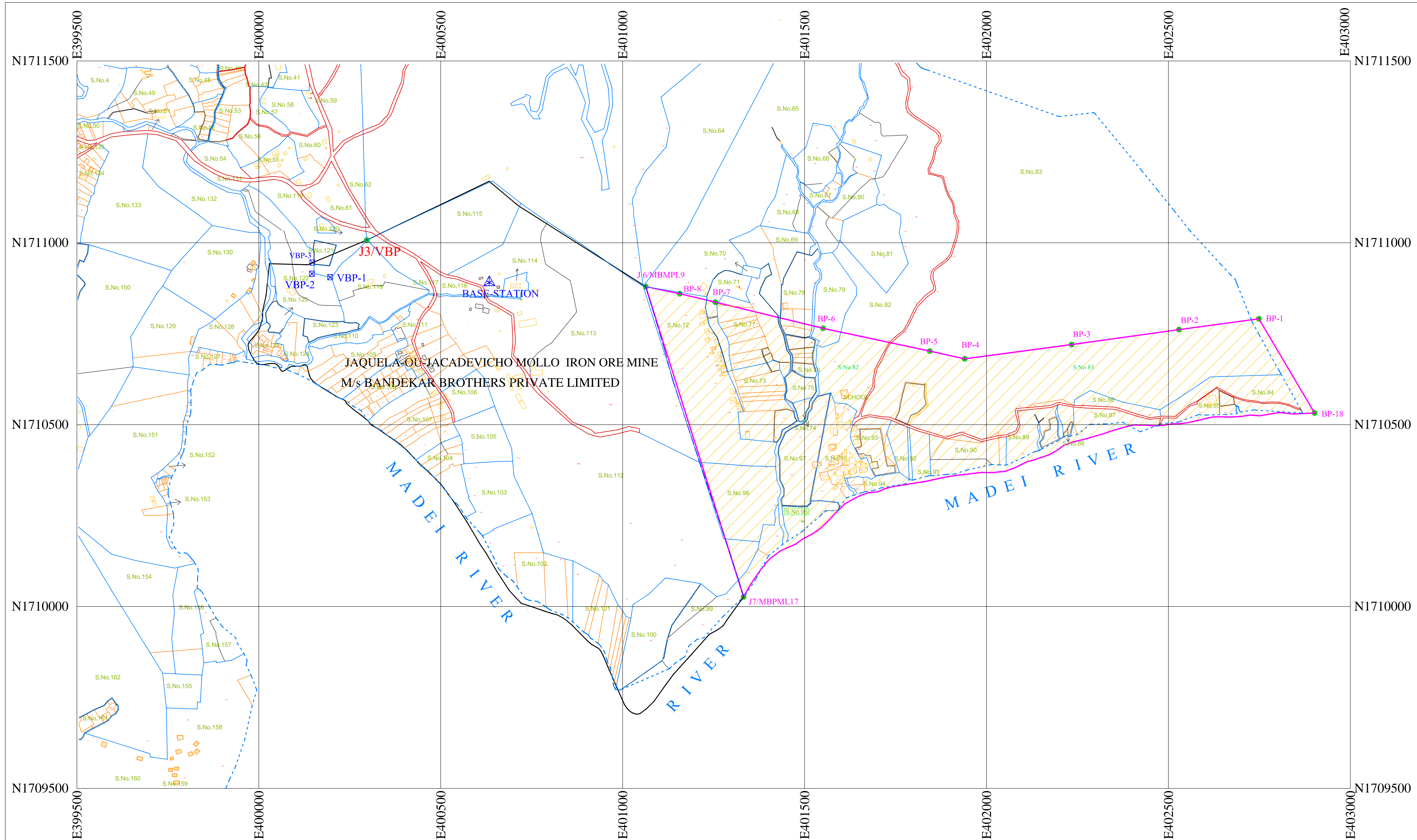
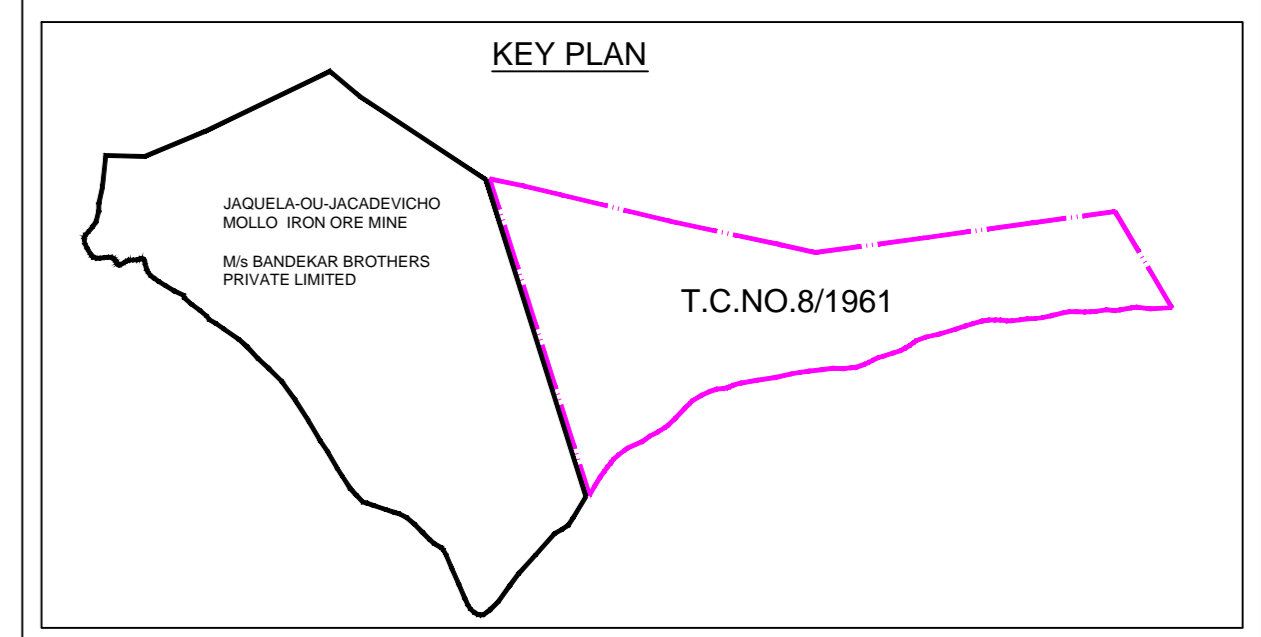


GEO REFERENCED CADASTRAL MAP OF MADACHEM BAT IRON ORE MINE, MINING LEASE BEARING T.C.No.8/1961,SITUATED IN PALE VILLAGE OF BICHOLIM TALUKA,NORTH GOA DISTRICT,GOA STATE.

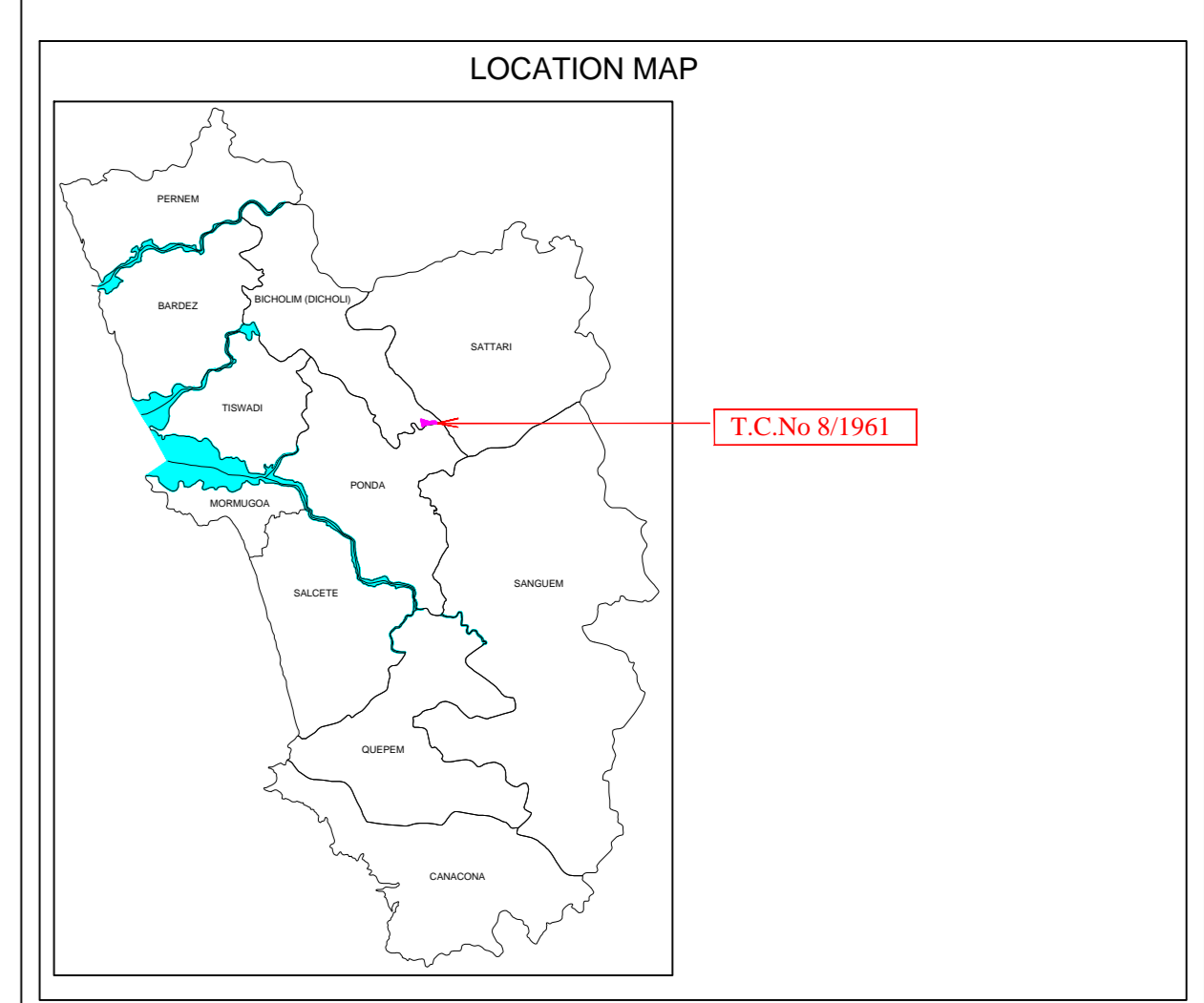


- INDEX**
- DGPS POINTS OF LEASE BOUNDARY
 - DGPS POINTS OF VILLAGE BOUNDARY PILLAR
 - MINE LEASE BOUNDARY AS PER DGPS SURVEY
 - ADJACENT MINE LEASE BOUNDARY
 - SURVEY No BOUNDARY
 - SUB DIVISION OF SURVEY No
 - TALUKA BOUNDARY
 - VILLAGE BOUNDARY
 - CART TRACK
 - ROAD
 - NALLAH RIVER

T.C.No 84 of 1952 and T.C.No 8 of 1961 are working as amalgamated Mines vide letter no.SHQ/DIR-CMC/111/64/98/393 dated 18.10.2001



DATUM : WGS 84
PROJECTION : UTM_ZONE_43N



Note : Corner Pillar no 10,11,12,13,14,15&16 shown in the planta are not accessible for DGPS survey due to points are submerged in the pit water.

AREA AS WRITTEN ON LEASE PLAN	64.76 Ha.
AREA DETERMINED AFTER DIGITISATION OF LEASE PLAN	64.81 Ha.
ACTUAL AREA AFTER DGPS SURVEY	64.75 Ha.

Sl No	POINT ID	LATITUDE	LONGITUDE	NORTHING	EASTING	DATE
1	Base-Station	15°28'23.88726"	74°04'25.28451"	1710890.702	400633.462	29-05-2013
2	BP-1	15°28'20.93817"	74°05'36.27749"	1710791.053	402748.654	28-06-2013
3	BP-2	15°28'19.93929"	74°05'28.91320"	1710761.287	402529.070	28-06-2013
4	BP-3	15°28'18.56173"	74°05'19.01954"	1710720.206	402234.060	28-06-2013
5	BP-4	15°28'17.24352"	74°05'09.15924"	1710680.949	401940.051	28-06-2013
6	BP-5	15°28'17.92354"	74°05'05.93909"	1710702.254	401844.180	28-06-2013
7	BP-6	15°28'19.92075"	74°04'56.09256"	1710764.876	401551.015	28-06-2013
8	BP-7	15°28'22.21955"	74°04'46.13715"	1710836.784	401254.647	28-06-2013
9	BP-8	15°28'22.96068"	74°04'42.85484"	1710859.977	401156.933	31-05-2013
10	J-6/MBMPL9	15°28'23.58251"	74°04'39.71601"	1710879.486	401063.478	31-05-2013
11	J7/MBMPL17	15°27'55.85517"	74°04'48.86101"	1710026.307	401332.349	30-05-2013
12	BP-18	15°28'12.53334"	74°05'41.44964"	1710532.139	402901.695	28-06-2013
13	J-3/VBP	15°28'27.64251"	74°04'13.97848"	1711007.550	400297.043	30-05-2013
14	VBP-1	15°28'24.30609"	74°04'10.60272"	1710905.463	400196.002	30-05-2013
15	VBP-2	15°28'24.60211"	74°04'08.92514"	1710914.776	400146.050	30-05-2013
16	VBP-3	15°28'25.60791"	74°04'08.95678"	1710945.678	400147.127	30-05-2013

Survey No Areas in mine area			
Sno	Village Name	Survey No	Area In Ha
1	PALE	71	0.47
2	PALE	72	7.45
3	PALE	73	2.81
4	PALE	74	0.20
5	PALE	75	0.58
6	PALE	76	0.72
7	PALE	77	2.55
8	PALE	78	0.31
9	PALE	79	0.30
10	PALE	82	2.81
11	PALE	83	19.74
12	PALE	84	1.89
13	PALE	85	1.18
14	PALE	86	0.63
15	PALE	87	0.90
16	PALE	88	0.29
TOTAL			
64.75			

Survey No Areas in mine area			
Sno	Village Name	Survey No	Area In Ha
17	PALE	89	1.45
18	PALE	90	1.85
19	PALE	91	0.66
20	PALE	92	0.61
21	PALE	93	1.43
22	PALE	94	0.55
23	PALE	95	2.69
24	PALE	96	0.83
25	PALE	97	2.60
26	PALE	98	3.42
27	PALE	99	0.90
28	PALE	112	0.59
NALLAH			
ROAD			
MADEI RIVER			
TOTAL			
64.75			

CERTIFICATE

This is certify that the boundary pillars of which the DGPS survey readings are taken are the boundary pillars situated on ground for T.C.No.8/1961. The same are surveyed as required by the Indian Bureau of Mines vide their Circular No.2/2010 dated 6-4-2010

(A.S Deshpande)
Sr.Mines Manager

CERTIFICATE

This is to certify that the boundary pillars as shown by A.S Deshpande (Sr.Mines Manager) was surveyed by our team led by Shri Johnson CM(Asst manager) using DGPS (Differential Global Positioning System) instruments. The lease map and pillar locations have been verified,survey conducted and plans prepared as required by the Indian Bureau of Mines vide their Circular No.2/2010 dated 6-4-2010

Kaliprasad S B
Chaithanya Geo Lynx

Prepared By
CHAITHANYA GEO LYNX
(Government of Goa, Licensed Agency)
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Empanelled by
Directorate of Mines and Geology
Govt of GOA, PANJIM
Vide order no 01/593/10-mines/203
Dated:05/04/2013

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