



Ref. No.: UTCL/ENV/MUM/2019/53

Date: 01.06.2019

To,
The Director (Non Coal Mining- IA Division)
Ministry of Environment, Forest & Climate Change
Govt. of India, Indira Paryavaran Bhavan,
Jorbag Road, Aliganj,
New Delhi – 110 003

Subject- Environmental Clearance of Baranda Laterite Mine (ML Area: 400.00 ha), Expansion in Production Capacity from 36,000 TPA to 2,50,000 TPA Located near Village Baranda, Taluka Lakhpat, District Kachchh (Gujarat) of UltraTech Cement Limited (Unit-Sewagram Cement Works) **reg. Additional Details Submission**

Ref: 1. MoEFCC File No - J-11015/19/2015-IA.II (M) & Proposal No IA/GJ/MIN/26384/2015
2. Additional Details Sought (ADS) by MoEFCC dated 06.03.2019

Sir,

With reference to the aforesaid subject and above stated reference; we would like to inform your good self that our Project was Re-considered for Environment Clearance by EAC (Non Coal Mining) in its EAC meeting held during 22nd – 23rd January, 2019.

Subsequently, Additional Details sought by MoEF & CC letter 06.03.2019. In compliance of Additional Details Sought by MoEFCC dated 06.03.2019, we are herewith submitting ADS Reply for your kind consideration.

We would like to humbly request your goodself to kindly consider our project and grant us Environment Clearance at the earliest.

Thanking you with Regards,

UltraTech Cement Limited
(Unit-Sewagram Cement Works)

Dr. K. V. Reddy
Sr. Vice President & Corporate Head Environment

Encl: as above



UltraTech Cement limited
(Manufacturing & Projects)

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ADS REPLY

Point No. 1 **District Survey Report as per the Ministry Notification S.O. No. 3611 (E) dated 25th July 2018.**
Reply

- District Survey Report has been prepared by district authorities in accordance with the MoEF Notification SO-141(E) dated 15th January 2016 on 04/08/2018, the same was submitted to MoEFCC and also enclosed herewith as **Annexure II.**
- Ministry has amended SO-141(E) wherein the procedure for procedure for preparation of DSR for minor mineral was prescribed vide notification SO-3611(E) dated 25th July 2018 which is not available with District Authorities.

Point no.2 **Status of the non-compliances of specific condition no. (ii), (xii) and (xv) and the general condition no. (VI) and (vii).**

Reply Status of the non-compliances of specific condition no. (ii), (xii) and (xv) and the general condition no. (VI) and (vii) is enclosed as **Annexure III.**

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2.	Annexure II	District Survey Report as per the Ministry Notification S.O. No. 3611 (E) dated 25th July 2018	3-65
3.	Annexure III	<p>Status of the non-compliances of specific condition no. (ii), (xii) and (xv) and the general condition no. (VI) and (vii)</p> <ul style="list-style-type: none"> • Annexure (a) - Wildlife compliance report. • Annexure (b) - Greenbelt development/Plantation photograph. • Annexure (c) – Rain water harvesting plan and Ground water study report. • Annexure (d)- Water sprinkler photographs • Annexure (e) - Noise level management report. 	66-128



F.No.J-11015/19/2015-IA-II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan
 Vayu Wing, 3rd Floor, Aliganj,
 JorBagh Road, New Delhi-110 003

Date: 06th March 2019

To,

M/s Ultra Tech Cement Limited
 B-Wing, 2nd Floor, Ahura Centre,
 Mahakali Caves Road,
 Andheri (East), Mumbai-400 093

Subject: Baranda Laterite Mine with enhancement in Production Capacity of Laterite from 36,000 TPA to 2,50,000 TPA (ROM) by M/s UltraTech Cement Ltd., located at Village-Baranda, Taluka-Lakhpat, District -Kachchh, Gujarat (ML Area: 400 ha)- Environmental Clearance regarding.

Ref.: Proposal No. IA/GJ/MIN/26384/2015

Sir,

This has with reference to your above mentioned proposal of M/s UltraTech Cement Ltd for Baranda Laterite Mine with expansion in production capacity from 36,000 TPA to 2,50,000 TPA (ROM) in a mine lease area of 400 ha. The mine lease area is located at Village Baranda, Taluka Lakhpat, District Kachchh State Gujarat. The mine lease area lies between Latitude: 23° 31' 42.20" N to 23° 32' 42.40" N and Longitude: 68° 39' 12.60" E to 68° 41' 47.81" E. The proposal was reconsidered in the EAC meeting held during January 22-23, 2019 wherein the Committee recommended the Proposal for grant of Environmental Clearance for enhancement in Production Capacity of Laterite from 36,000 TPA to 2,50,000 TPA (ROM).

2. It is observed that the District Survey Report has not been prepared in accordance with the Ministry Notification S. O. No. 3611 (E) dated 25th July 2018. Moreover, the MoEFCC Regional Office compliance report dated 11.08.2016 mentioned the non-compliance of specific conditions no. (ii), (xii) and (xv) and the

general conditions no. (vi) and (xvii). Therefore, it is requested to submit the District Survey Report as per the Ministry Notification S. O. No. 3611 (E) dated 25th July 2018 and status of the non-compliance of specific conditions no. (ii), (xii) and (xv) and the general conditions no. (vi) and (xvii).

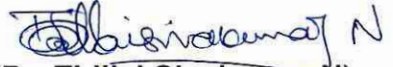
3. This issues with the approval of the competent authority.

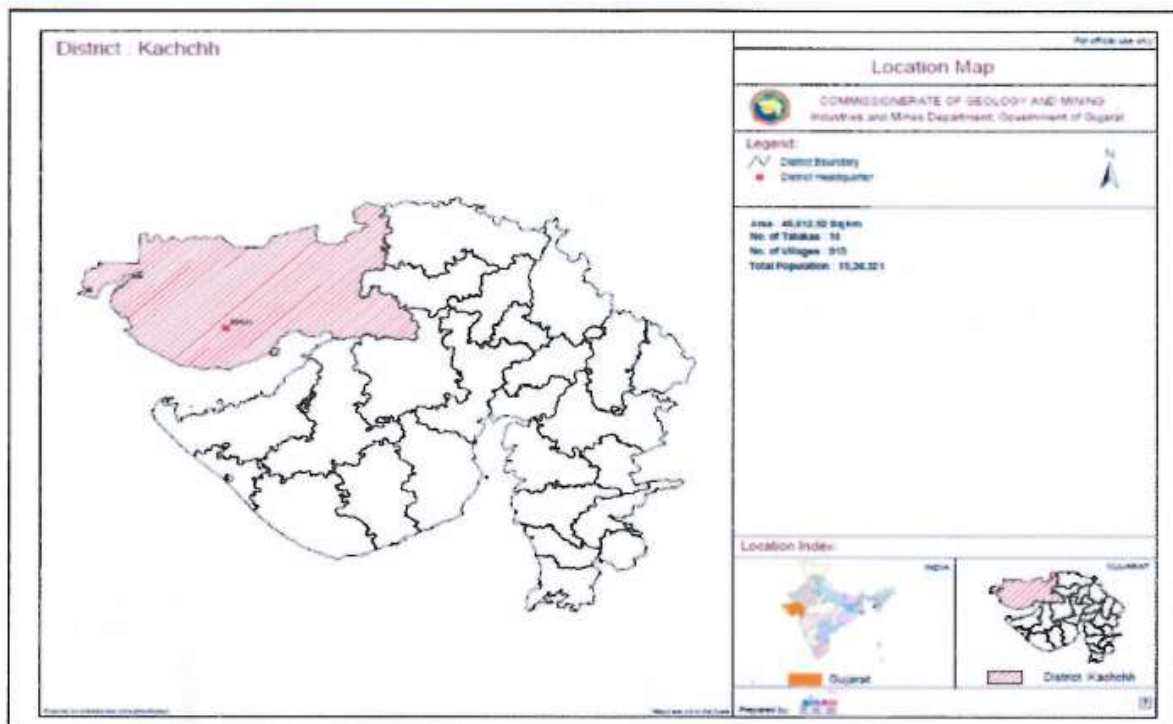
Yours faithfully,

(Dr. Thillai Sivakumar N)
Scientist 'B'

Copy to:

1. ✓ **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi-110 001.
2. ✓ **The Secretary**, Department of Mines and Geology, Government of Gujarat, Secretariat, Gandhinagar.
3. ✓ **The Secretary**, Department of Environment, Government of Gujarat, Secretariat, Gandhinagar.
4. ✓ **The Secretary**, Department of Forest, Government of Gujarat, Secretariat, Gandhinagar.
5. ✓ **The Member Secretary**, Gujarat State Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar-382010.
6. ✓ **The Principal Chief Conservator of Forest & Head of Forest Force (HoFF)**, "Aranya Bhavan", Near CH-3 Circle, Sector-10 A, Gandhinagar - 382010
7. ✓ **The Additional Principal Chief Conservator of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal - 462016
8. ✓ **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
9. ✓ **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
10. ✓ **The District Collector**, District-Kachchh, State of Gujarat.
11. **Guard File.**
12. **PARIVESH Portal.**


(Dr. Thillai Sivakumar N)
Scientist 'B'



DISTRICT SURVEY REPORT OF KUTCH DISTRICT [2017-18]

Prepared by
District Geologist

COMMISSIONERATE OF GEOLOGY AND MINING
Jilla Seva Sadan,
Bhuj-Kachchh

Date & Place 4.8.18


 District Geologist

LOCATION & COMMUNICATION MAP



POLITICAL MAP OF KUTCH



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1.0 Introduction

With reference to the gazette notification dated 15th January 2016, Ministry of Environment, Forest and Climate Change, District Survey Report for Kutch District is prepared. The main purpose of preparation of District Survey Report is to identify the mineral resources and mining activities alongwith other relevant data of district.

This report contains details of mining leases and revenue which comes from minerals in the district.

Kutch district of Gujarat is also spelled as Kachchh covering an area of nearly 45,674 km². It is one of the largest district of India. It has 10 talukas & 939 villages and 6 Municipalities.

Kutch literally means something which intermittently becomes wet and dry; a large part of this district is known as Rann of Kutch which is shallow wetland which submerges in water during the rainy season and becomes dry during other seasons. The same word is also used in Sanskrit origin for a tortoise. The Rann is famous for its marshy salt flats which become snow white after the shallow water dries up each season before the monsoon rains. The district is also famous for ecologically important Banni grasslands with their seasonal marshy wetlands which form the outer belt of the Rann of Kutch.

Kutch District is surrounded by the Gulf of Kutch and the Arabian Sea in south and west, while northern and eastern parts are surrounded by the Great and Little Rann (seasonal wetlands) of Kutch. When there were not many dams built on its rivers, the Rann of Kutch remained wetlands for a large part of the year. Even today, the region remains wet for a significant part of year. Bhuj is well connected with Mumbai airport. Being a border district, Kutch has both an army and an airforce base.

Kutch is a heavenly and mesmerizing destination in Gujarat, best known for hosting the Rann Festival from November to February. As the largest district of India, Kutch boasts of fantastic landscapes, mind blowing cultural traits, and awe-inspiring history.

Bhuj town is the district head quarter for the Government administration. Besides Mandvi, Mundra, Nakhtrana, Abdasa, Bhachau, Lakhpat, Anjar, Rapar and Gandhidham are the talukas in the district.

Geographically it lies on the South-western part of Gujarat, which comes between 22.44 to 24.42 latitude at Northern side and 68.10 to 71.55 Longitudes in Eastern side. Kutch is surrounded on two sides by sea and by the desert on the other two sides. Gulf of Kutch lies on the Southern side of Kutch. While, Arabian Sea on the South-Eastern side. On the Eastern side Banaskantha, Surendranagar and Mehsana are the adjoining districts to Kutch. And on the Northern part it is adjoined by the other nation namely Pakistan with Line of Control (LOC).

2.0 Over view of Mining Activity in the District: -

Kutch is Mineral rich region with very large reserve of Lignite, Bauxite, Gypsum among other minerals. Kutch got tax break for Industries for 15 years after the major earthquake on 26 January 2001. Lignite is mined only by Gujarat Mineral Development Corporation (GMDC) at its two mines in Panandhro and Mata no Madh.

Kutch also houses cement plants M/s UltraTech Cement Limited, Vadraj Cement and Sanghi Industries Ltd's promoted by Sanghi Group.

Other major Industries in Kutch are GMDC Power Plant, Umarsar, Tata Power's first 4000 MW Ultra Mega Power Project (UMPP) of India. Adani Power with an installed capacity of 10,000 MW.

There is great scope of development of new minerals and mining based industries like cement, tiles, paper mart, aluminum bricks, Silica Sand, china clay, pozzolana clay, Bal Clay, Fire clay, Ochar, white clay, Bentonite, Construction, laterite, sand stone etc. and surfing tiles.

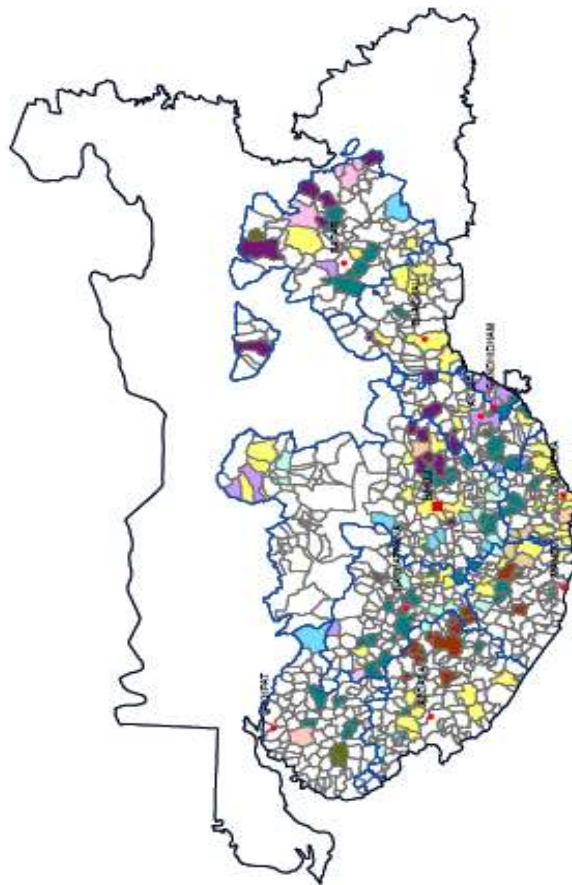
Black trap minerals are found a lot among the minor minerals in the district which can be used in stone crushing industry; where big and small greet concrete is produced. It is very useful primary raw material in construction activities.

3.0 Mining & Mining leases in Kutch District: -

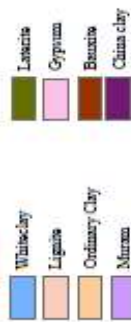
At present there are **24 mining leases of different Major Minerals** & 874 of different Minor Minerals granted in the District of Kutch. Mineral wise list of mining lease as on 31.12.2017 is given as under: -

S.No.	Name of Mineral	No. of Leases as on 31.12.2017
A) MAJOR MINERALS		
1	Bauxite	11
2	Limestone	08
3	Lignite	05
	Total (A)	24
B) MINOR MINERALS		
1	Silica Sand	08
2	Laterite	08
3	Ball Clay	4
4	Gypsum	5
5	Fire Clay	1
6	Pozzolonic Clay	1
7	Red Ochre	1
8	China Clay	68
9	White Clay	96
10	Black Trap	276
11	Sand	90
12	Bentonite	250
13	Limestone (Minor)	28
14	Sand Stone	31
15	Moram	4
16	Soil	2
17	Brick Soil	1
	Total (B)	874
	Total (A+B)	898

District : Kachchh



Minerals:

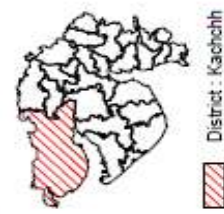


Legend:



Location Index:

GUJARAT



N

Prepared by:

*Maps are not to the scale

Original boundaries are not authoritative

For official use only

Mineral Map



COMMISSIONERATE OF GEOLOGY AND MINING
Industries and Mines Department, Government of Gujarat

The Map shows information of Mineral occurrences of Kachchh District.

8

4.0. Details of Royalty or Revenue received during three years is as under: -

The revenue received from mines during in year 2015, 2016 & 2017 is as under: -

S.No.	Name of Mineral	Revenue Receipts (in Lakhs)		
A) MAJOR MINERALS		2015	2016	2017
1	Bauxite	246.3	644.91	482.3
2	Limestone	5853.41	6107.88	7215.38
3	Lignite	3009.38	2832.25	3380.51
	Total (A)	9109.09	9585.04	11078.19
B) MINOR MINERALS				
1	Silica Sand	65.39	122.04	196.84
2	Laterite	211.16	164.74	348.24
3	Ball Clay	10.67	3.74	6.74
4	Gypsum	0.16	1.03	2.61
5	Fire Clay	0.02	0.04	0.03
6	Pozzolonic Clay	1.3	1.32	135.74
7	Red Ochre	1.23	0	0
8	China Clay	902.48	1340.75	1779.27
9	White Clay	790.27	1074.53	1760.98
10	Black Trap	2502.03	2495.73	3183.06
11	Sand	422.32	475.59	576.37
12	Bentonite	1409.47	2163.15	2642.96
13	Limestone (Minor)	44.19	45.37	42.67
14	Sand Stone	69.6	103.79	63.4
15	Moram	18.08	12.41	9.49
16	Soil	403.63	153.79	10.31
17	Brick Soil	0.02	0.01	0
	Total (B)	6852.02	8158.03	10758.71
	Total (A+B)	15961.11	17743.07	21836.9

5.0 Detail of production of minor mineral during 2015, 2016 & 2017 of the Kutch district is as under: -

S.No.	Name of Mineral	Production (MT)		
A) MAJOR MINERALS		2015	2016	2017
1	Bauxite	127083	718794	231702
2	Limestone	7401716	7231173	5812083
3	Lignite	5341080	4962551	5479976
	Total (A)	12869879	12912518	11523761
B) MINOR MINERALS				
1	Silica Sand	450103	441512	400746
2	Laterite	349432	330679	201114
3	Ball Clay	17117	5500	4750
4	Gypsum	143	150	70
5	Fire Clay	0	0	0
6	Pozzolonic Clay	0	0	230906
7	Red Ochre	0	0	0
8	China Clay	7153003	7574779	3102952
9	White Clay	6808739	6363462	3233740
10	Black Trap	7445062	6260398	3219578
11	Sand	2329174	1701176	522199
12	Bentonite	1874420	2106820	1391549
13	Limestone (Minor)	124713	114615	41493
14	Sand Stone	183012	221386	64961
15	Moram	29544	18240	5931
16	Soil	172929	150159	12225
17	Brick Soil	246	190	13
	Total (B)	26937637	25289066	12432227
	Total (A+B)	398075516	38201584	23955988

6.0. Process of deposition of sediments in the rivers of Kutch:

The Ranns of Kutch are flat salt-covered desert areas (sabkhas) which are just above the normal tidal range and may be regarded as supratidal flats. They are flooded annually by the storm tides of the Southwest Monsoon. As the waters recede and evaporate they leave behind a crust of halite, and gypsum crystals grow within the clays and sands. The increase in salinity of the interstitial waters as they are traced inland is reflected in the higher boron content of the clays. The Mg^{2+}/Ca^{2+} ratio of these waters increases from 3 on the coast, to 240 in the evaporite environment of the shoreline of Pachham Island.

Much of the sediment of the Ranns was probably once derived from the Indus and Nara rivers which used to flow into the western end of the Great Rann. Clay is now probably carried in by the monsoon storm tides after being transported along shore from the Indus, and also from the rivers of Kutch and Kathiawar. Coarser siliciclastic sediment is carried into the eastern inland portion of the area by the Luni and other intermittently flowing rivers and streams. Some sand and silt is blown into the Ranns from the surrounding hilly areas. Foraminifera are found concentrated in the sandier fractions of the sediments, having been transported there primarily by tidal currents and also by the wind.

The tectonic evolution of the Kachchh Rift Basin (KRB) dates back to early Mesozoic times, when the Indian landmass was part of the Gondwana Supercontinent. The breaking-off of the Indian subcontinent from the parent mass and its subsequent northward drift owing to fast accretion of more than 16 cm/yr at the Indian Ocean ridge started in Late Triassic.

In Late Cretaceous, the subcontinent got detached from Madagascar and, by Early Eocene, separated out from Seychelles. The free drift of the continent was checked during Eocene-Oligocene times, with commencement of subduction of its oceanic crust below the Tibetan plate. By 45-40 Ma, the Neo-Tethys Ocean closed along the Indus-Tsangpo suture, and the collision of the Indian and Tibetan continental crusts began, thereby heralding the rise of the Himalaya. The Indian plate, in its journey beginning from its break-off from the Gondwanaland to its collision with the Asian plate, passed through four plume heads, centered at Crozet, Kerguelen, Marion and Reunion Islands. The Deccan volcanicity, related with the Reunion plume, continued for nearly one million years soon after Maastrichtian age (65 Ma). During extrusion, the Deccan Basalts occupied approximately the same absolute position as that of the Reunion Island; in less than one million years, 1 to 2 million km³ of lava spread out over an area of about 0.5 million km².

Rifting in the subcontinent along certain Precambrian structural trends started since its detachment from the mainland. In the western margin of the Indian Shield, the faulting was controlled by NE-SW Aravalli-Delhi trend, ENE-WSW Son-Narmada-Tapti (SONATA) trend and NNW-SSE Dharwar trend (Biswas, 1987). Thus, during the migratory history of the subcontinent, three rifted basins, viz, Kachchh, Cambay and SONATA, developed and aborted at different times, became hosts to thick sedimentation of different ages and volcanic activity. The three basins now stand separated by the Saurashtra horst, which has been established to be an extension of the Aravalli range, uplifted in part, during Late Cretaceous times. By Early Cretaceous times, the sea started receding from the KRB, allowing deposition of continental facies. The Mesozoic sediments were deposited in two mega-cycles of i) Late Triassic-Late Jurassic synrift marine transgressive and ii) Late Jurassic-Early Cretaceous post rift deltaic regressive environments.

The early part of Tertiary continued to remain terrestrial, but by Early Eocene time, there was marine transgression. The Eocene-Middle Miocene period saw lagoonal, marine shelf to open marine platform type of depositional environment. In Pliocene-Pleistocene times the environment of deposition was littoral to fore shore. Most part of the Quaternary remained terrestrial, with dominance of tidal flat and marsh deposits in the latest part. A pre Holocene period was characterised by desertification in Kachchh. Nagar Parkar, Kachchh Mainland and North Kathiawar faults are recognized as the primordial tectonic discontinuities of the basin with Katrol hill, Gora Dongar, Island Belt, etc. as subsequent generation faults. It is inferred segmented by transverse basement structures following the Dharwar trend, the prominent among them being the Median High

(Source: <https://web.archive.org/web/20110721162346/http://www.portal.gsi.gov.in/portal/page>)

7.0 General profile of the Kutch district: -

Kutch is the third largest district in India having area of 45652 km². Bhuj town is the district head quarter for the Government administration. Besides Mandvi, Mundra, Nakhtrana, Abdasa, Bhachau, Lakhpat, Anjar, Rapar and Gandhidham are the other talukas in the district.

Geographically it lies on the South-western part of Gujarat, which comes between 22.44 to 24.42 latitude at Northern side and 68.10 to 71.55 Longitudes in Eastern side. Kutch is surrounded on two sides by sea and by the desert on the other two sides. Gulf of Kutch lies on the Southern side of Kutch. While, Arabian Sea on the South-Eastern side. On the Eastern side Banskantha, Surendranagar and Mehsana are the adjoining district to Kutch. And on the Northern part it is adjoined by the other nation namely Pakistan with Line of Control (LOC).

Administration Structure:

Bhuj town is the district headquarters for the administration. Besides, there are nine other talukas namely Mandvi, Mundra, Nakhtrana, Andasa, Bhachau, Lakhpatt, Anjar, Rapar and Gandhidham. There are 14 towns and 893 villages in the district. Moreover, Six Municipal Corporations in the towns namely Rapar, Bhachau, Anjar, Bhuj Mandvi and Gandhidham are functioning as administrators. At local levels there are also 09 Panchayat Samities and 614 Gram Panchayats. There are also 6 Sub-divisions, 18 Patwari Circle, 6 State Assembly and 1 Parliamentary Assembly area in the Kutch District.

Atmosphere and Rainfall:

Temperature fairly remains average in the district. Highest temperature goes up to 44.8 degree centigrade in summer and lowest temperature comes down to 3.7 de- gree in winter season. Rainfall is very low in Kutch district as low as 350 to 375 mili meter during the whole monsoon.

Type of land:

There are five categories of available land as given below.

1. Coastal soil., 2. Sand type soil, 3. Black soil., 4. Mud soil. & 5. Sand mixed soil.

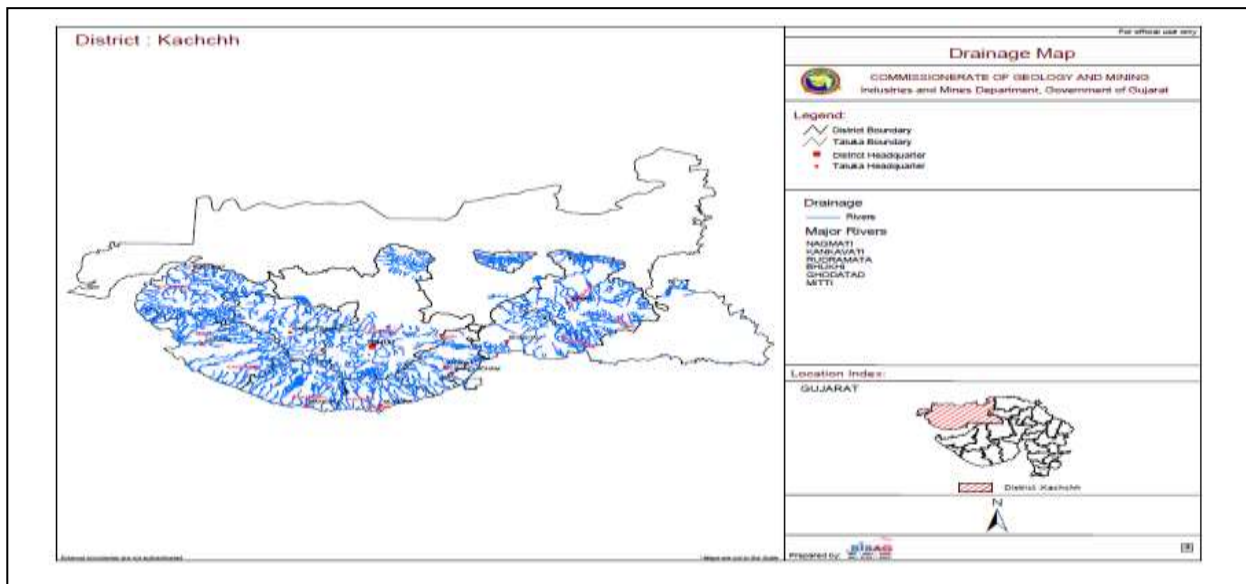
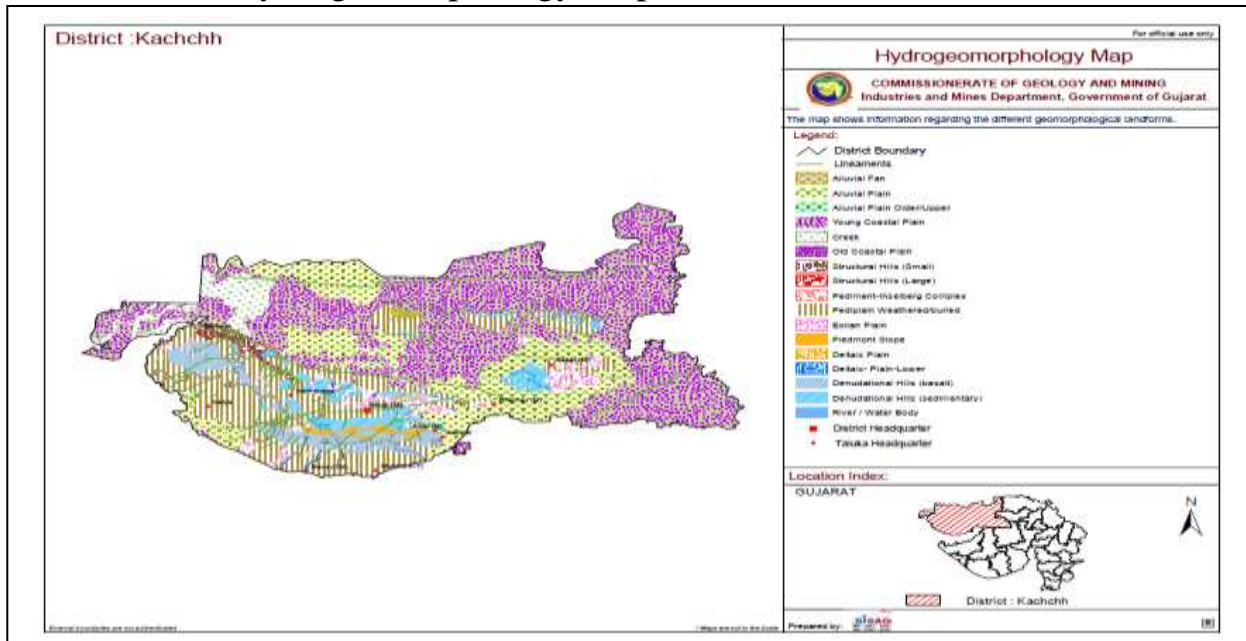
The land utilization pattern during the year 2014-15 of Kutch district is as under:

Sr.No	Type of Land	Area in Hectares
1	Total Geographical Area	1957629
2	Total Forest Area	306770
3	Current Fallow Land	140963
4	Non-agricultural used Land	73697
5	Permanent Pastures	70058
6	Total Cultivable Area	792210
7	Net sown Area	586770
8	Gross sown Area	727773
9	Dry Non Cultivable Area	412499
10	Area sown more than One Time	203908

River:

There is no continuously flowing river during whole of the year in Kutch. There are few streams flows from the Northern and Southern Ghats. “Khari” is the main river in North which measures nearly 30 Kms. of length which becomes dry in the desert of Kutch. “Madh” and “Tera” are main river in South and which also measures nearly 30 Kms. goes into the basin of Kutch near Jakhau.

Hydrogeomorphology Map-Source Mineral Atlas



Income:

Predominant Economic activities in the district:

Agriculture and Animal husbandry are predominant economic activities in the district. Salt processing, lignite mining, bentonite and china clay processing are other important activities prevalent in the district. Industry, business and commerce have also become other important activities in the district. Engineering, chemical and cement industries are the major industries

Major Food, Chemical and Plantation/ Horticulture Crops: Wheat, bajra, millets and pulses are the major food crops, while cotton, castor and groundnut are the major commercial crops grown in the district. Mango, fate palm, sapota, lemon and vegetables are the important plantation and horticulture crops grown in the district.

Special/ Additional/Other features of the district:

- Largest district of the State which occupies 25.29% of total area of the State.
- District has large desert admeasuring about 26000 sq.km
- Long coastline forming 25 % of total coastline in the State.
- Rivers flow Northwards or Southward because of ridges in the Central area, which serves as watersheds. Further, Kutch rivers are ephemeral in nature.
- Large scale minerals deposits of bauxite, lignite, limestone, bentonite gypsum and china clay etc.
- There are two ports viz. Kandla and Mundra, which have been enjoying the benefits of SEZ.
- Other factors that have mostly affected rural economy:

8.0 Land Utilization pattern in the Kutch: Forest, Agriculture, Horticulture,

There are five categories of available land soil as given below.

1. Coastal soil.
2. Sand type soil.
3. Black soil.
4. Mud soil.
5. Sand mixed soil

The land utilization pattern during the year 2014-15 of Kutch district is as under:

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Forest

There is no forest in the district as per the definition of forest that zone known as unfocused length of huge grass reeds spread over the vast land in local terms being called as “Rakhal”. Though forest area consists of babool thorny trees in nearly 2, 87,948 hectors spread over the various talukas of the district. There are no forest products in the district.

Particulars of Forest Area of Eastern Zone of Kutch district as on 31/03/2015 is as under:

Name of Taluka	Reserved Forest	Non- classified Forest	Transferable Area	Total
Bhuj	15146.71	10847.26	0.00	25993.97
Mundra	7959.94	5083.98	0.00	13043.92
Anjar	2195.72	2032.62	0.00	4228.34
Bhachau	578.81	14399.41	0.00	14978.22
Rapar	14845.70	23145.87	1.92	37993.49
Total	40726.88	55509.14	1.92	96237.94

Particulars of Forest Area of Western Zone of Kutch district as on 31/03/2015 is as under:

Name of Taluka	Reserved Forest	Non- classified Forest	Transferable Area	Total
Bhuj	20171	7216	2	27389
Mandvi	2926	1992	18	4936
Nakhtrana	32189	12942	23	45154
Abdasa	62924	10060	22	73006
Lakhpat	41953	18084	10	60047
Total	160163	50294	75	210532

Source: Deputy Conservator of Forest, Bhuj. (Dist. Industrial Potentiality Survey report of Kutch-16-17)

Agriculture:

Agriculture mainly depends upon good rainfall in Kutch. Average rainfall is 350 mm. in Kutch. Irrigation facility also exists here, but the good amount of rainfall remains the key factor. Therefore, rational agricultural policy should be prepared along with industrial policy for the balanced economic growth of the district.

Major/Predominated crops grown in the district:

Kharif	Groundnut, Sesame, Castor, Bajara, Cotton, Green, Black gram, Guar, Vegetables & Fodder
Rabi	Mustard, Cumin, Vegetables, Fodder, Coriander, Fenugreek, Isabul, Onion, Wheat
Summer	Groundnut, Bajara, Green gram, Guar, Flowers, Vegetables and Fruits viz. Mush melon and Watermelon.

Horticulture:

Good production of spices, fruits and vegetables is taken in horticulture during the year in the district. Mangoes, banana, chiku, and kharek are the main fruit. While, onion, potato and guwar are the main vegetables. Besides, guwar, papdi, parwal patal etc. are produced at satisfactory level in the district. Hara dhanian, garlic, chili and turmeric are produced in satisfactory quantity in the district under head spices.

The table given below highlight area and production of horticulture crops for the year 2014-15 of Kutch District.

Fruit Crops:

Sr. No.	Name of Fruit	2014-15	
		Area (Ha.)	Production
1	Mango	9165	78361
2	Anola	30	254
3	Chiku	1524	17145
4	Banana	1957	101764
5	Guava	510	8180
6	Pomegranate	3337	46718
7	Date Palm	16385	170097
8	Papaya	3542	299830
9	Ber	503	4653
10	Citrus	488	3894
11	Custard Apple	8	50
12	Cashew Nut	105	364
13	Coconut nut(1000 Nos.)	985	8382
14	Others	228	1824
	Total	38767	724752

Vegetable Crops:

Sr. No.	Name of Vegetables	2014-15	
		Area (Ha.)	Production (MT)
1	Potato	100	1825
2	Onion	300	6960
3	Brinjal	2913	51997
4	Cabbage	1041	16656
5	Okra	1196	10046
6	Tomato	1784	47347
7	Cauliflower	657	10413
8	Cluster bean	992	10267
10	Cucurbits	3592	54060
11	Cow Pea	175	2293
12	Others	1556	28724
13	Total	14306	240588

Spices Crops:

Sr. No.	Name of Spices	2014-15	
		Area (Ha.)	Production (MT)
1	Coriander	6300	14049
2	Fennel	200	396
3	Chillies	75	139
4	Fenugreek	348	738
5	Cumin	5100	3825
6	Garlic	100	355
7	Isabgul	2500	2750
	Total	14623	22252

Flower Crops:

Sr. No.	Name of Flower	2014-15	
		Area (Ha.)	Production (MT)
1	Rose	100	860
2	Marigold	73	648
3	Lily	25	216
4	Mogra	60	555
5	Others	75	630
	Total	333	2909

Source : Data collected from different concern departments & from the District Industrial Potentiality Survey Report of Kutch District prepared by MSME Development Institute Ahmedabad

9.0 Physiography of the Kutch: -

According to 2011 Census, the total population of Kachchh district is 20,92,371 comprising of 10,96,737 males and 9,95,634 females. The population of the district forms 3.5 percent of the state population and ranks 14th among the districts. There are 877 inhabited villages and 14 towns in the district. There are 10 talukas in the district. The total rural population in Kachchh district is 13,63,836 persons and it is 65.2 percent of the total population of the district. The total urban population in the district is 7,28,535 persons and it constitutes 34.8 percent of the total population of the district.

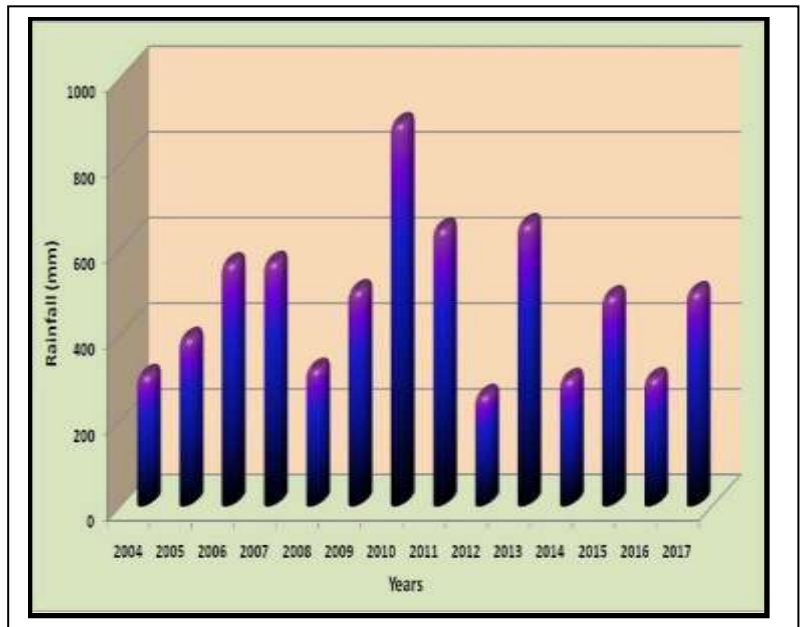
The state of Gujarat is the heartland of Indian industries like petroleum, power and steel. It is largely barren except for a fertile band along the Gulf of Kachchh in the Arabian Sea. It was the scene of major border disputes between India and Pakistan in 1965 and 1971. Kachchh or Kutch is an erstwhile princely state of India. It is the largest district of the state of Gujarat covering an area of 45,674 Sq Kms. The land is virtually an 'island' resembling a tortoise "Katchua or Kachbo", surrounded by sea water. Kutch was also known as the kutchdweep or Kutchbet." The Great Rann of Kutch" which dominates a major portion of the district. The Great Rann of Kutch and the Little Rann of Kutch respectively-uninhabitable deserts which during the monsoon season (June to October) is often completely submerged by floods.

10. Average rainfall in Kutch district: - Rainfall

The rainfall in the area is scanty (below normal to normal) and generally confined to the south-west monsoon months from June to September. The long term average rainfall (from 1982 to 2011) is 378 mm. It only rains a few days per year (15 days on average). The annual average rainfall of last fourteen years (2004-2017) is coming around 473 mm with minimum of 253 mm in 2012 and maximum of 888 mm in 2010 (Table 1.1 and Figure 1.2). However, the long term average rainfall (378 mm) has been taken into consideration for the study area.

Table 1.1: Rainfall Statistics of District Kutch

S.No.	Year	Rainfall (mm)
1	2004	300
2	2005	387
3	2006	561
4	2007	564
5	2008	314
6	2009	498
7	2010	888
8	2011	642
9	2012	253
10	2013	652
11	2014	291
12	2015	484
13	2016	293
14	2017	493



Source: India Meteorological Department

Rainfall Pattern in Kutch District, Gujarat

11. Geology and Mineral wealth: -

Geography

Kutch, or Kachchh region has a population of 20,92,371 according to 2011 census in Gujarat state of West India, bounded on the North by Pakistan. It is largely barren except for a fertile band along the Gulf of Kachchh in the Arabian Sea. Mandvi, Bhuj, and Kandla, a new port, are the chief towns.

The state of Gujarat is the heartland of Indian industries like petroleum, power and steel. It is largely barren except for a fertile band along the Gulf of Kachchh in the Arabian Sea. It was the scene of major border disputes between India and Pakistan in 1965 and 1971. Kachchh or Kutch is an erstwhile princely state of India. It is the largest district of the state of Gujarat covering an area of 45,674 Sq Kms. The land is virtually an 'island' resembling a tortoise "Katchua or Kachbo", surrounded by sea water. Kutch was also known as the kutchdweep or Kutchbet." The Great Rann of Kutch" which dominates a major portion of the district. The Great Rann of Kutch and the Little Rann of Kutch respectively-uninhabitable deserts which during the monsoon season (June to October) is often completely submerged by floods.



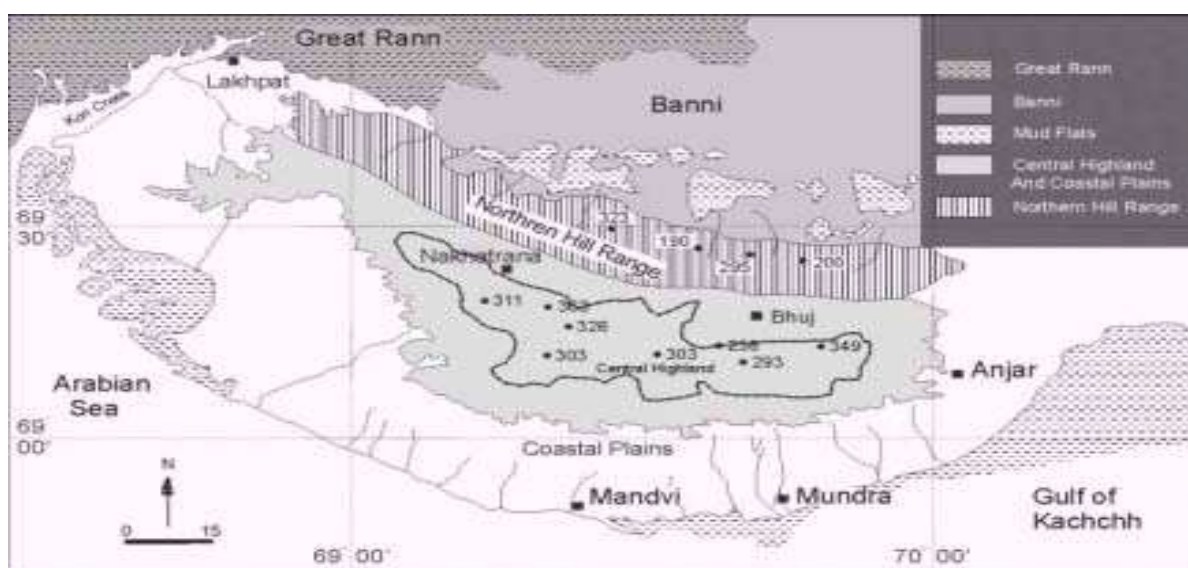
Satellite view of Kutch region

According to 2011 Census, the total population of Kachchh district is 20,92,371 comprising of 10,96,737 males and 9,95,634 females. The population of the district forms 3.5 percent of the state population and ranks 14th among the districts. There are 877 inhabited villages and 14 towns in the district. There are 10 talukas in the district. The total rural population in Kachchh district is 13,63,836 persons and it is 65.2 percent of the total population of the district. The total urban population in the district is 7,28,535 persons and it constitutes 34.8 percent of the total population of the district.

Geomorphology

Geomorphologically, Kutch (Kachchh) is categorized into four major E-W trending zones

- 1.Coastal Zone - demarcating the southern fringe
- 2.Kachchh Mainland - divided into the central portion comprising rocky upland, northern hill ranges and coastal plains,
- 3) Banni Plains (less than 5m MSL)-marked by raised fluviomarine sediments, mud flats and salt pans and
- 4) the two Ranns Great Rann (~ 2m MSL) in the north and Little Rann in the east comprising vast saline wasteland. The boundaries of these main geomorphic zones are bounded by the major E-W trending faults.



Geomorphologic Map of Kutch (Kachchh)

The Kutch landscape comprises an array of tectonogenic geomorphic elements in the form of uplifts and residual depressions. Elevated landforms are occupied by Mesozoic and Tertiary rocks, whereas the residual depressions or low-lying regions between the uplifts consist of Quaternary sediment successions marked alluvial river terraces in the rocky mainland and the mud-flats and salt pans in the Great and Little Ranns and Banni Plains. The general forms of the uplifts are marked by domes and asymmetric anticlines. All major uplifts are bounded, at least on one side, by a fault or a sharp monoclinial flexure, and on the other side by gently dipping peripheral plains, the strata (Tertiary) in which dip gently into the surrounding residual depression (Biswas, 1980).

Geology of Kutch (Katchchh) and Ahmedabad Basin

Sedimentary rocks ranging in age from Jurassic to Eocene age cover Kutch region. These sediments have a zone of Deccan trap volcanics sandwiched between Jurassic rocks of the northern part and Eocene sedimentaries in the south towards the coast. Limestones, shales and sandstones are the most common rocks (Krishnan, 1982)

The Jurassic rocks have an estimated thickness of 1950 m and crop out in three anticlinal ridges trending E-W. Owing to an E-W fault the whole sequence is repeated. The northern range is about 160 km long and broken in to four islands (Pachham, Karir, Bela and Chorar) in the Rann of Kutch. The middle ridge is 190 km long trending ESE from Lakhpat on the west. The southern ridge, south of Bhuj, is 65 km long and forms the Charwar and Katrol hills.

The Jurassic rocks are repeated in these two ridges. The main outcrop, of which they form parts, is cut by an E-W strike fault. An isolated but large outcrop, on which Wagur and Kantkote stand, is about 80 km long, in NE Kutch. These anticlines show transverse undulations so that the domes like parts have been separated from each other by denudation. (Krishnan 1982). Both Eocene and Jurassic rocks are fossiliferous. The Eocene rocks are exposed along the southern fringe of the Kutch peninsula as a thin band bounded by Deccan traps on the north. The northern part of the Kutch peninsula is covered by Recent marine deposits on which Jurassic rocks form outcrops. The coastal areas have thick alluvial and marine sediments of Recent origin. This area seems to be undergoing some marine recession. A major paleo-rift valley lies along the east west direction passing through the Kutch region.

Sedimentary rocks of this region are generally well indurated and behave like hard rocks. The pore spaces are mostly cemented with calcium carbonate and therefore are mostly impervious. The Deccan Traps are exposed along the southern part of the Kutch peninsula. Both limestones and sandstones are used as building materials in this region. Many quarries exist in this region for mining good quality limestone for making slabs for flooring and covering walls. Several cement factories mine limestones in this region. Bauxite is also being mined in this region.

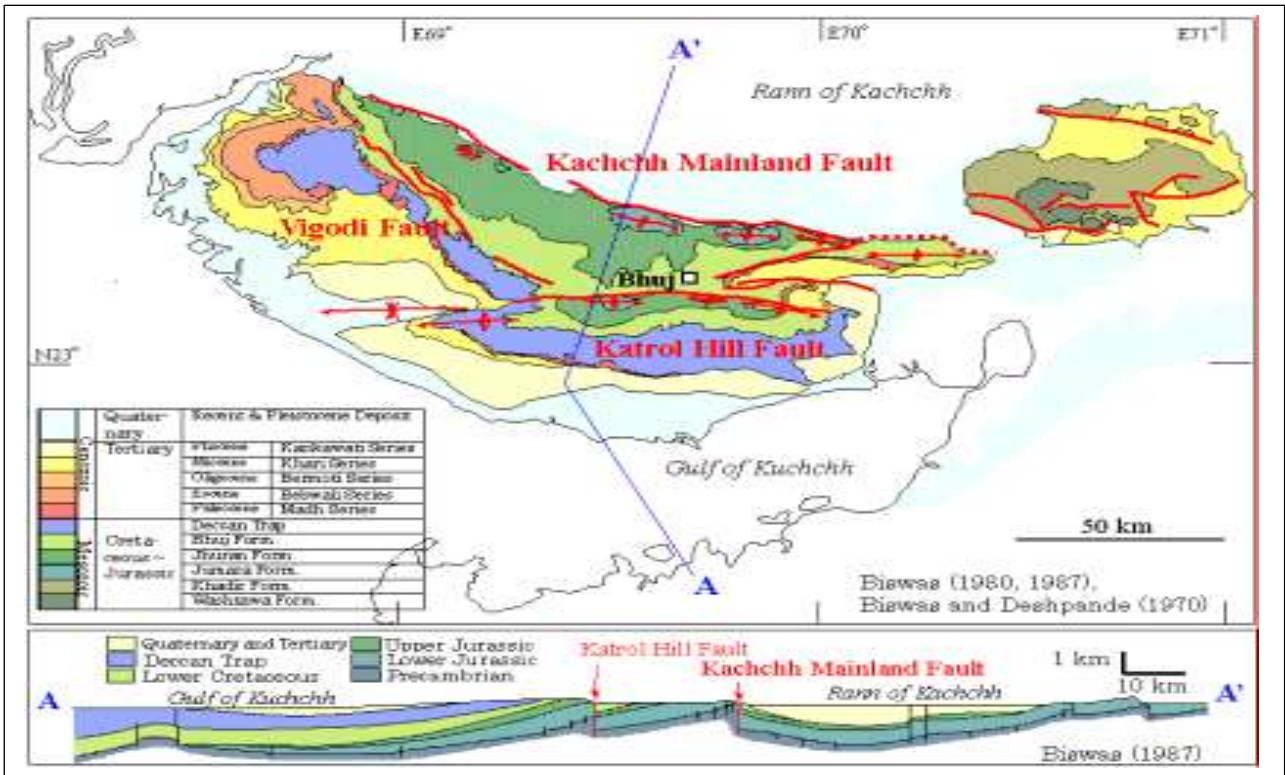
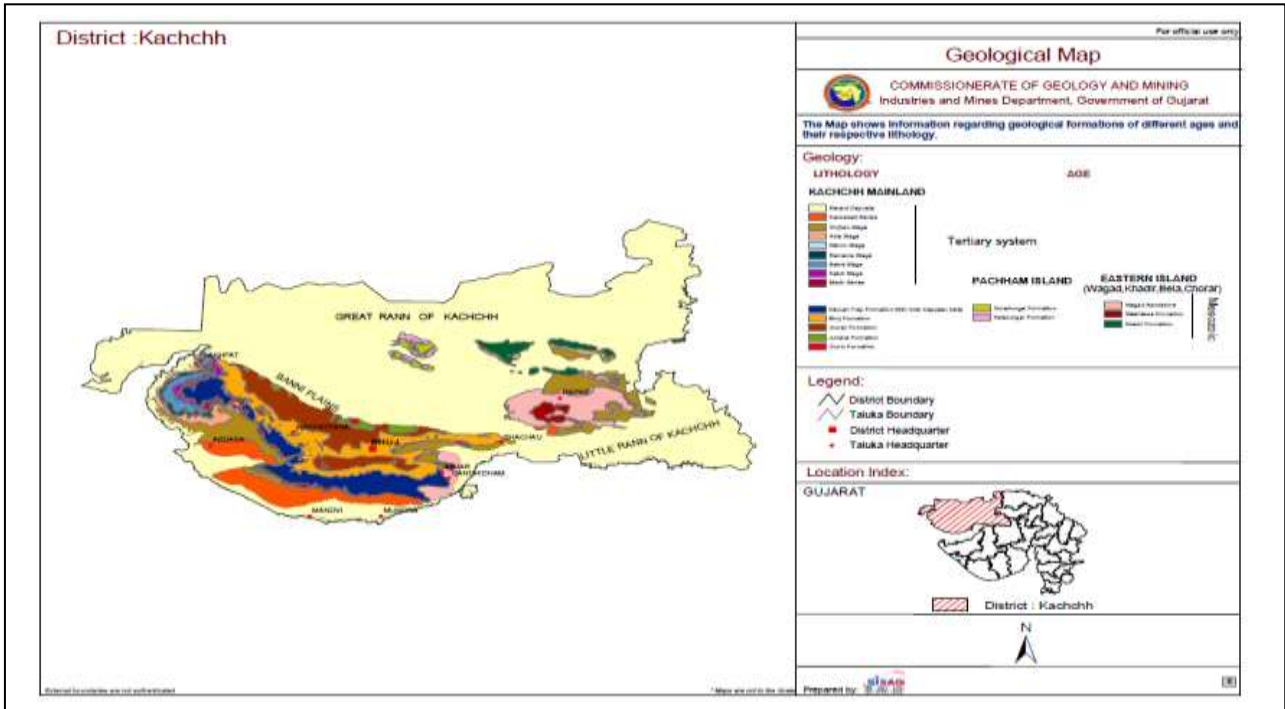
Mesozoic rocks of Kutch region are exposed in three chains of east-west trending ridges. The 2000 m thick succession of marine sedimentary rocks represent a phase of transgression of sea along the west coast during Jurassic-Early Cretaceous times. The succession has been intruded by various sills and dikes and overlain by Deccan Traps of same age. Mesozoic rocks of Kutch region are grouped into several formations as follows.

Patcham Formation marks the beginning of Jurassic marine transgression in Kutch. It consists of 300 m thick succession of limestone, marl and shale and has yielded pelecypods, corals and ammonites.

Chari Formation consists of 400 m thick succession of limestone, marl and shale. It contains fossil remains of ammonites and gastropods. Katrol Formation is a 750 m thick succession of shale, limestone and sandstone deposited during Late Jurassic. The Katrol Formation has yielded fossils. Umia Formation is about 550 m thick succession of sandstone, sandy shale and marl. This formation is characterized by presence of ammonite fossils like. Bhuj Formation comprises of sandstone and shale and is characterized by presence of plant fossils.

The state of Maharashtra is almost entirely covered by the basaltic lava flows of the Deccan Trap. The Traps have a thickness of about 2000 m near the western edge and thin out towards east. The lava flows extend into neighbouring Madhya Pradesh, Gujarat and Karnataka. The eastern edge has been eroded with some remnants occurring as far as Jabalpur. They were emplaced between Cretaceous to Paleocene period. Within the basaltic lava flows, numerous sedimentary beds (the Intertrappeans) of carbonates & cherts occur in the east and Gujarat. Usually the middle part of Trap is devoid of these intertrappean beds. It is believed that the Deccan Trap is the result of sub-aerial volcanic activity associated with continental divergence in this part of the earth during Mesozoic. Most magma-carrying fissures trend parallel to the western coast, Narmada lineament and the Cambay basin.

Gujarat Kutch and Cambay Basin contains an existing gas discovery and several untested gas-bearing reservoirs.

Geology of Kutch (Katchchh) region (*after Biswas 1970,1980,1987*)

Additional Information:

Drainage system with description of main rivers.

All the rivers or streams of Kachchh start from its central portion and flow towards the sea in the south and the Great Rann in the north and the Little Rann in the south east. The Rivers of Kachchh are non-perennial. Duration of flow of water in the rivers is a question of a few hours in monsoon. This is particularly the case with small rivers.

The major rivers of Kachchh are the Kali, the Dhudud, the Malan, the Khari, Kankawati, the Kharod, the Kukmavti, the Nagmati and the Bhukhi etc.

Rukmawati originating at a height of 155 m from North of Daisara-Bhuj, Kutch, district, the river after traversing a length of 48 Km. drains into Gulf of Kutch.

Kankawati is originating at a height of 150 m from North of West of Magwana-Bhuj, Kutch district, after traversing a length of 56 Km. drains into Gulf of Kutch.

Bhuki originates from near Angia village- Nakhatrana, Kutch & meets Great Rann of Kutch. Its length is 28 km.

Sr	River	Area drained in Sq Kms	% Area drained in the District
1	Kali	40.950	0.090
2	Dhudud	0.648	0.001
3	Malan	132.160	0.289
4	Khari	27.210	0.060
5	The Kankawati	110.364	0.242
6	The Rukmavati	33.672	0.074
7	The Nagmati	47.656	0.104
8	The Bhukhi	62.000	0.136
9	The Sang	24.650	0.054

Salient features of Important rivers & streams

Sr	River	Total Length in the district (Kms)	Place of Origin
1	Kali	45	The river Kali rises from the hills north-west of Mata no Madh village in the Lakhpata taluka. Sanadhro dam was constructed on this river during the First Five Year Plan. The river is 45 km long and meets the Arabian Sea near the Kori creek.
2	Dhudud	37	The river Dhudud rises from Manki hills near Jadodar village in Nakhatrana taluka. It merges in the Banni area, after a course of 37 km.
3	Malan	32	The river Malan issues from the hills near Dabhunda village in Rapar taluka. The length of the river is 32 km and it merges in the Great Rann of Kachchh.
4	Khari	15	The Khari starts from Chadwa hills in the Bhuj taluka, south-west of Bhuj keeping to north for about 15 km. After receiving Mithi or Pur from the right, it flows about 12 km more and then merges in the Banni area in the north.
5	Kankawati	51	The river Kankawati rises from the Roha hills south of Gangon village in the Nakhatrana taluka. The course of the river is about 51 km. It merges in the Gulf of Kachchh.
6	Rukmavati	46	The river originates from the Chadwa hills in Bhuj taluka. The Vijaysagar Dam was constructed on this river near the village Kojachora in Mandvi taluka during the princely Kachchh regime. The river flows 46 km and meets the Gulf of Kachchh near Mandvi.
7	Nagmati	46	The river Nagmati rises from the Lanki hills, south of Naranpur village of the Bhuj taluka. The total length of the river is 46 km. It meets the Gulf of Kachchh near Bhenslevali creek.
8	Bhukhi	40	The Bhukhi River rises from the Khatrod hills north of Jambudi village of Bhuj taluka. The total length of the river is 40 km. It merges in the Gulf of Kachchh near Mundra.
9	Sang	29	The Sang River rises from the hills south of Sinugra village of the Anjar taluka. The river is 29 km in length and it merges in the Nakti creek.

Source: Census-2011 & [http://www.india-wris.nrsc.gov.in/wrpinfo/index.php?title=Dams in Gujarat](http://www.india-wris.nrsc.gov.in/wrpinfo/index.php?title=Dams%20in%20Gujarat)

Mineral Potential

Sr	River	Area Sq.M	Sp. Gravity	App. Depth (m)	Potential Resources (mT)
1	Kali	40.950	2.67	1.00	109336.5
2	Dhudud	0.648	2.67	1.00	1730.16
3	Malan	132.160	2.67	2.00	705734.4
4	Khari	27.210	2.67	2.00	145301.4
5	Kankawati	110.364	2.67	2.00	589343.76
6	Rukmavati	33.672	2.67	2.00	179808.48
7	Nagmati	47.656	2.67	2.00	254483.04
8	Bhukhi	62.000	2.67	2.00	331080
9	Sang	24.650	2.67	1.00	65815.5

Volumetric resource estimation considering average specific gravity of 2.67 & average depth ranging from 1.0 to 2.0 meters. Boulders & Bajari can not be estimated since these rivers are not perennial in nature. As mentioned earlier that Duration of flow of water in the rivers is a question of a few hours in monsoon only. Secondly the depth of the mineable reserves can be determined at the time of grant / auction depending on geo-morphology & other physical features in view. Normally it is 50-60% of the particular stream or a river under consideration.



List of Mining Leases Major Mineral

Status as on 31.12.2017 - District Kutch Bhuj, State Gujarat

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
1	Lakhapat	Guneri	Kachchh Cement Pvt. Ltd.,	Limestone	ML-229	250.000	Active
2	Lakhapat	Guneri	Kachchh Cement Pvt. Ltd.	Limestone	ML-230	36.000	Active
3	Lakhapat	Kaner	Karasanbhai Devrajbhai Gorasiya,	Limestone	ML-374	6.000	Active
4	Lakhapat	Jadva	Sanghi Industries Ltd.	Limestone	ML-644	1543.096	Active
5	Lakhapat	Jadva	J.P.Gujarat Cement Plant,	Limestone	ML-760	2831.610	Active
6	Lakhapat	Harudi	J.P.Gujarat Cement Plant,	Limestone	ML-769	659.000	Active
7	Abdasa	Naniber	ABG Cement Ltd.	Limestone	ML-751	336.184	Active
8	Bhuj	Dhrang	Shri Ram Minechem Internationl,	Limestone	ML-272	18.000	Active
9	Lakhapat	Panandhro	G.M.D.C. Ltd.	Lignite	ML-76	1151.000	Active
10	Lakhapat	Panandhro	G.M.D.C. Ltd.	Lignite	ML-402	568.000	Active
11	Lakhapat	Matana Madh	G.M.D.C. Ltd.	Lignite	ML-631	1752.616	Active
12	Lakhapat	Julrai	G.M.D.C. Ltd.	Lignite	ML-156	321.000	Active
13	Lakhapat	Umarsar	G.M.D.C. Ltd.	Lignite	ML-630	2186.760	Active
14	Abdasa	Balachod Moti	Orient Abrasives Ltd.	Bauxite	ML-74	110.070	Active
15	Abdasa	Naredi	G.M.D.C.Ltd.	Bauxite	ML-161	62.360	Active
16	Abdasa	Naredi	G.M.D.C.Ltd.	Bauxite	ML-163	66.975	Active
17	Abdasa	Daban	G.M.D.C.Ltd.	Bauxite	ML-624	642.055	Active
18	Abdasa	Nandra Nana	G.M.D.C.Ltd.	Bauxite	ML-623	360.360	Active
19	Abdasa	Naredi	G.M.D.C.Ltd.	Bauxite	ML-626	169.598	Active
20	Abdasa	Mothala	G.M.D.C.Ltd.	Bauxite	ML-627	280.769	Active
21	Mandvi	Goniyasar Nana	G.M.D.C.Ltd.	Bauxite	ML-46	70.930	Active
22	Mandvi	Vandh-2	G.M.D.C.Ltd.	Bauxite	ML-117	8.900	Active
23	Mandvi	Ratadia	G.M.D.C.Ltd,	Bauxite	ML-124	204.070	Active
24	Mandvi	Vandh-1	G.M.D.C.Ltd.	Bauxite	ML-47	73.380	Active

List of Quarry Leases Minor Mineral

Status as on 31.12.2017 - District Kutch Bhuj, State Gujarat

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
1	Mandvi	Vandh	Kantilal Parmar Ashapura Minechem Industries	Bentonite	19	3.3200	Active
2	Mandvi	Vandh	Shree Ashapura Minechem	Bentonite	810	2.5100	Active
3	Mandvi	Hamla	Shree Ashapura Minechem	Bentonite	939	1.2342	Active
4	Lakhapat	Denma	Shree Kantilal Parmar C/o Ashapura Minechem Industries	Bentonite	2282	1.0000	Active
5	Mandvi	Hamla	Shree Kantilal Parmar C/o Ashapura Minechem Industries	Bentonite	2285	1.0000	Active
6	Mandvi	Vandh	Shree Kantilal Parmar C/o Ashapura Minechem Industries	Bentonite	2287	1.0000	Active
7	Mandvi	Vandh	Shree Babubhai Bhimji Galnga	Bentonite	2373	1.0000	Active
8	Mandvi	Vandh	Shree Babubhai Bhimji Galnga	Bentonite	2374	1.0000	Active
9	Mandvi	Sherdi	Atul Minerals	Bentonite	2471	4.5900	Active
10	Mandvi	Vandh	Manori Investment & Treding Pvt.Ltd Abhram Juma Sanghar	Bentonite	3456	2.8530	Active
11	Mandvi	Vandh	Shree Babubhai Bhimji Galnga	Bentonite	3532	0.3600	Active
12	Mandvi	Vandh	Arligatan Investment & Trading Pvt. Ltd Jaysukh Khimji Sosi	Bentonite	3544	1.7500	Active
13	Mandvi	Hamla	Arligatan Investment & Trading Pvt. Ltd Jaysukh Khimji Sosi	Bentonite	3545	1.8600	Active
14	Abdasa	Miyani	Shree Ashapura Minechem	Bentonite	3639	7.0000	Active
15	Lakhapat	Matanamadh	Shree Ashapura Minechem	Bentonite	3643	9.0000	Active
16	Abdasa	VamotiMoti	Shree Ashapura Minechem	Bentonite	3654	2.0000	Active
17	Abdasa	VamotiMoti	Shree Ashapura Minechem	Bentonite	3810	1.3500	Active
18	Mandvi	Hamla	Shree Kalpana I Jani	Bentonite	3833	3.0000	Active
19	Mandvi	Punadi	Shree Koteswar Mines & Minerals	Bentonite	3842	2.0000	Active
20	Abdasa	Miyani	Shree Ashapura Minechem Ltd.	Bentonite	4074	3.6900	Active
21	Mandvi	Sherdi	R.A.Songar	Bentonite	4084	5.0000	Active
22	Mandvi	Vandh	Shree Varshaben I Jani	Bentonite	4139	3.4678	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
23	Nakhatrana	Roha Sumary	Shree Sodha Lakhubha Banasangji	Bentonite	4211	1.0000	Active
24	Mandvi	Vandh	Shee Kachchh Ors Clay	Bentonite	4244	4.7000	Active
25	Mandvi	Punadi	Shree Harji Premji	Bentonite	4286	1.2000	Active
26	Lakhapat	Dedrani	Shree Pravinsinh Sujansinh Sodha	Bentonite	4291	1.0000	Active
27	Mandvi	Sherdi	Dajibha Jilubha Sodha	Bentonite	4301	1.7927	Active
28	Nakhatrana	Roha Sumary	Shree Ashapura Minechem Pvt. Ltd.	Bentonite	4417	2.0000	Active
29	Mandvi	Sherdi	Shree Kalpana I Jani	Bentonite	4570	0.6530	Active
30	Nakhatrana	Jorjok	Shee Kachchh Ors Clay	Bentonite	4592	0.9000	Active
31	Mandvi	Vandh	Shree Mahesh I Jani	Bentonite	4678	1.2600	Active
32	Mandvi	Sherdi	ShreeMati B.R.Songara	Bentonite	4792	1.0000	Active
33	Mandvi	Punadi	Shivam Minerals & Elied Industries	Bentonite	4906	1.0421	Active
34	Nakhatrana	Roha Sumary	Ashapura Export	Bentonite	5052	7.5984	Active
35	Mandvi	Punadi	Sanghar Vaalji Mithu	Bentonite	5063	0.9164	Active
36	Mandvi	Vandh	Usha Minechem Industries	Bentonite	5089	0.4000	Active
37	Mandvi	Hamla	J.K.Minerals	Bentonite	5151	1.5000	Active
38	Mandvi	Hamla	Kalyaji Shamji Paatriya	Bentonite	5207	3.0000	Active
39	Mandvi	Vandh	Shri Moti BR Songara	Bentonite	4311	31.0000	Active
40	Mandvi	Punadi	Mr. Jadeja Ranjitsinh Bhurubha	Bentonite	4346	0.7000	Active
41	Mandvi	Hamla	Mr. Kantaben Ramji Ravji Patel	Bentonite	4347	1.0000	Active
42	Abdasa	Miyani	Mr. Jimppe Limited	Bentonite	5393	3.0500	Active
43	Mandvi	Vandh	Mr. Meghji Lalji Bhimani	Bentonite	5424	2.0000	Active
44	Lakhapat	Bhadra Nana	Mr. Ashapura International Lee	Bentonite	5452	5.0000	Active
45	Mandvi	Sherdi	Kutch Oarskele	Bentonite	5505	1.0000	Active
46	Mandvi	Hamla	Shri Babubhai Dayalji Bhanushali	Bentonite	5532	1.0000	Active
47	Mandvi	Vandh	Shri Bhimji Rana Paddy	Bentonite	6332	1.7500	Active
48	Nakhatrana	Nani Bhujay	Shri Manilal Govindji Thakker	Bentonite	6423	1.0000	Active
49	Nakhatrana	Lakhsmpar No.2	Mr. Jimppe Limited	Bentonite	6481	2.7550	Active
50	Lakhapat	Mota Bhadra	Mr. Jimppe Limited	Bentonite	6550	3.0000	Active
51	Mandvi	Hamla	Mr. Ramji Paba Harijan	Bentonite	6692	3.2400	Active
52	Lakhapat	Mota Bhadra	Mr. Jimppe Limited	Bentonite	6785	3.0000	Active
53	Mandvi	Punadi	Mr. Jimppe Limited	Bentonite	6913	2.9800	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
54	Mandvi	Vandh	Sri Trichambhai Vasanabai Ahir	Bentonite	6934	2.5000	Active
55	Mandvi	Vandh	Mr. Shivam Minerals and Allied	Bentonite	7045	1.5800	Active
56	Mandvi	Vandh	Mr. Shivam Minerals and Allied	Bentonite	7046	1.6500	Active
57	Mandvi	Vandh	Mr. Shivam Minerals and Allied	Bentonite	7047	1.8500	Active
58	Mandvi	Hamla	Mrs. Vandana L. Quarani	Bentonite	7077	1.0000	Active
59	Mandvi	Hamla	Mr. Shivam Minerals and Allied	Bentonite	7162	1.2500	Active
60	Mandvi	Hamla	Mr. Shivam Minerals and Allied	Bentonite	7163	2.0000	Active
61	Nakhatrana	Nani Bhujay	Mr. Shivam Minerals and Allied	Bentonite	7215	4.7500	Active
62	Mandvi	Vandh	Mr. Shivam Minerals and Allied	Bentonite	7248	0.4000	Active
63	Mandvi	Punadi	Manilal Govind Thakkar	Bentonite	7428	1.8918	Active
64	Mandvi	Nana Asambiya	Mr. Nilesh M. Dhalakia Laxmikant P. Quarani	Bentonite	7451	3.0000	Active
65	Lakhapat	Matanamadh	Mr. Ratilal Hansraj Shokar	Bentonite	7480	31.0000	Active
66	Mandvi	Vandh	Shri Kirtikumar Shamji Seghani	Bentonite	7563	1.2000	Active
67	Mandvi	Sherdi	Mr. Ashapura International Ltd.	Bentonite	7724	1.0000	Active
68	Mandvi	Vandh	Mr. Ashapura International Ltd.	Bentonite	7725	1.0000	Active
69	Abdasa	Miyani	Mr. Ashapura International Ltd.	Bentonite	7852	1.7797	Active
70	Mandvi	Vandh	Mr. Minerals and Allied Ind.	Bentonite	7904	1.3611	Active
71	Mandvi	Vandh	Mr. Minerals and Allied Ind.	Bentonite	7905	2.8000	Active
72	Nakhatrana	Lakhsmpar No.2	Mr. Dinesh Arjun Thakkar Prof. Koteswar Mines and Minerals	Bentonite	7949	0.7082	Active
73	Mandvi	Vandh	Shri Samat Lalu Sanghar LP.Comani	Bentonite	8041	1.0000	Active
74	Mandvi	Punadi	Shri Govindbhai Vitthaladas Patel	Bentonite	8061	1.0000	Active
75	Mandvi	Punadi	Malabha Khanj Jadeja	Bentonite	8146	1.0000	Active
76	Abdasa	Nani Balachod	Ashapura Minechem Pvt.	Bentonite	8184	2.7000	Active
77	Nakhatrana	Lakhsmpar No.2	Ashapura Minechem Pvt.	Bentonite	8185	3.5000	Active
78	Mandvi	Hamla	Vinod Kumar Chunilal Mehta	Bentonite	8305	2.3000	Active
79	Mandvi	Hamla	JimPex Limited	Bentonite	8314	1.3759	Active
80	Abdasa	Vamoti Moti	Mr. Mitesh M. Thakker	Bentonite	8334	1.0000	Active
81	Mandvi	Hamla	Mr. Khimji Ramaji Sanghar	Bentonite	8337	0.2634	Active
82	Mandvi	Hamla	Shri Meghraj Desor Sanghar	Bentonite	8344	2.0000	Active
83	Mandvi	Vandh	JimPex Limited	Bentonite	8346	1.9500	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
84	Mandvi	Nana Ratadiya	Jagdishchandra Dayaram Lesson	Bentonite	8480	2.9800	Active
85	Mandvi	Vandh	Shri Rajesh Girishchandra Chappaneri Pardhari Shri Ashok Arjanbhai Jabuani	Bentonite	8594	4.2100	Active
86	Nakhatrana	Lakshmipar No.2	Ashapura Minechem Ltd	Bentonite	8864	2.1857	Active
87	Nakhatrana	Lakshmipar No.2	Ashapura Minechem Ltd	Bentonite	8871	4.7400	Active
88	Mandvi	Vandh	Shri Ramubhai Ramji Sanghar	Bentonite	9047	1.4600	Active
89	Nakhatrana	Lakshmipar No.2	Ashapura Minechem Ltd	Bentonite	9057	0.8985	Active
90	Mandvi	Punadi	Shri Manilal Govindji Thakker	Bentonite	9069	1.0000	Active
91	Nakhatrana	Lakshmipar	Ashapura Minechem Ltd	Bentonite	9182	4.5000	Active
92	Nakhatrana	Lakshmipar	Ashapura International Ltd.	Bentonite	9183	3.5500	Active
93	Nakhatrana	Lakshmipar	Ashapura International Pvt. Ltd.	Bentonite	9185	4.5000	Active
94	Nakhatrana	Lakshmipar	Ashapura International Pvt. Ltd.	Bentonite	9186	3.8000	Active
95	Mandvi	Hamla	Jayishtharampuri Shabappururi Goswami	Bentonite	9343	2.2000	Active
96	Mandvi	Faradi	Vishnaji Jivat Moata and Manilal Khimjee Mata	Bentonite	9392	1.0000	Active
97	Nakhatrana	Lakshmipar	Ashapura Minakam Lee	Bentonite	9439	3.8400	Active
98	Mandvi	Sherdi	Hir Mines and Minerals	Bentonite	9503	0.7488	Active
99	Mandvi	Sherdi	Mr. Atul Minerals	Bentonite	9516	3.0554	Active
100	Abdasa	Chiyasar	Ashapura International Ltd.	Bentonite	9943	8.7130	Active
101	Mandvi	Vandh	Mrs. Chandrakiben Bhaskarai Mehta	Bentonite	9948	1.0000	Active
102	Mandvi	Vandh	Mr. Dhawal Trade International Prof. Ridhidiben Bhushanbhai Joshi	Bentonite	9980	0.6200	Active
103	Mandvi	Vandh	Mr. Dhawal Trade International Prof. Ridhidiben Bhushanbhai Joshi	Bentonite	9988	4.9000	Active
104	Abdasa	Miyani	Siddharth Minerals Prof. Ridhideben Bhushanbhai Joshi	Bentonite	10094	3.0000	Active
105	Abdasa	Nani Balachod	Ashapura International Pvt.Ltd	Bentonite	10263	4.3047	Active
106	Mandvi	Vandh	Mr. Avnish Mines and Minerals Pvt.	Bentonite	10420	0.6600	Active
107	Abdasa	Rayadhanzar	Ashapura Minakam Lee	Bentonite	10589	2.8944	Active
108	Mandvi	Vandh	Mr. Kunal Rameshbhai Kapta	Bentonite	10679	1.0000	Active
109	Abdasa	Daban	Ashapura International	Bentonite	10729	2.1398	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
110	Mandvi	Nagrecha	Vikramsinh Kheerajari Jadeja	Bentonite	10874	2.9110	Active
111	Mandvi	Nagrecha	Ghulam Hussein Ismailesh	Bentonite	10875	1.5300	Active
112	Abdasa	Miyani	Bhalchandra chelsakar adhyaru	Bentonite	11014	1.2160	Active
113	Mandvi	Vandh	Ashapura Minakam Lee	Bentonite	11081	5.0181	Active
114	Abdasa	Rayadhanzar	Shri Pujabhai Narangbhai Sanghar	Bentonite	11275	2.2256	Active
115	Mandvi	Hamla	Vitram Ramji Sanghar	Bentonite	11312	0.3000	Active
116	Abdasa	Vamoti Nani	Shri Pujabhai Narangbhai Sanghar	Bentonite	11335	2.1722	Active
117	Abdasa	Rayadhanzar	Ramjibhai Pujabhai Sanghar	Bentonite	11338	1.7974	Active
118	Mandvi	Hamla	Rajesh Kumar Kantilal Patel	Bentonite	11460	0.7360	Active
119	Mandvi	Kotadi Mahadevpuri	Shri Rambilaben Ramjibhai Sanghar	Bentonite	11530	3.2274	Active
120	Mandvi	Kotadi Mahadevpuri	Kuwarbhai Nathabhai Sanghar	Bentonite	11531	2.2561	Active
121	Mandvi	Hamla	Vinayak Minerals	Bentonite	11588	0.6700	Active
122	Mandvi	Punadi	Mr. Mati Yahya Himmat Singh	Bentonite	11614	2.9036	Active
123	Mandvi	Vandh	Kanji Naran Sanghar	Bentonite	11654	0.3900	Active
124	Abdasa	Nudhatad	Dhruva Mines and Minerals	Bentonite	11660	4.2800	Active
125	Abdasa	Miyani	Rajeshbhai Nilalal Thakker	Bentonite	11757	3.4400	Active
126	Abdasa	Miyani	Rupganji Samji Pire	Bentonite	11758	2.8300	Active
127	Mandvi	Vandh	Parbat Naranbhai Gallaga	Bentonite	11808	4.5000	Active
128	Abdasa	Miyani	Kesha Kheraj Harijan	Bentonite	11816	3.0000	Active
129	Abdasa	Nudhatad	Damji Kesha Harijan	Bentonite	11817	2.0000	Active
130	Mandvi	Sherdi	Chaudhary Pravinbhai Khimjibhai	Bentonite	11853	1.5400	Active
131	Mandvi	Hamla	Samat Laghu Sangar	Bentonite	11995	3.6586	Active
132	Mandvi	Hamla	Harji Premji Patel	Bentonite	12065	1.0000	Active
133	Mandvi	Hamla	Ashapura Minakam Lee	Bentonite	12147	2.6592	Active
134	Mandvi	Vandh	Chandrase Pranajivan ends	Bentonite	12149	1.0000	Active
135	Mandvi	Vandh	Valji Mithu Sanghar	Bentonite	12215	2.0000	Active
136	Abdasa	Miyani	Rupsangji Shamji Payar	Bentonite	12229	3.7780	Active
137	Mandvi	Hamla	Laivoosa Triaimax Ind. Ltd	Bentonite	12255	1.6081	Active
138	Mandvi	Sherdi	Manali Mines Pro. Kapil J.Makani	Bentonite	12422	1.2743	Active
139	Mandvi	Kotadi Mahadevpuri	Maajethi Gulamhusen Ishmail	Bentonite	12837	4.9000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
140	Mandvi	Kotadi Mahadevpuri	Jadeja Jayendrasinh	Bentonite	12838	4.9000	Active
141	Mandvi	Punadi	Devraam Parbat patel	Bentonite	13065	1.0000	Active
142	Abdasa	Rayadhanzar	Hingora Abdulkaadir Jusab	Bentonite	13086	3.5916	Active
143	Mandvi	Sherdi		Bentonite	13249	2.8734	Active
144	Abdasa	Miyani	Hingora Abdulkaadir Jusab	Bentonite	13324	1.6000	Active
145	Mandvi	Vandh	Dhaval Kishorbhai Desai	Bentonite	13369	2.6810	Active
146	Mandvi	Vandh	Sunilbhai Muljibhai Majethiya	Bentonite	13421	1.0000	Active
147	Mandvi	Hamla	Ashapura Minechem	Bentonite	13439	1.5884	Active
148	Mandvi	Hamla	Sivubha bhimubha Jadeja	Bentonite	13452	1.0000	Active
149	Abdasa	Miyani	Hingora Abdulkaadir Jusab	Bentonite	13525	4.9000	Active
150	Mandvi	Hamla	JimPex Limited	Bentonite	13573	1.7806	Active
151	Mandvi	Hamla	Ramsangji Meghrajaji Jadeja	Bentonite	13622	1.0000	Active
152	Mandvi	Vandh	Kajhbaanu Hasam Them	Bentonite	13626	1.0000	Active
153	Mandvi	Vandh	Rashes Surykant Nisar Kinjal Rashes Nisar	Bentonite	13687	1.0000	Active
154	Mandvi	Goniyasar Nana	Heena Chandresh Cheda	Bentonite	13688	1.0000	Active
155	Mandvi	Goniyasar Nana	Hiravati Pranjivan Cheda	Bentonite	13689	1.0000	Active
156	Abdasa	Rayadhanzar	Shreemati changuben Dhanji Maheshwari	Bentonite	13788	1.4000	Active
157	Abdasa	Rayadhanzar	Vaalji Mithubhai Haijan	Bentonite	13843	3.0000	Active
158	Abdasa	Rayadhanzar	Harijan Harshi Thavar	Bentonite	14044	1.0000	Active
159	Abdasa	Nani Balachod	Jhafar Sekh	Bentonite	14321	4.2547	Active
160	Mandvi	Vandh	Ashapura Minakam Lee	Bentonite	14356	2.5900	Active
161	Mandvi	Hamla	Bipinbhai Arjunbhao Thakkar	Bentonite	14373	1.0000	Active
162	Mandvi	Hamla	Shivjibhai Bhaanji Sangar	Bentonite	14378	2.4483	Active
163	Mandvi	Hamla	Laivoosa Triaimax Ind. Ltd	Bentonite	14390	4.1500	Active
164	Mandvi	Hamla	Abdul Kaadir Jusab Hingora	Bentonite	14432	2.0000	Active
165	Abdasa	Rayadhanzar	Halepotra Ibbrahim Jafar	Bentonite	14442	3.0000	Active
166	Mandvi	Vandh	Ashapura Minakam Lee	Bentonite	14755	3.0453	Active
167	Mandvi	Vandh	Ashapura Minakam Lee	Bentonite	14768	1.9425	Active
168	Mandvi	Moti goniyasar	Ashapura export pvt ltd.	Bentonite	14809	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
169	Mandvi	Punadi	Deccan Mines	Bentonite	14969	11.0000	Active
170	Mandvi	Hamla	JimPex Limited.	Bentonite	15354	1.1533	Active
171	Mandvi	Vandh	Ashok Shamji Sanghar	Bentonite	16636	3.4500	Active
172	Mandvi	Moti Bhadaï	Shamji Jakhu Sanghar	Bentonite	16769	2.0234	Active
173	Nakhatrana	Roha	Ashapura Minechem ltd bhuj	Bentonite	17624	1.6693	Active
174	Nakhatrana	Roha	Manico Minerals	Bentonite	17625	4.3807	Active
175	Mandvi	Vandh	Manico Minerals	Bentonite	17653	2.9745	Active
176	Mandvi	Punadi	Manico Minerals	Bentonite	17654	2.2375	Active
177	Mandvi	Hamla	Manico Minerals	Bentonite	17655	4.9000	Active
178	Abdasa	Nudhatad	Dawood Haji Fakir Mammad Pyaar	Bentonite	13985	3.0000	Active
179	Abdasa	Rayadhanzar	Rabdia Jayantilal Bhikhalal	Bentonite	14047	4.0000	Active
180	Mandvi	Vandh	Kallupha Rupumba Jadeja	Bentonite	17658	2.0218	Active
181	Mundra	Nani Tumbadi	Riddhi Sidhi Min Pro. Je Soni	Bentonite	17639	2.0000	Active
182	Abdasa	Khirasara Vinzan	Hingora Siddique Musa	Bentonite	17662	2.6688	Active
183	Mandvi	Kotadi Mahadevpuri	Jayantilal Ratilal Sanghvi	Bentonite	17645	1.8818	Active
184	Abdasa	Rayadhanzar	Dhanji Narshi Harijan	Bentonite	13842	10.0000	Active
185	Abdasa	Miyani	Jimex Limited	Bentonite	15351	1.6180	Active
186	Abdasa	Miyani	Jimex Limited	Bentonite	15352	2.9543	Active
187	Abdasa	Miyani	Jimex Limited	Bentonite	15353	2.8000	Active
188	Abdasa	Miyani	Jimex Limited	Bentonite	16687	1.9725	Active
189	Mandvi	Hamla	Laivoosa Triaimax Ind. Pvt.Ltd	Bentonite	16693	2.9340	Active
190	Mandvi	Vandh	May Tandon Mines and Minerals Mumbai	Bentonite	17679	3.1970	Active
191	Lakhapat	Denma	Ashapura Min. Chem. Ltd.	Bentonite	10798	4.8958	Active
192	Mandvi	Vandh	Bipanbhai Arjunbhai Thakkar	Bentonite	15513	1.9424	Active
193	Mandvi	Hamla	Bipanbhai Arjunbhai Thakkar	Bentonite	15514	1.6289	Active
194	Mandvi	Vandh	Dineshbhai Arjunbhai Thakkar	Bentonite	15515	1.6188	Active
195	Mandvi	Punadi	Dineshbhai Arjunbhai Thakkar	Bentonite	15538	1.6787	Active
196	Lakhapat	Denma	Oren HydroCarbon	Bentonite	17693	4.8533	Active
197	Lakhapat	Julrai	Ashapura Min. Chem. Ltd.	Bentonite	3647	2.0000	Active
198	Mandvi	Vandh	Jinkushal minechem ltd mumbai	Bentonite	17663	1.0117	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
199	Nakhatrana	Laxmipar	Ashapura Min. Chem. Ltd.	Bentonite	8869	3.9957	Active
200	Nakhatrana	Laxmipar	Ashapura Min. Chem. Ltd.	Bentonite	8872	1.0400	Active
201	Nakhatrana	Laxmipar	Ashapura Min. Chem. Ltd.	Bentonite	8873	9.9999	Active
202	Abdasa	Miyani	Rupsangaji Samyaji Payar	Bentonite	11068	1.4500	Active
203	Mandvi	Vandh	Jinkushal minechem ltd mumbai	Bentonite	17664	2.4079	Active
204	Mandvi	Hamla	Koteswar Mines & Minerals Gandhidham	Bentonite	9520	4.1834	Active
205	Abdasa	Nudhatad	Abdul Ummer Traya	Bentonite	9763	2.0000	Active
206	Mandvi	Hamla	Keshwaji Muljibhai Dholu	Bentonite	11575	1.0000	Active
207	Abdasa	Nana nandra	Parthkumar Madhubhai Patel Priyesh D Patel	Bentonite	17677	1.2141	Active
208	Abdasa	Moti Vamoti	Parthkumar Madhubhai Patel Priyesh D Patel	Bentonite	17678	1.2140	Active
209	Mandvi	Vandh	Mineno Pra Minerals Pvt Ltd	Bentonite	17674	1.0000	Active
210	Mandvi	Vandh Sheradi	Pokar Mohanlal Ladharam Ludva	Bentonite	13109	4.0000	Active
211	Mandvi	Punadi	Mahendrachalgar Gusai Lakhmsinh	Bentonite	17676	4.7500	Active
212	Abdasa	Rayadhanzar	Koteswar Mines & Minerals Gandhidham	Bentonite	9433	4.3000	Active
213	Lakhapat	Kharoda	Ashapura Ekshamp and Agency	Bentonite	2325	2.5000	Active
214	Lakhapat	Kharoda	Koday Investment and Trading Ku. Pvt. Ltd	Bentonite	3523	10.0000	Active
215	Lakhapat	Kharoda	Koday Investment and Trading Ku. Pvt. Ltd	Bentonite	3438	5.4000	Active
216	Lakhapat	Kharoda	Koday Investment and Trading Ku. Pvt. Ltd	Bentonite	3439	8.5000	Active
217	Abdasa	Miyani	ManaliMInes Madhapar	Bentonite	11834	2.8136	Active
218	Mandvi	Sheradi	ManaliMInes Madhapar	Bentonite	11835	1.0000	Active
219	Abdasa	Miyani	ManaliMInes Madhapar	Bentonite	12847	1.7900	Active
220	Mandvi	Hamla	ManaliMInes Madhapar	Bentonite	12278	1.0000	Active
221	Mandvi	Gangapar	Kishorbhai Shantilal Desai	Bentonite	14228	3.3000	Active
222	Mandvi	Punadi	Dedhiya Himanshu Tarachandbhai	Bentonite	17712	2.0234	Active
223	Mandvi	Sheradi	V & H Infra Pvt Ltd	Bentonite	17699	1.0000	Active
224	Mandvi	Vandh	Sanghar Ramjibhao Gabhabhai	Bentonite	17681	3.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
225	Mandvi	Vandh	Krunal R Kapta	Bentonite	16724	2.0000	Active
226	Nakhatrana	Laxmipar	Kachchh Khanij vikash industries pro R P Goswami	Bentonite	10547	4.8000	Active
227	Abdasa	Miyani	Sunil Kulchand Shah	Bentonite	17728	23.4484	Active
228	Abdasa		Mohammed Muslim Aslam and Mohammed Iqbal Haji Amad	Bentonite	17700	2.3270	Active
229	Abdasa	Khirasara Vinzan	Laivosa Trimax Industries Pvt Ltd	Bentonite	17723	3.2375	Active
230	Mandvi	Nana Asambiya	Raj Arjan Ahir	Bentonite	17729	2.6507	Active
231	Mandvi	Vandh	MS Mines and Minerals	Bentonite	17704	1.0000	Active
232	Mandvi	Goniyasar	Ramji Mithu Sanghar	Bentonite	17734	1.0000	Active
233	Mandvi	Goniyasar	Siddhivinayak Mines and Minerals Pro Dinesh Ramchandra Mittal	Bentonite	17742	1.0000	Active
234	Nakhatrana	Lakshmipar	Kutchh Mineral Development Industries PRO RP Gauswami	Bentonite	11843	8.3000	Active
235	Nakhatrana	Lakshmipar	Kutchh Mineral Development Industries PRO RP Gauswami	Bentonite	1882	4.9550	Active
236	Mandvi	Vandh	Shivaji Valijibhai Pindaria	Bentonite	17563	1.0000	Active
237	Mandvi	Sherdi	Virendrabhai Laklubhai Karani	Bentonite	17730	2.5597	Active
238	Mandvi	Hamla	ACKO Mines and Minerals L LP Shailesh Laxman Patel	Bentonite	17755	1.6888	Active
239	Mandvi	Hamla	Mahesh Babulal Mehta	Bentonite	17733	3.3589	Active
240	Abdasa	Khirasara Vinzan	Charan Urhan Laadha and Sarfaraj Sulaiman Solanki	Bentonite	17725	1.9700	Active
241	Mandvi	Punadi	Jadeja Mahavirsinh Bhajanjee	Bentonite	17759	1.8312	Active
242	Nakhatrana	Lakshmipar	Kutch Mineral Development Industries Pro A P. Gauswami	Bentonite	11955	4.9000	Active
243	Mandvi	Vandh	Ridhi Siddhi Enterprises Laxman Punja Patel and others 03 Mumbai	Bentonite	16705	1.1837	Active
244	Mandvi	Vandh	Ashapura Minechem Ltd Bhuj	Bentonite	17688	1.6500	Active
245	Mandvi	Hamla	Mr. Koteswar Exports	Bentonite	5491	2.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
246	Mandvi	Hamla	Bipin Arjun Thakkar	Bentonite	17739	2.4291	Active
247	Lakhapat	Kotda Madh	Star Bentonite Exports	Bentonite	8612	7.0000	Active
248	Abdasa	Miyani	Bipin Arjun Thakkar	Bentonite	17738	2.1347	Active
249	Abdasa	Nudhatad	Haaji Fakir Mamad Bava Padyaar	Bentonite	13987	3.0000	Active
250	Abdasa	Nudhatad	Ashapura Minechem Ltd Bhuj	Bentonite	4075	1.1680	Active
251	Bhuj	Sarli	Amaad Fakirmamad Khalifa	SandStone	5485	1.0000	Active
252	Bhuj	Sarli	Shamji Devshi Khimani	SandStone	9372	1.0000	Active
253	Bhuj	Dahinsara	Sherbanu Abdreman Khalifa	SandStone	10667	1.7500	Active
254	Bhuj	Dahinsara	Ruksanben Abdreman Khalifa	SandStone	10669	1.0000	Active
255	Bhuj	Dahinsara	Bhayabhai Bhojabhai Parmar	SandStone	11591	1.4572	Active
256	Bhuj	NaranparRavli	Ashok Meghji Bhudiya	SandStone	11752	1.0000	Active
257	Bhuj	Makhna	Dadubha Velubha Parmar	SandStone	11819	1.0000	Active
258	Bhuj	jhiju Timbo	Abhubhakhar alana junej	SandStone	11933	0.6000	Active
259	Bhuj	NaranparRavli	Odedara Laghubhai Malribhai	SandStone	12161	0.8120	Active
260	Bhuj	Sedata	Haaji Jusab Rathod	SandStone	12197	1.0000	Active
261	Bhuj	Kalyanpar	Haaji Osmaan Saat	SandStone	12380	1.0000	Active
262	Bhuj	Makhna	Raayma Kasam Adam	SandStone	12490	1.0000	Active
263	Bhuj	sedata	Jusub Amad Rathod	SandStone	12731	1.0000	Active
264	Bhuj	jhiju Timbo	Ramsang Meghraj Jadeja	SandStone	13059	1.0000	Active
265	Bhuj	jhiju Timbo	Rajabhai Hardashbhai Bhutiya	SandStone	13337	2.1363	Active
266	Bhuj	Sarli	Khalifa Arif Jusab	SandStone	14198	1.0000	Active
267	Bhuj	jhiju Timbo	Abhubhakhar alana junej	SandStone	14352	1.0000	Active
268	Bhuj	Sarli	Pravinbhai Shamjibhai Khimani	SandStone	14463	1.4973	Active
269	Nakhatrana	Ludbay	Vijayrajaji Swarajaji Jadeja	SandStone	14558	4.0000	Active
270	Nakhatrana	Ludbay	Suratajaji Ranaji Sodha	SandStone	14559	4.0000	Active
271	Bhuj	Makhna	Dadubha Velubha Parmar	SandStone	14752	2.0000	Active
272	Bhuj	Ratdiya	Kadar Musha Sama	SandStone	14769	1.0000	Active
273	Bhuj	Dahinsara	Khalifa Abdreman Fakirmamad	SandStone	14901	2.0000	Active
274	Bhuj	Sedata	Rayma Ahmad Husen	SandStone	14957	1.7500	Active
275	Bhuj	Zizu Timbo	Viram Rakhya Goyal	SandStone	16199	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
276	Bhuj	Zizu Timbo	Odecha Abdul Amad	SandStone	14928	1.0000	Active
277	Bhuj	Kalyanpar	Malde Devshi Amar	SandStone	14991	1.0000	Active
278	Bhuj	Kalyanpar	Varva Haaj Ambaliya	SandStone	14976	2.0000	Active
279	Bhuj	Dahinsara	Dhirubhai Sudabhai Rabari	SandStone	14184	1.5600	Active
280	Bhuj	jhiju Timbo	Khalifa Asraf Jusab	SandStone	10022	1.0000	Active
281	Bhuj	Kodki	Nebhabhai Ranmalbhai Parmar	SandStone	17724	1.3400	Active
282	Bhuj	KURBAI	BHANDERI HARISH NANJI	Blacktrap	1735	1.0000	Active
283	Anjar	ANJAR	BHAVNANI R.G TRA.CONART DEVPOPARS.	Blacktrap	2553	2.0000	Active
284	Anjar	MOTI NAGALPAR	MALSATAR MANJI DAYA	Blacktrap	2598	2.0000	Active
285	Anjar	ANJAR	UNNAD OSMAN JAKHRABHAI	Blacktrap	2949	1.0000	Active
286	Mandvi	DHUNAI	KALYAN MAVJI PATEL	Blacktrap	3044	1.0000	Active
287	Nakhatrana	JIYAPAR	PINDORIYA RAVJI SHIVJI	Blacktrap	3111	2.0500	Active
288	Anjar	MEGHPAR KUMBHARDI	SOLANKI RATILAL RAVJI	Blacktrap	3229	1.0000	Active
289	Mandvi	SHERDI	PATEL PURBAI VELJI	Blacktrap	3241	1.0000	Active
290	Mandvi	DHUNAI	PATEL HARILAL PACHAN	Blacktrap	3259	1.0000	Active
291	Bhuj	DAHISARA	PINDORIYA SHAMJI VELJI	Blacktrap	3260	1.0000	Active
292	Rapar	HAMIRPAR MOTI	SADBHAV ENGINEERING LTD.	Blacktrap	3271	4.0000	Active
293	Mandvi	DHUNAI	KESHRANI HIMMAT PARSOTTAM	Blacktrap	3332	2.0000	Active
294	Rapar	HAMIRPAR MOTI	SADBHAV ENGINEERING LTD.	Blacktrap	3338	3.0000	Active
295	Anjar	NAGALPAR	SORTHIYA DHARAMSHI ARJAN	Blacktrap	3362	1.0000	Active
296	Anjar	MEGHPAR KUMBHARDI	SOLANKI LALJI RAVJI	Blacktrap	3447	1.0000	Active
297	Anjar	MEGHPAR KUMBHARDI	SOLANKI CHHAGANLAL RAVJI	Blacktrap	3570	0.7600	Active
298	Anjar	ANJAR	SORTHIYA PREMJI VELJI	Blacktrap	3612	2.0000	Active
299	Anjar	ANJAR	SORTHIYA PREMJI VELJI	Blacktrap	3613	2.0000	Active
300	Mandvi	DHUNAI	RAIMA DAAUD LADHA	Blacktrap	3622	2.0000	Active
301	Anjar	ANJAR	KARABHAI JAKHRABHAI UNNAD	Blacktrap	3702	4.0000	Active
302	Anjar	ANJAR	LADKANI CHANDRASHEKHAR S.	Blacktrap	3709	3.9500	Active
303	Anjar	ANJAR	UNNAD OSMAN JAKHRABHAI	Blacktrap	3719	1.0000	Active
304	Mandvi	DHUNAI	JADVA KERAJ KARSHAN JADVA	Blacktrap	3861	1.0000	Active
305	Anjar	MOTI NAGALPAR	MALSATAR MANJI DAYA	Blacktrap	3913	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
306	Anjar	ANJAR	SOLANKI SATISH KISHORBHAI	Blacktrap	4017	3.0000	Active
307	Mandvi	GADHSHISHA	RAIMA DAAUD LADHA	Blacktrap	4164	2.0000	Active
308	Mandvi	DHUNAI	VEKARIYA VELJI NARAN	Blacktrap	4227	1.0000	Active
309	Anjar	MOTI NAGALPAR	BHAVNANI R.G.	Blacktrap	4251	4.0000	Active
310	Anjar	ANJAR	SORTHIYA KANTILAL MEGHJI	Blacktrap	4478	1.0000	Active
311	Anjar	MOTI NAGALPAR	BHAVNANI M.G.	Blacktrap	4639	1.0000	Active
312	Mandvi	SHERDI	SHAMJI MAYA & CO.	Blacktrap	5236	1.0000	Active
313	Mundra	CHHASARA	BOLIYA KUMBHAR ABDUL REHMAN MAMAD	Blacktrap	5529	1.0000	Active
314	Anjar	ANJAR	SORTHIYA RAMESH MEGHJI	Blacktrap	5554	2.0000	Active
315	Anjar	ANJAR	BAMBHANIYA ASHOKKUMAR MANJIBHAI	Blacktrap	5583	1.0000	Active
316	Bhuj	BHARAPAR	RABDIYA MAVJI DHANJI	Blacktrap	5674	2.0000	Active
317	Bhuj	KERA	HIRANI VISHRAM DHANJI	Blacktrap	5724	2.0000	Active
318	Bhuj	BHARAPAR	GORSIYA SHAMIJI SHIVJI	Blacktrap	5749	2.0000	Active
319	Lakhapat	AASALADI	JABUANI RAVJI KANJI	Blacktrap	5877	3.0000	Active
320	Anjar	ANJAR	KAPDI MAHESH VELJI	Blacktrap	5959	1.2141	Active
321	Anjar	ANJAR	KAPDI VELJI NATHU	Blacktrap	5960	0.4000	Active
322	Mandvi	KOJACHORA	PATEL ASHOKKUMAR ARJANBHAI	Blacktrap	5967	1.0000	Active
323	Mandvi	KOJACHORA	PATEL ARJANBHAI PACHANBHAI	Blacktrap	5968	1.0000	Active
324	Bhuj	KALI TALAVDI/PADDHAR	DANGAR RAGHU GOVIND	Blacktrap	6025	1.0000	Active
325	Abdasa	RAYDHANJAR	JADEJA NARENDRASINH RANJITSINH	Blacktrap	6084	0.6600	Active
326	Mundra	VANKI	MAHESHVARI HARSHI LAKHMAN	Blacktrap	6162	1.0000	Active
327	Nakhatrana	NANA NAKHATRANA	PATEL SHANKARLAL GOPAL	Blacktrap	6173	1.0000	Active
328	Nakhatrana	NANA NAKHATRANA	PATEL JAYANTILAL GOPAL	Blacktrap	6174	1.0000	Active
329	Bhuj	CHUNADI	PINDORIYA SHAMJI DEVSHI	Blacktrap	6181	1.0000	Active
330	Anjar	ANJAR	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6424	1.0000	Active
331	Anjar	MEGHPAR KUMBHARDI	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6427	2.0000	Active
332	Anjar	MEGHPAR KUMBHARDI	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6428	4.5200	Active
333	Anjar	MEGHPAR KUMBHARDI	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6429	2.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
334	Anjar	ANJAR	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6430	4.0000	Active
335	Anjar	ANJAR	SOLANKI RATILAL RAVJIBHAI	Blacktrap	6431	1.0000	Active
336	Mandvi	SHERDI	SADGURU CRUSHER PLANT PRO.SHANTILAL GOVIND JABUANI	Blacktrap	6493	1.0000	Active
337	Anjar	ANJAR	SATHVARA NAVIN BHAVANJI	Blacktrap	6650	1.0000	Active
338	Anjar	VIDI	SORTHIYA MUKESH MANJI	Blacktrap	6666	1.3500	Active
339	Nakhatrana	NETRA	ZILL CONSTRUCTION CO;	Blacktrap	6726	2.0000	Active
340	Anjar	NAGALPAR	JAT SALIM ISMAIL	Blacktrap	6768	4.9000	Active
341	Anjar	MOTI NAGALPAR	GAJJAR KIRANBEN RAJESH	Blacktrap	6849	1.0000	Active
342	Anjar	ANJAR	SORTHIYA VELJI NATHU	Blacktrap	6867	4.0000	Active
343	Anjar	ANJAR	SORTHIYA PREMJI VELJI	Blacktrap	6868	4.0000	Active
344	Anjar	MOTI NAGALPAR	SORTHIYA HARILAL MANJI	Blacktrap	7327	1.0000	Active
345	Anjar	ANJAR	SORTHIYA KANTIAL MEGHJI	Blacktrap	7465	3.0000	Active
346	Anjar	ANJAR	CHUDHARI DIPAK SHANTILAL	Blacktrap	7654	1.7000	Active
347	Anjar	MOTI NAGALPAR	MALSATAR MANJI DAYA	Blacktrap	7785	1.0000	Active
348	Anjar	MEGHPAR KUMBHARDI	SORTHIYA RAVJI MANJI	Blacktrap	7915	1.2800	Active
349	Anjar	ANJAR	SORTHIYA RAVJI MANJI	Blacktrap	8047	1.0000	Active
350	Anjar	ANJAR	SATHAVARA MUKESH BHAVANJI	Blacktrap	8126	2.5000	Active
351	Anjar	ANJAR	UNNAD MAMAD AMAD	Blacktrap	8143	2.0000	Active
352	Bhuj	PAYARKA	VAGHANI SHAMJI VELJI	Blacktrap	8200	2.0000	Active
353	Anjar	ANJAR	SORTHIYA MADHAVJI MEGHJI	Blacktrap	8224	4.0000	Active
354	Nakhatrana	ANGIYA	LIMBANI DEVRAM RAVJIBHAI	Blacktrap	8629	1.0000	Active
355	Anjar	ANJAR	VYAS MAHENDRA BIPINCHANDRA	Blacktrap	8734	3.6000	Active
356	Anjar	ANJAR	THAKKAR PARESH CHHOTALAL	Blacktrap	8735	1.0000	Active
357	Bhuj	BHARAPAR	MEMAN HARUN HUSEIN	Blacktrap	8765	3.0000	Active
358	Gandhidham	SHINAY	SORTHIYA KUNVARJI BHIMJI	Blacktrap	8774	4.9000	Active
359	Nakhatrana	NANA NAKHATRANA	VAGHELA VIRJI PACHAAN	Blacktrap	8825	1.0000	Active
360	Bhuj	CHAKAR	CHAAD DHANJI RAMJI	Blacktrap	8838	4.9000	Active
361	Nakhatrana	NAKHATRANA	KESHRANI KARSHAN KANJI	Blacktrap	8843	2.0000	Active
362	Nakhatrana	NAKHATRANA	KESHRANI RATANSHI KANJI	Blacktrap	8844	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
363	Anjar	ANJAR	KAPDI MAHESH VELJI	Blacktrap	8880	1.5000	Active
364	Anjar	SINUGRA	SORTHIYA RAMESH MEGHJI	Blacktrap	8936	1.0000	Active
365	Anjar	ANJAR	SORTHIYA MADHAVJI MEGHJI	Blacktrap	8938	2.0000	Active
366	Anjar	ANJAR	PRUTHVI STONE CRUSHER PRO.KUTCH ENTERPRISE.	Blacktrap	8945	0.6900	Active
367	Anjar	MOTI NAGALPAR	PRUTHVI STONE CRUSHER PRO.KUTCH ENTERPRISE.	Blacktrap	9000	1.2300	Active
368	Nakhatrana	JIYAPAR	MEPANI KANJI DEVJI	Blacktrap	9064	1.5000	Active
369	Nakhatrana	ROHA	JADEJA JAYPALSINH H.	Blacktrap	9490	1.0000	Active
370	Anjar	ANJAR	SORTHIYA KUNVARJI BHIMJI	Blacktrap	9496	1.0000	Active
371	Bhuj	VADJAR	CHUDASAMA HANUBHA NATUBHA	Blacktrap	9527	1.0000	Active
372	Anjar	MOTI NAGALPAR	SORTHIYA NITIN ARJAN	Blacktrap	9679	3.0000	Active
373	Anjar	KHEDO	SORTHIYA KESHAVJI MANJI	Blacktrap	9723	2.0000	Active
374	Anjar	KHEDO	SORTHIYA RAVJI MANJI	Blacktrap	9724	4.0000	Active
375	Rapar	HAMIRPAR MOTI	SADBHAV ENGINEERING LTD.	Blacktrap	9773	4.9000	Active
376	Rapar	HAMIRPAR MOTI	SADBHAV ENGINEERING LTD.	Blacktrap	9774	3.0000	Active
377	Anjar	ANJAR	BAMBHANIYA DINESHBHAI MANJIBHAI	Blacktrap	9775	3.0000	Active
378	Anjar	KHEDO	OMKAR ENGINEERING CO.	Blacktrap	9794	4.0000	Active
379	Anjar	KHEDO	SORTHIYA SHAMJI MANJI	Blacktrap	9800	4.7400	Active
380	Anjar	MOTI NAGALPAR	BHAVNANI M.G.	Blacktrap	9816	5.4000	Active
381	Anjar	KHEDO	VYAS MAHENDRA BIPINCHANDRA	Blacktrap	9825	2.0000	Active
382	Anjar	VIDI	HADIYA LALJIBHAI KANJIBHAI	Blacktrap	9916	1.0000	Active
383	Anjar	ANJAR	SATHVARA MANJULABEN MOHANBHAI	Blacktrap	10051	3.5000	Active
384	Anjar	ANJAR	SATHVARA MUKESH BHAVANJI	Blacktrap	10053	0.8960	Active
385	Anjar	ANJAR	SATHVARA NAVIN BHAVANJI	Blacktrap	10054	0.5414	Active
386	Anjar	ANJAR	SOLANKI SATISH KISHORBHAI	Blacktrap	10067	4.1275	Active
387	Anjar	KHEDO	JADEJA PRADIPSINH JASHUBHA	Blacktrap	10089	1.3200	Active
388	Anjar	ANJAR	SORTHIYA KANTILAL MEGHJI	Blacktrap	10177	2.7600	Active
389	Nakhatrana	KADIYA MOTA	LUHAR CHETANKUMAR L.	Blacktrap	10222	1.0000	Active
390	Anjar	MOTI NAGALPAR	KAPDI BABUBHAI DEVJI	Blacktrap	10246	4.0000	Active
391	Bhuj	KERA	VAGHELA SHRAVANSINH SAMANTSINH	Blacktrap	10287	4.0000	Active
392	Mundra	VANKI	KAILASH SUPPLAYARS	Blacktrap	10299	2.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
393	Bhuj	KERA	MEPANI MURJI SHIVJI	Blacktrap	10551	2.0000	Active
394	Bhuj	BHARAPAR	SHRI LAXMI MINESPRO.J.B.HIRANI	Blacktrap	10653	2.0000	Active
395	Mandvi	MOTI MAU	SENGHANI DHANJI GOVIND	Blacktrap	10745	1.0000	Active
396	Anjar	KHEDO	GADHVI MANSI DOSA	Blacktrap	10762	4.0000	Active
397	Anjar	MOTI NAGALPAR	SORTHIYA RATILAL MEGHJI	Blacktrap	10943	4.9000	Active
398	Anjar	ANJAR	UNNAD RAMJU AMAD	Blacktrap	11044	0.5328	Active
399	Anjar	ANJAR	BAMBHANIYA JAGDISH NARSINH	Blacktrap	11053	3.0000	Active
400	Anjar	ANJAR	BAMBHANIYA HARESH NARSINH	Blacktrap	11054	4.9000	Active
401	Anjar	MOTI NAGALPAR	CHOTARA MANSUKH VALJI	Blacktrap	11138	1.8682	Active
402	Bhuj	CHAKAR	VAGHDIYA PRAKASH HIRJI	Blacktrap	11181	3.0000	Active
403	Mundra	MOTI TUMBDI	JADEJA ANIRUDHSINH C.	Blacktrap	11188	5.0800	Active
404	Anjar	ANJAR	BAMBHANIYA-SORTHIYA DINESH RATILAL	Blacktrap	11223	2.3700	Active
405	Anjar	MOTI NAGALPAR	BHANUSHALI JAVAHAAR LALCHAND	Blacktrap	11315	4.9500	Active
406	Mandvi	DHUNAI	HARBHOLE CRUSH METAL INDUSTRIES	Blacktrap	11406	1.9000	Active
407	Bhuj	KERA	PATEL RATILAL KESARA	Blacktrap	11411	3.0000	Active
408	Mandvi	DHUNAI	AMRUTIYA MANSUKHLAL MANILAL	Blacktrap	11415	1.0000	Active
409	Gandhidham	SHINAY	JANI VIREN ARVIND	Blacktrap	11423	3.8000	Active
410	Anjar	ANJAR	BAMBHANIYA DINESHBHAI MANJIBHAI	Blacktrap	11443	2.0000	Active
411	Anjar	ANJAR	BAMBHANIYA DINESHBHAI MANJIBHAI	Blacktrap	11510	1.3566	Active
412	Anjar	ANJAR	BAMBHANIYA DINESHBHAI MANJIBHAI	Blacktrap	11525	3.0000	Active
413	Anjar	KHEDO	JADEJA JAYENDRASINH DAJIRAJI	Blacktrap	11538	4.9000	Active
414	Bhuj	KERA	JADEJA BAIRAJBA PUNJAJI	Blacktrap	11630	9.9000	Active
415	Mandvi	GADHSHISHA	RAYMA MAHAMDHUSEN ALI MAHAMAD	Blacktrap	11668	1.0000	Active
416	Abdasa	RAYDHANJAR	JADEJA DEVENDRASINH VANRAJSINH	Blacktrap	11783	1.0000	Active
417	Mandvi	KOJACHORA	JAT MUSTAK MAMAD	Blacktrap	11813	8.0000	Active
418	Anjar	ANJAR	THAKKAR PRAVIN CHHOTALAL	Blacktrap	11818	2.3000	Active
419	Rapar	TRAMBOU	tra to hathubha ranaji sodha & ramesh hiralal joshi	Blacktrap	11820	4.9000	Active
420	Anjar	ANJAR	BAVA LAKHUBHAI RAMABHAI	Blacktrap	11877	0.6400	Active
421	Anjar	ANJAR	BAVA LAKHUBHAI RAMABHAI	Blacktrap	11878	0.7600	Active
422	Nakhatrana	NANA NAKHATRANA	VAGHELA VISHRAM PACHAAN	Blacktrap	11894	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
423	Anjar	ANJAR	SORTHIYA KESHAVJI RATILAL	Blacktrap	11914	2.0000	Active
424	Mandvi	DHUNAI	HARBHOLE CRUSH METAL INDUSTRIES	Blacktrap	11918	0.8500	Active
425	Mandvi	DHUNAI	HARBHOLE CRUSH METAL INDUSTRIES	Blacktrap	11919	2.0000	Active
426	Anjar	MOTI NAGALPAR	HADIYA CHAMAN KARSAN	Blacktrap	11934	1.0000	Active
427	Mandvi	NANA ASAMBIYA	MAHESHVARI DINESH VELJI	Blacktrap	12046	2.0000	Active
428	Anjar	ANJAR	THAKKAR PARESH CHHOTALAL	Blacktrap	12055	3.0000	Active
429	Bhuj	VADJAR	JYOTI STONE CRUSHER.PRO.VIJAYSINH L.JADEJA.	Blacktrap	12068	1.0000	Active
430	Rapar	TRAMBOU	PATEL KUVARBEN JAYESHBHAI	Blacktrap	12075	4.3636	Active
431	Rapar	TRAMBOU	PATEL JAYESHBHAI BHANJI	Blacktrap	12077	2.5088	Active
432	Nakhatrana	LAXMIPAR	LADHA PAIYA MAMAD	Blacktrap	12120	1.8194	Active
433	Mundra	TAPPAR	LAKHANI DEVRAJ SUMAR	Blacktrap	12126	2.8800	Active
434	Anjar	KHEDOI	GADHVI MANSI DOSA	Blacktrap	12162	4.0000	Active
435	Mandvi	NANA ASAMBIYA	KADAR HAJI MAMAD	Blacktrap	12216	4.9000	Active
436	Mundra	FACHRIYA	ABDUL KADAR MAMAD TURK & MANDAN RANABHAI RABARI	Blacktrap	12241	3.7000	Active
437	Anjar	VIDI	HADIYA LALJIBHAI KANJIBHAI	Blacktrap	12264	0.5900	Active
438	Abdasa	MIYANI	PAYAR RUPSANGJI SAMATJI	Blacktrap	12284	4.0000	Active
439	Abdasa	MIYANI	PAYAR DEVUBHA VANKAJI	Blacktrap	12289	3.2963	Active
440	Anjar	ANJAR	LADKANI CHANDRASHEKHAR S.	Blacktrap	12326	1.1710	Active
441	Bhuj	CHUNADI	JADEJA PREMSANGJI LALUJI	Blacktrap	12391	4.0000	Active
442	Nakhatrana	BANDIYARA	SANGHAR SIDDIK ISMAIL	Blacktrap	12396	2.6100	Active
443	Nakhatrana	BANDIYARA	NAKRANI SHANTILAL ARJAN PATEL	Blacktrap	12397	1.0296	Active
444	Nakhatrana	LAXMIPAR	PIR TAHERABANU ABDULSHA	Blacktrap	12438	3.2200	Active
445	Abdasa	RAYDHANJAR	MAHESHVARI DHANJI NAGSHI	Blacktrap	12477	0.6250	Active
446	Bhuj	CHAKAR	JADEJA KHETAJI KHIRAJI	Blacktrap	12485	2.0000	Active
447	Mandvi	KOJACHORA	BOLIYA ABDULRAHEMAN MAAMAD	Blacktrap	12496	3.2704	Active
448	Anjar	ANJAR	LADKANI CHANDRASHEKHAR S.	Blacktrap	12505	2.6500	Active
449	Nakhatrana	LAXMIPAR	LIYA PARAG P.	Blacktrap	12510	1.0000	Active
450	Bhuj	KERA	JADEJA MAHENDRASINH PUNJAJI	Blacktrap	12512	4.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
451	Mundra	MOTI TUMBDI	SONA HENVIMEJAR N.P.HENVI	Blacktrap	12541	1.6260	Active
452	Nakhatrana	LAXMIPAR	PATEL NARSINHBHAI RAJABHAI	Blacktrap	12565	6.2725	Active
453	Mundra	NANI TUMBADI	JADEJA RANJITSINH AGARSANG	Blacktrap	12577	8.6232	Active
454	Mundra	NANI TUMBADI	JADEJA CHANDUBHA AGARSANG	Blacktrap	12579	7.0000	Active
455	Mundra	NANI TUMBADI	BOLIYA ABDULRAHEMAN MAAMAD	Blacktrap	12593	8.0000	Active
456	Mundra	NANI TUMBADI	SAMAY ENTERPRAISE	Blacktrap	12601	7.5773	Active
457	Mundra	NANI TUMBADI	CHHANGA NANDLAL JIVABHAI	Blacktrap	12602	6.5184	Active
458	Mundra	MOTI TUMBDI	JADEJA RANJITSINH AGARSANG	Blacktrap	12615	6.1426	Active
459	Mundra	FACHRIYA	AHIR RANABHAI TRIKAMBHAI	Blacktrap	12685	2.8455	Active
460	Nakhatrana	NANA NAKHATRANA	CHHABHAIYA KISHOR MANILAL	Blacktrap	12787	0.8000	Active
461	Anjar	ANJAR	CHOTARA JAGDISH KANJI	Blacktrap	12805	1.0000	Active
462	Anjar	MATHDA	AGARIYA ISMAIL KASHAM	Blacktrap	12982	4.0000	Active
463	Bhuj	KURBAI	BHANDERI HARISH NANJI	Blacktrap	13033	2.0000	Active
464	Bhuj	KERA	VEKARIYA KHIMJI KALYAN	Blacktrap	13069	4.0000	Active
465	Bhuj	KERA	RAGHVANI KALYAN VISHRAM	Blacktrap	13070	4.0000	Active
466	Bhuj	KERA	TRA. KUVARJI BHIMJI HADIYA	Blacktrap	13071	4.0000	Active
467	Mundra	FACHRIYA	JADEJA ANIRUDHSINH P.	Blacktrap	13073	2.5769	Active
468	Bhuj	KERA	KERAI RAVJI GOVIND	Blacktrap	13075	4.0000	Active
469	Bhuj	KERA	RAGHVANI JADVA VISHRAM	Blacktrap	13076	4.0000	Active
470	Mandvi	KOJACHORA	BOLIYA ABDULRAHEMAN MAAMAD	Blacktrap	13078	1.0000	Active
471	Anjar	MINDIYALA	SORATIYA RAMESH MEGHJI	Blacktrap	13102	8.0000	Active
472	Anjar	ANJAR	JAT MUSTAK MAMAD	Blacktrap	13125	4.7784	Active
473	Nakhatrana	NANA NAKHATRANA	LONCHA PRAVINBHAI RAVJIBHAI	Blacktrap	13128	2.4400	Active
474	Rapar	KHIRAI	SHRI SANGVARI STONE CRUSHER CO.	Blacktrap	13138	4.9000	Active
475	Anjar	BHUVAD	ZARU ARJAN NARAN	Blacktrap	13197	2.6880	Active
476	Nakhatrana	NAKHATRANA	KESHRANI BHARAT PREMJI	Blacktrap	13285	1.1145	Active
477	Mundra	VANKI	SENMA SONALBEN ALKHABHAI	Blacktrap	13305	2.6991	Active
478	Nakhatrana	KOTDA JADODAR	JADEJA ARJUNSINH PRADYUMANSINH	Blacktrap	13320	4.0000	Active
479	Bhuj	KERA	GADHAVI VINODDAN NATTHDAN	Blacktrap	13357	2.1360	Active
480	Nakhatrana	NANA NAKHATRANA	CHHABHAIYA KESHVLAL MANJI	Blacktrap	13360	1.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
481	Bhuj	VADJAR	MATA AANANDABHAI BHACHUBHAI	Blacktrap	13390	4.9000	Active
482	Nakhatrana	LAXMIPAR	SODHA RASHUBHA SAMANTSINH	Blacktrap	13391	2.5500	Active
483	Mandvi	PIYAKO	TRISHUL CRUSHER PLANT	Blacktrap	13469	1.3000	Active
484	Mundra	NANI TUMBADI	MAJOTHI GAFUR HARUN	Blacktrap	13599	4.0000	Active
485	Mundra	LIFRA	JADEJA RAJENDRASINH SWARAJJI	Blacktrap	13657	1.0000	Active
486	Anjar	ANJAR	SORTHIYA KANTILAL MEGHJI	Blacktrap	13754	3.0000	Active
487	Anjar	ANJAR	SORATIYA RAMESH MEGHJI	Blacktrap	13755	5.9800	Active
488	Bhuj	VADJAR	SHREE JYOTI STONE CRUSHER.	Blacktrap	13773	2.0000	Active
489	Nakhatrana	KHAMBHALA	PARSIYA JAYSHREEBEN ARVINDBHAI	Blacktrap	13829	2.0000	Active
490	Nakhatrana	KHAMBHALA	PARSIYA ARVINDBHAI CHHAGANLAL	Blacktrap	13830	3.0000	Active
491	Bhuj	VADJAR	CHUDASAMA SIDHARAJINH HANUBHA	Blacktrap	13915	4.9000	Active
492	Mandvi	VANDH	GHELVA HARAJI RAJADE	Blacktrap	13955	9.9000	Active
493	Bhuj	ZUMKHA	KHALIFA SULTAN AAMAD	Blacktrap	13962	1.0000	Active
494	Nakhatrana	LAXMIPAR	JOSHI VINAYAKRAO PRAMODRAY TRA.JOGMAYA STON KRASHAR	Blacktrap	13992	5.0000	Active
495	Anjar	DEVADIYA	tra to shamji pachan aahir	Blacktrap	14086	2.5000	Active
496	Anjar	DEVADIYA	tra to shamji pachan aahir	Blacktrap	14087	2.5000	Active
497	Nakhatrana	KADIYA MOTA	LUHAR CHETANKUMAR LAXMIDAS	Blacktrap	14224	1.0000	Active
498	Bhuj	GAJOD	RAVI CONSRUCTION	Blacktrap	14231	7.8600	Active
499	Anjar	MOTI NAGALPAR	HADIYA CHAMAN KARSAN	Blacktrap	14252	3.0000	Active
500	Anjar	ANJAR	HUSEN JUSAB JAT	Blacktrap	14303	2.0000	Active
501	Nakhatrana	NETRA	SHAMJI MAYA & SONS.	Blacktrap	14307	2.0000	Active
502	Abdasa	RAYDHANJAR	HALEPOTRA IIBRAHIM JAFAR	Blacktrap	14442	3.0000	Active
503	Anjar	ANJAR	HITECH ROCK PRODUCTS & AGREEGETS LTD.	Blacktrap	14592	4.0000	Active
504	Nakhatrana	ROHASUMARI	SORATHIYA BHIMJI VELJI	Blacktrap	14680	2.5000	Active
505	Anjar	TAPPAR	SHREE KENUBHA BHIKHUBHA JADEJA	Blacktrap	14775	5.0000	Active
506	Anjar	TAPPAR	JADEJA DHRMENDRASINH B	Blacktrap	14776	5.0000	Active
507	Anjar	ANJAR	SORATHIYA KESHAVJI RATILAL	Blacktrap	14783	4.5600	Active
508	Bhuj	BALADIYA	HIRANI VISHRAM DHANJI	Blacktrap	14814	2.8300	Active
509	Anjar	ANJAR	HITECH ROCK PRODUCTS & AGREEGETS LTD.	Blacktrap	15166	3.3100	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
510	Anjar	DEVADIYA	SORATHIYA JITESH BHIMJI	Blacktrap	14782	4.0000	Active
511	Bhuj	KURBAI	PINDORIYA RAVJI SHIVJI	Blacktrap	14973	1.0000	Active
512	Nakhatrana	NANA NAKHATRANA	VAGHELA HARESH VISHRAM	Blacktrap	12737	1.0000	Active
513	Nakhatrana	LAXMIPAR	THAKKAR ARVINDBHAI MANHARLAL	Blacktrap	12776	4.9000	Active
514	Nakhatrana	KOTDA JADODAR	GOGARI PATEL JENTILAL RAMJI	Blacktrap	13142	2.5888	Active
515	Nakhatrana	KOTDA JADODAR	PARSIYA AMBALAL RATANSHI	Blacktrap	13143	4.0000	Active
516	Nakhatrana	KOTDA JADODAR	GOGARI PARVATIBEN JENTILAL	Blacktrap	13144	4.0000	Active
517	Mandvi	GADHSHISHA	RAIMA ABDUL BHACHU	Blacktrap	12472	1.7496	Active
518	Bhuj	KERA	RAGHVANI LAKHMAN VISHRAM	Blacktrap	13077	4.0000	Active
519	Anjar	CHANDRODA	SUTHAR LALJIBHAI VALJIBHAI	Blacktrap	13355	9.9000	Active
520	Gandhidham	SHINAY	GADHVI SAJAN MANUBHAI	Blacktrap	13654	2.0000	Active
521	Mundra	FACHRIYA	ABDUL KADAR MAMAD TURK & MANDAN RANABHAI RABARI	Blacktrap	12131	2.9500	Active
522	Mandvi	DHUNAI	SAHJANAND CRUSH METAL INDUSTRIES	Blacktrap	1819	3.0000	Active
523	Mandvi	DHUNAI	VEKARIYA VELJI NARAN	Blacktrap	1904	1.0000	Active
524	Mandvi	SHERDI	RAIMA DAAUD LADHA	Blacktrap	1937	1.0000	Active
525	Mandvi	DHUNAI	M/S. GANGJI RAMJI	Blacktrap	3805	2.2700	Active
526	Mandvi	DHUNAI	AMRUTIYA MANILAL BHANJI	Blacktrap	3932	2.0000	Active
527	Bhuj	BHARAPAR	LAXMI CRUSH METAL INDUSTRIES PRO.BHIMJI RAVJI HIRANI	Blacktrap	3982	1.0000	Active
528	Anjar	ANJAR	D.S.ENGINEERING	Blacktrap	4040	1.0000	Active
529	Nakhatrana	ANGIYA	PATEL RATANBEN GOPAL	Blacktrap	4128	1.0000	Active
530	Mandvi	DHUNAI	AMRUTIYA MANILAL BHANJI	Blacktrap	4801	1.0000	Active
531	Mandvi	DHUNAI	RABDIYA LALJI MAVJI	Blacktrap	4836	2.0000	Active
532	Mandvi	DHUNAI	PANCHANI DHANJI GOVIND	Blacktrap	4837	1.0000	Active
533	Anjar	VIDI	JAT JUSAB MITHU	Blacktrap	6045	2.3844	Active
534	Anjar	ANJAR	SORTHIYA RAVJI MANJI	Blacktrap	7995	1.6000	Active
535	Anjar	SINUGRA	KAPDI NARENDRA KANJI	Blacktrap	8169	1.0000	Active
536	Anjar	SINUGRA	KAPDI HIRJI KANJI	Blacktrap	8170	1.0000	Active
537	Anjar	ANJAR	JAT MUSTAK MAMAD	Blacktrap	8951	3.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
538	Anjar	SINUGRA	BAMBHANIYA KIRANBHAI MANJIBHAI	Blacktrap	9039	4.0000	Active
539	Anjar	SINUGRA	BAMBHANIYA DINESHBHAI MANJIBHAI	Blacktrap	9041	1.0000	Active
540	Anjar	MEGHPAR KUMBHARDI	SOLANKI CHHAGANLAL RAVJI	Blacktrap	3590	1.0000	Active
541	Anjar	MEGHPAR KUMBHARDI	SOLANKI HARESH CHHAGANLAL	Blacktrap	8675	2.0000	Active
542	Mundra	MOTI TUMBDI	JADEJA RANJITSINH A.	Blacktrap	8709	2.0000	Active
543	Mundra	MOTI TUMBDI	JADEJA SHAKTISINH CHANDUBHA	Blacktrap	11561	4.4352	Active
544	Gandhidham	SHINAY	BALDANIYA MAHENDRA NARAN	Blacktrap	12031	3.0528	Active
545	Gandhidham	SHINAY	BALDANIYA MIRAL BHIKHABHAI	Blacktrap	12033	2.0000	Active
546	Rapar	SAI	SOLANKI CHHAGANLAL RAVJI	Blacktrap	10352	8.0000	Active
547	Anjar	VIDI	NAVIN JERAM BAMBHANIYA	Blacktrap	11093	2.9322	Active
548	Mandvi	seradi	TRISHUL CRUSHER PLANT pro.lakhamashi ratanshi patel	Blacktrap	12460	1.9000	Active
549	Anjar	DEVADIYA	MANGALSINH RANCHODJI SARVAIYA	Blacktrap	15655	4.9000	Active
550	Anjar	SINUGRA	navinbhai kanjibhai kapadi	Blacktrap	8835	4.9000	Active
551	Anjar	SINUGRA	hirajibhai kanjibhai kapadi	Blacktrap	8836	4.9000	Active
552	Anjar	SINUGRA	navinbhai kanjibhai kapadi	Blacktrap	11092	1.4544	Active
553	Nakhatrana	BANDIYARA	Jadeja bipendrasinh juvansinh	Blacktrap	14766	4.0000	Active
554	Anjar	ANJAR	BAMBHANIYA ASHOKKUMAR MANJIBHAI	Blacktrap	4252	3.0000	Active
555	Bhuj	nagor	dinesh manji sorathiya	Blacktrap	15205	4.0000	Active
556	Mandvi	manjal	jadeja himatsinh megharajji	Blacktrap	17294	2.0000	Active
557	Bhuj	KERA	JADVA RAVJI VALANI	Blacktrap	13074	4.0000	Active
558	Nakhatrana	NETRA	Alpaben P.Goswami	Blacktrap	13775	4.7500	Active
559	Anjar	Anjar	Chhanga Ranachhod Jiva	Blacktrap	13589	4.9000	Active
560	Anjar	Anjar	Shri Natwarlal Vishnaji Ramani	Ordinary Sand	6176	2.0000	Active
561	Anjar	Anjar	shri bhogilal vasta Manani	Ordinary Sand	7698	1.0000	Active
562	Mandvi	Asharani	Shree Gitaben Navinbhai Sandhar	Ordinary Sand	8823	2.2556	Active
563	Nakhatrana	Manjal	Shree vijayba pravin sinh bhikhubha jadeja	Ordinary Sand	9121	1.0000	Active
564	Mandvi	Koja Chora	shri kesar natha sangar	Ordinary Sand	10229	1.0000	Active
565	Bhuj	Kunariya	shri arun gopalbhai chhanga	Ordinary Sand	11058	2.5800	Active
566	Mandvi	Koja Chora	shri bharatsinh jitubha jadeja	Ordinary Sand	11137	7.7697	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
567	Mandvi	Asharani	shri navinbhai valjibhai sandhar	Ordinary Sand	11424	1.2000	Active
568	Mundra	Shiracha	shri sava mula maheshvari	Ordinary Sand	11558	8.0000	Active
569	Mundra	Bhadreshvar	shr ajaypoalsinh sujansinh jadeja	Ordinary Sand	11590	4.0000	Active
570	Mundra	Bhadreshvar	shri pradhyumansinh bahadursinh ajdeja & jadeja nirnalsinh jakhubhai	Ordinary Sand	11691	4.2660	Active
571	Bhuj	Habay	shri harilal kanji kerasiya	Ordinary Sand	11766	0.1500	Active
572	Abdasa	Kothara	shri memen abdulgani ismail	Ordinary Sand	11824	1.0000	Active
573	Mundra	Mundra	shree devjibhai danabhai sorathiya	Ordinary Sand	11825	4.0000	Active
574	Lakhapat	Sayra	shree surubha samatji jadeja	Ordinary Sand	11915	2.0000	Active
575	Anjar	Moti Nagalpar	shree juma maheshvari	Ordinary Sand	11935	1.0000	Active
576	Abdasa	Kothara	shree kunbhar ismail harun	Ordinary Sand	11941	1.0000	Active
577	Abdasa	Sandhan	shree shivaji nenashi bhanushali	Ordinary Sand	11969	1.0000	Active
578	Bhachau	Shivlakha	shree saradarsinh lalji jadeja	Ordinary Sand	11979	2.0000	Active
579	Abdasa	Kothara	shree darad mamahaji sidhdhik	Ordinary Sand	11984	NA	Active
580	Rapar	Gedi	shree visha hari gohil	Ordinary Sand	12007	0.9900	Active
581	Bhuj	Kunariya	pir haiderasha abdulsha	Ordinary Sand	12060	0.7460	Active
582	Bhachau	Kharoi	shri hemubha hanubha sodha	Ordinary Sand	12113	4.2400	Active
583	Mandvi	Nana Bhadia	shree pabu devaraj gadhavi	Ordinary Sand	12233	7.4162	Active
584	Mandvi	Nana Bhadia	bhukera alimamad rahemtulla	Ordinary Sand	12236	4.0000	Active
585	Rapar	Nandasar	shree balavatsinh shivubha jadeja	Ordinary Sand	12242	2.0000	Active
586	Mundra	Desalapar	shree dilip sinh bhikhubha jadeja	Ordinary Sand	12417	5.0000	Active
587	Mundra	Desalapar	shree vijayrajsinh natubha jadeja	Ordinary Sand	12418	5.0000	Active
588	Mundra	Desalapar	shree ranajeetsinh natubha jadeja	Ordinary Sand	12419	5.0000	Active
589	Mundra	Desalapar	shree ajitsinh gumansinh jadeja	Ordinary Sand	12421	5.0000	Active
590	Mandvi	Koday	shree ranajeetsinh natubha jadeja & narendrasinh vikramsinh jadeja	Ordinary Sand	12445	6.0000	Active
591	Mandvi	Koday	shree ranajeetsinh natubha jadeja & narendrasinh vikramsinh jadeja	Ordinary Sand	12446	6.0000	Active
592	Mandvi	Koday	shree ranajeetsinh natubha jadeja & narendrasinh vikramsinh jadeja	Ordinary Sand	12447	6.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
593	Mundra	Baraya	shree pradipsinh k jadeja	Ordinary Sand	12484	4.9000	Active
594	Mundra	Luni	shree kesavji manji sorathiya	Ordinary Sand	12520	6.0000	Active
595	Abdasa	Bara Mota	shree ranamalji punjaji jadeja	Ordinary Sand	12692	4.9000	Active
596	Mundra	Luni	shree javahar lalchand bhanushali	Ordinary Sand	12748	4.9000	Active
597	Mundra	Vadala	shree lagadheersinh kathalji jadeja	Ordinary Sand	12811	4.9000	Active
598	Mundra	Vadala	shree lagadheersinh kathalji jadeja	Ordinary Sand	12812	1.8200	Active
599	Bhuj	Dagala	shree ranchhod rava dangar	Ordinary Sand	12813	1.5500	Active
600	Bhachau	Kakarava	shree daya dhara chavda	Ordinary Sand	12900	4.9000	Active
601	Mandvi	Nani Khakhar	shree hitubha bahadursinh jadeja	Ordinary Sand	12977		Active
602	Mandvi	Asharani	sandhar navin valji	Ordinary Sand	13040	0.7925	Active
603	Mandvi	Nani Khakhar	shree sangramsinh halubha jadeja	Ordinary Sand	13046	1.8000	Active
604	Mandvi	Nani Rayan	shree ratansi mulji gadhavi	Ordinary Sand	13053	4.5619	Active
605	Bhachau	Lakadiya	shree amad kasam rauma	Ordinary Sand	13079	1.0000	Active
606	Rapar	Kunbhariya	shree akabarali alarkha rauma	Ordinary Sand	13088		Active
607	Mandvi	Faradi	shree aravindsinh jethubha jadeja	Ordinary Sand	13171	2.0000	Active
608	Mandvi	Faradi	shree umyashankar ramji rajgor	Ordinary Sand	13172	2.0000	Active
609	Abdasa	Sukhapar (Bara)	shree pathubha velubha jadeja	Ordinary Sand	13183	0.9152	Active
610	Mandvi	Nani Khakhar	shree jigneshsinh bahadursinh jadeja	Ordinary Sand	13265	1.0775	Active
611	Mandvi	Nani Khakhar	shree hitendrasinh harubha jadeja	Ordinary Sand	13266	1.8427	Active
612	Mandvi	Faradi	shree aravindsinh jethubha jadeja	Ordinary Sand	13385	9.9000	Active
613	Abdasa	Kothara	abdulgani haji ismail memen	Ordinary Sand	13640	0.4200	Active
614	Abdasa	Ramapar (Gadhavali)	gunsai chandugar gangar	Ordinary Sand	13682	2.4000	Active
615	Abdasa	Vanku	goswami dinesgar gangagar	Ordinary Sand	13721	4.9000	Active
616	Mandvi	Koday	shree panchanbhai karubhai sandhar	Ordinary Sand	13800	2.0000	Active
617	Mundra	Desalapar	jadeja narendrasinh popatbha	Ordinary Sand	13888	1.0200	Active
618	Nakhatrana	Bhitara	shree balavatsinh shivubha jadeja	Ordinary Sand	13897	1.0000	Active
619	Mandvi	Koja Chora	sandhar navin valji	Ordinary Sand	13939	2.2800	Active
620	Abdasa	Kothara	kunbhar daud haji ayub	Ordinary Sand	14017		Active
621	Abdasa	Kothara	shree kunbhar jusab husain	Ordinary Sand	14018		Active
622	Mandvi	Asharani	shree gitaben navinbhai sangar	Ordinary Sand	14067	4.9000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
623	Mandvi	Mota Bhidiya	shree vachhiya medhrajji gadhavi	Ordinary Sand	14073	2.0000	Active
624	Mundra	Borana	shree khengar karashan gilva	Ordinary Sand	14083	1.0000	Active
625	Mundra	Desalapar	shree naranbhai vijanand gilva	Ordinary Sand	14099	2.0000	Active
626	Lakhapat	Nara	shree rasubha sanmatsinh sodha	Ordinary Sand	14129	4.9000	Active
627	Mundra	BHarudiya	shree kanabhai alabhai gadhavi	Ordinary Sand	14150	4.9000	Active
628	Abdasa	Tera	nileshbhai prahaladsinh bhanushali	Ordinary Sand	14154	2.0000	Active
629	Anjar	Kumbhariya	dhanjibhai vajabhai aytra	Ordinary Sand	14194	9.9000	Active
630	Mundra	Bhadreshvar	shree vajabhai panchan myatra	Ordinary Sand	14195	1.2487	Active
631	Abdasa	Vanku	shree balavantsinh rupasangji vadher	Ordinary Sand	14254	0.7600	Active
632	Mundra	Borana	shree haraji rajde gilva	Ordinary Sand	14336	2.0000	Active
633	Mandvi	Mandavi	shreemati pallaviben a dave	Ordinary Sand	14478	4.9000	Active
634	Mandvi	Mandavi	patel kanji mavji halai	Ordinary Sand	14492	1.0000	Active
635	Abdasa	Kothara	shree mahavisinh juvansinh jadeja	Ordinary Sand	14510	2.0000	Active
636	Nakhatrana	Mathal	shree vishanji velji panchanii	Ordinary Sand	14580	1.0000	Active
637	Bhachau	Khodasar	shree dilubha rambha gadhavi	Ordinary Sand	14670	2.0000	Active
638	Lakhapat	Sayra	shree vajerajsinh svarajaji jadeja	Ordinary Sand	14900	0.8000	Active
639	Bhuj	Mokhana	shee vira mula dhila	Ordinary Sand	14914		Active
640	Nakhatrana	Chhari Fulay	shree bahadursinh khetaji sodha	Ordinary Sand	14918	2.0000	Active
641	Bhachau	Chandrodi	shree nameribhai jethabhai dhila	Ordinary Sand	14944	2.0000	Active
642	Nakhatrana	Akadana	shree gitaben harish vadhaji halay	Ordinary Sand	14963	1.0000	Active
643	Bhuj	Mota Bandra	shree bhagirathsinh pradyumn sinh paramar	Ordinary Sand	14996	2.0000	Active
644	Anjar	Marigna	shree jagadish kanji chotara	Ordinary Sand	15007		Active
645	Bhuj	Bandra	bhairathsinh pradhyumansinh paramar	Ordinary Sand	14996 A	2.9000	Active
646	Abdasa	Tera	akabarsha husensha pirzada	Ordinary Sand	Tera Block E	2.0000	Active
647	Abdasa	Tera	abdulgani haji ismail memen	Ordinary Sand	Tera Block A	0.5000	Active
648	Abdasa	Tera	mahamad asharaf pirjada	Ordinary Sand	Tera Block F	2.0000	Active
649	Mundra	Dhrab	Turk Hussain Haji Mammad	Ordinary Sand	10944	4.0266	Active
650	Bhuj	Nadapa	Ranabhai Ravabhai Dangar	White Clay	ML-236	5.0000	Active
651	Bhuj	Nadapa	Gopalbhai Savabhai Dangar	White Clay	ML-332	1.0000	Active
652	Bhuj	Kandherai	Ranabhai Ravabhai Dangar	White Clay	ML-248	3.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
653	Bhuj	Lakhond	Vanza Minerals	White Clay	ML-126	46.5000	Active
654	Bhuj	Zura	Manoj P.Solanki	White Clay	ML-162	10.0000	Active
655	Bhuj	Mamuara	Satishbhai Valjibhai Chhanga	White Clay	ML-224	11.3000	Active
656	Bhuj	Mamuara	20 Microns Ltd	White Clay	ML-231	11.8900	Active
657	Bhuj	Mokhana	Ashapura Minechem Ltd.	White Clay	ML-385	12.0000	Active
658	Bhuj	Mamuara	Valabhai Ramjibhai Ayar	White Clay	ML-280	10.0000	Active
659	Bhuj	Mamuara	Chetankumar Navnitlal Shah	White Clay	ML-291	0.8094	Active
660	Bhuj	Nadapa	Aamrapali Chaina clay Minearls & Development Corporation.	White Clay	ML-540	2.8362	Active
661	Bhuj	Kunariya	Ashapura Minechem Ltd.	White Clay	ML-476	4.1000	Active
662	Bhuj	Dhoravar	Ashapura Minechem Ltd.	White Clay	ML-560	13.3392	Active
663	Bhuj	Mamuara	Ashapura Minechem Ltd.	White Clay	ML-561	4.1278	Active
664	Bhuj	Dhrobana	Ashapura Minechem Ltd.	White Clay	ML-559	6.0000	Active
665	Bhuj	Dagala	Chetankumar Navnitlal Shah	White Clay	ML-285	2.0234	Active
666	Bhuj	Dagala	Chetankumar Navnitlal Shah	White Clay	ML-286	1.2000	Active
667	Bhuj	Mamuara	Kanjibhai Rupabhai Jatiya	White Clay	ML-381	1.6498	Active
668	Bhuj	Dagala	Abdul Latip Hamid Hingora	White Clay	ML-399	2.8000	Active
669	Bhuj	Lakhond	Jayesh Ambika Prasad Pandya	White Clay	ML-414	2.2400	Active
670	Bhuj	Kunariya	Ashapura Minechem Ltd.	White Clay	ML-477	44.2000	Active
671	Bhuj	Mamuara	Bhupendrabhai Revashankar Gor	White Clay	ML-539	20.0000	Active
672	Bhuj	Modsar	Smt.Madhuben Mulajibhai Aashar	White Clay	ML-562	3.0000	Active
673	Bhuj	Nadapa	Ranabhai Ravabhai Dangar	White Clay	ML-822	4.8000	Active
674	Bhuj	Mamuara	Laxman Valjibhai Chhanga	White Clay	ML-951	4.5000	Active
675	Bhuj	Mamuara	Harilal Valjibhai Chhanga	White Clay	ML-955	4.5000	Active
676	Bhuj	Mamuara	Mohan Valjibhai Chhanga	White Clay	ML-1017	3.0300	Active
677	Bhuj	Mokhana	Dhanjibhai Ramjibhai Chad & Damjibhai Ranabhai Kerasiya	White Clay	ML-1154	9.9600	Active
678	Bhuj	Dagala	Mahavir Dhanjibhai Ahir	White Clay	ML-1161	3.3600	Active
679	Bhuj	Chapredi	Sharadkumar Gangaram Thakkar	White Clay	ML-1163	4.9000	Active
680	Bhuj	Dagala	Sharadkumar Gangaram Thakkar	White Clay	ML-1246	4.9000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
681	Bhuj	Dagala	Sharadkumar Gangaram Thakkar	White Clay	ML-1316	4.9000	Active
682	Bhuj	Dagala	Jayeshkumar Shankarlal Jobanputra	White Clay	ML-1317	4.9000	Active
683	Bhuj	Dagala	Sanjaykumar Kuvarji Thakkar	White Clay	ML-1318	4.9000	Active
684	Bhuj	Dagala	Uma Minechem	White Clay	ML-1319	4.9000	Active
685	Bhuj	Dagala	Karmanbhai Karsanbhai Dhila	White Clay	ML-1173	4.9000	Active
686	Bhuj	Mokhana	Veljibhai Ranabhai Dangar	White Clay	ML-1291	2.4700	Active
687	Bhuj	Nadapa	Bhachubhai Savabhai Dangar	White Clay	ML-799	4.9000	Active
688	Bhuj	Naliyeri Timbo	Jivabhai Panchabhai Mata	White Clay	ML-1587	21.0000	Active
689	Bhuj	Nadapa	Ishwarbhai Nanjibhai Bhavani	White Clay	ML-1267	4.5300	Active
690	Nakhatrana	Kotda-Jadodar	Chetankumar Navnitlal Shah	White Clay	ML-298	10.8861	Active
691	Nakhatrana	Mangwana	Ashapura Minechem Ltd.	White Clay	ML-462	8.0000	Active
692	Nakhatrana	Bibar	Chetankumar Navnitlal Shah	White Clay	ML-364	17.9300	Active
693	Rapar	Jatawada	Jitendrakumar Shankarlal Jobanputra	White Clay	ML-491	24.5600	Active
694	Rapar	Fatehghadh	Bhupendra Bhailal Thakkar	White Clay	ML-803	4.5629	Active
695	Rapar	Varnu	Menu Sultan Juma Bhatti	White Clay	ML-798	4.0000	Active
696	Rapar	Fatehghadh	Jitendrakumar Shankarlal Jobanputra	White Clay	ML-575	3.0000	Active
697	Rapar	Lodrani	Hamirji Mamuji Vaghela	White Clay	ML-188	4.0000	Active
698	Rapar	Fatehghadh	Ganesh Minerals	White Clay	ML-128	20.0000	Active
699	Rapar	Adesar	Bhikhusha Rahemansha Arvadiya	White Clay	ML-226	28.7531	Active
700	Rapar	Fatehghadh	Sankarlal Gangaram Thakkar	White Clay	ML-227	4.7700	Active
701	Rapar	Momaymora	Gangaram Valjibhai Thakkar	White Clay	ML-339	3.2375	Active
702	Rapar	Fatehghadh	Bhupendra Bhailal Thakkar	White Clay	ML-801	0.6400	Active
703	Rapar	Fatehghadh	Gajendrashinh Mangrubha Vadhela	White Clay	ML-802	2.0000	Active
704	Rapar	Fatehghadh	Jitendrakumar Amrutlal Rajgor	White Clay	ML-864	0.8547	Active
705	Rapar	Fatehghadh	Bhimabhai Bhavanbhai Parmar	White Clay	ML-908	4.0000	Active
706	Rapar	Fatehghadh	Vikramshinh Anopshinh jadeja	White Clay	ML-910	3.1363	Active
707	Rapar	Fatehghadh	Rameshbhai Meghabhai Patel	White Clay	ML-912	2.5717	Active
708	Rapar	Fatehghadh	Dhirenkumar Ratilal Rajde	White Clay	ML-852	1.2443	Active
709	Rapar	Fatehghadh	Velubha Chaturshinh Jadeja	White Clay	ML-918	1.1230	Active
710	Rapar	Fatehghadh	Bahadurshinh Velubha Jadeja	White Clay	ML-921	2.7923	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
711	Rapar	Fatehghadh	Bahadurshinh Velubha Jadeja	White Clay	ML-920	2.8531	Active
712	Rapar	Fatehghadh	Vanuba Velubha Jadeja	White Clay	ML-919	2.7200	Active
713	Rapar	Kidiyanagar	Hasmukhrai Amarchand Vora	White Clay	ML-986	4.0000	Active
714	Rapar	Fatehghadh	Smt.Prabhatkunvarba M. Jadeja	White Clay	ML-926	4.0000	Active
715	Rapar	Fatehghadh	Jayeshkumar Bhagwandas Thakkar	White Clay	ML-844	1.3355	Active
716	Rapar	Fatehghadh	Devishinh Jemalshinh Chauhan	White Clay	ML-1030	4.3281	Active
717	Rapar	Hamirpar Moti	Satyam Minerals	White Clay	ML-1038	4.9000	Active
718	Rapar	Hamipar Nani	Kishan Minerals	White Clay	ML-1482	4.9000	Active
719	Rapar	Fatehghadh	Devishinh Jemalshinh Chauhan	White Clay	ML-907	4.7000	Active
720	Rapar	Adesar	Rajubhai Mahadeva Chaudhri	White Clay	ML-1088	2.0842	Active
721	Rapar	Hamirpar Moti	Dilubha Velubha Jadeja	White Clay	ML-1040	4.0000	Active
722	Rapar	Fatehghadh	Rudrashinh Bahadurshinh Vaghela	White Clay	ML-909	4.0000	Active
723	Rapar	Hamipar Nani	Dilubha Velubha Jadeja	White Clay	ML-1099	4.9000	Active
724	Rapar	Fatehghadh	Bharmal Ramjibhai Chaudhri	White Clay	ML-1144	4.0000	Active
725	Rapar	Fatehghadh	Karamshi Dhingabhai Kara Sanjay	White Clay	ML-1037	2.2661	Active
726	Rapar	Adesar	Bechargar Keshavgar Gusai	White Clay	ML-934	1.6888	Active
727	Rapar	Adesar	Gajendrashinh Mangrubha Vadhela	White Clay	ML-1299	1.6896	Active
728	Rapar	Fatehghadh	Rajubhai Mahadeva Chaudhri	White Clay	ML-1298	1.1931	Active
729	Rapar	Fatehghadh	Dineshkumar Dayaram Thakkar	White Clay	ML-1300	2.7822	Active
730	Rapar	Adesar	Tapubha Ravaji Jadeja & Vaghubha Hathisinh Jadeja	White Clay	ML-1072	1.6188	Active
731	Rapar	Bhimasar	Ratanbhai Dalabhai Gohil	White Clay	ML-1143	4.0000	Active
732	Rapar	Deshalpar	Muljibhai Ratnabhai Munjat	White Clay	ML-1219	3.2325	Active
733	Rapar	Gedi	Dharmendra Dudabhai Parmar	White Clay	ML-917	4.9000	Active
734	Rapar	Mauvana	Jitendrakumar Shankarlal	White Clay	ML-543	13.0000	Active
735	Rapar	Mevasa	Jitendrakumar Shankarlal Jobanputra	White Clay	ML-493	9.3200	Active
736	Rapar	Moda	Rajubhai Mahadeva Chaudhri	White Clay	ML-1310	4.2578	Active
737	Rapar	Hamirpar Nani	Pradipshinh Ranaji Sodha	White Clay	ML-1311	4.9000	Active
738	Rapar	Hamirpar Nani	Ravechi Minerals and Traders	White Clay	ML-1639	4.1513	Active
739	Rapar	Mauvana	Velubha Chaturshinh Jadeja	White Clay	ML-579	5.0000	Active
740	Bhachau	Sukhpar	Pushpendrasinh Virendrasinh Jadeja	White Clay	ML-662	3.7760	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
741	Bhachau	Bhachau	Chetankumar Navnitlal Shah	White Clay	ML-356	4.0000	Active
742	Anjar	Modsar	Nandlal Jivabhai Ahir	White Clay	ML-1022	4.9000	Active
743	Anjar	Modsar	Kanjibhai Jivabhai Ahir	White Clay	ML-1021	2.8600	Active
744	Lakhapat	Matana Madh	Chetankumar Navnitlal Shah	White Clay	ML-284	21.9700	Active
745	Bhuj	Nadapa	Manoj P. Solanki Juna Vas	China Clay	ML-189	9.4500	Active
746	Bhuj	Mamuara	Manoj P. Solanki Juna Vas	China Clay	ML-234	1.3300	Active
747	Bhuj	Nadapa	Manoj P. Solanki Juna Vas	China Clay	ML-235	6.5000	Active
748	Bhuj	Nadapa	Speciality Minerals	China Clay	ML-211	7.3000	Active
749	Bhuj	Padhhar	Shiv Minerals	China Clay	ML-386	8.1200	Active
750	Bhuj	Mamuara	Harjibhai Ramji Pindoriya	China Clay	ML-567	2.0000	Active
751	Bhuj	Modsar	Gopalbhai Rupabhai Gagal	China Clay	ML-518	2.0000	Active
752	Bhuj	Mamuara	Satishbhai Valjibhai Chhanga	China Clay	ML-342	20.0000	Active
753	Bhuj	Dagala	Haribhai Ranabhai Dangar	China Clay	ML-1187	4.6000	Active
754	Bhuj	Nadapa	Valabhai Savabhai Dangar	China Clay	ML-800	4.9000	Active
755	Anjar	Modsar	Bhavna Minerals Bharatbhai Dayabhai Ahir	China Clay	ML-481	5.4000	Active
756	Bhuj	Padhhar	Kamshreeben Shivrajbhai Madhuda	China Clay	ML-592	1.0016	Active
757	Bhuj	Padhhar	Ram Minechem International	China Clay	ML-584	15.0000	Active
758	Bhuj	Chapredi	Harilal Ranabhai Patel	China Clay	ML-610	5.0000	Active
759	Bhuj	Nadapa	Vinod P. Solanki	China Clay	ML-589	29.0000	Active
760	Bhuj	Mamuara	H.D. Enterprise Pvt. Ltd.	China Clay	ML-580	8.5121	Active
761	Bhuj	Dagala	Gopalbhai Savabhai Dangar	China Clay	ML-612	3.5000	Active
762	Bhuj	Mamuara	Nitinkumar Vallabhaji Shah	China Clay	ML-614	13.0000	Active
763	Bhuj	Mamuara	Haresh Surendrabhai Maheta	China Clay	ML-616	13.0000	Active
764	Bhuj	Dhaneti	Virabhai Lavjibhai Solanki	China Clay	ML-675	5.0000	Active
765	Bhuj	Dagala	Ram Minechem International	China Clay	ML-578	6.0000	Active
766	Bhuj	Dagala	Super Fine Mineral Industries	China Clay	ML-954	3.7029	Active
767	Bhuj	Modsar	Mavjibhai Gopalbhai Gagal	China Clay	ML-1023	2.0400	Active
768	Bhuj	Modsar	Dilubha Velubha Jadeja	China Clay	ML-1666	4.9000	Active
769	Bhuj	Dagala	Kuvarji Gangaram ThakkarGandhidham-Kutch	China Clay	ML-1329	4.9000	Active
770	Bhuj	Naliyeri Timbo	Kuvarji Gangaram Thakkar	China Clay	ML-1330	4.9000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
771	Bhuj	Dagala	Laherchand Gangaram Thakkar	China Clay	ML-1369	4.5000	Active
772	Bhuj	Dagala	Jayeshkumar Sankarlal Jobnputra	China Clay	ML-1423	4.9000	Active
773	Bhuj	Dagala	Sharadkumar Gangaram Thakkar	China Clay	ML-1425	4.9000	Active
774	Bhuj	Nadapa	Kuvarji Gangaram Thakkar	China Clay	ML-1539	4.9000	Active
775	Bhuj	Modsar	Laherchand Gangaram Thakkar	China Clay	ML-1576	4.6900	Active
776	Bhuj	Dagala	Sanjaykumar Kuvarji Thakkar	China Clay	ML-1424	4.9000	Active
777	Bhuj	Dagala	Ramdevsinh Velubha Jadeja	China Clay	ML-1507	4.1000	Active
778	Bhuj	Dagala	Ranchhodbhai Ravabhai Dangar	China Clay	ML-1527	4.9500	Active
779	Bhuj	Dagala	Ruchaben Harshadbhai Patel	China Clay	ML-1531	4.9500	Active
780	Bhuj	Dagala	Bhurabhai Alabhai Varchand	China Clay	ML-1563	4.9500	Active
781	Bhuj	Mamuara	Satishbhai Valjibhai Chhanga & Harilal Hirabhai Jatiya	China Clay	ML-1373	4.7336	Active
782	Bhuj	Nadapa	ESSG Clay At : Nadapa	China Clay	ML-2119	4.0500	Active
783	Bhuj	Padhhar	Randhirbhai Bechubhai Baradia	China Clay	ML-1582	4.1441	Active
784	Bhuj	Nadapa	Ganeshbhai Lakhmanbhai Lodani	China Clay	ML-1881	4.8441	Active
785	Bhuj	Mamuara	Harjivan Kalyanji Kundaria	China Clay	ML-2357	4.4212	Active
786	Rapar	Gangodar	Jitendrakumar Shankarlal Jobanputra	China Clay	ML-492	4.0000	Active
787	Rapar	Hamirpar Moti	Kanjibhai Bhikhabhai Gohil	China Clay	ML-1315	4.0000	Active
788	Rapar	Hamirpar Moti	Manjibhai Bhikhabhai Gohil	China Clay	ML-1314	4.0000	Active
789	Rapar	Janan-Khadir	Gangaram Samatbhai Chavda	China Clay	ML-219	25.0000	Active
790	Rapar	Momaymora	Sankarlal Gangaram Thakkar	China Clay	ML-421	3.6422	Active
791	Rapar	Bhimasar	West Cost Minerals	China Clay	ML-465	5.0000	Active
792	Rapar	Jatawada	Jitendrakumar Shankarlal Jobanputra	China Clay	ML-490	10.7080	Active
793	Rapar	Fatehghadh	Sahajanand Minerals	China Clay	ML-931	4.7346	Active
794	Rapar	Hamirpar Nani	Mahipalsinh Sajansinh Jadeja	China Clay	ML-754	4.9500	Active
795	Rapar	Fatehghadh	Bharamal Ramjibhai Chaudhari	China Clay	ML-893	4.9000	Active
796	Bhachau	Kakarva	Rupeshkumar Ranamalbhi Changa	China Clay	ML-1508	4.9000	Active
797	Bhachau	Manfara	Kutch Minerals Ltd. 98	China Clay	ML-78	11.3100	Active
798	Bhachau	Sukhpar	Mavjibhai Punjabhai Patel	China Clay	ML-602	13.0000	Active
799	Bhachau	Sukhpar	Hirjibhai Nathabhai Gothi	China Clay	ML-605	10.0000	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
800	Bhachau	Sukhpar	Ranabhai Ravabhai Dangar	China Clay	ML-655	4.9000	Active
801	Bhachau	Sukhpar	Deepak Pushpadan Gadhavi	China Clay	ML-658	4.9000	Active
802	Bhachau	Lunva	Vagheshvari Mines & Minerals	China Clay & Laterite	ML-1651	4.9000	Active
803	Abdasa	VAYOR	ultratech cement ltd	Pozzolan Clay	ML-1642	432.3000	Active
804	Bhachau	Kakarva	Ranchhod Lakhman Dhila & Hasmukh Tribhovan Patel	China Clay	ML-2208	4.5491	Active
805	Anjar	Chandrani	Suryakumar P. Zolapura	China Clay	ML-943	4.0470	Active
806	Bhuj	Ratadiya	Sama Juma Alimamad	Murum	11536	2.9000	Active
807	Anjar	Anjar	Narendra Kanji Kaapdi	Murum	12274	2.3200	Active
808	Bhuj	Dhrobana	Hamid Jiya Sama	Murum	12292	1.0000	Active
809	Mundra	Tunda	Shree Asha Rama Rabari	O.Clay	14765	2.0000	Active
810	Anjar	Rampar	Patel Construction Company	O.Clay	17376	3.6000	Active
811	Bhachau	Bhachau	Kishor Jivram Prajapati	O.Clay	4022	1.2500	Active
812	Abdasa	Hothiai	Sanghi Industries Ltd.	Pozzolan Clay	ML-772	49.1800	Active
813	Bhachau	Lunva	Vagheshvari Mines & Minerals		ML-1651		Active
814	Anjar	Sinugra	Satyanarayan Radheshyam Bansal	Silicasand	ML-139	3.30	Active
815	Anjar	Sapeda	Madhusudan R.Pandya	Silicasand	ML-257	3.23	Active
816	Anjar	Ratnal	Hematkumar H.Sajnani	Silicasand	ML-557	5.000	Active
817	Anjar	Nagalpar Moti	Tejabhai Ramabhai Kangad	Silicasand	ML-178	1.2141	Active
818	Anjar	Sapeda	Javahar B.Maheshwari	Silicasand	ML-239	4.000	Active
819	Rapar	Adesar	Gangaram Thakkar	Gypsum	ML-120	31.360	Active
820	Nakhatrana	Lifri	Vinod P. Solanki	Gypsum	ML-187	10.000	Active
821	Rapar	Fatehghadh	Pankaj Narasibhai Patel	Ball Clay	ML-854	2.500	Active
822	Rapar	Fatehghadh	Pankaj Narasibhai Patel	Ball Clay	ML-855	2.500	Active
823	Nakhatrana	CHAVADAKA	Dadubha Khimji Jadeja	Limestone	6370	1.000	Active
824	Bhuj	RATADIYA	Jadeja Hameerji Ranaji	Limestone	6696	4.000	Active
825	Bhuj	RATADIYA	Mr. Rajendrasinh S.Bhati	Limestone	6697	2.3196	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
826	Bhuj	RATADIYA	Mr. Kantilal J. Gor	Limestone	6714	4.50	Active
827	Bhuj	PAIYA RATADIYA	Mrs. Pushpa R.Bhati	Limestone	8487	4.50	Active
828	Bhuj	PAIYA RATADIYA	Mrs. Jayaba D. Solanki	Limestone	8488	4.50	Active
829	Bhuj	PAIYA RATADIYA	Mr. Pushpendra R.Bhati	Limestone	8489	4.50	Active
830	Bhuj	PAIYA RATADIYA	Mr. Deepaben R.Bhati	Limestone	8490	1.38	Active
831	Bhuj	RATADIYA (KHAVADA)	Mr. Rajendrasinh S.Bhati	Limestone	8910	4.50	Active
832	Bhuj	MOTA BANDARA	Amad Fakiramad Khalifa	Limestone	9114	1.00	Active
833	Nakhatrana	VAMARADPAR	RaveedAN RamHlibhai Gadhvi	Limestone	10544	1.00	Active
834	Bhuj	RATADIYA (KHAVADA)	MOTAPAIYA BANDHAKAM SVA. MANDALI	Limestone	11168	3.00	Active
835	Nakhatrana	KOTDA ROHA	Mr. Khalifa influenced Jasab	Limestone	11313	0.50	Active
836	Bhuj	RATADIYA (KHAVADA)	Devisih LaDHUshi Solanki	Limestone	11352	4.500	Active
837	Mandvi	MOTI MAU	Puthvi Raj Singh Megharaj Jih Jadeja	Limestone	12489	1.000	Active
838	Nakhatrana	VYAR	DHANJI MALA VANAKAR	Limestone	12605	1.344	Active
839	Nakhatrana	CHAVADAKA	Khetaji KhanjAJI Jadeja	Limestone	12809	1.000	Active
840	Bhuj	ZIZU TIMBO	Dhansukh Shivanand	Limestone	12984	1.336	Active
841	Nakhatrana	CHAVADAKA	Ashapura Stone	Limestone	13431	2.000	Active
842	Nakhatrana	MEDISAR	JAT OSAMAN	Limestone	13595	0.809	Active
843	Nakhatrana	JADAY	VANAKAR PREMJI	Limestone	13668	1.000	Active
844	Nakhatrana	ANGIYA NANA	BABUBHAI RANABHAI KESAVALA	Limestone	14072	1.000	Active
845	Bhuj	BHARAPAR	RANAJIT	Limestone	14414	1.500	Active
846	Mandvi	MOTI MAU	Jadeja JayshreebEN GulAbSINH	Limestone	14718	1.000	Active
847	Nakhatrana	VYAR	RABARI MAMU HIRA	Limestone	15017	4.000	Active
848	Nakhatrana	KOTDA ROHA	AARATIBA VAKHATSINH	Limestone	14517	1.000	Active
849	Bhuj	BHARAPAR	KISHOR	Limestone	12061	1.000	Active
850	Bhuj	RATADIYA	Kadar Musa Sam	Limestone	14799	4.890	Active
851	Anjar	Nagalpar Moti	Keshvaji Kacharaji Sorathiya	Silicasand	ML-442	1.910	Active
852	Anjar	Anjar	Dipesh Minerls	Silicasand	ML-395	6.000	Active
853	Abdasa	Motiber	Sanghi Industries Ltd..	Silicasand	ML-773	160.7581	Active
854	Lakhapat	Naredo	Sanghi Industries Ltd.	Laterite	ML-778	117.1925	Active
855	Lakhapat	Baranda	J.P.Gujarat Cement Plant	Laterite	ML-883	400.00	Active

Sr.	Block	Village	Name	Type	Lease ID	Area(in ha)	Status
856	Rapar	Dhabda	Vishabhai Govabhai Rabari	Laterite	ML-1230	4.80	Active
857	Rapar	Dhabda	Ramesh Megabhai Patel	Laterite	ML-1209	4.98	Active
858	Mandvi	Hamla	Ravilal Abjibhai Patel	Ball Clay	ML-858	2.00	Active
859	Rapar	Gangodar	Sankarlal Gangaram Thakkar	Ball Clay	ML-541	1.50	Active
860	Rapar	Vijapar	Sankarlal Gangaram Thakkar	Gypsum	ML-186	1.72	Active
861	Rapar	Fatehgadh	Sankarlal Gangaram Thakkar	Gypsum	ML-180	35.60	Active
862	Rapar	Bamansar	Prabhuram Narabheram Thakkar	Gypsum	ML-536	4.95	Active
863	Bhachau	Lunva	KUNVARJI GANGARAM THAKKAR	China Clay & Laterite	ML-1647	4.90	Active
864	Bhachau	Lunva	BIPIN DHIRAJLAL CHANDE	China Clay & Laterite	ML-1650	4.90	Active
865	Bhachau	LUNVA	GOPAL BHAJ KHENGAR CHHANGA	China Clay & Laterite	ML-1649	4.90	Active
866	Bhuj	Nadapa	Alabhai Bhachubhai Chhanga	China Clay	ML-1547	4.16	Active
867	Bhuj	Nadapa	Raghabhai Ratabhai Dangar	China Clay	ML-1645	4.10	Active
868	Rapar	Palasva	Dayabhai Dalabhai Gohil	China Clay	ML-1792	4.3724	Active
869	Rapar	Palasva	Khimabhai Bhimabhai Rapar	China Clay	ML-1841	4.057	Active
870	Rapar	Palasva	Dineshkumar Dayaram Thakkar	China Clay	ML-2169	4.8866	Active
871	Rapar	Fatehgadh	Parshottam Dhanjibhai Sorathiya	China Clay	ML-1993	4.1276	Active
872	Rapar	Fatehgadh	Kanaiyalal Manilal Thakkar	China Clay	ML-1134	4.1379	Active
873	Bhuj	Nadapa	DHANABHAI KARASAN MATA	China Clay	ML-2310	4.10	Active
874	Rapar	MODA	Rajubhai Mahadeva Chaudhri	China Clay	ML-1310	4.2578	Active

Baranda Laterite Mine (M.L. Area 400 ha)Ref.: MoEF Letter No. J-11015/889/2007– I A.II (M), Dated 22nd February, 2011 & 22nd August, 2014**Action taken on the non-compliance / partially complied specific conditions observed during the inspection carried on 21-22 July 2016****A. Specific Condition**

Sr. No.	Compliance Conditions	MoEF&CC Observations	Current Status as on 31 st March 2019
(ii)	Requisite prior clearance from the Standing Committee of the National Board for Wildlife shall be obtained due to location of the project in the buffer zone of the Narayan Sarovar Wildlife Sanctuary, before starting any activity relating to the project at site. All the conditions stipulated by the Standing Committee of the National Board for Wildlife shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be noted that this clearance does not necessarily implies that Wildlife clearance shall be granted to the project and that your proposed for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and MOEF shall not be responsible in this regard in any manner.	<p>Clearance obtained under Wildlife (Protection) Act-1972, Vide Letter No. WLP/321P, 17971800 dated 30.04.2013.</p> <p>Mining commenced on 24.10.2013, after obtaining clearance under Wildlife (Protection) Act- 1972. However, neither status of compliance of conditions stated nor it could be ascertained.</p> <p>Partial Complied.</p> <p>The action taken report was submitted to the Director(S) Ministry of Environment, Forest & Climate Change, Regional Office, Western Region, Bhopal, vide our letter no. UTCL/SCW/1.05/2017/6679 dated 14/03/2017. Copy of the same is attached</p>	<p>Clearance obtained under Wildlife (Protection) Act-1972, Vide Letter No. WLP/32/B/797/800 dated 30.04.2013. Mining commenced on 24.10.2013, after obtaining clearance under Wildlife (Protection) Act-1972.</p> <p>Compliance report of said clearance is regularly being submitted to the concern authorities on six monthly basis. April – September 2018 compliance was sent to MoEF vide our letter No. UTCL/SCW/1.05/2018/11101 dated 27.11.2018.</p> <p>Condition is complied.</p> <p>Attached as Annexure(a)</p>
(xii)	Plantation shall be raised in an area of 16.5 ha including a 7.5 m wide green belt in the safety zone around the mining lease, benches of the excavated pit, around worked out pit, roads etc. by planting the native species in consultation with the local DFO/ agriculture department. The density of the trees should be around 1600 plants per ha. Greenbelt shall be developed all along the mine	<p>Total mine life is 30 years. During these 30 years, 16.5 ha plantation to be done. However, in two years, the total 2620 nos saplings planted which covers 2.27 Ha. Every year we will cover 1 ha area for plantation.</p> <p>Greenbelt has been developed in mining lease area all along the road. It is an ongoing activity & 7.5 m</p>	<p>Greenbelt has been developed in mining lease area all along the road. It is an ongoing activity & 7.5 m wide green belt along the safety zone will be continued as mining progress.</p> <p>Total 6390 nos. saplings have been planted over an area of 3.29 ha up to year 2018-19.</p>

	<p>lease area in a phased manner and shall be completed within first five years.</p>	<p>wide green belt along the safety zone will be continued as mining progress.</p> <p>Company informed that they have experienced & Qualified in-house expertise for Horticulture, for plantation of native species.</p> <p>Total plantation was scheduled to be completed during first five years. The PA needs to speed up complete at the earliest. Condition partly complied.</p>	<p>Action taken report was submitted to the Director(S) Ministry of Environment, Forest & Climate Change, Regional Office, Western Region, Bhopal, vide our letter no. UTCL/SCW/1.05/2017/6679 dated 14/03/2017.</p> <p>Plantation is regular activity and will be continued with mining progress. Condition is complied. Photographs are attached as <i>Annexure(b)</i></p> <p>Year wise details of plantation is as under:</p> <table><tr><th>Year</th><th>Area (ha)</th><th>CuM (ha)</th><th>No. of Sapling</th><th>CuM (Nos)</th></tr><tr><td>14-15</td><td>2.0</td><td>2.0</td><td>200</td><td>200</td></tr><tr><td>15-16</td><td>0.27</td><td>2.27</td><td>2620</td><td>2820</td></tr><tr><td>16-17</td><td>1.20</td><td>3.29</td><td>1650</td><td>4470</td></tr><tr><td>17-18</td><td>Rep</td><td>3.29</td><td>250</td><td>4720</td></tr><tr><td>18-19</td><td>Rep</td><td>3.29</td><td>1670</td><td>6390</td></tr></table>	Year	Area (ha)	CuM (ha)	No. of Sapling	CuM (Nos)	14-15	2.0	2.0	200	200	15-16	0.27	2.27	2620	2820	16-17	1.20	3.29	1650	4470	17-18	Rep	3.29	250	4720	18-19	Rep	3.29	1670	6390
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18-19	Rep	3.29	1670	6390																													
(xv)	<p>The project authority should implement suitable conservation measures to augment ground water Resources in the area in consultation with the regional director, central ground water board.</p>	<p>The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the regional director, central ground water board. The detail hydrogeological study of ground water has been carried out by Gujarat Ground Water Board (Govt of Gujarat). Based on this study we have established network of groundwater monitoring by establishing piezometers.</p> <p>However, the ground water has not been drawn or utilized. Water requirement for the project is sourced from captive Desalination Plant, thus conserving ground water resource in the area.</p> <p>But, no plan as envisaged has been prepared to Augment groundwater has been undertaken by PA. Condition not Complied</p>	<p>The detailed hydrogeological study of ground water has been carried out by Gujarat Ground Water Board (Govt. of Gujarat). Based on this study we have established network of groundwater monitoring by establishing piezometers.</p> <p>For augmentation of ground water resources & preparation of detailed rainwater harvesting plan, a survey & studies were conducted by T & C Cell, Marwadi Universal Education Private Limited, Marwadi University, Rajkot.</p> <p>Based on the outcomes & recommendations of the study we have started the work on rainwater storage for augmentation of ground water resource</p> <p>Rainwater will be stored in the mined out pit which act as recharge structure for ground water augmentation.</p>																														

			Report is attached as <i>Annexure(c)</i>
			Condition complied

B. General Conditions

Sr. No.	Compliance Conditions	MoEF&CC Observations	Current Status
(v)	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Water sprinkling is done on haul road, loading point, etc. to arrest air borne dust using water tankers. However, during inspection, proper sprinkling system was not found. Condition Partially Complied.	Water sprinkling is done on haul road, loading point, etc. to arrest air borne dust using water tankers. It is regular practice. Photographs are attached as Annexure(d) Condition is complied
(vi)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/ muffs.	PA has reported average reading of noise is 69 dBA against permissible limit of 85 dBA. Following measures are taken to keep Noise levels below 85 dBA <ul style="list-style-type: none"> Preventive maintenance of the transporting equipment's is ensured. Workers are providing PPEs Regular monitoring of noise level by third party. However, ear plugs/muffs not seen during inspection which need to be insured. Condition Partially Complied.	Measures are taken to keep Noise levels below permissible level. <ul style="list-style-type: none"> Preventive maintenance of the transporting equipment's is ensured. Workers are providing PPEs Regular monitoring of noise level. We are providing all the necessary PPEs for workers involved in mining operation. We assure your good self to use of ear plug/ muffs for workers engaged in mines operation. Report is attached as Annexure(e) Condition is Complied
(xvii)	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the state pollution control board and also at web site of the	The company have advertised in one local newspaper in vernacular language on dated 28.02.2007; instead of two as was mandated.	Advertisement was given in two local newspapers namely <ol style="list-style-type: none"> KUTCH MITRA & GUJARAT SAMACHAR as copy of the same in attached.

ministry of environment and forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the regional office of this ministry located Bhopal.

સોમવાર, તા. ૨૮ ફેબ્રુઆરી, ૨૦૧૧

આપવાનું અમલી બનાવ્યું હતું. આજે પછા. પઠ બુધ ઉપર ૧૨૦૦-૧૨૦૦ રૂા.ની કિંમતવાળી એક-એક ટ્રાયસિકલ મુકાઈ હતી. બ્લોક હેલ્થ ઓફિસર ડો. અલીએ જણાવ્યું કે 'બુધ પર ટીપાં કરાશે' જ્યારે ગોડલ તાલુકામાં તાલુકા પંચાયત પ્રમુખ દ્વારા વ્યક્તિગત રીતે ૬૦ હજાર ચોકલેટસ ખરીદીને તાલુકાભરના બુથો પર મોકલાઈ હતી, અને રસીના ટીપાં પીવા આવેલા તમામ બાળકોને

જાહેર નોટિસ

પર્યાવરણ અને વનવિભાગ મંત્રાલય ભારત સરકાર, નવી દિલ્હીએ જેપી ગુજરાત સિમેન્ટ પ્લાન્ટ, વાચોર (યુનીટ ઓફ જયપ્રકાશ એસોસિએટ લિમિટેડ) તાલુકા-લખપત, જિલ્લા-કચ્છ, ગુજરાતમાં બરંદા ગામે, બરંદા લેટરાઈટ ખાણ, જેનો વિસ્તાર ૪૦૦ હેક્ટર છે જેને ખાણ કામ હેતુ પર્યાવરણ અને વનવિભાગ મંત્રાલયની મંજૂરી મળી ગયેલ છે. આ મંજૂરી પર્યાવરણ મંત્રાલયના મંજૂરી પત્ર નં. No. J-11015/889/2007-1A-II (M) જે તારીખ ૨૨/૨/૨૦૧૧ મુજબથી મળેલ છે. આ મંજૂરીની નકલ અધ્યક્ષશ્રી, પર્યાવરણ નિયંત્રણ બોર્ડ, ગુજરાત સરકાર, પર્યાવરણ ભવન સેક્ટર ૧૦ બ ગાંધીનગર ૩૮૨૦૧૦ પાસે મળશે. આ ઉપરાંત આની નકલ પર્યાવરણ અને વનવિભાગ મંત્રાલયની વેબસાઈટ <http://envfor.nic.in> માં જોવા મળશે

જેપી ગુજરાત સિમેન્ટ પ્લાન્ટ

(યુનીટ ઓફ જયપ્રકાશ એસોસિએટ લિમિટેડ)
સેવાગ્રામ-વાચોર, તાલુકા-અબડાસા, જિલ્લા-કચ્છ.

જાહેર નોટિસ

પર્યાવરણ અને વનવિભાગ મંત્રાલય ભારત સરકાર, નવી દિલ્હીએ જેપી ગુજરાત સિમેન્ટ પ્લાન્ટ, વાચોર (યુનીટ ઓફ જયપ્રકાશ એસોસિએટ લિમિટેડ) તાલુકા-લખપત અને અબડાસા, જિલ્લા-કચ્છ, ગુજરાતમાં ખારઈ, જાડવા, હુડી અને વાઘાપદ્ધર ગામે, લાઇમસ્ટોન ખાણ જેનો વિસ્તાર ૨૮૩૧.૬૧ હેક્ટર છે જેને ખાણ કામ હેતુ પર્યાવરણ અને વનવિભાગ મંત્રાલયની મંજૂરી મળી ગયેલ છે. આ મંજૂરી પર્યાવરણ મંત્રાલયના મંજૂરી પત્ર નં. No. J-11015/390/2008-1A-II (M) જે તારીખ ૨૨/૨/૨૦૧૧ મુજબથી મળેલ છે. આ મંજૂરીની નકલ અધ્યક્ષશ્રી, પર્યાવરણ નિયંત્રણ બોર્ડ, ગુજરાત સરકાર, પર્યાવરણ ભવન સેક્ટર ૧૦ બ ગાંધીનગર ૩૮૨૦૧૦ પાસે મળશે. આ ઉપરાંત આની નકલ પર્યાવરણ અને વનવિભાગ મંત્રાલયની વેબસાઈટ <http://envfor.nic.in> માં જોવા મળશે

જેપી ગુજરાત સિમેન્ટ પ્લાન્ટ

(યુનીટ ઓફ જયપ્રકાશ એસોસિએટ લિમિટેડ)
સેવાગ્રામ-વાચોર, તાલુકા-અબડાસા, જિલ્લા-કચ્છ.

Condition Complied

Condition Partially Complied.



UltraTech Cement Limited

(Unit: Sewagram Cement Works)



Baranda Laterite Mining Project

(M.L. Area 400 ha)

Half Yearly Wild Life Clearance Compliance Report

Period: April 18 to September 18

At

**Village: Vayor
Taluka: Abdasa
District: Kachchh (Gujarat)**

Half yearly Wild Life clearance compliance report for the period Oct'17 to March'18

Wildlife Clearance Letter No.: PCCF, WL, G.S. Letter No. WLP/32/B/ 797-300 dated 30.04.2013



UTCL/SCW/L09/2018/11107

Date: 27.11.2018

To,
The Deputy Conservator of Forest
Bhuj Forest Division
Bhuj (Kutch).

Sub: Submission of six monthly compliance report of Wild Life Clearance for Baranda Laterite Mine (M.L. Area 400 ha) UltraTech Cement Limited (Unit: Sewagram Cement Works)

Ref: PCCF, WL, G.S. Letter No. WLP/32/B/ 797-300 dated 30.04.2013.

Dear Sir,

This is with reference to Wild Life Clearance granted by your esteemed office vide letter No. PCCF, WL, G.S. Letter No. WLP/32/B/ 797-300 dated 30.04.2013 for our Baranda Laterite Mine (M.L. Area 400 ha) UltraTech Cement Limited (Unit: Sewagram Cement Works).

We are submitting herewith the six monthly wild life clearance compliance report for the period of April 18 to September 18.

Thanking you

Yours Faithfully
For UltraTech Cement Limited
(Unit: Sewagram Cement Works)

(Authorized Signatory)

Enclosed: As Above

Copy to:

- **The Principal Chief Conservator of Forest & Head of Forest Force (HoFF)**
Aranya Bhawan, Near CH 3 Circle, Sector-1D (A), Gandhinagar-382 010 (Gujarat)
- **The Chief Conservator of Forest**
Kutch Circle, Bhuj (Gujarat)
- **The Chief Wild Life Warden**
Aranya Bhawan, Sector - 1D/A, Block No. B/1, CH - Circle, Gandhinagar (Gujarat)

Be 27/11/18
OFFICE OF THE
Chief Conservator of Forests,
Behind B.L.C.
Kodachhi Bhuj.



UltraTech Cement Limited
(Unit: Sewagram Cement Works)

ESTIN : 2744AC164421175 Corporate Identification Number (CIN) : L26940MH12000PI CDP470

Factory Village Vayol, Taluka Anjar, District: Kutch, Gujarat - 370 511 | Tel : +91 2831 779200 | Fax : +91 2831 279279

Mumbai Office: UltraTech Cement Limited, A Wing, 1st Floor, Ahuja Centre, Mahakali Creek Road, Andheri (E), Mumbai - 400 093

Tel : 022 66917400 | Fax : 022 2824 1960 / 70

Registered Office: UltraTech Cement Limited, 'D' Wing, 2nd Floor, Ahuja Centre Mahakali Creek Road, Andheri (E), Mumbai - 400 092 | Tel : 022 66917800

Sr. No.	Compliance Conditions	Status of Compliance Conditions
1.	The all mitigation measures and conditions shown in the environment clearance circulated vide MoEF, GOI's New Delhi letter J-11015/889/2007 IA II(M) dated 22.02.2011 must be strictly followed. The compliance status of conditions stipulated in the Environmental Clearance be verified by the Regional Office of MoEF and in case it is found that any of the conditions have not been complied with the proposal would be rejected.	All the mitigation measures shown in the said environment clearance are being followed and EC compliance status has been regularly submitting in every six months to the Regional Office MOEF&CC, Bhopal. Copy of EC compliance report enclosed as <u>Annexure – I</u> for your ready reference please.
2.	The study /report of environment or according to situation any additional conditions are added by the office of the Chief Wildlife Warden must be binding to the party and the have to follow the terms and condition stipulated by the authority.	Any additional conditions added by your esteemed office/authority which will if applicable for our project will be abided.
3.	In future if any act or rule declared for environment/forest and or conservation of Wildlife, then it must be followed by the party.	Noted and we will follow, if will be applicable for our project.
4.	Party should implement plantation and wildlife related conditions in coordination and supervision of concerned Deputy Conservator of	Greenbelt has been developed in mining lease area all along the road. It is an ongoing activity & 7.5 m wide green belt along the safety zone will

	Forest.	be continued as mining progress and plantation details are given as under– <table><tr><td>Year</td><td>No. of Plant Planted</td></tr><tr><td>2014-15</td><td>200</td></tr><tr><td>2015-16</td><td>2620</td></tr><tr><td>2016-17</td><td>1650</td></tr><tr><td>2017-18</td><td>250</td></tr></table> We have experienced & Qualified in-house expertise for Horticulture, for plantation of native species. Local plant species are being purchased from Forest Department.	Year	No. of Plant Planted	2014-15	200	2015-16	2620	2016-17	1650	2017-18	250										
Year	No. of Plant Planted																					
2014-15	200																					
2015-16	2620																					
2016-17	1650																					
2017-18	250																					
5.	The copies of the Forestation plan, Green Belt plan, Wildlife conservation plan etc. must be submitted to the local Deputy Conservator of Forest, Chief Wildlife Warden by the party,	As mentioned above plantation is being done regularly. Howe ever point is noted and plan will be submitted.																				
6.	The budget for environmental protection and conservation must be kept in separate accounts as well budget for Wildlife management and conservation must be kept in separate account. Every six month the expenditure incurred in this account details should be submitted to Deputy Conservator of Forest, Conservator of Forest and Chief Conservator of forest and Chief Wildlife Warden.	The fund has been earmarked for environment protection measures and kept in the separate account and it has not diverted for other purpose and details for the year 2017-18 given under below table <table><tr><th>Description</th><th>Rs. (Lacs)</th></tr><tr><td>Third party environment monitoring</td><td>0.12</td></tr><tr><td>WED celebration</td><td>0.01</td></tr><tr><td>Consultancy Charges</td><td>0.70</td></tr><tr><td>Green belt development</td><td>0.54</td></tr><tr><td>Water tanker</td><td>0.09</td></tr><tr><td>Levelling of land for plantation</td><td>0.02</td></tr><tr><td>Plantation post care</td><td>0.16</td></tr><tr><td>Water pump operation cost</td><td>0.01</td></tr><tr><td>Total Rs. (In Lacs)</td><td>0.65</td></tr></table>	Description	Rs. (Lacs)	Third party environment monitoring	0.12	WED celebration	0.01	Consultancy Charges	0.70	Green belt development	0.54	Water tanker	0.09	Levelling of land for plantation	0.02	Plantation post care	0.16	Water pump operation cost	0.01	Total Rs. (In Lacs)	0.65
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Water pump operation cost	0.01																					
Total Rs. (In Lacs)	0.65																					
7.	The local Deputy Conservator of Forest will monitor the progress related to Wildlife conservation	Wildlife conservation related activities are being carrying out and compliance report has been																				

	activities as per Wildlife Conservation Plan Aug-2012 Rs 52.20 Lakh (copy enclose) and party will submit report to the Dy. Conservator of Forest, Chief Conservator of Forest and Chief Wildlife Warden, every six months (September and March ended)	submitting in every six months to the Dy. Conservator of Forest, Chief Conservator of Forest and Chief Wildlife Warden. With reference to your letter no. C/JMN/TE-11/217/2014-15 dated 22.08.2014, We have submitted Rs. 1.5 lacs for conservation and awareness activities vide our letter no. UTCL/SCW/Forest/2014-15 dated 11.09.2014.
8.	For the use of the Forest land, approval under the Forest Conservation Act 1980 will be obtained.	There is no any forest land involved in mining lease area.
9.	The Chief Wildlife Warden or any officer authorized or working under him may monitor the compliance of conditions mentioned above and any non-compliance partly or wholly, may lead to cancellation of the permission.	Noted.



Green Belt at Baranda Laterite Mining Lease







Technical Report on
**To Increase Storage Capacity of Existing Pits: Recommendations for
Stage I to Stage III as per Work Plan**

Client

Ultratech Cement Limited – Sewagram Cement Works

**Village: Vayor, Taluka Abdasa,
District: Kutch, Gujarat - 370511**



Prepared by

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1. Objective

Ultratech Cement Limited –Sewagram Cement Works is having his own mining area in the village Vayor of Taluka Abdasa and district Kutch. Once the mining is over in the specified location as per permissible limit specified by Government of Gujarat, company stops mining in that area and uses that space for the rainwater storage and creates the artificial lake over there. This stored water is utilized in plant and society throughout the year.

The company wants to increase the storage capacities of these artificial lakes by accumulating rainwater during monsoon season as much as possible.

To find these possibilities Ultratech Cement Limited has appointed T & C Cell of Marwadi Universal Education Private Limited and Arunkumar Trivedi & Associates collectively to accomplish this task and derive some recommendation for the said objective.

2. Proposed Work Plan

Team had visited the mines on 15/05/2018 for the preliminary talk and site supervision. On the basis of interactions, following work plan is proposed to the company.

The task is divided in to three main stages.

Stage I :

- Identification of patches within the mines area from where water remains within the mines boundaries.
- Identification of patches within the mines area from where water goes out of the mines boundaries.

Stage II :

- Estimation of quantity of water that can be retained within the mines boundaries by considering average rainfall in the region.

Stage III :

- Identification of locations from where water can be diverted in the plant boundary either naturally (through gravity) or artificially (through level pumping).

Stage IV :

- Repeat exercise from Stage I to Stage III shall be done for the plant area and other lease areas of Ultratech Sewagram.

Stage V :

- As per quality and quantity of water required for different uses, distribution network shall be developed depending on the quality and quantity available in different patches of the plant area.

As per interaction, this assignment is kept limited to stage I, II & III only.

3. Runoff Calculation

3.1 Rational Method

With help of this method and current situation of available rainfall data, the maximum flood flow is produced by a certain rainfall intensity which is calculated using following formula.

$$Q = 2.78 C I_c A$$

Where Q = discharge in m^3/sec , C = coefficient which depends upon the characteristics of the catchment which is considered 0.50 for hill areas, forest, clay and loamy soils. I_c = the critical intensity of rainfall (cm/hr) corresponding to the time of concentration (t_c) of the catchment for a given recurrence interval obtained from the intensity duration frequency curves, A = area of catchment in sq.km .

The time of concentration will vary generally depending on the slope and characteristic of the drainage basin. If intensity duration frequency curves are not available, the value of I_c can be computed from the equation.

$$I_c = P / t_r [(t_c + 1) / t_c + 1]$$

Where P=the maximum precipitation (cm), t_r = storm period (hr), t_c = time of concentration (hr), but, if the time of concentration is not known then, $t_c = P / t_r$. (Reference Book: Dr. R. B. Khasiya "Hydrology and Water Resources Engineering", 4th edition, Mahajan Publication).

4. Quantity Estimation of Water in Pit-1 to 8

Runoff calculation is done based on average rainfall data from year 2015 to 2018. This data is provided by mining department of GCW – Vayor. This data is analyzed and major rainfall event are derived which is nine in numbers with different intensities. Intensities of rainfall is estimated on the basis of average rainfall in the region across five years and these estimated quantities are presented in Table 1 to Table 8 respectively.

Other parallel Assumptions :

- Time of concentration (t_c) and Rainfall intensity (I_c) are computed based on assumption of rainfall duration of major rainfall event.
- Major rainfall event are derived with minimum bench of 0.5" inch rainfall.
- It is assumed that 40% rainfall runoff water shall be absorbed in the soil.
- Area of Pit 1 to 8 is computed from AutoCAD map provided from the mining department which are as follows:
 - Pit 1 - 0.445 Sq.km
 - Pit 2 – 0.305 Sq.km
 - Pit 3 – 0.291 Sq.km
 - Pit 4 - 0.059 Sq.km
 - Pit 5 (A) - 0.117 Sq.km
 - Pit 5 (B) – 0.368 Sq.km
 - Pit 6 - 0.231 Sq.km

- Pit 7 - 0.126 Sq.km
- Pit 8 - 0.240 Sq.km

The rational method is utilized when storm duration is greater than time of concentration. But with available of limiting data of catchment, other method cannot be utilized for runoff calculation. Therefore rational method is adopted to compute a runoff accumulate which is described step by step in following section.

Table 1 Rainfall intensity, Runoff calculation for Pit-1

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-1 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.445	1.51	0.109
2	40	1	4.00	1.60	0.445	1.19	0.043
3	40	1	4.00	1.60	0.445	1.19	0.043
4	27	1	2.70	1.46	0.445	1.08	0.039
5	59	1	5.90	1.71	0.445	1.27	0.046
6	31	1	3.10	1.51	0.445	1.12	0.040
7	13	1	1.30	1.13	0.445	0.84	0.030
8	15	1	1.50	1.20	0.445	0.89	0.032
9	15	1	1.50	1.20	0.445	0.89	0.032
	282						0.414

Table 2 Rainfall intensity, Runoff calculation for Pit-2

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-2 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.305	1.03	0.074
2	40	1	4.00	1.60	0.305	0.81	0.029
3	40	1	4.00	1.60	0.305	0.81	0.029
4	27	1	2.70	1.46	0.305	0.74	0.027
5	59	1	5.90	1.71	0.305	0.87	0.031
6	31	1	3.10	1.51	0.305	0.77	0.028
7	13	1	1.30	1.13	0.305	0.58	0.021
8	15	1	1.50	1.20	0.305	0.61	0.022
9	15	1	1.50	1.20	0.305	0.61	0.022
	282						0.283

Table 3 Rainfall intensity, Runoff calculation for Pit-3

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-3 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.291	0.99	0.071
2	40	1	4.00	1.60	0.291	0.78	0.028
3	40	1	4.00	1.60	0.291	0.78	0.028
4	27	1	2.70	1.46	0.291	0.71	0.026
5	59	1	5.90	1.71	0.291	0.83	0.030
6	31	1	3.10	1.51	0.291	0.73	0.026
7	13	1	1.30	1.13	0.291	0.55	0.020
8	15	1	1.50	1.20	0.291	0.58	0.021
9	15	1	1.50	1.20	0.291	0.58	0.021
	282						0.271

Table 4 Rainfall intensity, Runoff calculation for Pit-4

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-4 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.059	0.20	0.014
2	40	1	4.00	1.60	0.059	0.16	0.006
3	40	1	4.00	1.60	0.059	0.16	0.006
4	27	1	2.70	1.46	0.059	0.14	0.005
5	59	1	5.90	1.71	0.059	0.17	0.006
6	31	1	3.10	1.51	0.059	0.15	0.005
7	13	1	1.30	1.13	0.059	0.11	0.004
8	15	1	1.50	1.20	0.059	0.12	0.004
9	15	1	1.50	1.20	0.059	0.12	0.004
	282						0.054

Table 5 Rainfall intensity, Runoff calculation for Pit-5(A)

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-5A Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.117	0.40	0.029
2	40	1	4.00	1.60	0.117	0.31	0.011
3	40	1	4.00	1.60	0.117	0.31	0.011
4	27	1	2.70	1.46	0.117	0.28	0.010
5	59	1	5.90	1.71	0.117	0.33	0.012
6	31	1	3.10	1.51	0.117	0.30	0.011
7	13	1	1.30	1.13	0.117	0.22	0.008
8	15	1	1.50	1.20	0.117	0.23	0.008
9	15	1	1.50	1.20	0.117	0.23	0.008
	282						0.108

Table 6 Rainfall intensity, Runoff calculation for Pit-5(B)

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-5B Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.368	1.25	0.090
2	40	1	4.00	1.60	0.368	0.98	0.035
3	40	1	4.00	1.60	0.368	0.98	0.035
4	27	1	2.70	1.46	0.368	0.90	0.032
5	59	1	5.90	1.71	0.368	1.05	0.038
6	31	1	3.10	1.51	0.368	0.93	0.033
7	13	1	1.30	1.13	0.368	0.69	0.025
8	15	1	1.50	1.20	0.368	0.74	0.027
9	15	1	1.50	1.20	0.368	0.74	0.027
	282						0.342

Table 7 Rainfall intensity, Runoff calculation for Pit-6

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-6 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.231	0.78	0.056
2	40	1	4.00	1.60	0.231	0.62	0.022
3	40	1	4.00	1.60	0.231	0.62	0.022
4	27	1	2.70	1.46	0.231	0.56	0.020
5	59	1	5.90	1.71	0.231	0.66	0.024
6	31	1	3.10	1.51	0.231	0.58	0.021
7	13	1	1.30	1.13	0.231	0.44	0.016
8	15	1	1.50	1.20	0.231	0.46	0.017
9	15	1	1.50	1.20	0.231	0.46	0.017
	282						0.215

Table 8 Rainfall intensity, Runoff calculation for Pit-7

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-7 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.126	0.43	0.031
2	40	1	4.00	1.60	0.126	0.34	0.012
3	40	1	4.00	1.60	0.126	0.34	0.012
4	27	1	2.70	1.46	0.126	0.31	0.011
5	59	1	5.90	1.71	0.126	0.36	0.013
6	31	1	3.10	1.51	0.126	0.32	0.011
7	13	1	1.30	1.13	0.126	0.24	0.009
8	15	1	1.50	1.20	0.126	0.25	0.009
9	15	1	1.50	1.20	0.126	0.25	0.009
	282						0.117

Table 9 Rainfall intensity, Runoff calculation for Pit-8

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Pit-8 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.24	0.81	0.059
2	40	1	4.00	1.60	0.24	0.64	0.023
3	40	1	4.00	1.60	0.24	0.64	0.023
4	27	1	2.70	1.46	0.24	0.58	0.021
5	59	1	5.90	1.71	0.24	0.68	0.025
6	31	1	3.10	1.51	0.24	0.61	0.022
7	13	1	1.30	1.13	0.24	0.45	0.016
8	15	1	1.50	1.20	0.24	0.48	0.017
9	15	1	1.50	1.20	0.24	0.48	0.017
	282						0.223

Total Volume of water that can be accumulated in all the pits considering its own catchment internally comes out to be **2.027 lakh cu.m.**

5. Recommendation for Increase in Water Storage Capacity

5.1 Area behind Pit-6 and HARUDI village (Immediate Actions Required)

This region is around 1.09 sq km and slope of this area runs towards the Pit-6 and towards the natural drain. Two channels PCH-1 and PCH-2 are proposed that runs parallel to natural drain and road respectively. The proposed bottom level of the channel and its layout is shown in figure-1. The rain water that falls in this area can be completely diverted to Pit-6 through both these proposed channels. The runoff calculations are given in table - 10. It is estimated that the amount of water collected by providing these channels can be around 1.015 lakh cum. But due to the presence of natural pond and vegetation cover in this region it is not possible to collect 100 % of rain water. It can be approximately estimated that about 60% water will be diverted to pit VI that shall be around 0.609 lakh cu.m.

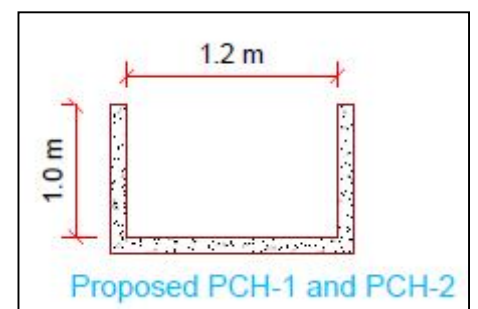
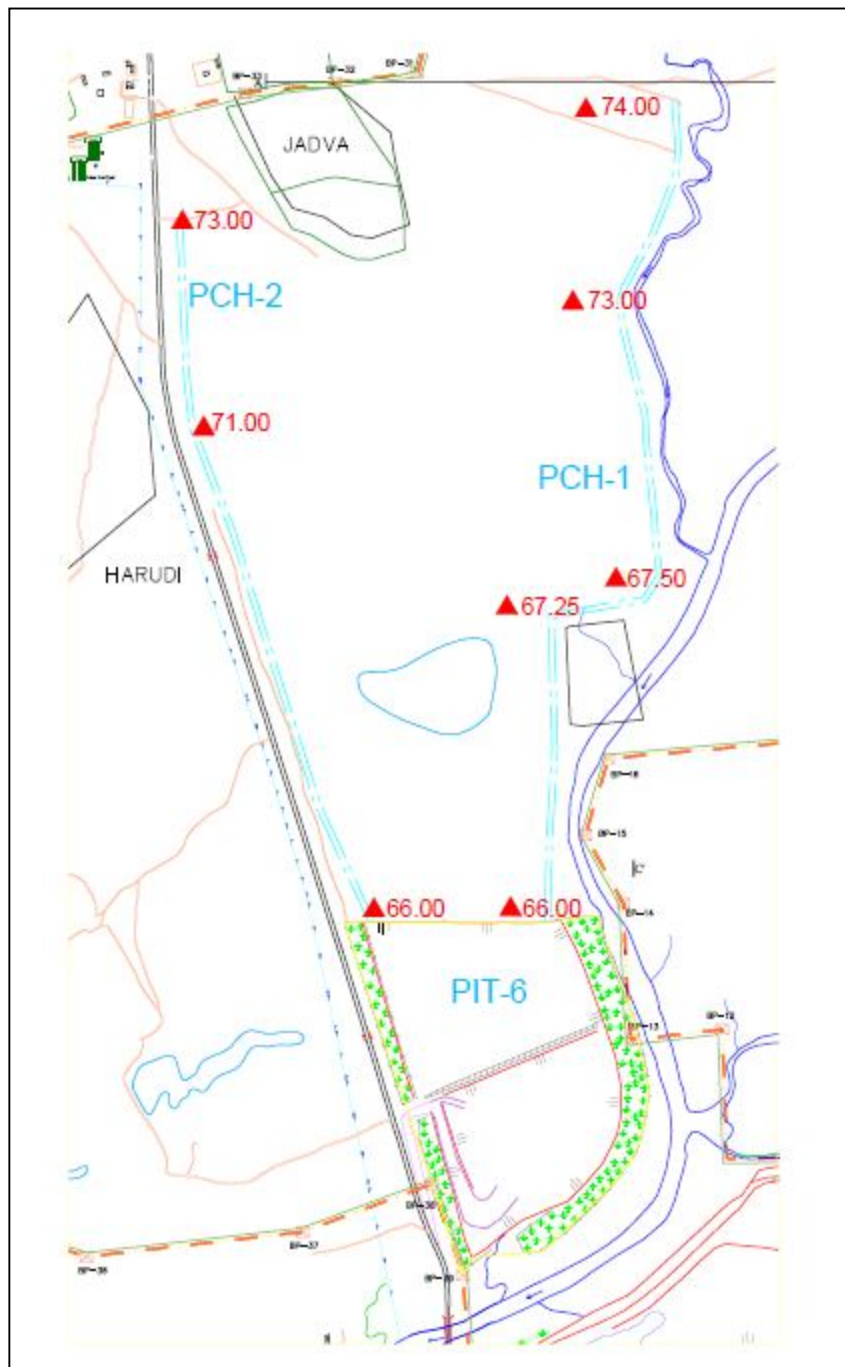


Figure-1 Proposed PCH-1 and PCH-2 behind Pit-6 and Harudi Village and cross section of channel.

Table 10 Rainfall intensity, Runoff calculation for Patch-1

Sr. No.	<i>P</i> (mm)	<i>t_r</i> (hr)	<i>t_c</i> (hr)	<i>I_c</i> (cm/hr)	Patch-1 Area (Sq.km.)	<i>Q</i> (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	1.09	3.96	0.266
2	40	1	4.00	1.60	1.09	3.12	0.105
3	40	1	4.00	1.60	1.09	3.12	0.105
4	27	1	2.70	1.46	1.09	2.84	0.096
5	59	1	5.90	1.71	1.09	3.33	0.112
6	31	1	3.10	1.51	1.09	2.95	0.099
7	13	1	1.30	1.13	1.09	2.20	0.074
8	15	1	1.50	1.20	1.09	2.34	0.079
9	15	1	1.50	1.20	1.09	2.34	0.079
	282						1.015

5.2 Connection of Catchment area in Pit-3 (Immediate Actions Required)

There is an existing Hume pipe that connects the Pit -3 with the catchment area on the north-west side of Pit -3. However, the RCC Hume pipe is completely choked with soil and the water cannot pass through it. The bottom level of the existing Hume pipe is very high that does not allow the flow of water coming from the north-west direction to enter Pit-3. Hence it is recommended to provide 900mm diameter RCC Hume pipe and lowering of bottom level of RCC Hume pipe as shown in the figure-2. The area of this catchment is 0.44 sqkm and approximate quantity of water that can accumulate in Pit-3 can be 0.409 lakh cum.

Table 11 Rainfall intensity, Runoff calculation for Patch-2

Sr. No.	<i>P</i> (mm)	<i>t_r</i> (hr)	<i>t_c</i> (hr)	<i>I_c</i> (cm/hr)	Patch-2 Area (Sq.km.)	<i>Q</i> (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.44	1.60	0.107
2	40	1	4.00	1.60	0.44	1.26	0.042
3	40	1	4.00	1.60	0.44	1.26	0.042
4	27	1	2.70	1.46	0.44	1.15	0.039
5	59	1	5.90	1.71	0.44	1.35	0.045
6	31	1	3.10	1.51	0.44	1.19	0.040
7	13	1	1.30	1.13	0.44	0.89	0.030
8	15	1	1.50	1.20	0.44	0.94	0.032
9	15	1	1.50	1.20	0.44	0.94	0.032
	282						0.409



Figure-2 Hume pipe details from catchment to Pit-3.

5.3 Area near Pit-7 (Immediate Actions Required)

The region on the north of Pit-7 that is about 0.61 sq. km. which is having slope towards Pit 7 and natural drain passing between pit 7 and Pit 5B extended. One channel PCH-3 is proposed that runs parallel to natural drain. The proposed bottom level of the channel and its layout is shown in figure-3. The rain water that falls in this area can be diverted to Pit-7 through this proposed channel. It is estimated that the amount of water collected by providing this channel can be around 0.567 lakh cum. The calculation of runoff is given in table 12.

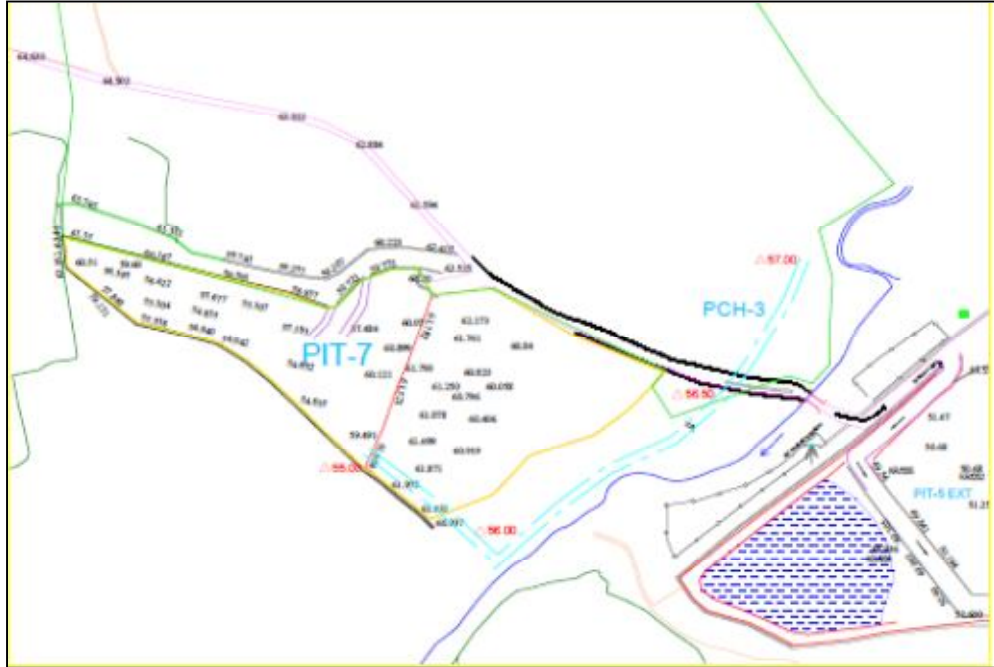


Figure-3 Proposed PCH-3 between Pit-7 and Nala and cross section of channel.

Table 12 Rainfall intensity, Runoff calculation for Patch-3

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Patch-3 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.61	2.22	0.149
2	40	1	4.00	1.60	0.61	1.75	0.059
3	40	1	4.00	1.60	0.61	1.75	0.059
4	27	1	2.70	1.46	0.61	1.59	0.053
5	59	1	5.90	1.71	0.61	1.87	0.063
6	31	1	3.10	1.51	0.61	1.65	0.055
7	13	1	1.30	1.13	0.61	1.23	0.041
8	15	1	1.50	1.20	0.61	1.31	0.044
9	15	1	1.50	1.20	0.61	1.31	0.044
	282						0.567

5.4 Area below Pit-8 (Immediate Actions Required)

The area proposed for Pit-8 is excavated partly whereas the other region is having the slope southwards and area of the region is about 1.44 sq. km. Basically, rainwater from the region is escaping from the boundary area. To retain this water inside the boundary one channel PCH-4 is proposed with bottom level of the channel and its layout is shown in figure-4. As the existing elevation of excavated Pit 8 is higher, a sump is proposed in the encircled region and water collected during rainfall event shall than be pumped in Pit-8. It is estimated that the amount of water collected by providing this channel can be around 1.338 lakh cum. The size of the sump proposed shall be around 15m x 15m and having a depth of 5m to 6m as per practical possibilities. The water collected in the sump can be pumped runtime into the excavated Pit-8.

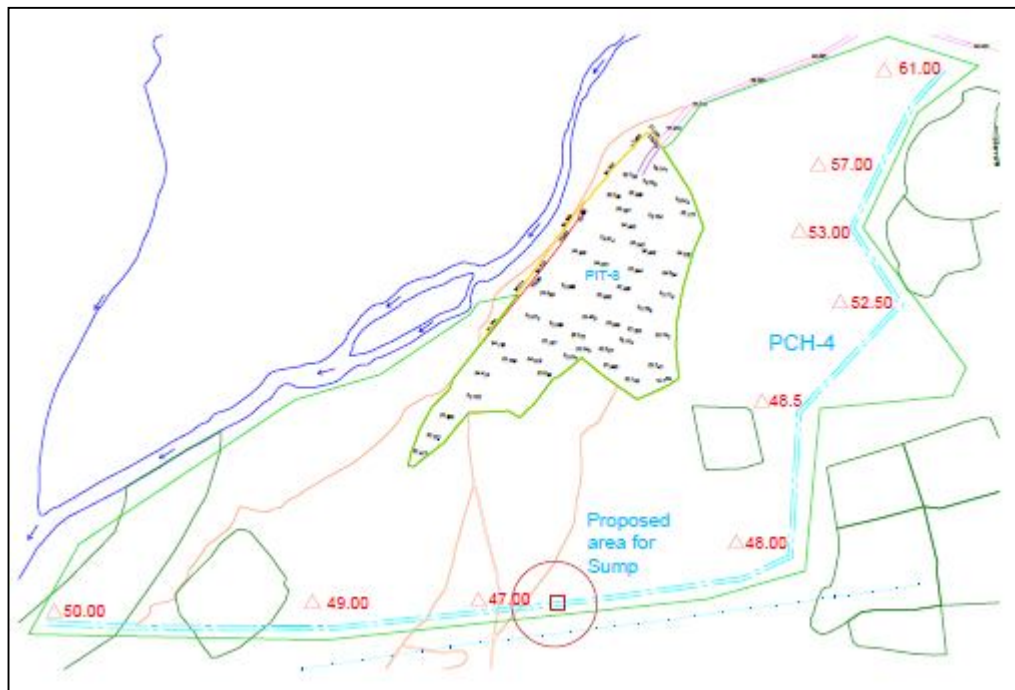


Figure-4 Proposed PCH-4 below Pit-8 and cross section of channel

Table 13 Rainfall intensity, Runoff calculation for Patch-4

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Patch-1 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	1.44	5.23	0.351
2	40	1	4.00	1.60	1.44	4.12	0.138
3	40	1	4.00	1.60	1.44	4.12	0.138
4	27	1	2.70	1.46	1.44	3.76	0.126
5	59	1	5.90	1.71	1.44	4.40	0.148
6	31	1	3.10	1.51	1.44	3.89	0.131
7	13	1	1.30	1.13	1.44	2.91	0.098
8	15	1	1.50	1.20	1.44	3.09	0.104
9	15	1	1.50	1.20	1.44	3.09	0.104
	282						1.338

5.5 Area at the corner of Pit -1 near the view point (Long Term Proposals)

The natural drain in this region is flowing with water during peak monsoon season. There is a deep ditch which is formed on the north of view point at the corner of pit-1. This ditch has a slope towards the drain. Some part of the water flowing through the natural drain during the peak monsoon season can be diverted into pit-1 as the level of Pit-1 is lower than the bottom level of natural drain. If a small temporary obstruction can be created in the natural drain, the water flowing in the drain can be diverted into pit-1 through reversing the slope as per bottom RL mentioned in figure -6. The length of temporary obstruction can only be for 2m to 3m just enough to partially divert the flowing water into the ditch that is formed naturally. The existing levels of pit -1 can be lowered by 1.0m or so and that can result into storage of large amount of water. This provision can be considered as a long term plan for future monsoon seasons. It is difficult to quantify the amount of water as the catchment area of natural drain is quite large and amount of water cannot be estimated with the available data. Refer figure-6 for the details of suggested RL.

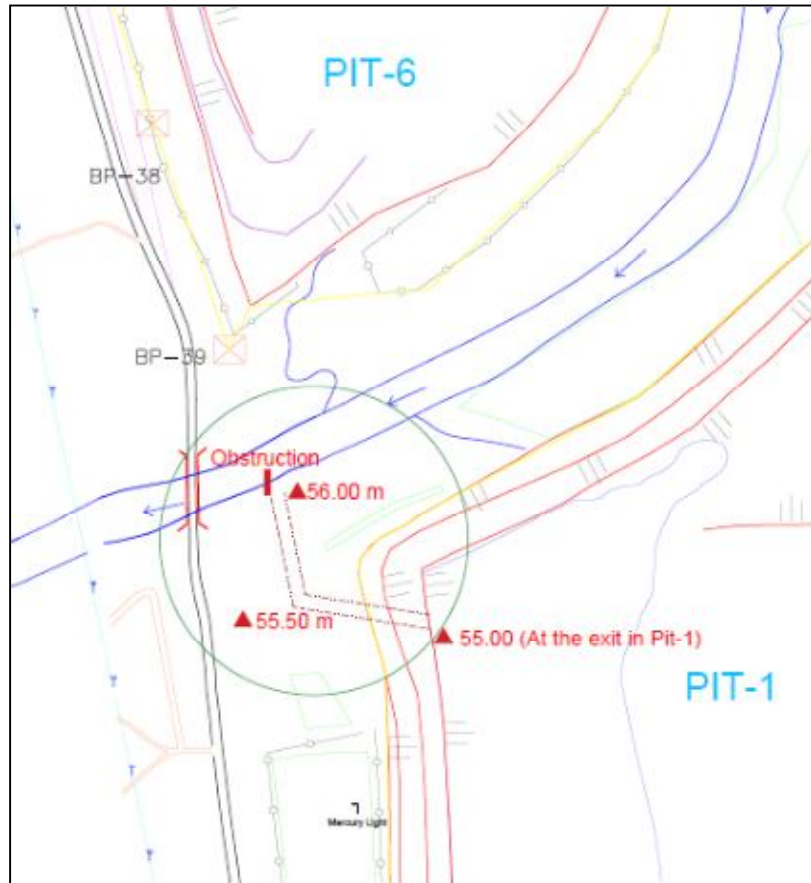


Figure-6 Proposed reversing of slope in at the corner of Pit-1

5.6 Lake behind the Existing Workshop (Long Term Proposals)

As per the discussions conducted during the presentations held at Ultratech mines on 23/06/2018, a permanent Bund has been proposed as shown in figure-7. This bund shall be constructed with at top level of 0.5 m below the existing rough road which is used for transit of vehicles. The bottom level of the lake has been proposed at an RL of 39.0m. This Lake-3 shall have an approximate water storage capacity of 1.0 lakh cum. The water from the existing channel shall be diverted into the bund and necessary changes shall be implemented to change the bottom level of channel so that the existing bottom RL remains higher than the bottom RL proposed for the Lake-3. Also a Hume pipe is proposed to transfer the water from the colony. This arrangement has been explained in article 5.8 and Figure 11. The boundary wall separating the workshop and old pit-5 area shall be made water retaining. Necessary changes shall be undertaken prior to storage of water to ensure that the water does not escape through the wall.

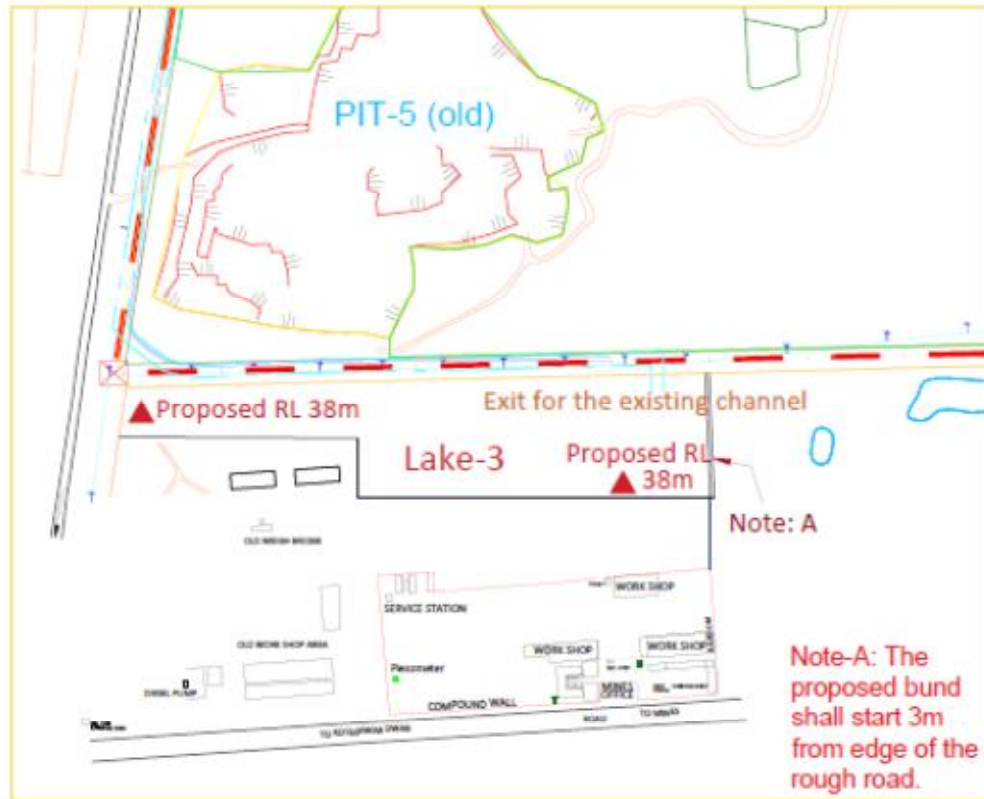


Figure-7 Proposed Lake-3 behind the existing workshop

5.7 Lake-1 Proposed in the colony area (Long Term Proposals)

The colony area has a large potential to collect the rain water owing to its profile and slope which is towards its outer boundaries. The total quantity of water that can be accumulated from the colony area as per runoff calculations is shown in table-14.

There are a few potential areas where water can be stored inside the colony. As shown in Figure-8, a lake is proposed at east of C type quarters. An open channel is proposed starting from corner in front of Unit head bungalow with its bottom RL at 47.00m and its exit into the lake-1. The water comes from the west through the road and escapes through the compound wall and hence a grated channel GCH-1 is proposed in front of the lake to trap the water from the road and transfer into the lake. A typical cross section of the Channel is shown in figure-8.

Table-14 Runoff calculations in colony area

Sr. No.	P (mm)	t_r (hr)	t_c (hr)	I_c (cm/hr)	Patch-1 Area (Sq.km.)	Q (m ³ /s)	Volume of Runoff (lakh m ³)
1	42	2	2.10	2.03	0.584	2.31	0.166
2	40	1	4.00	1.60	0.584	1.82	0.065
3	40	1	4.00	1.60	0.584	1.82	0.065
4	27	1	2.70	1.46	0.584	1.66	0.060
5	59	1	5.90	1.71	0.584	1.94	0.070
6	31	1	3.10	1.51	0.584	1.72	0.062
7	13	1	1.30	1.13	0.584	1.28	0.046
8	15	1	1.50	1.20	0.584	1.36	0.049
9	15	1	1.50	1.20	0.584	1.36	0.049
	282						0.633

The boundary of the lake shall be constructed as a water retaining structure. The the boundary of the lake shall be constructed such that it does not disturb the existing drainage lines. As per the catchment area of the proposed lake, the storage capacity required for accumulating water shall be 0.088 lakh cum. This estimated volume of water is calculated based on the colony contour map provided from the Mine's office.

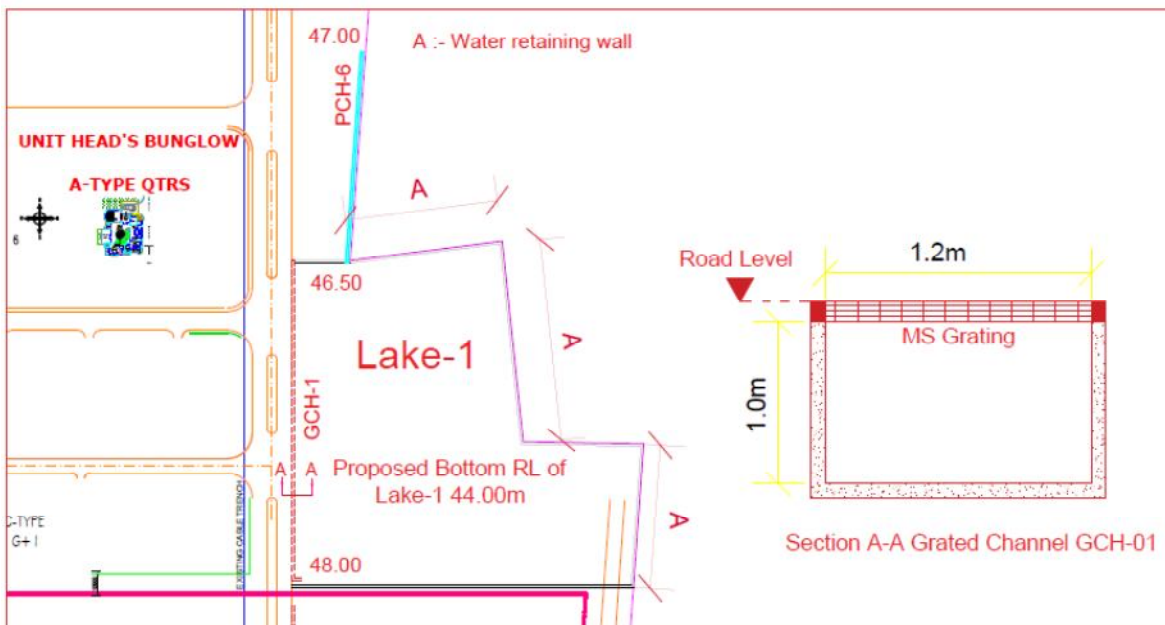


Figure-8 Proposed Lake-1 behind the C-Type Quarters

5.8 Lake-2 Proposed in the colony area (Long Term Proposals)

There is a lake-2 which is proposed on the south end of the colony where there is a huge potential for rain water accumulation and storage. A grated channel GCH-2 is proposed that starts from C-type quarters and ends on lake-2. The typical cross section of the grated channel can be taken from Figure-8. This channel shall trap the water from moving towards the east end of the colony and shall transfer it to the proposed Lake-2. The grated channel shall have the top level at the RL of existing road whereas; the bottom level of the GCH-2 is shown in figure-9. There is one more escape of water from the south west direction that can be trapped through an open channel constructed besides the boundary wall that starts from the Cheeku farm and ends at Lake-2. The bottom RL of this proposed channel are shown in figure-10. The storage capacity required for the proposed lake based on the catchment area of the colony is estimated to be 0.374 lakh cum.

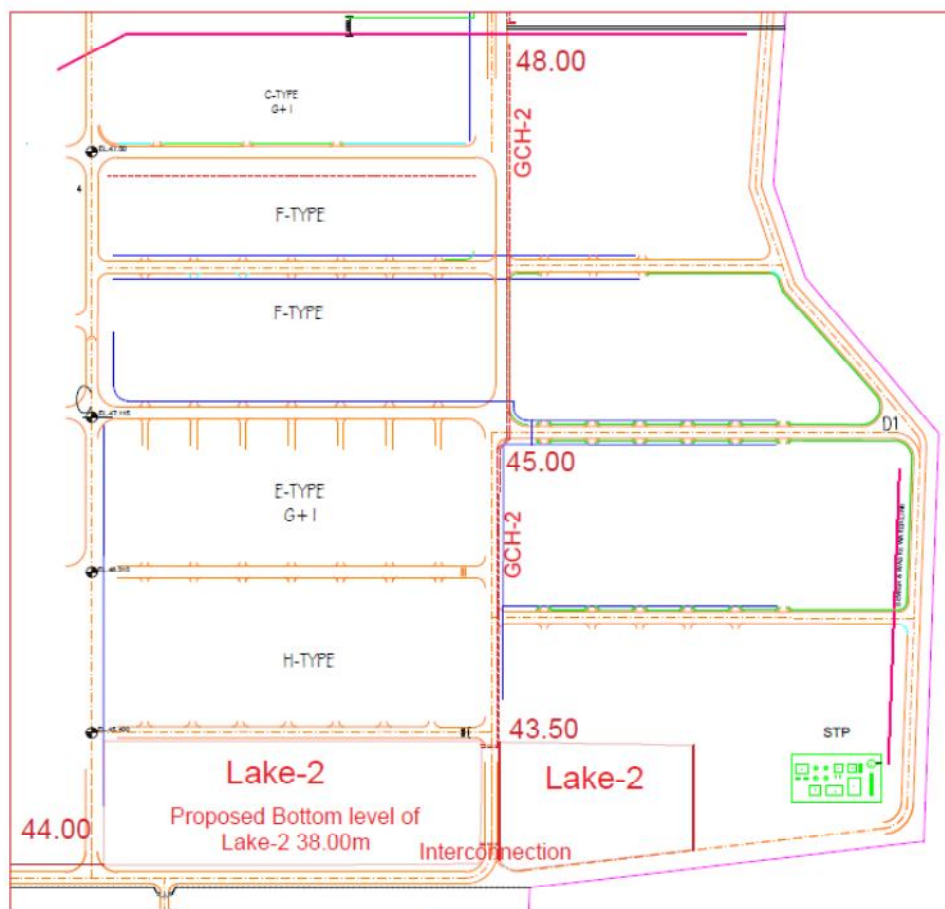


Figure-9 Proposed Lake-2 on the south end of the colony

The Water from the colony area also escapes through the main road between mines and colony main gate. This water can be trapped through a grated channel which is proposed as shown in Figure-11. This channel shall trap the water and through underground pipes preferably of 900 mm diameter can be transferred to the lake-3 proposed behind workshop. The rain water runs on the road from west to east and hence this grated channel beneath the road shall trap the water and transfer to Lake-3. The details of the channel and underground pipes are shown in Figure-11. The storage capacity required for this lake-3 based on the catchment area of the colony works out to be 0.114 lakh cum.

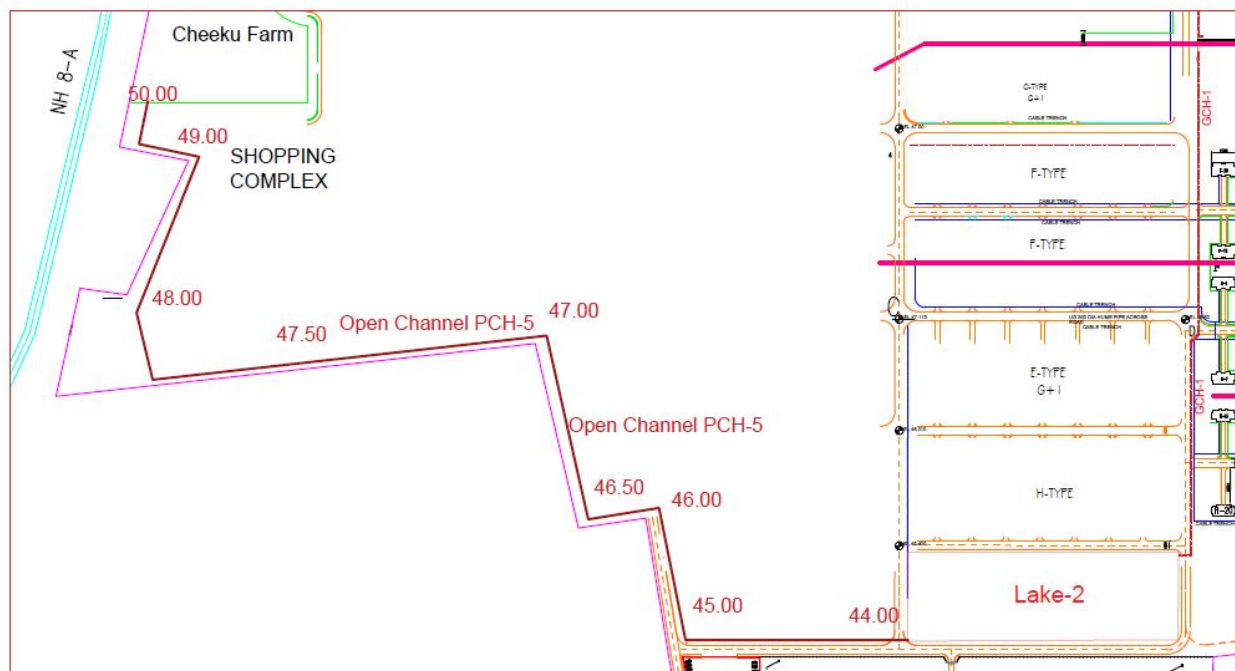


Figure-10 Details of bottom RL of the channel proposed from Cheeku farm to Lake-2

There is a small patch in the colony region where practically it is very difficult to trap water due to the presence of drainage lines and STP in the South East corner of the colony. The water accumulated in this area cannot be directed into either of the lakes in the colony due to its existing topographical condition. The quantity of water that is not possible to retain works out to be 12% of total runoff calculated from the colony area

The size of all the three lakes has been provided based on information available from the drawing and mine officials during the site visits. However, necessary changes in the depth and size of the lake shall be decided as per site conditions to attain the required storage capacity.

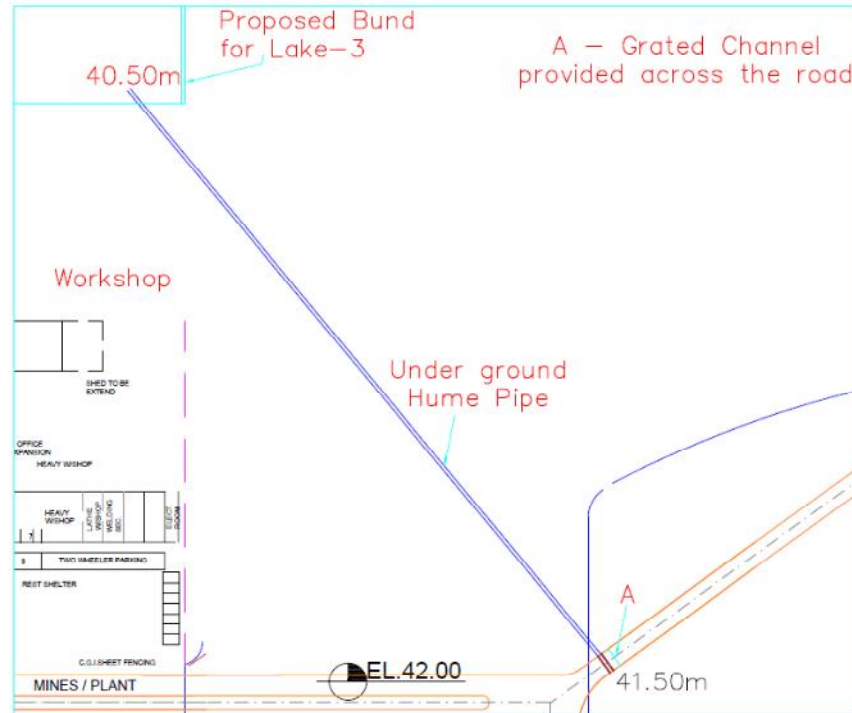


Figure-11 Details of underground Pipe and Grated channel from Colony Road to Lake-3

6. Summary

- Total estimated quantity of water that can be stored in all the nine pits with reference to past rainfall data is 2.027 lakh cu.m. as mentioned in Table 15.
- Total estimated quantity of water that can be diverted to existing pits or to the new proposed storage area with reference to past rainfall data is 3.489 lakh cu.m. as mentioned in Table 16.
- It is difficult to predict quantity of water that can be diverted in to the Pit-1 at this stage. This depends on the type of divergence created on site. Hence, quantity is not mentioned in the Table 16.

Table 15 : Estimated quantity of water stored in all the nine Pits

Sr. No.	Location	Area (Sq.km.)	Quantity of Water Stored (Lakh Cu.m.)
1	Pit – 1	0.445	0.414
2	Pit – 2	0.305	0.283
3	Pit – 3	0.291	0.271
4	Pit – 4	0.059	0.054
5	Pit – 5A	0.117	0.108
6	Pit – 5B	0.368	0.342
7	Pit – 6	0.231	0.215
8	Pit – 7	0.126	0.117
9	Pit – 8	0.240	0.223
Grand Total			2.027

Table 16 : Estimated quantity of water that can be diverted to existing pits or new storages

Sr. No.	Location	Estimated Quantity of Water (Lakh cu.m.)	Implementation of Suggestion
1	Area behind Pit-6 and HARUDI village	0.609	Immediate Actions Required
2	Connection of Catchment area in Pit-3	0.409	
3	Area near Pit-7	0.567	
4	Area below Pit-8	1.338	
5	Lake-1 Inside Colony area	0.566	Long Term Plans
6	Lake-2 Inside Colony area		
7	Lake-3 Behind Workshop		
8	Area near the corner of Pit-1	-	
Grand Total		3.489	

Stage I :

- Identification of patches within the mines area from where water remains within the mines boundaries. : **Nine patches identified as per Table 15.**
- Identification of patches within the mines area from where water goes out of the mines boundaries. : **Six locations identified as per Table 16.**

Stage II :

- Estimation of quantity of water that can be retained within the mine boundaries by considering average rainfall in the region. : $2.027 + 3.489 = 5.516$ lakh cu.m.

Stage III :

- Identification of locations from where water can be diverted in the plant boundary either naturally (through gravity) or artificially (through level pumping). : **One location near Pit-1.**

Stage IV :

- Repeat exercise from Stage I to Stage III shall be done for the plant area and other lease areas of Ultratech Sewagram. : **Can be initiated as per need.**

Stage V :

- As per quality and quantity of water required for different uses, distribution network shall be developed depending on the quality and quantity available in different patches of the mines area. : **Data regarding quality of water in different pits is provided. Suggestion for treatment to water can be developed depending on the type of use of water from that particular pit and respective quality of water.**

Team Leader
Testing & Consultancy Cell
MUEPL







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Environment Auditing & Consultancy Service

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Ref. No. : 84/05/2019-20

Date: 01/06/2019

REPORT OF AMBIENT NOISE LEVEL MEASUREMENT

Name of company : Ultratech Cement Ltd.

"Sewagram" , Village : Vayor ,

Taluka:Abdasa

Dist. : Kutch

Sr. No.	Location of Sampling	Avg. Results in dB(A)	
	Sampling Time	Day Time 6:00 AM - 10:00 PM	Night Time 10:00 PM - 06:00 AM
	Date of sampling	06/05/2019	06/05/2019
	Prescribed Limits	75	70
1	At. New Packing Area	62.2	56.8
2	At. RO Plant - Jetty	58.5	47.4
3	AT. Captive Power Plant	61.2	59.5
4	At. Plant Sec. Gate	63.7	58.5
5	At. Mines Office	55.9	52.3
6	Pit of Laterite Mines - Baranda Vill.	50.4	42.7
7	West End - Baranda Vill.	53.7	45.8

CPCB Standards

Area Code	Category of Area / Zone	Limit in dB(A) Leq.	
		Day Time	Night Time
A	Industrial Area	75.0	70.0
B	Commercial Area	65.0	55.0
C	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Note : 1. Day time shall mean from 6.00 AM to 10.00 PM
2. Night time shall mean from 10.00 PM to 6.00 AM

Reference : Limits As Per The Noise Pollution Regulation and Control Rules, 2000 Schedule See Rule 3(1) and 4(1).

Calibration due on : 12/09/2019

Royal Environment Auditing & Consultancy Service



Analyst