RIVER BED SAND (MINOR MINERAL) MINE

APPLICANT - MUKESH SHARMA

TEHSIL – PIDAWA, DISTRICT – JHALAWAR (RAJASTHAN)

To,

Date: 23.05.2018

The Director- IA.II (M)

Ministry of Environment, Forests & Climate Change,

Indira Paryavaran Bhawan, Aliganj, Jor Bagh Road,

New Delhi-110003.

Sub: Regarding Environmental Clearance of our proposed project "River Bed Sand (Minor Mineral) Mine" of lessee Mukesh Sharma situated near Village(s) of Tehsil –Pidawa, District – Jhalawar, Rajasthan for an area of 905.206 hectare.

Ref: Minutes of Meeting of 29th Meeting of Reconstituted Expert Appraisal Committee (Non- Coal Mining) held on 22nd March'2018 (Item No. 2.5)

Respected Sir,

With reference to above mentioned subject, kindly consider our point-wise reply, as below:

S. No.	Particular	Reply
i.	DMG, State Government to submit demarcated river stretch through latitudes and longitudes (out of the total lease) where river sand/ bajri mining can be permitted based on available reserves and Original Ground Level (OGL) at each cross section in consultation with State Irrigation Department.	That the demarcated river stretch through latitudes and longitudes based on Original Ground Level (OGL) and reserves with each cross section duly authenticated by Office of Department of Mines & Geology, Jhalawar is enclosed as **Annexure – I.**
ii.	PP and Consultant to submit latitudes and longitudes of the identified cross section, duly authenticated by State Government, which shall be used for replenishment study in future for calculation of replenishment amount/ rate	That the latitudes and longitudes of cross section used for replenishment study have been done. Copy of duly authenticated map is enclosed as **Annexure – II.**
iii.	PP to give undertaking that only Scrapers shall be used for mining to ensure that the mining depth be maintained as 1.0 meters (max.) from Original Ground Level and No other heavy machinery like bucket excavators, JCB machines etc. shall be used	That the mining will be undertaken using Scrapers only and the mining depth will be maintained as 1.0 meter (max.) from Original Ground Level. Undertaking for the same by Project Proponent is enclosed as **Annexure-III.**

	which may adversely impact the aquatic biota	
iv.	State Government of Rajasthan shall regulate the mining operations made by PP and submit report to MoEF&CC on quarterly basis. It shall also be ensured that leveled cross section is made before the onset of next rainfall season; and	The same has been communicated.
v.	State Government of Mines & Geology and PP are required to submit District Survey Report (DSR) in line with provisions made in Ministry's notification dated 15.01.2016.	Duly signed cover letter of District Survey Report from SME, Kota is enclosed as **Annexure – IV.**

We have applied for extension for validity of the LOI, which is under active consideration. We request Receipt of submitted letter is enclosed as **Annexure-V.** Meanwhile, we request MoEF&CC to grant us EC subjected to validity of LOI. The time taken for completion of EC formalities has taken over 2 years.

In lieu of this, we request your good self to kindly consider our reply and accord us environment clearance at the earliest.

Thanking You,

Yours Faithfully,

For River Bed Sand Mine, Jhalawar

(Mukesh Sharma)

Applicant

ANNEXURE - I

राजस्थान–सरकार

कार्यालय सहायक खनि अभियन्ता, खान एवं भू–विज्ञान विभाग, झालावाड

कमरा नं. 156, भूतल पर, मिनि सचिवालय, झालावाड़ – 326001

Email – ame.jhalawar@rajasthan.gov.in Tel No. 07432-232414

क्रमांक : सखअ/झाला/सीसी/2018–19/ 1626 दिनांक : 4/5/2018

प्रेषिति –

श्रीमान सुरेन्द्र कुमार,
सलाहकार/वैज्ञानिक "जी"
भारत सरकार का वन, पर्यावरण एवं जलवायु परिवर्तन मन्त्रालय, (इम्पेक्ट असेसमेन्ट डिविजन)
तीसरी मन्जिल, वायु विंग, इन्द्रा पर्यावरण भवन, जोरबाग रोड़,
अलीगंज, नई दिल्ली 110003

विषय :– Minutes of 29th EAC Meeting held during Dated March 22-23.2018 के क्रम में चाही गई कमी/पूर्ति कार्यवाही सूचना बाबत्।

प्रसंग :– आपका पत्र दिनांक 18.04.2018 के क्रम में।

महोदय,

उपरोक्त विषयान्तर्गत प्रासंगिक पत्र के सन्दर्भ में निवेदन है कि इस कार्यालय के अधिकार क्षेत्र में आने वाले खनिज बजरी का **एलओआई खनन पट्टा** सं.खा 22/2013 क्षेत्र 905.206 हैक्टेयर, तहसील पिड़ावा जिला झालावाड़ के संबंध में ई.सी. प्राप्ति हेतु चाहे गए अक्षांश व देशान्तर नक्शे एवं डिस्ट्रिक्ट सर्वे रिपोर्ट तैयार करवा कर प्रमाणित कर इस पत्र के साथ संलग्न कर भिजवाई जा रही है, जिसका उक्त प्रासंगिक पत्र का सन्दर्भ निम्न प्रकार से है –

(2.5).Mining of Bajri (Minor Mineral) with proposed production capacity of 2.8 Million TPA (ROM) by Lessee Shri Mukesh Sharma, located at near revenue villages of Tehsil- Pidawa, District–Jhalawar, Rajasthan (MLA: 905.206ha.) (F. No. J-11015/113/2016-IA-II(M); Minutes of EAC meeting held during March 22-23, 2018 Page 12 of 75 Proposal No. IA/RJ/MIN/25369/2014) (Consultant: Enkay Enviro Services Pvt. Ltd.)-Consideration of Environmental Clearance.

भवदीय

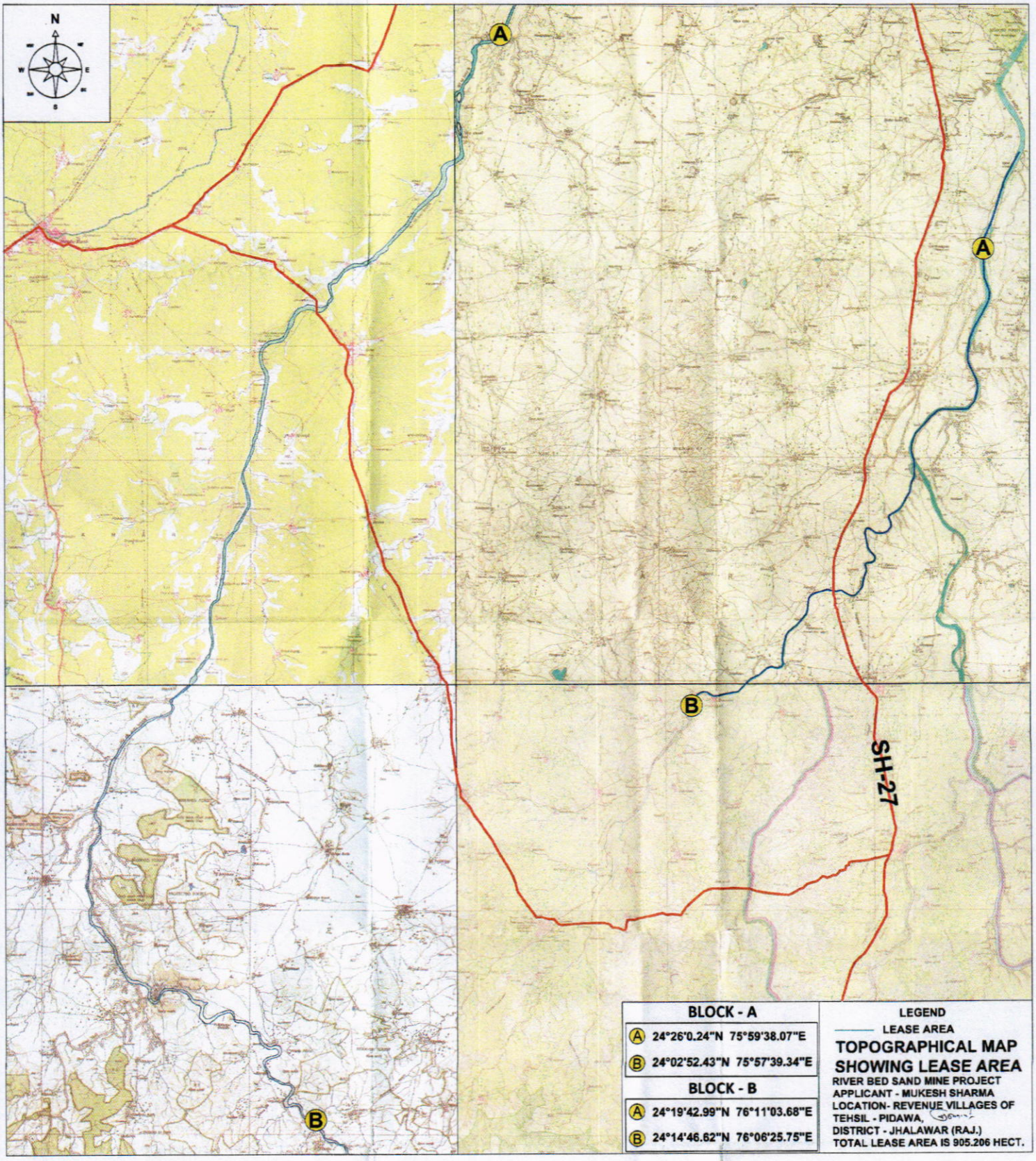
(मलिक उस्तर)
सहायक खनि अभियन्ता,
झालावाड़

क्रमांक : सखअ/झाला/सीसी/2018–19/ दिनांक :

प्रतिलिपि –

1. श्रीमान अतिरिक्त निदेशक (खान) महोदय, कोटा–जोन, कोटा।
2. श्रीमान अधीक्षण खनि अभियन्ता महोदय, कोटा–वृत, कोटा।

(मलिक उस्तर)
सहायक खनि अभियन्ता
झालावाड़



BLOCK - A	
A	24°26'0.24"N 75°59'38.07"E
B	24°02'52.43"N 75°57'39.34"E
BLOCK - B	
A	24°19'42.99"N 76°11'03.68"E
B	24°14'46.62"N 76°06'25.75"E

LEGEND

LEASE AREA

TOPOGRAPHICAL MAP SHOWING LEASE AREA

RIVER BED SAND MINE PROJECT
APPLICANT - MUKESH SHARMA
LOCATION- REVENUE VILLAGES OF
TEHSIL - PIDAWA,
DISTRICT - JHALAWAR (RAJ.)
TOTAL LEASE AREA IS 905.206 HECT.

नोट- खाद के नक्शा क्षेत्र के ख D/S के खनन की अनुमति नहीं

प्रमाणित

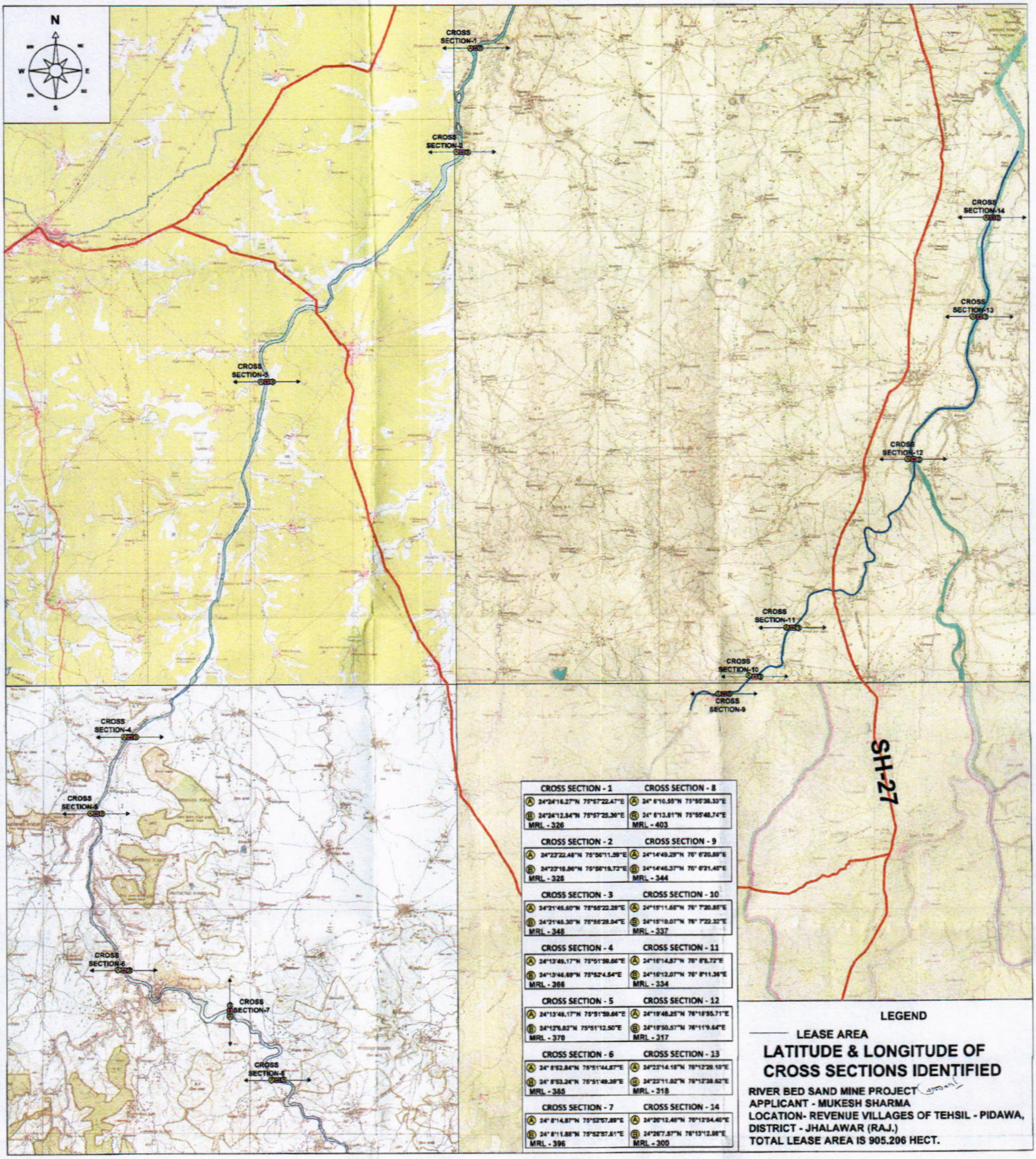
सहायक अभियंता
खनिज विभाग पी. उपखण्ड
पिड़ावा, झालावाड़

प्रमाणित

सहायक खनि अभियन्ता
खान एवं भू विज्ञान विभाग
झालावाड़

D.M.

ANNEXURE - II



CROSS SECTION - 1	CROSS SECTION - 8
Ⓐ 24°24'16.27"N 75°57'22.47"E	Ⓐ 24° 6'10.55"N 75°55'38.33"E
Ⓑ 24°24'12.84"N 75°57'25.36"E	Ⓑ 24° 6'13.81"N 75°55'48.74"E
MRL - 326	MRL - 403
CROSS SECTION - 2	**CROSS SECTION - 9**
Ⓐ 24°23'22.48"N 75°56'11.59"E	Ⓐ 24°14'49.29"N 76° 6'20.89"E
Ⓑ 24°23'18.86"N 75°56'19.73"E	Ⓑ 24°14'46.37"N 76° 6'21.45"E
MRL - 328	MRL - 344
CROSS SECTION - 3	**CROSS SECTION - 10**
Ⓐ 24°21'45.60"N 75°55'22.28"E	Ⓐ 24°15'11.65"N 76° 7'20.85"E
Ⓑ 24°21'45.30"N 75°55'28.04"E	Ⓑ 24°15'10.07"N 76° 7'22.32"E
MRL - 348	MRL - 337
CROSS SECTION - 4	**CROSS SECTION - 11**
Ⓐ 24°13'49.17"N 75°51'59.66"E	Ⓐ 24°16'14.87"N 76° 8'8.72"E
Ⓑ 24°13'46.69"N 75°52'4.54"E	Ⓑ 24°16'12.07"N 76° 8'11.36"E
MRL - 366	MRL - 334
CROSS SECTION - 5	**CROSS SECTION - 12**
Ⓐ 24°13'49.17"N 75°51'59.66"E	Ⓐ 24°19'48.25"N 76°10'55.71"E
Ⓑ 24°12'6.82"N 75°51'12.50"E	Ⓑ 24°19'50.57"N 76°11'9.64"E
MRL - 370	MRL - 317
CROSS SECTION - 6	**CROSS SECTION - 13**
Ⓐ 24° 8'52.84"N 75°51'44.87"E	Ⓐ 24°23'14.18"N 76°12'29.10"E
Ⓑ 24° 8'53.24"N 75°51'49.39"E	Ⓑ 24°23'11.02"N 76°12'38.62"E
MRL - 385	MRL - 318
CROSS SECTION - 7	**CROSS SECTION - 14**
Ⓐ 24° 8'14.87"N 75°52'57.89"E	Ⓐ 24°26'12.48"N 76°12'54.40"E
Ⓑ 24° 8'11.88"N 75°52'57.61"E	Ⓑ 24°26'7.57"N 76°13'12.98"E
MRL - 396	MRL - 300

LEGEND

——— LEASE AREA

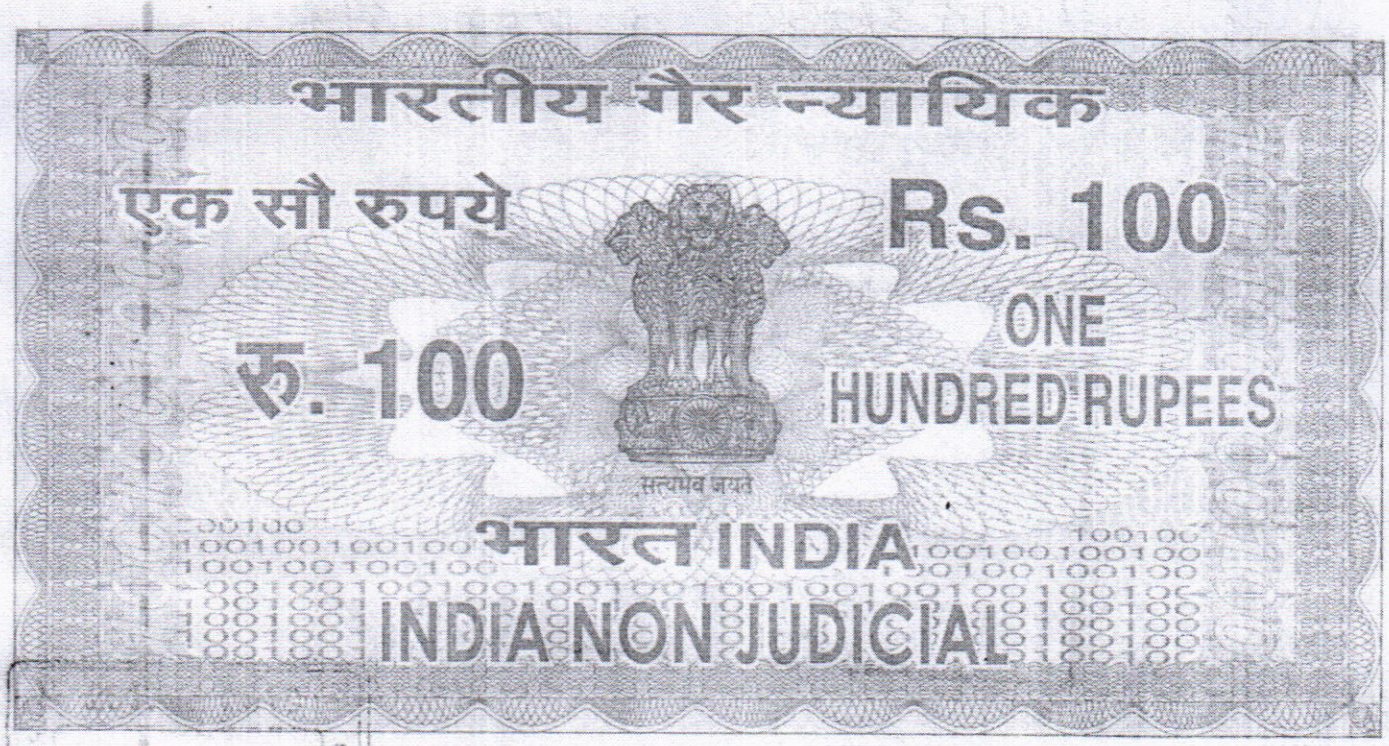
LATITUDE & LONGITUDE OF CROSS SECTIONS IDENTIFIED

RIVER BED SAND MINE PROJECT
APPLICANT - MUKESH SHARMA
LOCATION- REVENUE VILLAGES OF TEHSIL - PIDAWA,
DISTRICT - JHALAWAR (RAJ.)
TOTAL LEASE AREA IS 905.206 HECT.

प्रमाणित

प्रमाणित

ANNEXURE - III



राजस्थान RAJASTHAN

AN 054173

UNDERTAKING

Mukesh Sharma S/o Suresh Chand Sharma, R/o Plot No. 7 Anandpuri Colony, Kalvad Road Jhotwara, Jaipur Lessee/owner for River bed mining project of minor mineral sand (Bajri), **Lease Area 905.206 Hect. ML No. 22/2013** located at revenue villages of **Tehsil Pirawa of District-Jhalawar, State-Rajasthan**, hereby undertakes that only scrapers will be used for mining and mining depth will be maintained as 1.0 meters (max.) from Original Ground Level and no other heavy machinery like bucket excavators, JCB machines etc. will used which any adversely impact the aquatic biota.

Date : 04 May, 2018

प्रमाणित

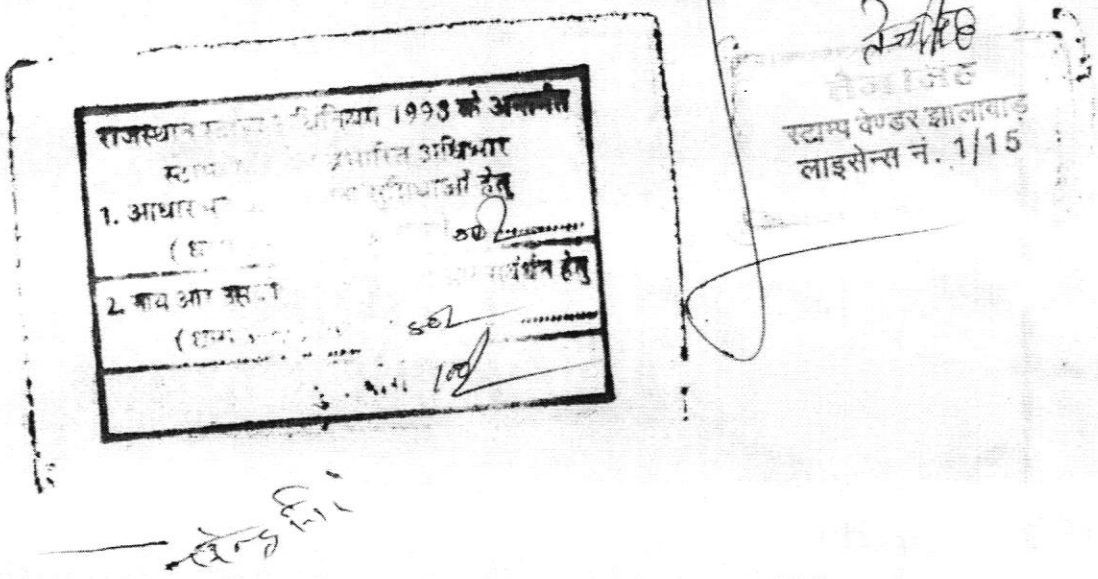
सहायक खनि अभियन्ता
खान एवं भू विज्ञान विभाग
झालावाड़

Lessee

(Mukesh Sharma)

ATTESTED
Zafar Mohd. Khan
NOTARY
Jhalawar Distt. (Raj.)
8.5.18

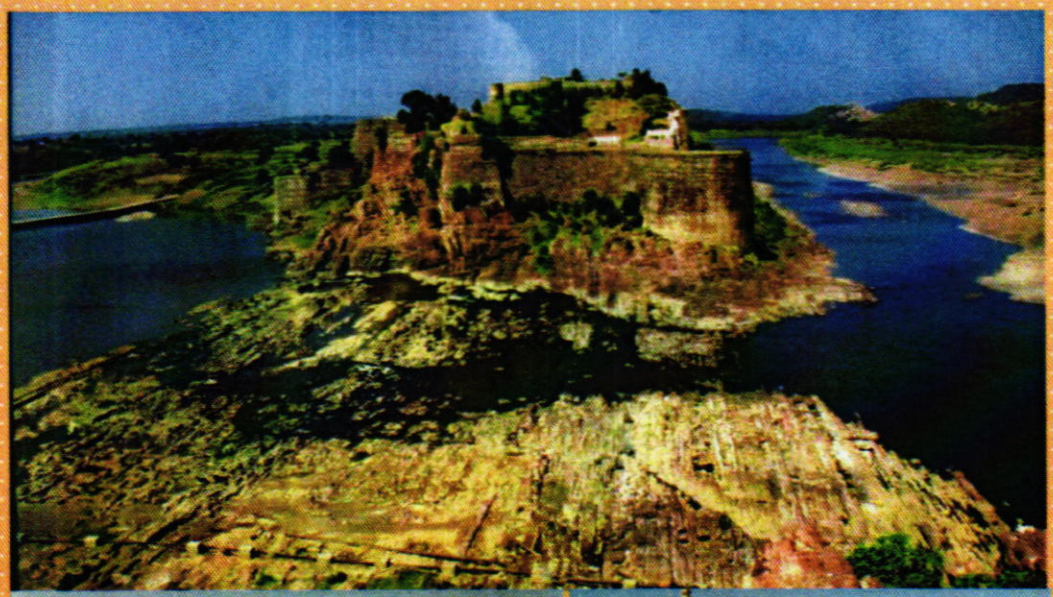
15
05417/3
415/18 मुकेश शर्मा s/o सुरेश चन्द्र शर्मा जाति ब्राह्मण
100x1 निवासी झोटवाड़ा जयपुर (राज.)
वास्ते शपथपत्र

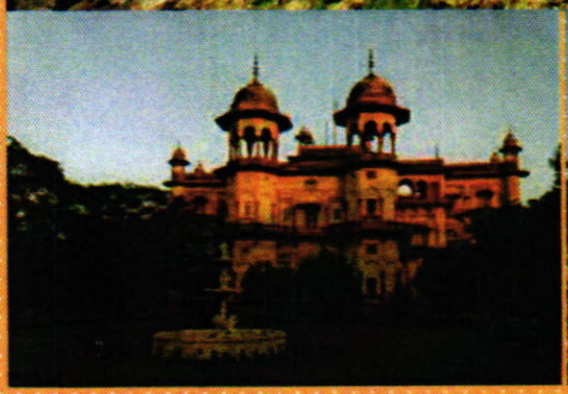


ANNEXURE - IV

DISTRICT SURVEY REPORT
DISTRICT JHALAWAR, RAJASTHAN

AS PER NOTIFICATION NO. S.O. 141(E) NEW DELHI, THE 15TH JANUARY, 2016 OF MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE. GOVT. OF INDIA





Office of the Assistant Mining Englineer

Department of Mines and Geology, Jhalawar

GOVT. OF RAJASTHAN

....., Sep. 2016

डिस्ट्रिक्ट सर्वे रिपोर्ट पृष्ठ सं॰ 1 से 44 तक

प्रमाणित किया जाता है।

सहायक खनि अभियन्ता
खान एवं भू विज्ञान विभाग
झालावाड़

DISTRICT SURVEY REPORT, DISTRICT JHALAWAR

The Ministry of Environment, Forests & Climate Change (MoEFCC), Government of India, made Environmental Clearance (EC) for mining of minerals mandatory through its Notification of 27th January, 1994 under the provisions of Environment Protection Act, 1986.Keeping in view the experience gained in environmental clearance process over a period of one decade, the MoEFCC came out with Environmental Impact Notification, SO 1533 (E), dated 14th September 2006. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Schedule-1 of the Notification.

Further, In pursuance to the order of Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease; And also in view of the Hon'ble National Green Tribunal, order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor Minerals,

The Ministry of Environment, Forest and Climate Change in consultation with State governments has prepared Guidelines on Sustainable Sand Mining detailing the provisions on environmental clearance for cluster, creation of District Environment Impact Assessment Authority and proper monitoring of minor mineral mining using information technology and information technology enabled services to track the mined out material from source to destination.

District Survey Report will be a model and guiding document which is a compendium of available mineral resources, geographical set up, environmental and ecological set up of the district and replenishment of minerals and is based on data of various departments, published reports, journals and websites. The District Survey Report will form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report will be updated once every five years.

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following -

(i) Identification of areas of aggradations or deposition where mining can be allowed; and

(ii) Identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

(iii) Identification of mineral wealth in the district.

1. Introduction:

The word Jhalawar, literally means "land of the Jhalas" this being the name of the ruling clan of the formar state. Occuping an area of 6219 Sq. Kms. Jhalawar district lies in the south eastern corner of Rajasthan between Latitude 23°45'20" to 24°52'17" & Longitude 75°27'35" to 76°56'48". It is bounded in the north, north-east and north-west by Kota district and by Madhya Pradesh in the rest of the district. The district head quarter Jhalawar is situated on the National Highway No. 12 about 85 Kms. from Kota. The Rail head, Jhalawar Road on the Kota-Nagda section of the Western Railway, is about 27 Kms. away. Metalled roads link important places within the district and outside in the neighbouring Madhya Pradesh.

In the 2011 Indian census, Jhalawar had a population of 14,11,129. Males constitute 725143 in the population and females 685986. Jhalawar has an average literacy rate of 61.5% .The district is known for its Sand Stone, Lime Stone, Masonry Stone, Bentonite mineral wealth. A map showing the blocks of the district is presented as Figure-1.

The general information of jhalawar district:

Poplation (2011)

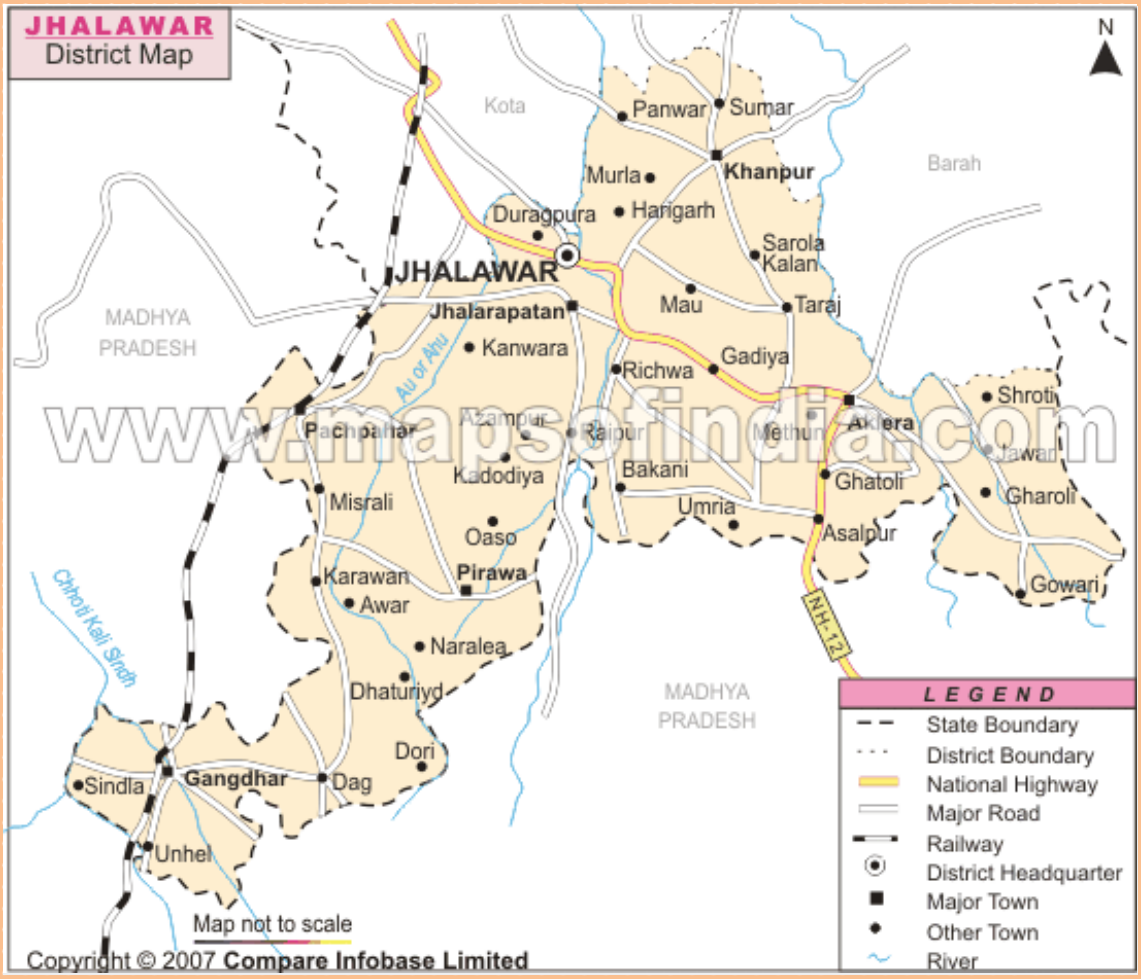
S.No.	Tehsil	Population		Total Population
		Male	Female	
1.	Aklera	92070	86501	178571
2.	Asnawar	31428	29526	60954
3.	Gangdhar	85544	81942	167486
4.	Jhalrapatan	152171	143582	295753
5.	Khanpur	89958	83235	173193
6.	Manoharthana	73213	69862	143075
7.	Pachpahar	91844	87574	179418
8.	Pirawa	108915	103764	212679
Total		**725143**	**685986**	**1411129**

Administractivre Structure

Item	Unit	Description
1 Sub Division	number	8
2 Tehsil	number	8
3 Panchayat Samiti	number	8
4 No.of Village(Habitated)	number	1492
5 No.of Village(Unhabitated)	number	118
6 Total Cities	number	8
7 Gram Panchayat	number	252
8 No. of circles Inspector	number	61

Tehsil wise villages, Patwar Boards, follows the position of inspector circles

S.No.	Tehsil	No. of Cercles Inspector	No. of Patwar	No. of Village	Populatioin (2011)		
					SC	ST	Total
1	Aklera	06	36	269	23851	51529	75380
2	Asnawar	4	14	99	9596	21952	31548
3	Gangdhar	7	49	195	41173	758	41931
4	Jhalrapatan	14	53	299	45199	30925	76124
5	Khanpur	6	45	207	32211	28261	60472
6	Manoharthana	4	26	195	13256	29442	42698
7	Pachpahar	5	40	151	39026	5558	44584
8	Pirawa	15	60	220	39270	13804	53074



Demographical Datas of Jhalawar District:

क्र सं.	मद	ईकाई	विवरण
1	**भोगोलिक क्षैत्रफल**	**वर्ग कि.मी.**	**6219**
2	**जनसंख्या (जनगणना 2011)**	**संख्या**	**1411129**
	A. पुरूष	संख्या	725143
	B. स्त्री	संख्या	685986
3	**जिले की कुल जनसंख्या**	**संख्या**	**1411129**
	A. ग्रामीण जनसंख्या	संख्या	1181838
	B. शहरी जनसंख्या	संख्या	229291
4	जनसंख्या का घनत्व/प्रति वर्ग कि.मी.	संख्या	227
5	कुल साक्षरता	प्रतिशत	61.50
	A. पुरूष साक्षरता	प्रतिशत	75.75
	B. स्त्री साक्षरता	प्रतिशत	46.53
6	कुल जनसंख्या में शहरी जनसंख्या का प्रतिशत	प्रतिशत	16.26
7	लिंगानुपात (महिलाऐं) प्रति हजार पुरूष	संख्या	946
8	जनसंख्या की दस वर्षीय वृद्धि दर (2001–11)	प्रतिशत	19.55

Agriculture 2014–15

क्र.सं.	मद	ईकाई	विवरण
1	कुल प्रतिवेदित क्षेत्रफल	हेक्टेयर	632235
2	वन क्षेत्र	हेक्टेयर	127328
3	कृषि हेतु अनुपलब्ध भूमि	हेक्टेयर	62863
4	स्थाई चारागाह एवं अन्य गोचर भूमि	हेक्टेयर	47435
5	वृक्षों के झुण्ड एवं बाग	हेक्टेयर	6054
6	कृषि अयोग्य,बंजड एवं पडत भूमि	हेक्टेयर	51993
7	वास्तविक बोया गया क्षेत्रफल	हेक्टेयर	336562
8	एक बार से अधिक बोया गया क्षेत्रफल	हेक्टेयर	277487
9	समस्त बोया गया क्षेत्रफल	हेक्टेयर	614049
10	सिंचाई हेतु उपयोगी पम्प सेट	संख्या	82868
11	सामान्य वर्षा	मि.मी.	919.6
12	वास्तविक वर्षा	मि.मी.	909.7
13	जोते का औसत आकार	हेक्टेयर	1.98

Industry 2014–15

क्र.संख्या	मद	ईकाई	विवरण
1	फैक्ट्री एक्ट अन्तर्गत पंजीकृत कारखाने	संख्या	57
2	पंजीकृत कारखानो में कार्यरत श्रमिक	संख्या	6834
3	उद्योग विभाग के अन्तर्गत पंजीकृत लघु उद्योग	संख्या	1753
4	वृहद एवं मध्यम उद्योग	संख्या	1
5	वृहद एवं मध्यम उद्योगों में कार्यरत श्रमिक	संख्या	3594
6	औद्योगिक क्षैत्र	संख्या	10

2. Overview of Mining Activity in the District:

Though no major metallic minerals of economic importance is found in the district except small occurrences of copper, the district is endowed mainly with building stones (Flaggy limestone and sandstone, masonary stone) and industrial minerals like bentonite, hjghgrade limestone, laterite, cement grade limestone, chertagate, lithomergic clays etc. Minor indications of calcite and gypsum have also been found in the district.

Quarring of building stone mainly sandstone is the major activity. Good quality flaggy limestone (Kotastone) has also been discovered near Aroliya, Biriyakheri, Jhinjhni, Nandiyakheri, Pipliya, Paroliya, Runji etc and mining of this stone has already commenced near Aroliya, Biriyakheri, Jhinjhni, Nandiyakheri, Pipliya, Paroliya, Runji. Exploration by means of drillng in the area is in progress. Recently, department has delineated few plots for mining leases of flaggy limestone near Aroliya, Biriyakheri, Jhinjhni, Nandiyakheri, Pipliya, Paroliya, Runji.

There is no major mineral based indutstry in the district. However, number of stone polishing units based on limestone and sand stone have been set up and are increasing day by day. There is ample scope of expansion of stone polishing and cutting industry when the Aroliya, Biriyakheri, Jhinjhni, Nandiyakheri, Pipliya, Paroliya, Runji limestone belt is put to mining.

There are large reserves of bentonite deposits of type-2 grade which after activation can be utilized in oil refining and foundry industries.. In Jhalawar district, mining activity is not as promising as in other parts of the state. Small quarries of sandstone, limestone (burning), splitt able limestone and masonary stone are running in the district..

The table exhibits the mineral based industries in the district:

Sr. No.	Mineral based industries	Numbers of plants stablished
1.	Lime Stone	504 cutting and polishing plant
2.	Masonry Stone	28 stone gitty crusher units
3.	Sand stone	40 cutting and polishing plant

3. The list of Mining leases in the District with location, area and period of validity:

Office Of The Assistant Mining Engineer, Jhalawar									
ML List Full Detail 05-09-2016									
S. No.	ML No	Name and Address	Mineral Name	Near Village	Tehsil	District	Area In Hect.	Period Date	
1	031/02	Chhitar Lal/ Puri Lal Meghwal R/o Dittya Kheri Tehsil Jhalrapatan	Bentonite	Chandiakheri,	Jhalrapatan	Jhalawar	1	29.07.03	28.07.23
2	013/02	Manish/ Gopal Ram Dhaka, R/o 276 Guru jameshwar Nagar, Queens Road. Jaipur.	Bentonite	Chandiakheri,	Jhalrapatan	Jhalawar	1	09.04.02	08.04.22
3	029/12	Pinnacle Mining & Minerals, Jhalawar	Bentonite	Chandiakheri	Jhalrapatan	Jhalawar	1	03.05.13	02.05.43
4	006/13	Satya Narayan Patidar/ KaluRam Patidar Dityakheri Tehsil Jhalrapatan	Bentonite	Nahardi	Jhalrapatan	Jhalawar	1	26.08.13	25.08.43
5	036/04	Sunil Patidar/Satya Narain Patidar R/o Ditya Kheri Dist. Jhalawar	Bentonite	Jarel	Jhalrapatan	Jhalawar	1	21.01.09	20.01.29
6	001/10	Vimala Dhaka/ GR Dhaka 276 Guru jameshwar Nagar, Queens Road, Jaipur.	Bentonite	Chandiakheri	Jhalrapatan	Jhalawar	1	19.01.11	18.01.31
7	021/03	Dasha Banu w/o Gaffur Mohammad	Lime Stone Burning	Kishanpura	Jhalrapatan	Jhalawar	1	17.04.06	16.04.26
8	005/13	Abdul Mujeeb/Peer Khan Jhalawar	Lime Stone Dimensional	Neravad	Jhalrapatan	Jhalawar	4	21.06.13	20.06.43
9	043/96	Abdul Muzib /Peer Khan Near TopKhana Maszid, Jhalawar	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4.9998	15.12.99	14.12.19

10	064/10	Abhay Kumar/Gyan Chand jain, J Patan	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar		20.10.10	19.10.30
11	022/96	Amit Upadhyay / Jaswant Bhai Upadhyay Bazar No. 6 Ramganjmandi	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4.5	17.09.2004	16.09.2024
12	112/96	Arif Ahmad/ Sakhi Ahmad R/o Bajar No.- 4, Ramganjmandi	Lime Stone Dimensional	Jhijhni	Jhalrapatan	Jhalawar	5	18.04.1998	17.04.2018
13	026/12	Arpita Minerals Runji C/o Mohd. Sakhi 1679 Kota Road, Suket	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	04.01.13	03.01.43
14	027/12	Arpita Minerals Runji C/o Mohd. Sakhi 1679 Kota Road, Suket	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	04.01.13	03.01.43
15	063/10	Ashok Kumar /Sampat Raj Jain Shanti Nath ji ki Gali Jhalrapatan	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar	4	25.04.2011	24.04.2031
16	426/08	Banas Minerals Pvt. Ltd. Jhalawar	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4.0001	02.07.2008	01.07.2028
17	035/10	Banas Minerals Pvt. Ltd. Jhalawar	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4	29.06.10	28.06.30
18	040/10	Banas Minerals Pvt. Ltd. Jhalawar	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4	29.06.10	28.06.30
19	018/12	Banas Minerals Pvt. Ltd. Jhalawar	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	23.01.2013	22-01-43
20	017/12	Banas Minerals Pvt. Ltd. Jhalawar	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	23-01-13	22-01-43
21	005/09	Banas Stone Enterprises Partner Sh. Abbas Ali Khan Housing Board Colony Jhalawar	Lime Stone Dimensional	Biryakheri	Jhalrapatan	Jhalawar	4	02.06.2009	01.06.2029

22	022/01	Banas Stone Prop. Sh. Khurshid Khan Police Line Chauraha, Jhalawar	Lime Stone Dimensional	Biryakheri	Jhalrapatan	Jhalawar	4	05.11.2001	04.11.2021
23	056/10	Fair Deal Channels Pvt. Ltd. PA Mukesh Khandelwal	Lime Stone Dimensional	Biryakheri	Jhalrapatan	Jhalawar	4	06.04.2011	05.04.2041
24	025/13	Govind Ram Modi	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4	15.05.2015	14.05.2045
25	018/94	Hari Om/ Kalash Chand R/o 186- B, Talwandi Kota,	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4.9998	07.04.1995	06.04.2015
26	037/11	Hazre Stone Piplia Tehsil Pachpahad	Lime Stone Dimensional	Pipliya	Pachpahar	Jhalawar	4	26.12.11	25.12.31
27	002/11	Khalil Ahmed / Jamil Ahmed Pathan, Kota	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4	23.05.11	22.05.41
28	046/10	Laiek Ahmed/Sakhi Ahmed Ramganjmandi	Lime Stone Dimensional	Nandiyakheri	Jhalrapatan	Jhalawar	4	13.10.11	12.10.41
29	109/96	Laxmi Industries, Asha Tea Suppliers Kota Agrsen Market Kota.	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	5	03.03.98	02.03.18
30	053/96	Modi flooring Co. Prop. RamRatan Modi Morak Station	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	5	14.03.2002	13.03.2022
31	421/08	Mohd Shahid/Abdul RashidSuket Dist Kota	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4	07.08.2008	06.08.2028
32	015/06	Mohd Tosif/ Mohd Sakhi Suket	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	5	29.05.2006	28.05.2026
33	028/09	Mohd.Aalam/Abdul Rashid Suket R/o Khalli Mohalla Suket Dist Kota	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4	12.05.10	11.05.30

34	420/08	Mohd.Aalam/Abdul Rashid Suket R/o Khalli Mohalla Suket Dist Kota	Lime Stone Dimensional	Runji	Pachpahar	Jhalawar	4	07.08.2008	06.08.2028
35	025/96	Patidar Minerals Prop. Sh. Ram Patidar Mama Bhanja Chauraha Jhalawar	Lime Stone Dimensional	Pipliya	Pachpahar	Jhalawar	5	04.09.2004	03.09.2024
36	018/09	Pradip Kumar Jain s/o Sardar Singh Jain Near of Kuti Sant Kabir Jhalrapatan	Lime Stone Dimensional	NandiaKheri	Jhalrapatan	Jhalawar	4	25.01.2010	24.01.2030
37	053/10	Pradip Kumar Jain s/o Sardar Singh Jain Near of Kuti Sant Kabir Jhalrapatan	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar	4	02.12.2010	01.12.2030
38	010/09	Pukhraj Jain / Laxmi Chand Jain Vipul Apartment Godam Ki Talai Jhalawar	Lime Stone Dimensional	Parolia	Jhalrapatan	Jhalawar	3.9999	17.08.2009	16.08.2029
39	012/13	Pukhraj Jain / Laxmi Chand Jain Vipul Apartment Godam Ki Talai Jhalawar	Lime Stone Dimensional	Parolia	Jhalrapatan	Jhalawar	4	22.07.13	21.07.43
40	016/13	Rahat Ali /Rafat Ali Bhawani mandi road mama bhanja jhalawar	Lime Stone Dimensional	SankhliKhera	Jhalarapatan	Jhalawar	4	22.10.2013	21.01.2043
41	246/08	Rahul Jain /LC Jain Vipul Apartment Godam Ki Talai Jhalawar	Lime Stone Dimensional	Parolia	Jhalrapatan	Jhalawar	3.9999	12.03.2009	11.03.2029
42	010/13	Rahul Jain /LC Jain Vipul Apartment Godam Ki Talai Jhalawar	Lime Stone Dimensional	Parolia	Jhalrapatan	Jhalawar	4	22.07.13	21.07.43
43	028/13	Ram Ratan Modi	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4	15.05.2015	14.05.2045
44	010/95	Razashah Khan/ Mubarak Shah Khan, Housing Board Colony Jhalawar	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar	4	03.09.1996	02.09.2016
45	024/96	Ritesh / Jaswant Bhai Upadhyay, Bazar No. 6 Ramganjmandi	Lime Stone Dimensional	Pipliya	Pachpahar	Jhalawar	4.82	06.12.1997	05.12.2017

46	025/12	Salaf Minerals Runji C/o Vijay Kumar Saklecha ,28 Pipali Chauraha Jhalrapatan	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	04.01.13	03.01.43
47	024/12	Salaf Minerals Runji C/o Vijay Kumar Saklecha ,28 Pipali Chauraha Jhalrapatan	Lime Stone Dimensional	Runji	PachPahad	Jhalawar	4	04.01.13	03.01.43
48	045/10	Salman Aarif/ Aarif Ahmed R. Mandi	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar	4	29.11.10	28.11.30
49	042/96	Shafi Ullah Khan/ Hikamatullah Khan Godam Ki Talai Jhalawar	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4.6178	15.12.99	14.12.19
50	108/86	Shakil Mohd. Bhanwar Singh/Sawaisingh Aamera	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	5	11.01.95	10.01.2025
51	015/12	Shrikrishna Earth Moovers and Minerals Prop Shaym Patidar Petrol Pump Mama Bhanja Chauraha Jhalawar	Lime Stone Dimensional	SankhliKhera	Jhalrapatan	Jhalawar	4	21-01-13	20-01-43
52	047/10	SilverStone Nandiyakheri Part. Shanti Kumar Jhalrapatan	Lime Stone Dimensional	Nandiakheri	Jhalrapatan	Jhalawar	4	20.10.10	19.10.30
53	097/89	Suresh Gurjer	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	5.73	22.07.1989	21.07.2019
54	036/11	Virendra Mehta /Abhay Mehta Chopria Bazar Jhalrapatan	Lime Stone Dimensional	Nandiyakheri	Jhalrapatan	Jhalawar	4	01.02.12	31.01.42
55	014/94	Vishnu Modi /RamRatan Modi Morak Station Tehsil Ramganjmandi	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	5.0221	28.02.1996	27.02.2016
56	026/11	Vishnu Modi /RamRatan Modi Morak Station Tehsil Ramganjmandi	Lime Stone Dimensional	Aroliya	Pachpahar	Jhalawar	4	03.10.2011	02.10.2041

57	002/06	Arti Chaudhry / Satnarayan Chaudhry Bhuramal H Jat Petrol Pump Aklera	Masonary Stone	Uni	Aklera	Jhalawar	1	28.03.2007	27.03.2027
58	004/12	Banesheari Stone Crusher, Borda	Masonary Stone	Borda	Khanpur	Jhalawar	1	09.05.13	08.05.43
59	001/07	Devendra Nyati / Ghanshyam Das Nyati Manohar Thana	Masonary Stone	Rihchdi	M.Thana	Jhalawar	1	01.11.2007	31.10.2027
60	002/07	Devendra Nyati / Ghanshyam Das Nyati Manohar Thana	Masonary Stone	Rihchdi	M.Thana	Jhalawar	1	01.11.2007	31.10.2027
61	224/90	Devendra Patidar/Balmukund Patidar Ramganj Mandi	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	12.02.1992	11.02.2022
62	223/90	Devendra Patidar/Balmukund Patidar Ramganj Mandi	Masonary Stone	Mishroli	Panchpahar	Jhalawar	0.9397	12.02.1992	11.02.2022
63	222/90	Harish Chand/ Kalyan Prasad R/o Asnawar Tehsil Jhalrapatan,	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	12.02.1992	11.02.2022
64	028/06	Hukum Singh/Man singh R/o Bhagwatipura Tehsil Gangdhar	Masonary Stone	Sarod	Panchpahar	Jhalawar	1	24.07.2007	23.07.2027
65	027/06	Hukum Singh/Man singh R/o Bhagwatipura Tehsil Pachpahad	Masonary Stone	Sarod	Panchpahar	Jhalawar	1	24.07.2007	23.04.2027
66	020/12	Kailash /Roognath R/o Girdharpura Tehsil Jhalrapatan Dist. Jhalawar	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	20.08.13	19.08.43
67	054/10	Nageshwar Stone Crusher Guradiya Kalan	Masonary Stone	Guradiya kalan	Panchpahar	Jhalawar	1	14.07.11	13.07.41
68	023/12	RadheyShyam Patidar/ Satya Narayan patidar Azad Chowk, Mishroli Tehs.	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	21.08.13	20.08.43

		Pachpahad Dist. Jhalawar							
69	071/10	RamGopal Patidar/Dwarka Lal Patidar Mishroli	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	26.05.11	25.05.41
70	055/10	Ranjeet Const. Pirawa	Masonary Stone	Balda	Pirawa	Jhalawar	1	04.05.11	03.05.41
71	032/07	Sachin Malhotra/Anil Malhotra , Bakani	Masonary Stone	Berkheda Khurd	Jhalrapatan	Jhalawar	1	19.12.2007	18.12.2027
72	033/07	Sachin Malhotra/Anil Malhotra , Bakani	Masonary Stone	Berkheda Khurd	Jhalrapatan	Jhalawar	1	19.12.2007	18.12.2027
73	015/05	Satyanarayan Chaudhry / Magnaram Chaudhry, Petrol Pump Aklera	Masonary Stone	Uni	Aklera	Jhalawar	1.5	25.10.2005	24.10.2025
74	008/06	Snehlata Arya / Balchand Arya Lata Kunj Near Bus Stand BhawaniMandi	Masonary Stone	Mishroli	Panchpahar	Jhalawar	1	15.01.2007	14.01.2027
75	001/06	Suresh Kr Goyal Sarafa Bazar Aklera	Masonary Stone	Uni	Aklera	Jhalawar	1	28.03.2007	27.03.2027
76	059/98	Ab. Aziz/ Hazi Usman Khan R/o Ramjanpura, Aklera, Jhalawar.	Sand Stone	Poli	Aklera	Jhalawar	0.5592	07.10.1999	06.10.2019
77	171/96	Abdul Hafiz/ Bashir Mohd. R/o Jail Road Jhalawar,	Sand Stone	Raipur	Jhalrapatan	Jhalawar	0.72	05.12.1997	04.12.2017
78	115/92	Abdul Hamid/ Chand Khan R/o Rinchwa Tehsil Jhalrapatan	Sand Stone	Motyadungri	Jhalrapatan	Jhalawar	0.72	20.08.1992	19.08.1922
79	029/99	Akhil Sharma / Rajaesh Sharma Rinchhawa Teshil Jhalraptan	Sand Stone	Bilva	Jhalrapatan	Jhalawar	0.72	06.04.2000	05.04.2020

80	053/97	Anil Ramdiya/Kanti Lalji Kalal Aditya Nagar Morak Tehsil Ramganjmandi	Sand Stone	Poli	Aklera	Jhalawar	1.0004	19.02.2000	18.02.2020
81	136/91	Bhupenra Singh/ Indra Singh R/o Mama Bhanja Jhalawar,	Sand Stone	Kotra	Jhalrapatan	Jhalawar	0.6766	10.10.1992	19.10.2018
82	024/04	Chetan Patidar/Vishnu Patidar Subhash Colony Jhalawar	Sand Stone	Bhalta	Aklera	Jhalawar	2	10.03.2006	09.03.2026
83	098/92	Chhagan Lal / Badri Lal Gujar C/o K.T.C Jhalrapatan, Jhalawar.	Sand Stone	Poli	Aklera	Jhalawar	0.5895	18.09.1992	17.09.2022
84	034/03	Chhotekhan / Ganikhan, Neembari Jhalrapatan	Sand Stone	Modi Bakani	Jhalrapatan	Jhalawar	1	08.06.2004	07.06.2024
85	018/99	Dinesh Pareta/Kanhaiya Lal Pareta Morak	Sand Stone	Poli	Aklera	Jhalawar	1.41	01.11.2001	31.10.2021
86	130/92	Geeta W/o Puri Lal Meghwal R/o Girdhar Pura Tehsil Jhalrapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	1	17.02.1993	16.02.2023
87	282/04	Jagdishchandra / Daulat Ram Sharma Surajpole Road Jhalrapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	1	12.09.2008	11.09.2028
88	010/03	Jagdishchandra / Ramlal Ahir, Jhalawar	Sand Stone	Garda	Aklera	Jhalawar	1.0001	10.06.2004	09.06.2024
89	014/09	Kalyan Prasad/Ram Narayan Suman Asnavar Tehsil Jhalrapatan	Sand Stone	Mahesar	Jhalrapatan	Jhalawar	1	23.11.2011	22.11.2041
90	048/04	Leela Patidar / Vishnu Patidar, Jhalawar	Sand Stone	Kotra	Jhalrapatan	Jhalawar	1.0584	30.12.2005	29.12.2025
91	131/91	Mohammd Umar Hayat / Mohd. Umar Daraz Neembari Jhalarapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	0.72	29.09.1992	28.09.2022

92	077/08	Mohd. Salim / Ab. Rahman, Patwar Ghar ke Peechhe Suket Tehsil Ramganjmandi	Sand Stone	Luhario ki Dhani	Jhalrapatan	Jhalawar	1.1613	19.02.2009	18.02.2029
93	147/90	Nahru Kurashi/ Haroon Kurashi, Surajpole Gate Jhalrapatan	Sand Stone	Bhanwrasa	Jhalrapatan	Jhalawar	0.603	27.09.1991	26.09.2021
94	022/97	Nakora Crusher Engineering R/o Ralayti Tehsil Jharapatan, Distt. JHR.	Sand Stone	Kalmandi khurd	Jhalrapatan	Jhalawar	2.1092	06.11.99	05.11.2019
95	028/98	Naresh Pareta/Kanhaiya Lal Pareta Morak	Sand Stone	Poli	Aklera	Jhalawar	0.72	01.05.1999	30.04.2019
96	068/93	Nasiruddin/ Shafiuddin R/o Ramjanpura By Pass Aklera, Jhalawar.	Sand Stone	Poli	Aklera	Jhalawar	1.105	08.02.1994	07.02.2024
97	020/92	Punam Bawa W/o Subhash Baraigi R/o Bus Stand Jhalrapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	0.72	28.09.1992	27.09.2022
98	018/06	Puri Lal/ Kalu Ram Meena R/o Banjara Mohalla Aklera, Jhalawar.	Sand Stone	Poli	Aklera	Jhalawar	1.1613	24.04.2007	23.04.2027
99	085/97	R.R.Minerals Partner Ashfak Mohd. Neembari Gate, Jhalrapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	0.72	05.11.1998	04.11.2018
100	088/93	Radha Kanwar/Bharat Singh Jhalawar	Sand Stone	Raipur	Jhalrapatan	Jhalawar	0.72	07.02.1994	06.02.2014
101	072/95	Ramesh Chand S/o Shiv Shankar R/o Silawat Mohalla Jhalrapatan	Sand Stone	Govindpura	Jhalrapatan	Jhalawar	0.72	02.03.1996	01.03.2016
102	113/92	Razak Mohd./Shafiq Mohd, R/o Dhanoda Via Asnawar Post Asnawar Tehsil Jhalrapatan,	Sand Stone	Jatamari	Jhalrapatan	Jhalawar	0.72	20.04.1993	19.04.2023

103	067/97	Razashah Khan/ Mubarak Shah Khan, Housing Board Colony Jhalawar	Sand Stone	Semli	Jhalrapatan	Jhalawar	0.72	20.08.1998	19.08.2018
104	034/02	Rohit Modi/RamSharan Modi Talwandi Kota	Sand Stone	Garda	Aklera	Jhalawar	1.0001	10.06.2004	09.06.2024
105	033/02	Rohit Modi/RamSharan Modi Talwandi Kota	Sand Stone	Garda	Aklera	Jhalawar	1.0001	10.06.2004	09.06.2024
106	058/98	Ruchika Dangi/Surendra Dangi Jhalrapatan	Sand Stone	Bhanwrasa	Jhalrapatan	Jhalawar	0.72	26.09.1999	25.09.2019
107	001/03	Sanjay Agrawal/KC Agrawal Forest road Jhalawar	Sand Stone	Junapani	Jhalrapatan	Jhalawar	1.32	21.05.2004	20.05.2024
108	069/92	Seema Kumari W/o Suresh Chand/ R/o Silawat Mohalla Jhalrapatan	Sand Stone	Bagdar	Jhalrapatan	Jhalawar	4.6452	26.10.1992	25.10.2022
109	042/95	Shakti Stone Crusher	Sand Stone	Raipur	Jhalrapatan	Jhalawar	0.72	27.11.1995	26.11.2015
110	077/95	ShreeLal Lodha/Prabhu Lal Lodha 23 Gajwara, Mandir Chok	Sand Stone	Poli	Aklera	Jhalawar	1.1613	06.09.1996	05.09.2016
111	005/99	ShreeLal Lodha/Prabhu Lal Lodha 23 Gajwara, Mandir Chok	Sand Stone	Poli	Aklera	Jhalawar	0.72	29.12.1999	28.12.2019
112	011/07	Teekam Chand/Prahlad Prajapat Out Side Surajpole Jhalarapatan	Sand Stone	Mahesar	Jhalrapatan	Jhalawar	1	16.10.2007	15.10.2027
113	056/95	Urvashi Jain/ Bipin Jain 41 KRISHNA COLONY Ramganjmandi	Sand Stone	Poli	Aklera	Jhalawar	0.72	15.06.1996	16.04.2016
114	135/90	Uttam Chand/ Panna Lal Jain R/o Taraj Tehsil Khanpur, Jhalawar.	Sand Stone	Poli	Aklera	Jhalawar	0.5424	13.08.1991	12.08.2021

115	**122/80**	**Ashok Kumar /Phool Chand R/o Bajar No. 1 Ramganjmandi**	Sand Stone	**Naharsinghi**	**Jhalrapatan**	**Jhalawar**	0.72	**03.08.2004**	**02.08.2024**
116	**037/91**	**Dara Singh/ Sardar Singh R/o Modak Tehlisl R. Mandi, Distt. Kota.**	Sand Stone	**Kotra**	**Jhalrapatan**	**Jhalawar**	19.4752	**16.10.2007**	**15.10.2027**
117	**036/91**	**Guru Bhege Singh/ Sardar Singh R/o Modak Tehlisl R. Mandi,**	Sand Stone	**Bilonia**	**Jhalrapatan**	**Jhalawar**	19.87	**16.10.2007**	**15.10.2027**
118	**033/12**	**Indrajeet Singh Jhala**	**Bajari**		**Gangdhar**	**Jhalawar**	1695.06	**LOI**	**LOI**
119	**034/12**	**Indrajeet Singh Jhala**	**Bajari**		**Jhalrapatan**	**Jhalawar**	1179.84	**LOI**	**LOI**

4. Details of Royalty or Revenue received in last three years and production:

MINOR MINERALS

FINANCIAL YEAR 2013-14

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	BENTONITE	8.42	7626
2	MASONARY STONE	33.57	88388
3	SAND STONE	33.93	15243
4	LIME STONE DIMENSIONAL	132.71	1365902
5	LIME STONE BURNING	0.53	0

FINANCIAL YEAR 2014-15

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	BENTONITE	15.48	15952
2	MASONARY STONE	50.69	199444
3	SAND STONE	37.04	37533
4	LIME STONE DIMENSIONAL	124.64	1225745
5	LIME STONE BURNING	0.35	0

FINANCIAL YEAR 2015-16

Sr. No.	Name of Mineral	Revenue collection in Lac Re.	Production in M.T.
1	BENTONITE	8.17	5766
2	MASONARY STONE	69.32	180765
3	SAND STONE	25.35	26589
4	LIME STONE DIMENSIONAL	230.45	1406447
5	LIME STONE BURNING	0.35	0

5. Details of Production of Sand or Bajri or Minor Minerals in last three years:

BAJRI OR SAND MINERALS

FINANCIAL YEAR 2013-14

Sr. No.	Financial year	Production of Sand Or Bajri in Cum	Revenue in Rupees Lac
1.	2013-14	129.06	515190
2.	2014-15	162.24	561003
3.	2015-16	681264	170.32

6. Process of Deposition of Sediments in the Rivers of the district:

Process -

Sediment is a naturally occurring material that is broken down by processes of weathering and erosion, and is subsequently transported by the action of wind, water and/or by the force of gravity acting on the particles. Sediments are most often transported by water. Sediment is transported based on the strength of the flow that carries it and its own size, volume, density, and shape. Stronger flows will increase the lift and drag on the particle, causing it to rise, while larger or denser particles will be more likely to fall through the flow.

If the upwards velocity approximately equal to the settling velocity, sediment will be transported downstream entirely as suspended load. If the upwards velocity is much less than the settling velocity, but still high enough for the sediment to move, it will move along the bed as bed load by rolling, sliding, and saltating (jumping up into the flow, being transported a short distance then settling again). If the upwards velocity is higher than the settling velocity, the sediment will be
Transported high in the flow as wash load. As there are generally a range of different particle sizes in the flow, it is common for material of different sizes to move through all areas of the flow for given stream conditions. Sand mining is critical to infrastructure development around the globe. Sand is an essential minor mineral used extensively across the country as a useful construction constituent and variety of other uses in sports, agriculture, glass making (a form of sand with high silica content) etc. The rivers are the most important source of Sand. It acts as source of transportation and deposition of sand and Bajri etc.The various factors governing the occurrence and deposition of sand is country rock i.e. geological disposition, climate, rainfall, water load physical parameters of river and velocity of water current.

ENVIRONMENTAL SETTING

S. No.	Particulars	Details	
1	Name of Project	Mine (Minor Mineral)	
2	Location	Villages of Tehsil Jhalrapatan of District – Jhalawar (Raj.)	Villages of Tehsil Ganjdhar of District – jhalawar(Raj.)
3	Lease Area	1695.06 hact.	1179.84 hact.
4	Land Type	Gair Mumkin Nadi Nallah	
5	Latitude & Longitude	24°41'24.96" to 24°12'49.56" 75°59'34.8" to 76°14'45.78"	23°48'24.40" to 24°01'32.91" 75°31'16.10" to 76°34'0.88"
6	Lowest & Highest Elevation	Lowest 295m RL Highest 338m RL	
7	Geological Reserves	54233568 MT	-
8	Mineable Reserves	48280968 MT	-
9	Targeted Production	750000 per annum	-
10	Type of Mining	Open cast manual	
11	End Use of Product	For local Infrastructure developement	

HYDROLOGY, HYDROGEOLOGY AND WATER RESOURCES

Geomorphology :

The district lies at the edge of Malwa plateau, an area of low hills and shallow plains. The district falls in following 5 physical divison

1. The Muknadhara Range
2. The hills of Dag
3. The plateau region with low rounded hills
4. Central plains of Pachpahar and Jhalrapatan
5. The plain of Khanpur between two arms of Mukandhara

The whole of south Jhalawar has characteristics of the Malwa plateau, an area of rounded bare hills interspersed by plain. The Jhalawar plain stretches in a wide belt from Bhawani Mandi in the west almost up to Asnawar in the east and is bounded in the northern, eastern and southern sides by the Mukandhara hills. Geomorphologically, the district is divided into various units as described in Table 1.

Origin	Land Forms	Occurrence in the District
Fluvial	Valley Fill	Scatteredintheentire district, more concentrated in south, west and central.
	Ravine	Along rivers Parwan, Ahu, Kalisindh and their tributaries.
Denudational origin	Pediment	In small atches mainly in west, north, east and central
	Burried pediment	Main concentration in northern, central, western and south in central part.
Hill Strucutral Plateau	Structural hill dissected plateau	Scattered in central and prominent in south west.

DRAINAGE

The rivers and streams of the entire district belong to the Chambal system. Except in the Gandhar tehsil, the general flow in from south to north. The rivers of Jhalawar may be divided in to two groups : the western group and eastern group. The western rivers are Ahu, Piplaj, Kyasri, Kantli, Rawa, Kalisindh and Chandrabhaga. The estern rivers are Parwan, Andheri, Newaj, Ghar and Ujar. There are artificial lakes Kadila and Mansarovar. Generally speaking rivers have deep bed with the result the water level is below that of the surrounding area. Drainage density in most part of the district varies from 0.5 to 0.7 km/km^2. Drainage density is from 0.7 to more than 1 km/km^2 in the southeastern and southwestern part of the district. In the north central part of he district, it is low ans ranges between 0.3 to 0.5 km/km^2.

Hydrogeology

Occurrence of ground water in the district is mainly controlled by the topographic and structural features present in the geological formations. Ground water occurs mainlyunder unconfined to semi- confined conditions in saturated zone of rock

formation. Its occurrence is controlled by topography, physiography and structural features of the geological formations. Movement of ground water in hard rock areas is governed by size, openness, interconnection and continuity of structurally weak planes while in unconsolidated rocks ground water movement takes place through pore spaces between grains. Water bearing properties of different aquifers are described below.

Ground water in Vindhyan Super Group:

Vindhyan sandstones and shales mainly occur in northern part of the district. Sandstones (mostly of Bhander group) are the most widely distributed litho-units in the Vindhyan terrain of the district. Generally the sandstones and shales occur as alternatelayers. The sandstone layers are low dipping, fine grained, compact and hard whereas shales are flaky in nature. Under favourable conditions, the contact of two formations yields water. Within sandstone large dia. open wells are most feasible abstraction structures and yield of wells ranges from 50 to200 cu.m/ day. Specific capacity ranges from 20 to 200 litre/min/meter.

Ground water within Vindhyan shales occurs under water table conditions in the weathered zone and in fractures formed due to splintery nature of the shales. Large diameter dug wells tapping shales yield only in the range of 20 to 80 cum/day. Dug wells at a stretch can run for 1 to 2 hours only. Horizontal boring in the dug wells also does not yield promising results.

Ground water in Alluvium

Alluvial aquifer with limited thickness occurs along river courses like Ahu and Chhoti Kalisindh. Apart from this in some depressions also alluvium of limited thickness forms aquifer. It is comprised of sand, silt and gravel. Along river courses, pebbles are also found. Depth of open wells is maximum upto 18 meter and yield ranges from 100 to 200 cubic meter per day.

Ground water in Deccan Traps:

The thickness of basalt ranges from a few meter to more than 200meter. Generally in Dag

block, thickness of basalt is more than 200 meter. Ground water in weathered basalt occurs under water table condition. Thickness of weathering in basalt ranges up to a maximum o f 20 meter. Large diameter wells are mainly feasible with an average yield of 100 to 120 cubic meter. Ground water in compact basalt occurs under water table condition in the joints and fractures. Yield of open wells ranges from 20 to 200 cubic meter per day. In vesicular basalt, ground water occurs in the vesicles, joints, fissures and

cracks. Yield of open wells varies from 40 to 280 cubic meter per day. Vesicular basalts are soft in comparison to compact basalts. In amygdaloidal basalt, ground water occurs in cavities, fissures, cracks and joints. Yield of open wells ranges from a few to 330 cubic meter per day.

SEDIMENTATION YIELD and PRODUCTION

The Universal Soil Loss Equation (USLE) is a widely used mathematical model to compute sedimentation yield from a river bed. Soil erosion within watersheds results in

sedimentation which gets deposited along the river course. The rainfall energy interacts with terrain parameters and results in water induced soil erosion. It comprises of sequential actions viz. detachment of particles from soil mass, transportation of soil particles. The parameters like soil characteristics, terrain slope length & steepness, land-use/land-cover and land management practices are considered as given below in the empirical equation(Source: Auckland Regional Council LandfactsS-05, "Estimating Sedimentation Yield Using Universal Soil Loss Equation (USLE)".

A= R x K x LS x C x P x SD x SE

Where,

A= Sedimentation Yield, (tons/annum)

R=Rainfall Erosion Index, (J/ha)

K=Soil Erodibility Factor (tons/unit of R)

LS=Slope Length and Steepness Factor

C=Ground Cover Factor

P=Roughness Factor

SD= Sediment Delivery Ratio

SE=Sediment Control Efficiency

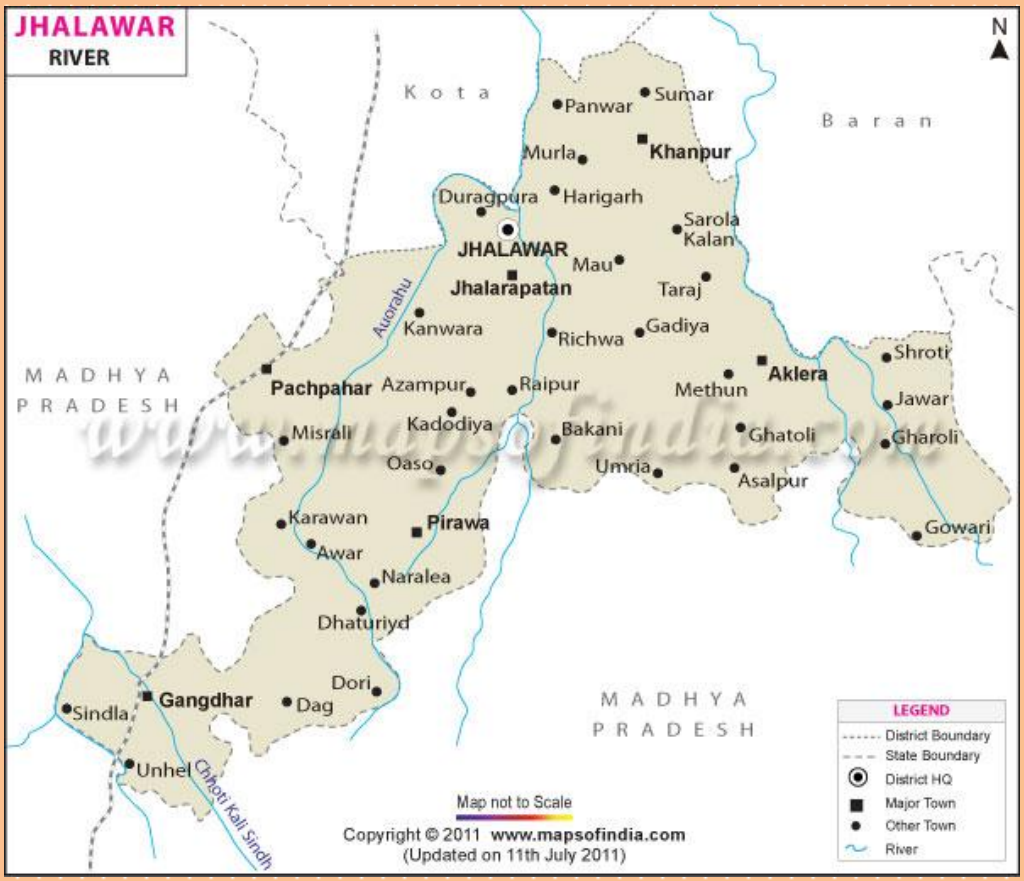
Basis for Calculation of Sedimentation Yield for Proposed Project Site:

Using USLE, Year-wise Sedimentation Yield is calculated. All the parameters for the USLE and Sedimentation Yield is given below in Table.

Parameters for the USLE and Sedimentation Yield
Parameters
Rainfall Erosion Index, (J/ha)
Soil Erodibility Factor (tons/unit of R)
Slope Length and Steepness Factor
Ground Cover Factor
Roughness Factor
Study Area (ha)
Time (Years)
Sediment Delivery Ratio

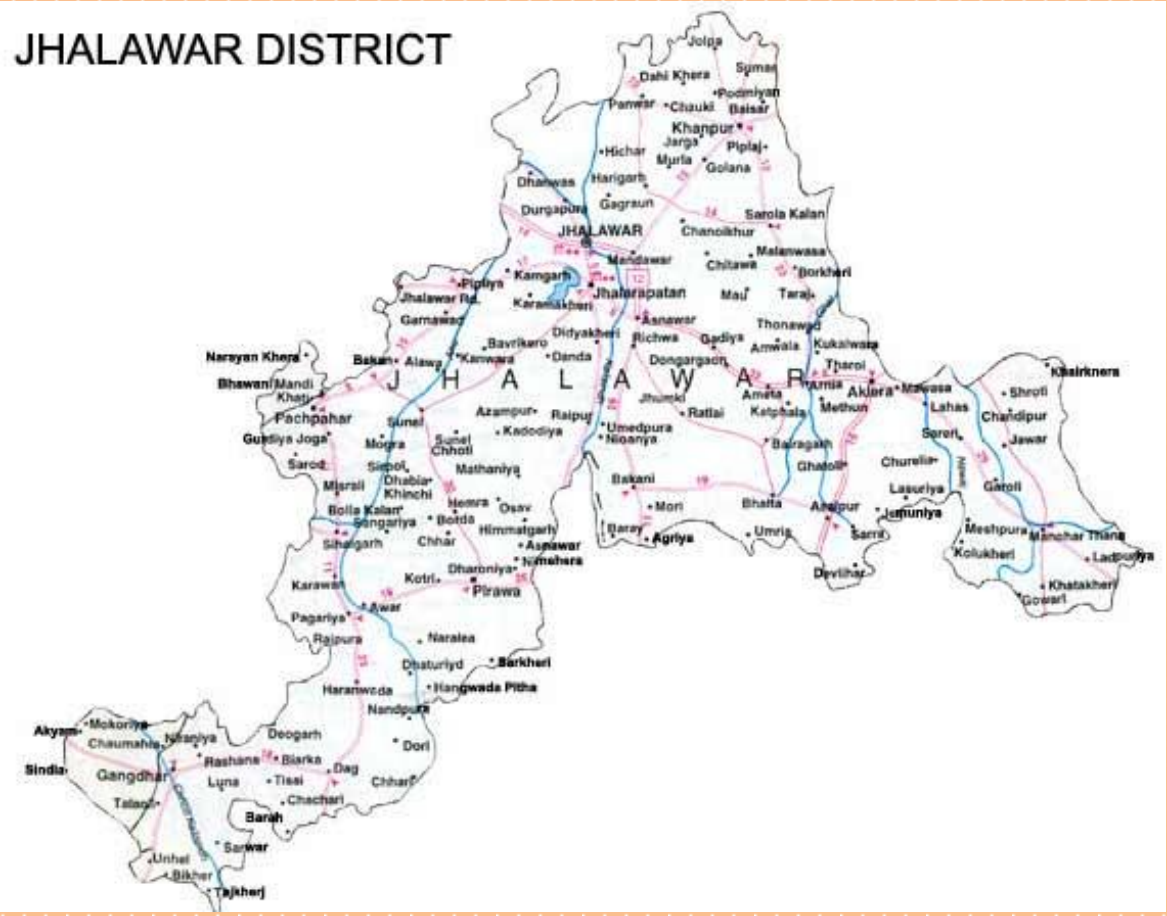
Sediment Control Efficiency
Sedimentation Yield, (tons/annum)
Drainage Area(ha)
Lease Area (ha)
Sedimentation Yield for the Site

After extraction of the mineral from the Reserve, the remaining Reserve as well as sediment replenishment of that year will be available for extraction every next year. As
the sediment control efficiency will gradually increase every year due to increase in mining activity, the sedimentation yields will also increase every year depended on velocity and yield of river water flow.



A map showing the route of rivers of the district is presented as

7. General Profile of the District :



Jhalawar district is one of the 33 districts of Rajasthan state in western India. The district is bounded on the northwest by Kota district, on the northeast by Baran district, on the east by Guna district of Madhya Pradesh state, on the south byRajgarh and Shajapur districts of Madhya Pradesh state and on the west by Ratlam, Mandsaur and Nimachdistricts of Madhya Pradesh state. The district occupies an area of 6219 km². The district is part of Kota division. The historical city of Jhalawar is the administrative headquarters of the district. The territory of the present district belonged to the princely state of Jhalawar till India's independence in 1947. This princely state was carved out from another princely state of Kota on April 8, 1838 by a treaty between the British and the rulers of Kota state. The district lies in the Hadoti region in southeast Rajasthan, on the edge of Malwa Plateau. The Kali Sindh River flows northward through the center of the district. According to the 2011 census Jhalawar district has a population of 1411129 . The district has a population density of 227 inhabitants per square kilometre (590/sq mi). Its population growth rate over the decade 2001-2011 was 19.55%. Jhalawar has a sex ratio of 946 females for every 1000 males, and a literacy rate of 61.50%. The district is divided into eight sub-divisions: Jhalawar, Aklera, Bhawani Mandi, Pirawa, Khanpur and Manohar Thana, Gangdhar & Asnawar.

A map showing the route of the district is presented as

Topography

Jhalawar is located in the south east corner of Rajasthan at the edge of the Malwa plateau. The State of Madhya Pradesh borders Jhalawar on the south west and in the east of Jhalawar district, while to the north west, north and north east are Ramganj Mandi, Sangod tehsils of Kota district and north east are Atru and Chhipabarod tehsils of Baran district. To the north the Mukandara Range, running from north-west to east. From a rough boundary between the two district but Khanpur is beyond the main range. The district is situated between 23o45'20'' and 24o52'17'' north latitudes and 75o27'35'' and 76o56'48'' east longitudes.

Jhalawar district is an expanse of fertile plain having rich black-cotton soil. It is watered by several rivers, giving it a verdant look. The largset river flowing through the area is Kali Sindh which flows through the territory to join the Chambal,

Rajasthan's largest river. Other rivers include Ujaad, Ahu, Parvan, Chavli, etc.The Aravali hills, which are the most ancient folded mountain range in India, crosses the region, roughly dividing the plains of hadoti from the Malwa plateau. These hills and the surrounding areas were once thickly forested and teemed with wildlife.

Items			Statistics
General Information			
i)	Geographical Area		6219 Sq. Km.
ii)	Sub Division/ Number of Tehsil/ Panchayat Samity Gram Panchayat Nagar Parishad Nagar Palika		08 08 08 252 01 04
iii)	Population(2011)		14,11,129
iv)	Normal annual rainfall		91.96 Cms
v)	Temprature		40° to 50°C in summer Drops to 2° C in winter
Geomorphology			
Major Drainage	**Ahu River and Kalisindh river & its tributries**		
Land used(2014-15)			
i) Forest area	127328 ha		
ii) Posture land and other grass land	47435 ha		
iii) Actual sown area	336562 ha		
iv) more than once sowed area	277487 ha		
v) Gross sown area	614049 ha		
Major soil type	Black cotton soil, Lithosols and Regosols		
Irrigation by different sources (District Statistical record 2014-15)	**No.**		**Area irrigated (in hectors)**
	Dug wells		147036
	Tube wells/bore wells		51866
	Tanks/ponds		215
	Canals		6538
	Other sources		2399
	Net irrigated area		208054
Principal Crops	Soyabean, Pulses, Wheat, Jowar, Coriandar, Repeseed, Mustard, Maize, Garlic, Citrus Frute.		
Pre dominant Geological formation	Basalt, Sandstone, shale (Deccan trap & Vindhyan Super Group) and Quaternary alluvium		

HYDROGEOLOGY		
Major Water bearing formations	Younger Alluvium, Sandstone, shale & Basalt.	
Depth to water level (Pre-monsoon, 2011) (mbgl)	8 to 16	
Depth to water level (Post-monsoon, 2011) (mbgl)	5 to 12	
Efforts of artificial Recharge & Rain Water Harvesting		
Projects completed by CGWB (No. & Amount Spent)		Nil
Projects under technical guidance of CGWB (Numbers)		Nil
Major Ground water problems and issues	Over-exploitation of ground water resources in 5 out of 6 blocks. Being underlain by hard rock formations, the area has limited availability of ground water and faces water scarcity during summer months.	

8. Physiography of District :

The district lies at the edge of Malwa plateau, an area of low hills and shallow plains.

The district falls in following 5 physical divison

1. The Muknadhara Range
2. The hills of Dag
3. The plateau region with low rounded hills
4. Central plains of Pachpahar and Jhalrapatan
5. The plain of Khanpur between two arms of Mukandhara

The whole of south Jhalawar has characteristics of the Malwa plateau, an area of rounded bare hills interspersed by plain. The Jhalawar plain stretches in a wide belt from Bhawani Mandi in the west almost up to Asnawar in the east and is bounded in the northern, eastern and southern sides by the Mukandhara hills.

9. Rainfall (in mm) in Jhalawar District:

Tehsil	2010	2011	2012	2013	2014	2015	Avg.
Aklera	532.30	1373.00	727.00	1792.00	902.00	1297.00	**1103.88**
Asnawar	601.00	1274.00	648.00	1429.00	979.00	1263.00	**1032.33**
Gangdhar	518.00	1277.00	1004.00	1406.00	458.00	1197.00	**976.67**
Jhalrapatan	476.60	1046.00	587.00	1425.00	915.00	1254.00	**950.60**
Khanpur	679.00	1303.00	532.00	1178.00	836.00	1175.00	**950.50**
Manoharthana	576.70	1430.50	819.00	1977.00	922.00	-	**1145.04**
Pachpahar	468.00	1015.00	898.20	1057.00	787.00	-	**845.04**
Pirawa	648.00	1052.00	974.00	1059.00	568.00	-	**560.20**

t

10. GEOLOGY & MINERAL RESOURCES OF JHALAWAR DISTRICT

The topography of the area is highly undulatory comprising continuous ridges and broad valleys of Vindhyan sandstones and shales, extensive wide plateau, flat topped conical and isolated hills and cultivated plains of Deccan Traps and the alluvial plains.

Geomorphologically, the district can be divided into four divisions.

1. The Mukundwara range in the central and north western part of the district.
2. Plains, hillocks and plateau of basaltic rock (Deccan trap) in the eastern, southern and western areas of the district.
3. Plains are well watered and agriculturally rich and,
4. Alluvium in dissected patches along river courses and stream Channels.

The principal rivers flowing through the district area Ahu, Kalisindh and parwan on the eastern side of the Dag plateau and Sirpa and Choti Kalisindh with its tributaries Chacharni & Kilor on the west. There are number of tributaries to these major rivers.

The rivers have dendritic to subdendritic pattern of drainage.The general ground level of the district is 340 mts. above MRL. The highest elevation is 528 mts. The district in general has a subtropical climate receiving moderate rainfal. The average rainfall in the district is 95 CM Temperature .fluctuates between 10° C and 47° C.

The people depend on cultivation and some are engaged in the stone quarries and trade work. Both rabi and kharif crops are grown in the area. Wheat, Jwar. Gram. Dhania ,Opium etc are the main crops of the area.

The Vindhyan and the Deccan trap terrain supports fairly thick vegetation with teak Babool, Mango, Mahua, Neem, Khair etc.The hill slopes covered with thm soil. patches support thin vegetation.

Geology:

Jhalawar district comprises of rocks of Vindhyan super group and Deccan traps. About 60 % of the district is covered by Deccan trap flows.

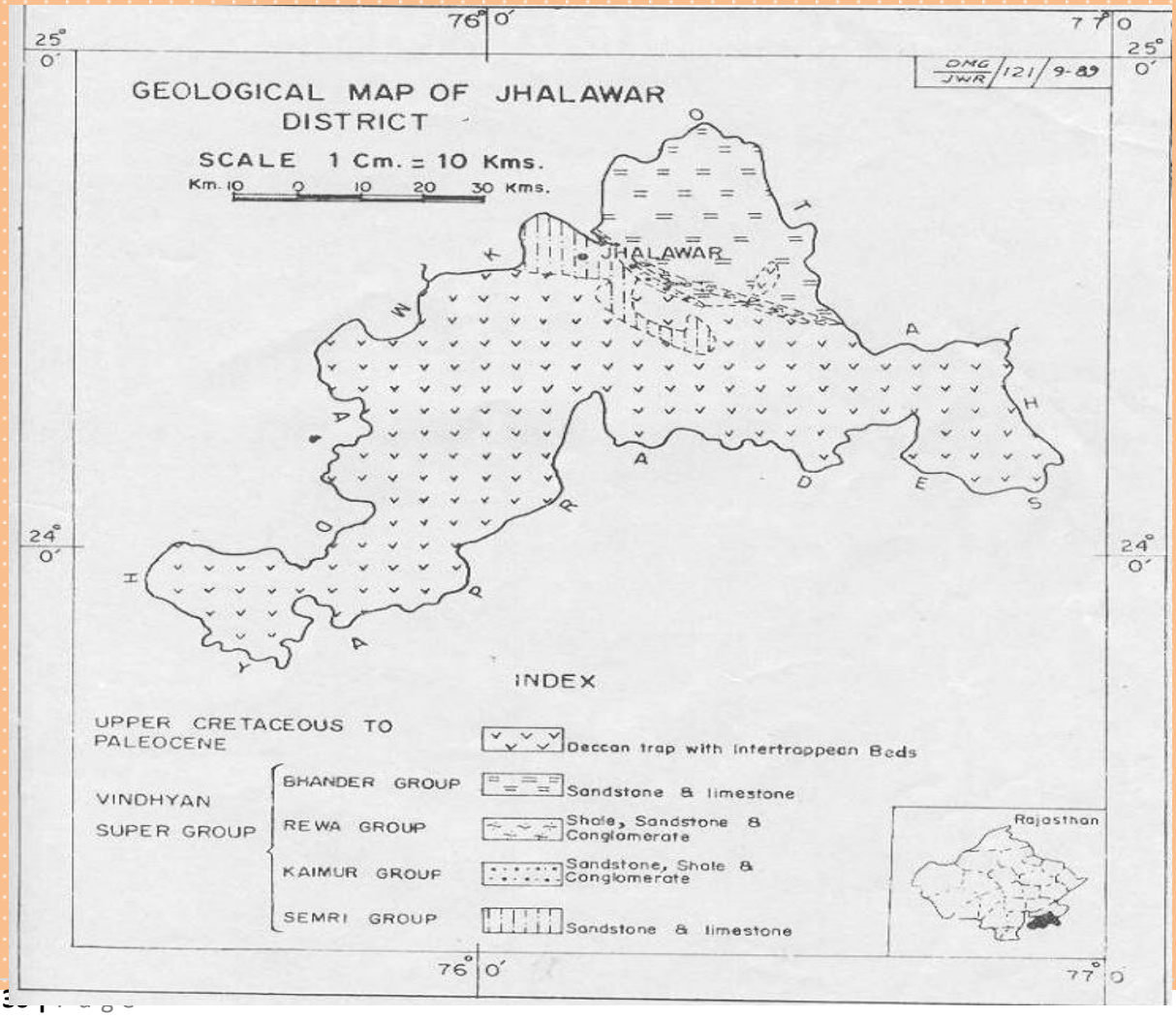
The pretrappean rock formations comprise Lower and Upper Vindhyans represented by Jhalrapatan sandstone, Suket Shales and limestone, Kaimur sandstone, Rewa shale, sandstone and conglomerates, Ganurgarh shales, Lower Bhander sandstone and limestone, Sirbhu shales and limestone.

The Vidhyan sandstone and shales form linear hills trending northwest to southeast and velleys. They are exposed around Jhalawar and to its north east and north west. These rocks have been overlain by twelve basaltic flows between 280 mts. to 481 mts. R. L.

Around Dag and Chaumahala areas, the flows have undergone widespread lateritisation. Both fossiliferous and imfossiliferous intertrappean clay, chert limestone beds are also present.

The general stratigraphic sucession of the district is as under

Recent			Alluvium and soil.
	Deccan traps.		Twelve basaltic flows (7 mts. to 45 mts thick) with intertrappean beds,
		Sirbhu shales	Shales with siltstone, limestone intercalation.
	Bhander group	Lower Bhander Sandstone	Sandstone with shale intercalations.
Upper Vind-hyans		Bhander limestone	Impure argillaceous stromatolitic limestone. intercalations.
		Ganurgarh shale	Variegated shale.
	Rewa group	Rewa sandstone	Sandstone, grit and conglomerate with shale
		Rewa shale	Brown, purple, green colour shales.
	Kaimur group	Kaimur sandstone	Sandstone, grit and conglomerate.
Lower Vindh-yans	Semri group	Suket shale	Khaki brown, purple and grey colour shale.
		Suket limestone	Limestone.
		Jhalrapatan sand-stone	Sandstone with intercalated shales.



Mineral Resources:

A-Metallic Minerals:

Due to absence of metamorphic rocks to which most of the metallic minerals are associated, no major metallic mineral of economic importance is found in Jhalawar district. However, small occurrences of copper are found around Jhalawar.

I. Copper:

There are few old workings of copper just 1 Km. north of Jhalawar town where Malachite

and Azurite are present in Jhalrapatan sandstone of Lower Vindhyans.

Chalcopyrite was noted in a well cutting along shear and breccia zone. Selective samples from this well have shown good copper values. Surface indications, geophysical and geochemical prospecting by the department indicated encouraging resu1ts. However, further work is yet to be taken up.

B- None-metallic Minerals :

1. Bentonite:

Bentonite is a variety of clay possessmg inherent bleaching properties. It is of great

commercial importance specially in chemical industries, oil drilling, decolourising, vegetable oils, rubber industry, foundries etc.

There are various bentonite deposits in Jhalawar district but so far these have not been put to any industrial use because these are mainly non-swelling type and will necessarily require activation. Owing to poor infrastructural facilities and because of its low cost, no serious efforts have been made for its industrial utilization.

The department of Mines and Geology has carried out intensive survey to locate and prospect bentonite deposits in various parts of the district. There are large number of occurrences spread over in Pirawa, Pachpahar and Jhalrapatan tehsils.

1. Mathniya-Bhandar Tehsil Pirawa.

2. Khetakheda, Tehsil Pirawa.

3.Chandi kheri, Teh. Jhalrapatan

4. Karodiya-Quadir nagar-Chhoti sunel, Teh. Pirawa.

5. Azampur, Semlikham etc., Teh. Pirawa.

6. Low grade bentonites found in various parts of the district.

Mathniya-Bhandar :

The mathniya deposit is found spread over an area of about 3.50 sq. Kms. around Mathniya,Bhandar and Naklang. This bentonite is best among all the deposits of Jhalawar. On the basis of pitting-trenching 0.8 million tonnes reserves have been calculated in Mathniya block and 0.47 million tonnes in Bhandar block. The chemical analysis and physical characteristic of the mineral are tabulated below:

SiO2	Varying	Between	36.02 to 49.76
Al2O3	"	"	5.47 to 13.46
Fe2O3	"	"	8.30 to 11.66
CaO	"	"	1.40 to 13.72
MgO	"	"	2.01 to 6.04
LOI	"	"	22.50 to 24.36
Na2O3	"	"	0.29 to 0.81
K2O3	"	"	0.10 to 0.41

Gel value :	Between	9.0 to 10.0
Swelling Index:	,,	7.0 to 22.0
PH:	,,	8.1 to 80.0

The bentonite responds much to acid actio vation and can be utilised in chemical industries, decolorising vegetable oil, foundries, rubber,ceramics etc. after activation.

12. Khetakheda:

The area has been investigated by pitting calcium trenching followed by drilling.

The based bentonite is found spread over an area of about 2 sq kms. A reserve of 13 million tonnes were calculated on the basis of drilling. Bentonite occurs at a depth of 0.50 to 14.70 mts. under an overburden of soil, traps and calcareous chert. Its thickness varies

from 0.25 to 5.95 mts. The swelling index varies from lata 21 and gel value from 7 to 11.

The bentonite is non swelling type and does nO£ respond to acid activation but may respond to alkali activation to some extent. Moreover, in most of the bore holes, it was found at a depth of more than 5 mts. So the working of this deposit may not be economical presently.

Chandi Kheri:

About 0.57 million tonnes of grey bentonite and 4.536 million tonnes of grey mixed with red bentonite found in area of 2.75 sq. kms. were proved by pitting trenching. It was foundthat these are calcium based non-swelling type requires pretreatment (activation) before marketing.

Karod iy a-QuadirnagarChhuti-Sunel :

The grey bentonite mixed with red variety similar to that of that of Mathniya has been found near Karodiya, Quadir nagar. Chhoti-Sunel, Kundlapratap, Charelia Kesharpura etc. Extensive pitting trenching was carried out in Quadirnagar, Chhoti sunel area. The bentonite zone is found in all the hill slopes around these villages. The width of the zone varies from 5 to 10 mts. and thickness 2 to 5 mts. Reserves of more than 5 million tonnes are expected from these area.

Low Grade Bentonite:

Huge deposits of reddish pink bentonite are widespread in Jhalawar district. It is poor

in quality, important localities are :-

1. Near village Chauki, 20 M. T. of reserves arc inferred.

2.Near Gurariya Joga, about 20 M. T. of poor grade bentonite are available.

In addition to the above occurrences red bentotite is found near Jhalawar road, Guraria Jhala, Pagariya, Semlikham Gurara etc. areas.

Though large deposits available in Jhalawar district, of bentonite are but no serious

efforts have been made so far for its industrial utilisation. However recently some parties have shown interest in these deposits and it is hoped that mining operations will start soon.

Limestone:

High Grade Limestone:

There are number of intertrappean high grade limestone patches in Jhalawar district

having limited extent, both on surface as well as in depth. Most of the patches are associated with varying amount of chert ranging from 10% to as much as 70%. The limestone when manually separated from chert is of high grade containing more than 50 % Cao and can be utilized as sweetner in cement industry.

Arogonite is also foand associated with high grade limestone The thickness of the cherty limestone varies between 0.5 m. to 1.5 mts. only.

As a result of the investigations carried out by the department about 30 cherty limestone patches scattered in different parts of the district have been located near Jhalawar road, Jhinkhriya, Kotri, Kishanpura, Karmakheri, Napaniya etc. The dimensions of these patches vary from 30 X 20 mt. to 1200 X 500 mts. but most of the patches have limited extent (about200 X 200 m.) and contain about 50% of chert. However few patches are promising which have comparatively less amount of chert and have reasonably good extent. These are near Jhalawar road, Kotri-Gardhankheri, Jhinkhriya and Kotrikhurd. After discarding chert manually, some bands of limestone have following variable chemical composition.

CaO : 47.32 to 54.04 %

SiO2 : 0.82 to 11.66 %

MgO : 0.80 to 3.80 %

But the high grade limestone contaning more than 50% Cao can only be available after selective mining which may not be more than 60% of the limestone part of the rock.

About 1.5 million tonnes of limestone may be available in these three areas.

Most of the mining leases are also actively operating in these localities. In additional to this, a reserve of about 1.00 million tonnes of limestone is also expected from rest of the occurrences.

From the above it may be said that the intertrappean limestone of Jhalawar are not of much importance because of their limited extent, erratic nature with cherty bands. Therefore the limestone after selective mining can only be utilised either as sweetner in cement industry or for making lime.

LOW Grade Limestone:

The low grade limestone belonging to Suket shales of lower Vindhyans and Sirbhu shales of upper Vindhyans is widespread near Gagraun and Sarola kalan respectively. The limestone is generally of low grade siliceous, dolomitic and shaly contents.

2.21 Gagraun Limestone:

A limestone band having 8 Kms. strike length and 60 to 130 mts. width is exposed

near Gagraun. Probable reserves of about 30 million tonnes of limestone may by available.But the limestone is intercalated with shaly limestone and shales. It is highly erratic in calcium carbonate percentage and only small cement grade limestone bands are available having thickness of less than a meter to maxium 4 mts.

Laterite:

Laterite occurs as capping over Deccan trap hills in south western part of Jhalawar

district. Extensive deposits are found near sarod, Mishroli, Kolvi, Gunavi, Binayaga, Kysara and around Dag, varying in thickness from less than a meter to over 10 mts. This rock was excavated locally due to its soft nature to buildtemples and caves during the Buddhist period such constructions arc seen in Kolvi, Binayaga etc

One area near Sarod is taken on lease by Mis Manglam cement but presently there is no

production.

Investigations are continued in the area to assess the laterite deposits.

5.00 Chert, Agate Chalcedony :

The trap rocks are store-house of chalcedony chert, agate etc. In Jhalawar district occurrences of agate and associated crypto-crystalline silica products are found spread in many localities. They are found scattered in plains as well as in hill slopes.

Important occurrences are:-

1.Near village Nasirabad on Richwa-Bakani road.

2. Mundlya Kheri south of Jhalarapatan.

3 Diwallkhera, Borband, Donda, Semli Bhawani etc. Thesil Pirwa.

4. Mariavada Goverdhanpura, Khokhariya etc, between-Bhawanimandi and Dag.

5. Near Garnawad.

6. Near Ruparel

In addition to these areas such abrasive stones are found as scattered pieces almost in every locality of Deccan trap in Jhalawar distt. No regular mining is being done for these minerals but the mineral can be utilised in abrasive industry and some part of it having variegated colours is of Semi-precious nature.

6.00 Lithomergic Clays:

The lithomergic clays associated with laterite cappings are found near Sarod, Dag, Gunavi etc. villages but the draw back with these clays is higher iron content which in not separable by washing and electromagnetic separation.

Building Stones:

Flaggy Limestone

(Kotahstone)

Flaggy limestone yielding slabs similar to that of Ramganjmandi has been located in Jhalawar district Mining has already commenced near Aroliya, Paroliya, Biriyakheri, Nandiyakehri, Jhinjhni, Pipliya, Runji villages.

The limestone belonging to lower Vindhyans is found below Deccan traps at a depth of about 25 mts. Indications of similar limestone have been found in two scout bore holes, wells and handpump sections between Aroliya and Kishanpura near Mangal, Chandloi, Kishanpura, Piplod, Khanpuriya .etc. villages at a depth of 15 to 25 mts.The entire area is covered with Deccan trap not much is known about the underlying limestone

Initially a comprehensive scheme of exploration in 154 sq. kms. area between, Aroliya and Mangal was proposed. Recently, department has delineated few plots for mining leases in these areas. The flaggy limestone of greenish grey colour has been encountered between depth of 28 and 47 mts.

Flaggy Sandstone:

Sandstone in the form of slabs and pillars are mined ,on large scale in Jhalawar district. There it is associated with two horizons with (i) Jhalrapatan sandstone of lower Vindhyans and (ii) Lower Bhahder sandstone of upper Vindhyans. The important mining areas are: Loharia-ki-Dhani, Manak chauk, Bagdhar, Bakaspura, Asnawar Bhanwrasa, Bhalta, etc. all belonging to Jhalrapatan sandstone. The Bhander sandstone quarries exist near Ambala and Laxmipura.

Masonary Stones:

There are huge deposits of sandstone in the district. The non flaggy sandstone is quarried and used as masonary stone at number of places around Jhalawar,Asnawar,Jhalrapatan etc.In most of the flaggy sandstone areas, masonary stone is found as overburden.In addition to this, trap rock, limestone, laterite etc. are also produced as masonary stone by local villagers.

11. Conclusion:

The mining of minor mineral plays an important role in Jhalawar district to generate employment, money trasaction and to fulfill the requirement of employment in the district. The mining sector of the district gives employement to the thousands of people directly in mining areas and indirectly as transportation, industralisation etc. Previously the mining of Limestone, sandstone & masonery stone was done in happazard way as a labour intensive industry. Now a days mining of Limestone, sandstone & masonery stone is going on systematically, scientifically and in mechanized manner. Now reach upto the available deposits in the area with complete benefication of the mineralis possible. The waste generated is also utilized completely and in systematic manner up. The abundant and closed mines help as water reservoir and recharging the ground water.

The Limestone, Sand Stone and Masonry Stone Produced in the District area help in the Dovelopment of infrastructures in rural and urban areas to fufill the demands of development locally and in the adjoining districts of Rajasthan. The deposits of mineral Bazari available in the rivers and nallas in district area replenished from time to time naturally. It fulfill the requirement of infrastructure development and masonary works at local level in rural and urban areas without harming river environmental systems.

The Limestone produced in the district area is also exported to so many other countries due to their attracting natural colours. The mines and Geology depertment and district administration with the help of other depertments are well aware of health of mining labour, labour welfare, eduction and development of mining area.

12. References

1. Economic and Social analysis Year 2014-15(District Jhalawar),
2. District Atlas Jhalawar, Ground Water Department,
3. Jhalawar, Ground water information report.
4. Jhalawar Water resource department report.

यह डिस्ट्रिक्ट सर्वे रिपोर्ट पृष्ठ संख्या 1 से 44 तक को प्रमाणित किया जाता है।

सहायक खनि अभियन्ता
खान एवं भू विज्ञान विभाग
झालावाड़

MUKESH SHARMA
RIVER BED SAND (MINOR MINERAL) MINE
TEHSIL – PIDAWA, DISTRICT – JHALAWAR (RAJASTHAN)

ANNEXURE - V

Date: 26.03.2018

To,
The Principal Secretary
Department of Mines, Secretariat
Govt. of Rajasthan, Jaipur (Rajasthan)

Sub:- Request for Extension in validity of Letter of Intent (LOI) for our proposed project of "River Bed Sand (Minor Mineral) Mine" of applicant Mukesh Sharma, situated near revenue villages of Tehsil – Pidawa, District - Jhalawar, Rajasthan for an area of 905.206 hectare.

Reference: 1) LOI Extension Letter vide no. P.9(7)Khan/Group-2/2013 dated 13.03.2018 **(Annexure-I)**
2) Original LOI Letter vide no. P.9(7)Khan/Gr.-2/2013 dated 25.09.2013 **(Annexure-II)**

Sir,

With reference to above, we would like to submit that our project for Environment Clearance was considered (Agenda Item No. 2.5) in 29th Meeting of The Reconstituted Expert Appraisal Committee (Non-Coal Mining) on dated 22.03.2018 at Ministry of Environment, Forest & Climate Change, New Delhi. Copy of agenda enclosed as **Annexure-III.**

Hon'ble EAC committee heard the proposal at length and have in principally agreed for sanction of Environment Clearance as all the statutory requirements were fulfilled and the same will accorded shortly.

We request your goodself to kindly extend the validity of Letter of Intent for Three Months as this will take minimum 45 days in issuance of EC as per procedure.

Thanking You,

Yours Faithfully,

For River Bed Sand Mine, Jhalawar

(Mukesh Sharma)
Applicant

Copy To: 1) Mining Engineer, Kota, DMG, Rajasthan
2) AME, Jhalawar, DMG, Rajasthan