



TSPL/MIN/MoEF/ENV/17-18/

Srikakulam,  
30-06-2017.

To  
The Regional Office (South Eastern Zone)  
Ministry of Environment, Forests and Climate Change  
1<sup>st</sup> and 2<sup>nd</sup> floor, HEPC Building, No.34,  
Cathedral Garden Road, Nungambakkam,  
Chennai – 600034

Dear Sir,

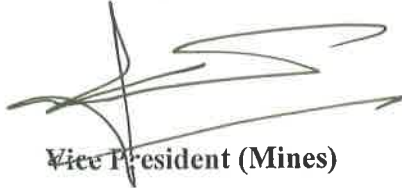
Sub: Srikurmam Mineral Sand Mine of Trimex Sands Pvt. Ltd., Village Vatsavalasa, Gara Mandal, Srikakulam District, Andhra Pradesh., Submission of half yearly Environmental Clearance compliance report for the period of Oct'2016 – Mar'2017 – Reg.

Ref: Environmental Clearance vide No.J-11015/175/2011-IA.II (M) dated 17-04-2015.

With reference to the subject Environmental Clearance granted vide reference above, we are submitting the half yearly EC compliance report for the period of Oct'2016 –Mar'2017.

Thanking you

Yours truly



**Vice President (Mines)**

CC to : 1. APPCB, RO, VZM  
2. CPCB, ZO, Bangalore

**Trimex Sands Pvt Ltd:** Vatchavalasa (V), Gara Mandal, Srikakulam District - 532 404, Andhra Pradesh, India.  
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**CIN :** U14299TN2004PTC071437

## Compliance report on E.C Conditions

**Environmental Clearance Vide No.J-11015/175/2011-IA.II (M) dated 17-04-2015**

### **A. Specific conditions.**

S.No	Conditions	Compliance
1	The 325 dunes recorded in the TSPL area of which, 13 dunes exist beyond 100m from the high tide, shall be protected and maintained. All effort should be made to ensure that existing natural vegetation of these dunes are fully protected.	Dunes which are existing beyond and up to 100mts from HTL are protected. Also efforts are taken to protect the vegetation on these dunes.
2	Rs. 1.80 crore proposed for Wildlife Conservation plan should be deposited within one month of issue of EC letter for implementation of Wildlife Conservation plan by the Department.	As per the approved wildlife conservation plan the amount required for conservation is of Rs.1.8 crore for the period of 10 years. We have requested the Ministry of MoEF to make the payment every year and it is pending. However, we have deposited for an amount of Rs. 15.10 Lakhs for FY 2015-16 on 14.03.2016 (Annexure-1A) and Rs.15.10 Lakhs for FY 2016-17 on 17.03.2017 (Annexure-1B) to the Principal Chief Conservator of Forests & Chief Wildlife Warden, Hyderabad through the Divisional Forest Officer, Srikakulam. Further, as advised by DFO vide Rc No. 1316/2015-A1, dated 16.06.2017, we would be comply on or before 15th July 2017 vide our letter dated 22.06.2017 (Annexure-1C).
3	The Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the standing Committee of National Board of Wildlife, as may be applicable to this project.	Not Applicable.
4	The Environmental clearance is subject to obtaining clearance under the Coastal Regulation Zone, Notification, 2011 to this project.	CRZ Clearance obtained Vide F.No.11-67/2013-IA-III dated 28-04-2015.
5	Necessary AERB clearance shall be obtained under the Atomic Energy (Radiation Protection) Rules, 2004 for operation of BSM (beach Sand Minerals) facility.	AERB License has been obtained and copy of same submitted to RO vide lr. no. TSPL/MIN/MoEF/ENV/15-16/921 Dated 28-11-2015
6	The mining activity will commence only after taking	No ground water drawal is required

	necessary approval of water drawl from the concerned Authority of State Government.	during mining activity. However, approval is taken from the State Govt for drawal of water from the Vamsadara river ( <b>Annexure – 2</b> ).
7	The mined area should be replenished immediately.	The tailings generated after concentrating and separating the minerals at the plants is being used for concurrent backfilling of the mined out lands ( <b>Annexure 3</b> ).
8	The mineral separation plant/pre-concentration plant should be located outside coastal Regulation Zone area.	Mineral separation plant and pre-concentration plants are located outside CRZ area. Map enclosed as <b>Annexure -4</b>
9	Implementation of Wildlife Conservation plan for schedule – I species. The conservation plan should be species specific, should have allocation of budget, time frame and agencies to be responsible for the implementation for each of the target species, Conservation plan shall be approved by the State Government.	Wildlife Conservation Plan for schedule – I species is approved by the Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, Hyderabad. Submitted vide lr. no. TSPL/MIN/MoEF/ENV/15-16/921 Dated: 28-11-2015
10	No mining shall be carried out in the inter-tidal zone and within 100m from HTL towards landward side.	Mining is carried out beyond 100m from HTL towards landward side and beyond 100m from HTL area is demarcated with boundary pillars with barbed wire fencing to ensure that no mining is carried out. Enclosed as <b>Annexure-5</b> .
11	Identification of sand dunes shall be done prior to undertaking mining activities and their conservation shall be as per MoEF guidelines from time to time. No flattening of sand dunes shall be carried out. Dressing or altering the sand dunes, hills, natural features including landscape changes shall not be carried out for beautification/recreational purposes. Precautions shall be taken to prevent intrusion of sea water into hinterland to avoid problem of submersion/flooding.	All sand dunes are identified before undertaking mining activities, by the ENVID group, Andhra University, Visakhapatnam. All these dunes are being protected and maintained as per MoEF guidelines and approved plan. No flattening, dressing or altering and landscape changes of sand dunes are done. All precautions as per the recommendations of the Hydro Geological study by the Andhra university are being implemented to prevent intrusion of sea water into hinterland.
12	Fencing of entire lease area barrier of 100 meters towards sea to prevent olive turtle nesting ground.	Towards landward side 100m from HTL line is demarcated with pillars along with barbed wire fencing to ensure that no mining is carried out between 100m HTL line and HTL. ( <b>Annexure -5</b> )

13	Tailings and rejects shall be filled back systematically after separating the heavy/rare minerals. Sand tailing shall be put back at the mined area on completion of extraction of rare minerals. Afforestation shall be taken up with suitable species on mined out areas to prevent erosion of shoreline. Under no circumstances, the tailings will be dumped in agricultural lands, wet lands, paddy fields, canals and the backfilling will be carried out only in the inland mined out areas.	Sand tailings and rejects are being filled back to the mined out areas systematically after separating the heavy minerals. Afforestation is being carried out with different species on mined out areas to prevent erosion of shoreline. No waste is dumped outside the mining lease area in agricultural lands, wet lands, paddy fields, canals and the backfilling is carried out only in the inland mined out areas.
14	The mining activities shall be regulated in such a way that there will be minimum disturbance to the fauna during spawning and brooding period i.e. from November to March.	It is being complied by avoiding working near the 100m line during the season and also by opening up minimum area at any point of time.
15	Mining shall be carried out in phases only. Simultaneous opening of entire beach front is not permissible, There shall be uninterrupted access to the seafront, Minimum 20m width of approach roads shall be provided where necessary.	Mining and backfilling operations are done concurrently and in phases. No mining is done near the beach front. Uninterrupted access is provided to the beach with approach road.
16	Tapping of ground water is expressly prohibited in CRZ area. A network of ground water observation wells within and outside the lease area shall be established for regular monitoring of ground water quality and water levels in the surrounding area. These analysis as per norms much be documented and sent regularly (every three months) to the Regional Office MoEF.	No ground water is tapped from the CRZ area. Established 10 Nos. of ground water observation wells within and outside the lease area and monitoring is being carried out and reports submitted to the regional office of the MoEF quarterly. Enclosed observation well's location map As <b>Annexure - 4</b> and monitoring reports as <b>Annexure - 6</b> .
17	The fresh water gradient towards the sea will be maintained by close monitoring of water table. Piezometer wells to be constructed and monitored.	7 Nos. of Piezometer wells are provided and monitoring is being carried out. Enclosed monitoring data as <b>Annexure-7</b> .
18	Mining shall be carried out by permitted methods without the use of any forms of blasting. Use of explosives for blasting is prohibited. The mining should be stated near sea side and mining should be progressed parallel to sea coast so that inland water table is not disturbed.	No blasting is carried out. The mining was started near sea side and mining is progressed parallel to sea coast so that inland water table is not disturbed.
19	Radiation survey shall be carried out as stipulated by the Atomic Minerals Directorate for Exploration and research, Department of Atomic Energy, Government of India to ascertain the effects of radioactive minerals.	Radiation survey is carried out as per the directive of the Atomic Energy Regulations Board (AERB), DAE to ascertain the effects of radioactive minerals and reports submitted periodically ( <b>Annexure - 8</b> )
20	Occupational health and safety measures, especially concerning radiation hypertension, diabetes etc,	Occupational health check up and safety measures, especially concerning radiation

	should have health check-up once in six months.	hypertension, diabetes etc. is carried out once in six months and records are maintained.
21	The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Andhra Pradesh and effectively implement all the conditions stipulated therein.	We have obtained Consent to Operate from the State Pollution Control Board, Andhra Pradesh on 30.10.2015 and it is valid upto May 2018. The copy of same has been submitted vide Ir.no. TSPL/MIN/MoEF/ENV/15-16/921 Dated: 28-11-2015
22	Implementation of conditions laid down in the Mining Plan along with progressive Mine Closure Plan which has been approved by Indian Bureau of Mines, Ministry of Mines vide Letter No. AP/SRK/MP/Garnet-2/Hyd dated 26.09.2003 and 18.06.2009.	Mining Plan conditions are being implemented along with progressive Mine Closure Plan which has been approved by Indian Bureau of Mines vide letter no. AP/SRK/MP/Garnet-2/Hyd. dated 26.09.2003 & 18.06.2009 and Modified Mining Plan approval vide letter no. AP/SRK//MP/Garnet-Sillimanite-7/Hyd. dated 02.03.2017 ( <b>Annexure-9</b> ).
23	Implementation of conditions laid down in the Mining Plan which has been approved by atomic Minerals directorate for Exploration and Research, Department of Atomic Energy vide Letter No. AMD/MPA/3M/TRIMEX/03, dated December 08, 2003 and Mining scheme approval vide no. AMD/MPA/3M/TSPL/720ha/2009 dated 17.08.2009.	Mining Plan conditions are being implemented as approved by Atomic Minerals Directorate for Exploration and Research, Department of Atomic Energy vide letter no. AMD/MPA/3M/TRIME/03, dated 08.12.2003 and Mining Scheme approval vide no. AMD/MPA/3M/TSPL/720ha/2009 dated 17.08.2009.
24	Implementation of the Conditions, if any, as laid down by Andhra Pradesh State Coastal Zone Management Authority.	All conditions are implemented as detailed, Proof submitted vide letter No. TSPL/MIN/MoEF/ENV/16-17/1030 dated 28-11-2015
25	Effective safeguard measures such as conditioning of material with water, regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	In dry plant, ambient dust is arrested from the generating points by dust extraction system consisting of de-dusting mechanism, cyclone and bag filters etc. Water sprinklers are installed at MSP rejects discharge point and water tankers are deployed for haul road wetting. Ambient Air Quality monitoring is being carried out as per norms prescribed by the PCB. Ambient air quality monitoring reports are enclosed as <b>Annexure - 10</b>
26	Regular monitoring of ground water level and quality	Ground water monitoring is being carried

	shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers. during the mining operation. The periodic monitoring [(At least four times in a year-pre-monsoon(April-May),monsoon (August), post-monsoon(November)and winter(January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment, Forests & Climate Change and its Regional Office Chennai, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity necessary corrective measures shall be carried out.	in the observation wells situated within and outside the lease area. In addition, 7 Nos. of piezometers are installed in the mining lease area and water table, salinity, pH, TDS etc are monitored. It is observed that there is no depletion in ground water table or negative change in the quality. Details are submitted to all authorities as directed. Enclosed <b>Annexure - 11</b>
27	The project proponent shall ensure that no natural watercourse and /or water resources shall be obstructed due to any operations.	No obstructions are made to any natural water course or water resources.
28	Regular monitoring of water quality upstream and downstream of adjoin water bodies shall be carried out an record of monitoring data should be maintained and submitted to Minister of Environment,. Forests & Climate Change its Regional office, Chennai, Central Ground water Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	No water body (except sea) is available within or adjacent to the mining lease area. However, water monitoring is done in a pond situated near the mining lease area. ( <b>Annexure -12</b> )
29	As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analyzed for their mineralogical composition and records maintained.	Ambient Air Quality Monitoring is being carried out. Enclosed reports as <b>Annexure - 10.</b>
30	Compliance status shall be submitted to the Minister of Environment, Forests & Climate Change its Regional office, located at Chennai on six monthly basis.	Compliance status is being submitting on six monthly basis to RO, Chennai. Last report was submitted vide letter No. TSPL/MIN/MoEF/ENV/16-17/1039 dated 29-11-2016
31	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	In dry plant, ambient dust is arrested from the generating points by dust extraction system consisting of de-dusting mechanism, cyclone and bag filters etc. Water sprinklers are installed at MSP rejects discharge point and water tankers are deployed for haul road wetting. Ambient Air Quality monitoring is being carried out as per norms prescribed by the CPCB. <b>Annexure - 10.</b>
32	Vehicular Emissions shall be kept under control and	Vehicular Emissions are kept under

	regularly monitored. Vehicles used for transportation of ores and other shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. The vehicles shall be covered with a tarpaulin and shall not be over loaded.	control and regularly monitored. Vehicles used for transportation of ores are having valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. The ore carrying vehicles are covered with tarpaulin and not over loaded as informed.
33	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Chennai.	Will be complied.
34	Implementation of Action plan on issues rose during Public Hearing. As committed by the project proponent during the public hearing shall be implemented and the report shall be submitted to the Regional Office of the Ministry every year.	All the commitments made during the public hearing are being implemented and Proof submitted vide letter No. TSPL/MIN/MoEF/ENV/16-17/1039 dated 29-11-2016. CSR expenditure for the year 2016-17 enclosed as <b>Annexure - 13</b> .
35	During initial mining stages, a green belt of 7.5m barrier all around the mine lease boundary shall be made. Subsequently to develop 50m barrier zone with 5-tier plantation inside mine lease in a progressive way near the active mining sites. Adequate plantation shall be raised in the ML area, haul roads, vacant area etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. The density of the trees shall not be less than 2500 plants per ha. The company shall involve local people with the help of self-help group for plantation programme. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Regional Office of the Ministry every year.	A green belt of 7.5m barrier along the ML boundary has been taken up wherever mining has been completed and also it is continuing. We have agreed to take up 5-tier plantation from this year onwards since it is stipulated in 2015 EC. Afforestation is being carried out in mined out and backfilled lands with in-house nursery saplings and saplings sourced from the forest dept. Greenbelt development is under progress around mine lease boundary and vacant areas. Density of plantation is more than 2500 plants per ha carried out in consultation with the local DFO. Details of plantation carried out, extent of land covered and green belt developed during the year 2016-17 is attached as <b>Annexure -14</b> .
36	Adequate air monitoring stations shall be installed in areas of human habitations near the mine and the results of ambient air quality shall be maintained and regularly submitted to the Regional Office of the Ministry. The monitored data for criteria pollutants shall be regularly uploaded on the company's website and also displayed at project site.	Out of 10 AAQ monitoring stations 4 number of stations are located near the habitations and the AAQ monitoring is carried out regularly through approved external laboratory. The levels are within the limit. Enclosed reports as per <b>Annexure – 10</b> .
37	The waste water from the mine shall be treated to conform to the prescribe standards before discharging in to the natural stream. The discharged water shall be	No water from the mine or plant is discharged into any natural stream. Water used for mineral concentration is pumped

	Ministry of Environment & Forests, Central Pollution Control Board and the State Pollution Control Board.	back filling and water is recovered back to the plant through water treatment plant/thickeners for recycling for process.
38	A final mine closure plan, along with other details shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.	Will be complied.

#### B. General Conditions:

S. No	Condition	Compliance
1	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	There is no change in the mining technology and scope of working.
2	No change in the calendar plan including excavation, quantum of beach sand mineral i.e. Ilmenite, Rutile, Zircon, Monazite and Garnet and waste should be made.	There is no change in the calendar plan including excavation, quantum of beach sand mineral i.e. Ilmenite, Rutile, Zircon, Sillimanite and Garnet and Waste. Details of production of RoM, minerals and waste during the last 6 months is enclosed as per <b>Annexure- 15</b>
3	At least four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e. PM <sub>10</sub> ) and NO <sub>x</sub> monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board/Central Pollution Control Board once in six months.	The AAQ is monitored in the core as well as in the buffer zone at 10 locations through external approved laboratory for PM <sub>10</sub> and PM <sub>2.5</sub> and NO <sub>x</sub> . The parameters are within the limit. The location of the AAQMS were decided in consultation with State Pollution Control Board based on the meteorological data, topographical features and environmentally and ecologically sensitive targets. The frequency of monitoring is carried out as directed by the SPCB in their consent. Enclosed AAQM reports as per <b>Annexure - 10</b>
4	Measures should be taken for control of noise levels below 85 db in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs.	Noise monitoring being carried out through external agency and the levels are within the limit. Enclosed reports as per <b>Annexure – 16</b> Workers engaged in HEMM operation are provided with ear muffs.
5	There will be zero waste water discharge from the plant.	The water used for mineral processing activities is pumped into the mining pit along with the tailings in the form of slurry and no waste water is discharged outside. For the toilets and canteen waste water septic tanks and soak pits are



		provided.
6	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Personnel working in dusty areas are provided with personnel protective equipment. Details of the PPE issued during the period are enclosed as <b>Annexure – 17</b>
7	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Occupational health surveillance programme of the workers is being carried out regularly as per the Mines Act and records are maintained.
8	A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the Organization.	We have set up a separate environment management cell with qualified person under the control of Senior Executive. Monitoring of environmental parameters are carried out through external approved laboratories.
9	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Chennai.	We have allocated an adequate amount for environment management activities and it is kept in a separate account and also not diverted for any other purpose. Year wise expenditure is reported to RO, Chennai. Expenditure during the period for financial year 2016-17 given as <b>Annexure - 18</b>
10	The project authorities should inform to the Regional Office located at Chennai regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	We have informed to RO, Chennai regarding EC/CRZ approvals vide our letter dated 05.05.2015. Also intimated the RO about final approval for the project i.e. CFO dated 30.10.2015 for the project vide our letter dated 28.11.2015.
11	The Regional Office of this Ministry located at Chennai shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation the officers(s) of the Regional Office furnishing the requisite data/information/monitoring reports.	Being complied.
12	The project proponent shall submit six monthly reports on the status compliance of the stipulated environmental clearance conditions including results of monitored data ((both in hard copies as well as by e-mail) to the Ministry of Environment, Forests & Climate Change, its Regional Office Chennai, the respective Zonal Office of Central Pollution Control	We are submitting six monthly compliance reports both hard copy and soft copy to the Regional Office and the reports are uploaded on the website periodically.

	Board and State Pollution Control Board. The Proponent shall upload the status of compliance of the environmental clearance conditions including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment, Forest & Climate Change Chennai, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.	
13	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Prasad/Municipal Corporation, urban Local Body and the Local NGO, If any from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	A copy of EC was sent to local panchayat vide our letter dated 05.05.2015. The clearance letter also was put on the website of the company.
14	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collectors's office/Tehsildar's Office for 30days.	Complied. Proof submitted vide letter No. TSPL/MIN/MoEF/ENV/15-16/921 dated 28-11-2015
15	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment, Forests & Climate Change, Chennai by e-mail.	The Form-V is submitted to RO regularly and uploaded on the company website. Copy of same for the period 2015-16 vide letter No. TSPL/ENV/PCB/ES/2015-16/1007 dated 13-08-2016. <b>Annexure - 19</b>
16	The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and 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 Ministry of Environment, Forests & Climate Change at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Chennai.	We had given an advertisement in two local newspaper and submitted copies of the same to RO, Chennai vide our letter dated 05.05.2015.



Annexure - 1A

TRIMEX

To

Date: 14.03.2016

The Principal Chief Conservator of Forests (WL) &  
Chief Wildlife Warden, Govt of Andhra Pradesh (AP)  
Aranya Bhavan, Hyderabad.

Through:

The Divisional Forest Officer, Srikakulam

Dear Sir,

Sub: Approved Wildlife Conservation Plan – Payment of committed fund in the 1<sup>st</sup> year (2015-16) for wildlife conservation - Reg.

Ref: Wild life conservation plan approved vide R C.No:22899/2013NVL-3 dated 11.11.2014.

Further to the approval of the wildlife conservation plan (copy enclosed) under reference above, we have received environmental clearance for the expansion project vide No.J-11015/175/2011-IA.II (M) dated 17<sup>th</sup> April 2015. As per the approved wildlife conservation plan, total amount committed by us for wildlife conservation during the 1<sup>st</sup> year of operation i.e 2015-16 is as below:


i. Interventions for conservation of Sea turtles	- Rs5.00 Lakhs
ii. Interventions for protecting shelter belt	- Rs4.80 Lakhs
iii. Other interventions	- Rs5.30 Lakhs
<b>Total</b>	<b>Rs 15.10 Lakhs</b>

Therefore, we are herewith submitting an account payee Cheque for Rs15.10 Lakhs (Rupees Fifteen Lakhs and Ten Thousands only) (Cheque No 950794 dated 14.03.2016 of State Bank of India) drawn in favour of BIOSAP.

Kindly acknowledge receipt of the same. We confirm that we will continue to make annual payments as per the approved plan.

Thanking you  
Yours faithfully

For Trimex Sands Pvt Ltd

  
Authorized Signatory



*Handwritten notes and signatures:*  
15,10,000/-  
(CP Sankaranarayanan)  
14/3/2016  
C. P. Sankaranarayanan  
7600800000

Trimex Sands Pvt Ltd: Vatchavalasa (V), Gara Mandal, Srikakulam District - 532 404, Andhra Pradesh, India.  
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Tel: +91 44 2498 8822 / 8813 Fax: +91 44 2498 6047 web: www.trimexsands.com

CIN: U14299TN2004PTC071437

भारतीय स्टेट बैंक  
A/c Payee State Bank of India

(00519) - SRIKAKULAM  
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TRIMEX

18/03/2017

To  
The Principal Chief Conservator of Forests (WL),  
Aranya Bhavan, Sankurathri Residency,  
Agathavarappadu, Mahatma Gandhi Inner Ring Road,  
Peda Kakani Mandal,  
Guntur - 522509  
Andhra Pradesh.

Through:

The Divisional Forest Officer, Srikakulam

Respected Sir,

Sub: Approved Wildlife Conservation Plan for our project – Payment of committed fund in the 2<sup>nd</sup> year (2016- 17) for wildlife conservation – Reg.

Ref: Wildlife conservation plan approved vide R C.No.22899/2013 NVL-3 dated 11.11.2014

Further to the approval of the Wildlife conservation plan under reference above and grant of Environmental Clearance vide order no. J-11015/175/2011-IA.II (M) dated 17<sup>th</sup> April 2015, total amount committed by us for the wildlife conservation during the 2<sup>nd</sup> year of operation i.e 2016-17 is as below:

I.	Interventions for conservation of Sea Turtles	- Rs.5.00 Lakhs
II.	Interventions for protecting shelter belt	- Rs.4.80 Lakhs
III.	Other interventions	- Rs.5.30 Lakhs
	<b>Total</b>	<b>Rs. 15.10 Lakhs</b>

Therefore, we are herewith submitting an account payee Cheque for Rs.15.10 Lakhs (Rupees Fifteen Lakhs and Ten Thousand only) (Cheque No: 602188 dated 17-03-2017 of State Bank of India) drawn in favour of BIOSAP.

Kindly acknowledge receipt of the same.

Thanking you

Yours faithfully,

For Trimex Sands Pvt. Ltd

Authorized Signatory

Trimex Sands Pvt Ltd: Plot No. 56, Telugu Musalayaa Layout, Adithya Nagar, Arasavilli Road, Srikakulam-532001, Andhra Pradesh, India

Telefax: +91 8942 229328, e-mail: trimexsklm@eth.net

Hyderabad Office: #8-2-624, 2nd Floor, Sri Durga Towers, Flat No. 201, Road No.10, Banjara Hills, Hyderabad-500034. India  
Tel: +91 40 2338 4380, +91 40 3371 3600, Fax: +91 40 2338 4068.

Reg. Office: Trimex Towers, No.1, Subbaraya Avenue, C.P. Rama Swamy Road, Alwarpet, Chennai-600 018. India  
Tel: +91 44 2498 8813/22, Fax: 2498 6047 Web: www.trimexgroup.com

CIN: U14299TN2004PTC071437



(04004)-OVERSEAS BRANCH (CHENNAI)  
88, RAJAJI SALAI,  
FIRST LINE BEACH ROAD CHENNAI 600001  
Tel: 44 25255661 Fax: IFS Code: SBIN0004804 SWIFT:

5965 / 100 / BLUE ORDER / P / S  
SESHAASA (C) / CTS-201

30941532657 ₹ 15,00,000/-

30941532657

VALID UPTO ₹ 50 LACS AT NON-HOME BRANCH

CASH CREDIT A/C

PREFIX :

0523600006

FOR TRIMEX SANDS PVT LIMITED

AUTHORISED SIGNATORY

Please sign above

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

⑈602188⑈ 600002035⑈ 000198⑈ 30



Annexure-1c

22 June 2017

The Divisional Forest Officer  
Forest Department  
Government of Andhra Pradesh  
Srikakulam - 532 001  
Andhra Pradesh

Respected Sir,

**Sub:** Approved Wildlife Conservation Plan - Expansion of Srikurmam Heavy Mineral Sand Project of Trimex Sands Pvt. Ltd - Remittance of budgeted amount for interventions to the Forest Department - Regarding.

**Ref:**

- 1) Wildlife conservation plan approved vide R C.No.22899/2013 NVL-3 dated 11.11.2014
- 2) Letter from PCCF Rc.No. 22899/2013/WL-3 dated 20.04.2015
- 3) Our letter dated 16.06.2015
- 4) Letter from the PCCF Rc. No.22899/2013/WL-3 dated 12.04.2017
- 5) Letter from DFO Rc. No.2398/2016/A4 dated 27.04.2017 received by us on 02.05.2017
- 6) Letter from the PCCF Rc.No.22899/2013/WL-3, dated 24.05.2017
- 7) Our letter dated 09.06.2017
- 8) Letter from DFO Rc No. 1316/2015-A1, dated 16.06.2017

We acknowledge the receipt of letter Rc. No. 1316/2015-A1, dated 16.06.2017 on 22.06.2017 directing us to deposit Rs.180.40 Lakhs with the department to the BIOSAP account immediately.

In this regard, we would like to inform you that further to our letter under ref (7), we have discussed with The Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden at Guntur Office on 20.06.2016. Based on our request, he was kind enough to permit us time limit up to 15<sup>th</sup> July 2017.

As agreed, we would be complying this aspects on or before 15<sup>th</sup> July 2017.

Thanking you,  
Yours Sincerely  
For M/s Trimex Sands Pvt. Ltd.,

  
22/06/17  
Authorised Signatory

Copy:

- 1) The Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, Aranya Bhavan, Sankurathri Residency, Agathavarappadu, Mahatma Gandhi Inner Ring Road, Peda Kakani Mandal, Guntur - 522509, Andhra Pradesh.
- 2) The Chief Conservator of Forests, Vishakapatnam Circle, Vishakapatnam
- 3) The Forest Range Officer, Srikakulam

Page 1 of 1

**Trimex Sands Pvt Ltd:** Plot No. 56, Telugu Musalayaa Layout, Adithya Nagar, Arasavilli Road, Srikakulam-532001, Andhra Pradesh, India.  
Telefax: +91 8942 229328, e-mail: trimexsklm@eth.net

**Hyderabad Office:** #B-2-624, 2nd Floor, Sri Durga Towers, Flat No. 201, Road No.10, Banjara Hills, Hyderabad-500034. India  
Tel: +91 40 2338 4380, +91 40 3371 3600, Fax: +91 40 2338 4068.

**Reg. Office:** Trimex Towers, No.1, Subbaraya Avenue, C.P. Rama Swamy Road, Alwarpet, Chennai-600 018. India.  
Tel: +91 44 2498 8813/22, Fax: 2498 6047 Web: www.trimexgroup.com

**CIN:** U14299TN2004PTC071437

GOVERNMENT OF ANDHRA PRADESH  
ABSTRACT

Water Resources Department - Industrial Water Supply - SLSWCC -  
Renewal Permission to draw 0.14 TMC of water per annum from the  
Vamsadhara River in favour of M/s. Trimex Sands Pvt. Ltd., at Vatsavalasa  
(V), Gara (M) of Srikakulam District for a further period of 10 years for  
consumptive use - Accorded - Orders - Issued.

WATER RESOURCES (REFORMS) DEPARTMENT

G.O.Ms.No.103.

Dated:24-09-2015.

Read the following:-

- 1) G.O.Ms.No.71, I&CAD(PW:Reforms) Deptt., dt:21-01-2007.
- 2) From the E.N.C.(Irr.), Hyd., Lr.No.ENC(I)/DCE.DW/OT.5/AEE17/  
Trimex Industries, dated:25-03-2015.

>><<

ORDER:

In the reference 1<sup>st</sup> read above, Government have accorded permission to M/s.TRIMEX Industries Limited to draw 0.14 TMC of water from the Vamsadhara River near Vatsavalasa(V), Srikakulam District for a period of five years subject to payment of water charges @ Rs..5.50/1000 gallons for consumptive use. However, agreement for water drawl was concluded by M/s. Trimex Sands Private Limited, Vatsavalasa (V), Gara(M) of Srikakulam District with Superintending Engineer, Irrigation Circle, Bobbili vide agreement No.28SE/2009-10, dated:16-6-2009 and expired on 15.06.2014.

2. In the reference 2<sup>nd</sup> read above, the Engineer-in-Chief(Irrigation), Hyderabad has submitted proposals for renewal permission to draw 0.14 TMC of water from Vamsadhara River for a further period of 10 years from 16.06.2014 to 15.06.2024 in favour of M/s.Trimex Sands Private Limited, Vatsavalasa (V), Gara(M) of Srikakulam District, taking into account on change of name as per G.O.Ms.No.10, Industries & Commerce(M-III) Department, dated:17-01-2007 and Registrar of Companies, A.P. Certificate, dated:11-4-2007.

3. Government after careful examination, hereby accord renewal permission for drawl of 0.14 TMC water in favour of M/s. Trimex Sands Private Limited, Vatsavalasa (V), Gara(M) of Srikakulam District from Vamsadhara River for a further period of 10 years from 16-06-2014 to 15-06-2024 for consumptive use with usual terms and conditions subject to payment of water charges @ Rs.5.50/1000 gallons as ordered in the reference 1<sup>st</sup> read above. The water royalty charges are likely to be revised by the Government from time to time and the industry shall pay the revised rates as fixed by the Government from time to time. The royalty charges on water shall be paid in advance every year.

4. The other conditions as stipulated in the G.O. 1<sup>st</sup> read above shall also be adhered to.

P.T.O.,



:: 2 ::

5. The Engineer-in-Chief(Irrigation), A.P., Hyderabad shall take necessary action in the matter, accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

ADITYA NATH DAS,  
PRINCIPAL SECRETARY TO GOVERNMENT.

To

The Engineer-in-Chief(Irrigation), I&CAD Department,  
Jalasouda Buildings, Errum Munzil, Hyderabad.  
The Superintending Engineer, Irrigation Circle, Bobbili - 535 558.  
The District Collector, Srikakulam.

Copy to:

The Managing Director, A.P. Pollution Control Board, Hyderabad.  
The Commissioner of Industries, Govt. of A.P., Chirag Ali Lane, Hyd.  
The P.S. to Hon'ble Minister (WRD).  
The P.S. to Principal Secretary to Govt.(WRD).  
✓ M/s. Trimex Sands Private Limited, Plot No.56, Telugumusalayya Layout,  
Srikakulam District - 532001.  
SF/SC.

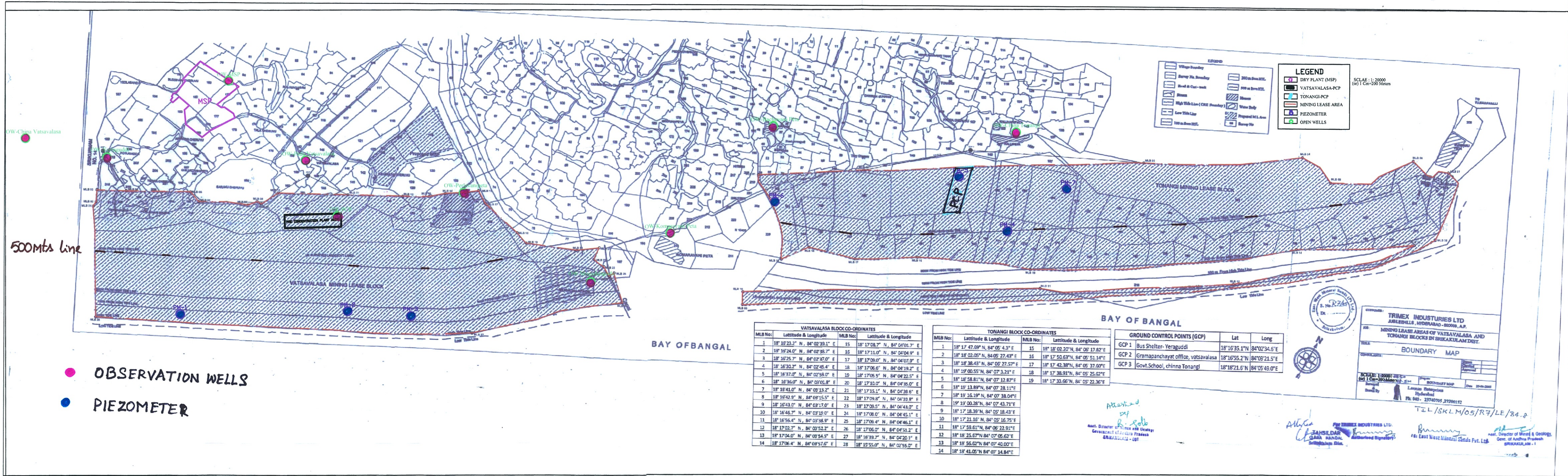
//FORWARDED :: BY ORDER//

*I. S. Srinivasan*  
SECTION OFFICER.

Back filling









Annexure-8

**Fencing at 100 Mts. HTL**



**Labs and Consultants****Registered Office :****2179**

B-115, 116, 117 &amp; 509, Annapurna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization

Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/8/0317

dt04.04.2017

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 14.03.2017

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangi Open Well water
1	pH	8.05	8.15	7..90	8.2	8.05
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	850mgpl	1150mgpl	1950mgpl	610mgpl	1850mgpl
5	Total Suspended Solids	5mgpl	5mgpl	8mgpl	5mgpl	7mgpl
6	Turbidity	4.5 NTU	4.9 NTU	8.5NTU	2.5NTU	8.2 NTU
7	Total Hardness as CaCo3	390 mgpl	190mgpl	490mgpl	105mgpl	460mgpl
8	Calcium as CaCo3	250mgpl	130mgpl	310mgpl	70mgpl	310mgpl
9	Magnesium as CaCo3	140mgpl	60mgpl	180 mgpl	35mgpl	150 mgpl
10	Chlorides Cl-	150mgpl	220mgpl	450mgpl	80mgpl	480mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	70mgpl	170mgpl	235mgpl	75mgpl	275mgpl
13	Nitrates	62.0 mgpl	22.8/ mgpl	32.5 mgpl	3.0 mgpl	7.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.06mgpl	0.05mgpl	0.06mgpl	0.05mgpl	0.04mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.89	3.15	3.8	5.9	-

For TEAM Labs and Consultants



**Labs and Consultants****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Gol, New Delhi

TEST REPORT

Test Report No.TLC/V/Env/TSPL/9/0317

dt04.04.2017

Description of Test: Phisico-chemical Analysis of Water

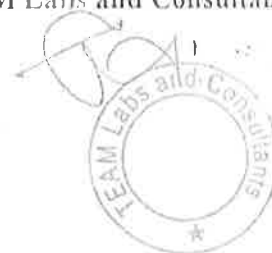
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 14.03.2017

No	parameter	PCP open well	Tails water	Pond at Vatchavalasa	MSP Open well
1	pH	7.7	7.9	8.05	7.9
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	250	250mgpl	740	330mgpl
5	Total Suspended Solids	5	12mgpl	5	5mgpl
6	Turbidity	1.5NTU	5.5NTU	1.8NTU	3.0 NTU
7	Total Hardness as CaCo3	60mgpl	80mgpl	150mgpl	190mgpl
8	Calcium as CaCo3	40mgpl	60mgpl	90mgpl	120mgpl
9	Magnesium as CaCo3	20mgpl	20mgpl	60mgpl	70mgpl
10	Chlorides Cl-	65mgpl	45mgpl	210mgpl	55mgpl
11	Flouride	0.5 mgpl	0.4mgpl	0.5 mgpl	0.4mgpl
12	Sulphates	35mgpl	40mgpl	32mgpl	35mgpl
13	Nitrates	0.5mgpl	0.5mgpl	1.5mgpl	0.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.06mgpl	0.03mgpl	0.03mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from groundlevel inmtrs	1.9	-	-	1.99

For TEAM Labs and Consultants



**Labs and Consultants****2181****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Gol, New Delhi**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/10/0317

dt04.04.2017

Description of Test: Phisico-chemical Analysis of Water

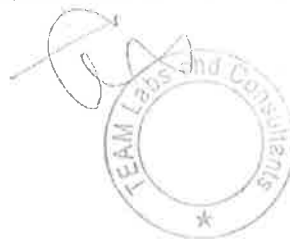
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 14.03.2017

No	Parameter	Komara vanipeta O. W.water	Bandaruvani peta O. W.water	Chinatonangi open well water	Batchuvanipeta open well water
1	pH	8.1	7.2	8.05	7.5
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1150mgpl	1290mgpl	640mgpl	1810mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl
6	Turbidity	3.9 NTU	5.0NTU	3.0NTU	9.0 NTU
7	Total Hardness as CaCo3	450mgpl	540mgpl	190mgpl	580mgpl
8	Calcium as CaCo3	320mgpl	330mgpl	130mgpl	400mgpl
9	Magnesium as CaCo3	130mgpl	210 mgpl	60mgpl	180mgpl
10	Chlorides Cl-	270mgpl	320mgpl	130mgpl	490mgpl
11	Flouride	0.5mgpl	0.5mgpl	0.4mgpl	0.6mgpl
12	Sulphates	120mgpl	395mgpl	25mgpl	270mgpl
13	Nitrates	65.0 mgpl	9.0 mgpl	11.0 mgpl	5.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.04gpl	0.05mgpl	0.04mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.5	2.90	1.85	2.87

For TEAM Labs and Consultants



**Registered Office :**

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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/8/0217

dt10.03.2017

Description of Test: Phisico-chemical Analysis of Water

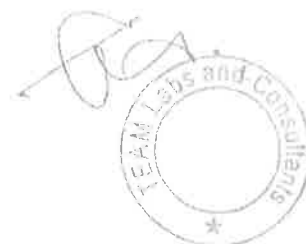
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 15.02.2017

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangi Open Well water
1	pH	7.9	8.05	7.95	8.0	7.7
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1010mgpl	1390mgpl	2450mgpl	860mgpl	2200mgpl
5	Total Suspended Solids	5mgpl	5mgpl	8mgpl	5mgpl	7mgpl
6	Turbidity	4.8 NTU	6.9 NTU	12.2NTU	4.5NTU	12.0 NTU
7	Total Hardness as CaCo3	460 mgpl	240mgpl	770mgpl	180mgpl	360mgpl
8	Calcium as CaCo3	290mgpl	150mgpl	510mgpl	120mgpl	230mgpl
9	Magnesium as CaCo3	170mgpl	90mgpl	260 mgpl	60mgpl	130 mgpl
10	Chlorides Cl-	260mgpl	290mgpl	760mgpl	130mgpl	880mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	170mgpl	130mgpl	230mgpl	70mgpl	132mgpl
13	Nitrates	26.0 mgpl	21.0 mgpl	25.5 mgpl	9.0 mgpl	22.0 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.05mgpl	0.06mgpl	0.04mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.8	2.95	3.68	5.8	-

For TEAM Labs and Consultants





**Labs and Consultants****2003****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No. TLC/V/Env/TSPL/9/0217

dt 10.03.2017

Description of Test: Phisico-chemical Analysis of Water

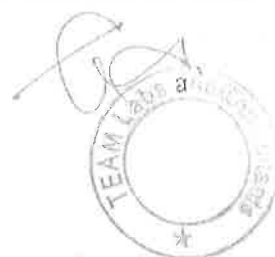
Name of the client: Trlmex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 15.02.2017

No	parameter	PCP open well	Tails water	Pond at Vatchavalasa	MSP Open well
1	pH	7.5	7.9	7.5	7.8
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	440	650mgpl	660	430mgpl
5	Total Suspended Solids	5	14mgpl	5	5mgpl
6	Turbidity	1.6NTU	5.8NTU	1.3NTU	3.8 NTU
7	Total Hardness as CaCo3	180mgpl	80mgpl	90mgpl	220mgpl
8	Calcium as CaCo3	100mgpl	60mgpl	60mgpl	140mgpl
9	Magnesium as CaCo3	80mgpl	20mgpl	30mgpl	80mgpl
10	Chlorides Cl-	120mgpl	80mgpl	120mgpl	75mgpl
11	Flouride	0.5 mgpl	0.4mgpl	0.5 mgpl	0.4mgpl
12	Sulphates	35mgpl	45mgpl	30mgpl	35mgpl
13	Nitrates	0.5mgpl	0.5mgpl	0.5mgpl	0.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.06mgpl	0.03mgpl	0.03mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from groundlevel inmtrs	1.8	-	-	1.93

For TEAM Labs and Consultants



**Labs and Consultants****2064****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616; Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization

Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/10/0217

dt10.03.2017

Description of Test:

Phisico-chemical Analysis of Water

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

Water samples as per Details given

Date of Sample Collected :

15.02.2017

No	Parameter	Komara vanipeta O. W.water	Bandaruvani peta O. W.water	Chinatonangi open well water	Batchuvanipeta open well water
1	pH	7.3	7.6	7.6	7.5
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1480mgpl	1710mgpl	660mgpl	2110mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl
6	Turbidity	4.5 NTU	7.0NTU	3.6NTU	9.5 NTU
7	Total Hardness as CaCo3	520mgpl	530mgpl	220mgpl	570mgpl
8	Calcium as CaCo3	370mgpl	320mgpl	140mgpl	390mgpl
9	Magnesium as CaCo3	150mgpl	210 mgpl	80mgpl	180mgpl
10	Chlorides Cl-	320mgpl	430mgpl	120mgpl	790mgpl
11	Flouride	0.5mgpl	0.5mgpl	0.4mgpl	0.6mgpl
12	Sulphates	75mgpl	310mgpl	35mgpl	218mgpl
13	Nitrates	18.0 mgpl	15.5 mgpl	13.5 mgpl	18.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.05gpl	0.05mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.4	2.80	1.80	2.80

For TEAM Labs and Consultants



**Labs and Consultants**

1822

**Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization

Laboratory Recognised by Ministry Environment, Forests and Climate Change, GoI, New Delhi

**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/8/0117

dt02.02.2017

Description of Test: Phisico-chemical Analysis of Water

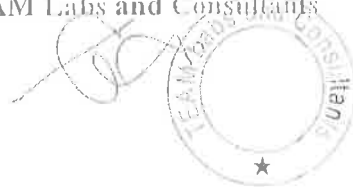
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 24.01.2017

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangl Open Well water
1	pH	7.5	7.80	7.6	8.0	7.6
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	880mgpl	1350mgpl	2050mgpl	850mgpl	2080mgpl
5	Total Suspended Solids	5mgpl	5mgpl	8mgpl	5mgpl	7mgpl
6	Turbidity	4.0 NTU	6.2 NTU	10.2NTU	2.5NTU	8.5 NTU
7	Total Hardness as CaCo3	440 mgpl	210mgpl	750mgpl	170mgpl	340mgpl
8	Calcium as CaCo3	280mgpl	130mgpl	490mgpl	120mgpl	230mgpl
9	Magnesium as CaCo3	160mgpl	80mgpl	260 mgpl	50mgpl	110 mgpl
10	Chlorides Cl-	240mgpl	270mgpl	740mgpl	120mgpl	860mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	152mgpl	125mgpl	230mgpl	64mgpl	120mgpl
13	Nitrates	24.0 mgpl	18.0 mgpl	20.5 mgpl	4.5 mgpl	17.0 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.03mgpl	0.05mgpl	0.05mgpl	0.03mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	2.90	2.40	2.5	4.5	-

For TEAM Labs and Consultants



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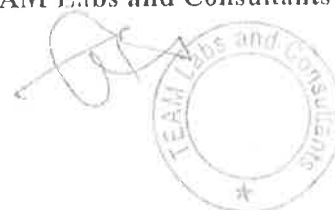
**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/9/0117 dt02.02.2017

Description of Test: Physico-chemical Analysis of Water  
Name of the client: Trimex Sands Pvt. Ltd.  
Location of sampling: Water samples as per Details given  
Date of Sample Collected : 24.01.2017

No	parameter	PCP open well	Tails water	Pond at Vatchavalasa	MSP Open well
1	pH	7.5	7.8	7.5	7.8
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	460	710mgpl	580	450mgpl
5	Total Suspended Solids	5	10mgpl	5	5mgpl
6	Turbidity	1.2NTU	4.8NTU	1.6NTU	3.6 NTU
7	Total Hardness as CaCo3	170mgpl	80mgpl	90mgpl	210mgpl
8	Calcium as CaCo3	100mgpl	60mgpl	60mgpl	140mgpl
9	Magnesium as CaCo3	70mgpl	20mgpl	30mgpl	70mgpl
10	Chlorides Cl-	130mgpl	90mgpl	130mgpl	80mgpl
11	Flouride	0.5 mgpl	0.4mgpl	0.5 mgpl	0.4mgpl
12	Sulphates	30mgpl	40mgpl	35mgpl	30mgpl
13	Nitrates	0.5mgpl	0.5mgpl	0.5mgpl	0.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.05mgpl	0.05mgpl	0.04mgpl	0.04mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from groundlevel inmtrs	1.7	-	-	2.1

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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/10/0117

dt02.02.2017

Description of Test:

Phisico-chemical Analysis of Water

Name of the client:

Trlmex Sands Pvt. Ltd.

Location of sampling:

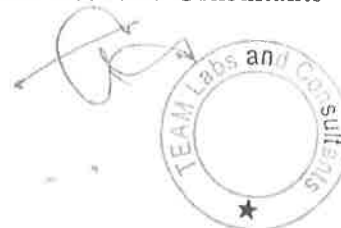
Water samples as per Details given

Date of Sample Collected :

24.01.2017

No	Parameter	Komara vanlpeta O. W.water	Bandaruvanl peta O. W.water	Chinatonangi open well water	Batchuvanlpeta open well water
1	pH	7.3	7.6	7.2	7.5
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1510mgpl	1750mgpl	605 mgpl	1890mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl
6	Turbidity	5.0 NTU	7.2 NTU	3.0NTU	8.5 NTU
7	Total Hardness as CaCo3	530mgpl	530mgpl	210mgpl	550mgpl
8	Calcium as CaCo3	370mgpl	320mgpl	140mgpl	370mgpl
9	Magnesium as CaCo3	160mgpl	210 mgpl	70mgpl	180mgpl
10	Chlorides Cl-	340mgpl	420mgpl	110mgpl	770mgpl
11	Flouride	0.5mgpl	0.5mgpl	0.4mgpl	0.6mgpl
12	Sulphates	82mgpl	330mgpl	32mgpl	210mgpl
13	Nitrates	24.0 mgpl	9.5 mgpl	11.5mgpl	12.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.06mgpl	0.06gpl	0.04mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.3	2.20	1.80	1.80

For TEAM Labs and Consultants



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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/8/1216

dt03.01.2017

Description of Test:

Phlsico-chemical Analysis of Water

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

Water samples as per Details given

Date of Sample Collected :

31.12.2016

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangi Open Well water
1	pH	7.7	7.95	7.5	8.25	7.7
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	980mgpl	1450mgpl	2210mgpl	690mgpl	2290mgpl
5	Total Suspended Solids	5mgpl	5mgpl	8mgpl	5mgpl	7mgpl
6	Turbidity	4.2 NTU	6.9 NTU	9.5 NTU	2.8NTU	9.0 NTU
7	Total Hardness as CaCo3	460 mgpl	200mgpl	740mgpl	180mgpl	360mgpl
8	Calcium as CaCo3	290mgpl	130mgpl	490mgpl	120mgpl	240mgpl
9	Magnesium as CaCo3	170mgpl	70mgpl	250 mgpl	60mgpl	120 mgpl
10	Chlorides Cl-	255mgpl	295mgpl	720mgpl	115mgpl	875mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	150mgpl	135mgpl	260mgpl	70mgpl	115mgpl
13	Nitrates	21.5 mgpl	10.5 mgpl	17.0	1.5 mgpl	16.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.03mgpl	0.05mgpl	0.05mgpl	0.03mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.00	2.50	2.5	4.2	-

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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/10/1216

dt03.01.2017

Description of Test:

Phisico-chemical Analysis of Water

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

Water samples as per Details given

Date of Sample Collected :

31.12.2016

No	Parameter	Komara vanipeta O. W.water	Bandaruvani peta O. W.water	Chinatonangi open well water	Batchuvanipeta open well water
1	pH	7.4	7.25	7.5	7.45
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1510mgpl	1950mgpl	630 mgpl	2050mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl
6	Turbidity	5.2 NTU	8.2 NTU	3.6NTU	9.1 NTU
7	Total Hardness as CaCo3	520mgpl	560mgpl	220mgpl	560mgpl
8	Calcium as CaCo3	360mgpl	360mgpl	140mgpl	380mgpl
9	Magnesium as CaCo3	160mgpl	200 mgpl	80mgpl	180mgpl
10	Chlorides Cl-	355mgpl	430mgpl	120mgpl	795mgpl
11	Flouride	0.5mgpl	0.5mgpl	0.4mgpl	0.6mgpl
12	Sulphates	80mgpl	350mgpl	40mgpl	215mgpl
13	Nitrates	22.0 mgpl	3.5 mgpl	8.5mgpl	9.5 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.06mgpl	0.06gpl	0.04mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.0	2.10	1.65	1.60

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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/9/1216

dt03.01.2017

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 31.12.2016

No	parameter	PCP open well	Tails water	MSP Open well
1	pH	7.5	7.7	7.8
2	Colour Hazen units	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	465	260mgpl	490mgpl
5	Total Suspended Solids	5	5mgpl	5mgpl
6	Turbidity	1.5NTU	2.8NTU	3.0 NTU
7	Total Hardness as CaCo3	170mgpl	60mgpl	220mgpl
8	Calcium as CaCo3	100mgpl	40mgpl	140mgpl
9	Magnesium as CaCo3	70mgpl	20mgpl	80mgpl
10	Chlorides Cl-	140mgpl	70mgpl	75mgpl
11	Flouride	0.5 mgpl	0.4mgpl	0.4mgpl
12	Sulphates	35mgpl	22mgpl	28mgpl
13	Nitrates	0.5mgpl	0.5mgpl	0.5 mgpl
14	Phosphates	BDL	BDL	BDL
15	Iron	0.04mgpl	0.03mgpl	0.04mgpl
16	Lead	BDL	BDL	BDL
	Water table from groundlevel inmtrs	1.5	-	2.0

For TEAM Labs and Consultants



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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/8/1116

dt05.12.2016

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 15.11.2016

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangi Open Well water
1	pH	7.9	8.05	7.8	7.9	7.4
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1150mgpl	1250mgpl	1980mgpl	650mgpl	2150mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl	8mgpl
6	Turbidity	3.5 NTU	4.6 NTU	7.2 NTU	2.0NTU	8.8 NTU
7	Total Hardness as CaCo3	450 mgpl	180mgpl	480mgpl	130mgpl	430mgpl
8	Calcium as CaCo3	300mgpl	120mgpl	310mgpl	90mgpl	280mgpl
9	Magnesium as CaCo3	150mgpl	60mgpl	170 mgpl	40mgpl	150 mgpl
10	Chlorides Cl-	260mgpl	280mgpl	455mgpl	90mgpl	690mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	105mgpl	32mgpl	105mgpl	30mgpl	75mgpl
13	Nitrates	19.5 mgpl	19.0 mgpl	18.0mgpl	15.0 mgpl	22.0 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.04mgpl	0.05mgpl	0.04mgpl	0.03mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	3.2	2.70	2.6	4.1	

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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST** 17.10.2016

Test Report No.TLC/V/Env/TSPL/8/1016

dt07.11.2016

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 17.10.2016

No	Parameter	Mogadalapadu Open Well water	Parlavanipeta Open Well water	Pedda vatsavalasa Open Well water	Yerraguddi Open Well water	Pedda Tonangi Open Well water
1	pH	8.15	7.95	8.0	7.8	7.4
2	Colour Hazen units	5	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1120mgpl	1450mgpl	1520mgpl	690mgpl	2100mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl	9mgpl
6	Turbidity	3.3 NTU	5.0 NTU	6.0 NTU	2.0NTU	9.0 NTU
7	Total Hardness as CaCo3	440 mgpl	190mgpl	450mgpl	135mgpl	410mgpl
8	Calcium as CaCo3	290mgpl	120mgpl	290mgpl	90mgpl	270mgpl
9	Magnesium as CaCo3	15mgpl	70mgpl	160 mgpl	45mgpl	140 mgpl
10	Chlorides Cl-	270mgpl	290mgpl	430mgpl	95mgpl	710mgpl
11	Flouride	0.6mgpl	0.5mgpl	0.5mgpl	0.4mgpl	0.5mgpl
12	Sulphates	110mgpl	30mgpl	98mgpl	35mgpl	60mgpl
13	Nitrates	15.5 mgpl	11.5 mgpl	11.0mgpl	11.5 mgpl	19.0 mgpl
14	Phosphates	BDL	BDL	BDL	BDL	BDL
15	Iron	0.03mgpl	0.04mgpl	0.04mgpl	0.03mgpl	0.05mgpl
16	Lead	BDL	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	2.35	2.40	1.55	3.1	

For TEAM Labs and Consultants

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Test Report No.TLC/V/Env/TSPL/9/1016

dt07.11.2016

Description of Test:

Phisico-chemical Analysis of Water

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

Water samples as per Details given

Date of Sample Collected :

17.10.2016

No	parameter	Pond at Vatchavalasa	PCP open well	MSP Open well	PCP Tail water
1	pH	7.4	8.0	7.8	7.8
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	470	440mgpl	580mgpl	160
5	Total Suspended Solids	5	5mgpl	5mgpl	18
6	Turbidity	1.8NTU	2.8NTU	3.0 NTU	9.8 NTU
7	Total Hardness as CaCo3	140mgpl	120mgpl	230mgpl	60mgpl
8	Calcium as CaCo3	90mgpl	80mgpl	140mgpl	45mgpl
9	Magnesium as CaCo3	50mgpl	40mgpl	90mgpl	15mgpl
10	Chlorides Cl-	90mgpl	95mgpl	105mgpl	55mgpl
11	Flouride	0.5 mgpl	0.4mgpl	0.4mgpl	0.5 mgpl
12	Sulphates	30mgpl	22mgpl	25 mgpl	20mgpl
13	Nitrates	0.5mgpl	0.5mgpl	0.5 mgpl	0.5mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.04mgpl	0.03mgpl	0.03mgpl	0.09mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from groundlevel inmtrs		1.6	1.65	-

For TEAM Labs and Consultants

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**TEST REPORT**

Test Report No.TLC/V/Env/TSPL/10/1016

dt07.11.2016

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Water samples as per Details given

Date of Sample Collected : 17.10.2016

No	Parameter	Komara vanipeta O. W.water	Bandaruvani peta O. W.water	Chinatonangi open well water	Batchuvanipeta open well water
1	pH	7.4	7.3	7.5	7.3
2	Colour Hazen units	5	5	5	5
3	Odour	un objectionable	un objectionable	un objectionable	un objectionable
4	Total Dissolved solids	1510mgpl	890mgpl	540mgpl	1880mgpl
5	Total Suspended Solids	5mgpl	5mgpl	5mgpl	5mgpl
6	Turbidity	4.2 NTU	4.9 NTU	3.0NTU	8.9 NTU
7	Total Hardness as CaCo3	530mgpl	480mgpl	180mgpl	750mgpl
8	Calcium as CaCo3	360mgpl	290mgpl	110mgpl	480mgpl
9	Magnesium as CaCo3	170mgpl	190 mgpl	70mgpl	270mgpl
10	Chlorides Cl-	330mgpl	170mgpl	105mgpl	940mgpl
11	Flouride	0.5mgpl	0.5mgpl	0.4mgpl	0.6mgpl
12	Sulphates	63mgpl	45mgpl	40mgpl	155mgpl
13	Nitrates	27.0 mgpl	12.0 mgpl	9.0mgpl	12.0 mgpl
14	Phosphates	BDL	BDL	BDL	BDL
15	Iron	0.06mgpl	0.04gpl	0.04mgpl	0.06mgpl
16	Lead	BDL	BDL	BDL	BDL
	Water table from ground level in mtrs	2.3	2.20	1.2	1.70

For TEAM Labs and Consultants

**Piezometer Monitoring for the month of January-2017**

Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	30-Jan-17	14:41:00	28.3	7.73	498	323	0.16	0.180	
PM-2	30-Jan-17	14:00:00	28.6	7.90	404	262	0.13	6.794	
PM-3	30-Jan-17	14:12:00	29.5	8.35	224	145	0.07	3.806	
PM-4	30-Jan-17	14:27:00	28.9	7.52	394	256	0.12	3.420	
PM-5	30-Jan-17	12:33:00	27.8	6.85	340	221	0.11	4.347	
PM-6	30-Jan-17	12:21:00	26.0	7.62	106	68	0.03	0.730	
PM-7	30-Jan-17	13:41:00	28.4	7.21	335	217	0.11	1.570	

**Piezometer Monitoring for the month of February-2017**

Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	27-Feb-17	12:27:00	28.5	7.96	689	447	0.29	0.130	
PM-2	27-Feb-17	13:07:00	30.7	8.16	333	216	0.11	6.734	
PM-3	27-Feb-17	12:57:00	30.9	8.15	207	134	0.07	2.976	
PM-4	27-Feb-17	12:44:00	30.4	8.35	406	263	0.13	3.190	
PM-5	27-Feb-17	13:36:00	29.9	7.93	276	179	0.09	4.200	
PM-6	27-Feb-17	13:50:00	30.6	7.98	156	101	0.05	1.800	
PM-7	27-Feb-17	13:27:00	30.2	8.07	328	213	0.1	0.680	

**Piezometer Monitoring for the month of March-2017**

Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	31-Mar-17	15:41:00	29.3	7.86	621	403	0.26	0.280	
PM-2	31-Mar-17	18:07:00	31.0	8.33	404	262	0.13	6.754	
PM-3	31-Mar-17	17:57:00	30.7	8.22	224	145	0.07	3.066	
PM-4	31-Mar-17	16:01:00	30.4	8.44	397	258	0.13	3.330	
PM-5	31-Mar-17	17:15:00	30.0	7.30	319	207	0.1	4.240	
PM-6	31-Mar-17	17:07:00	29.9	7.99	158	102	0.05	1.800	
PM-7	31-Mar-17	17:30:00	30.4	7.64	333	216	0.11	0.780	

### Piezometer Monitoring for the month of October-2016

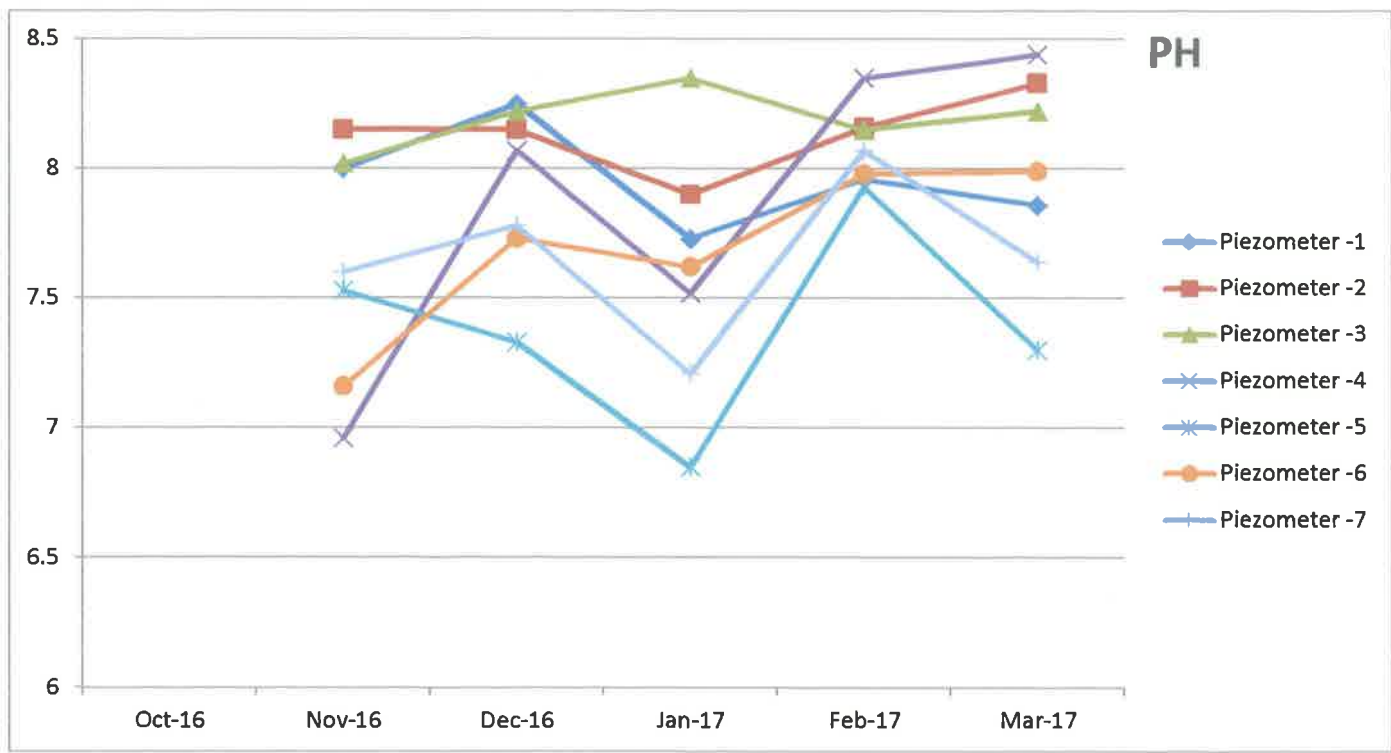
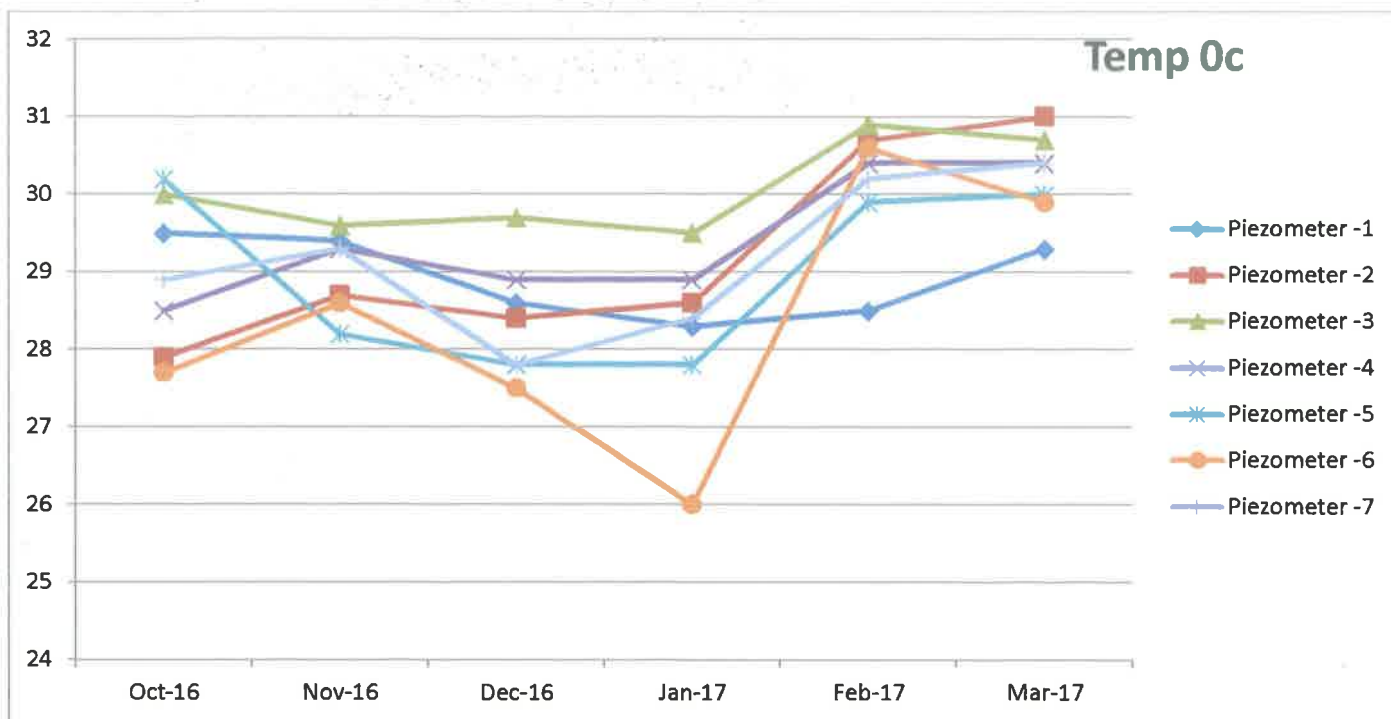
Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	29-Oct-16	13:33:28	29.5	8.04	618	401	0.26	0.280	
PM-2	29-Oct-16	12:45:41	27.9	8.39	257	167	0.08	6.044	
PM-3	29-Oct-16	12:55:19	30.0	8.26	387	251	0.12	6.216	
PM-4	29-Oct-16	12:13:13	28.5	7.37	329	213	0.10	3.210	
PM-5	29-Oct-16	13:08:38	30.2	7.34	412	267	0.13	1.600	
PM-6	29-Oct-16	11:50:40	27.7	6.86	127	82	0.04	1.200	
PM-7	29-Oct-16	12:23:25	28.9	7.14	257	167	0.08	3.080	

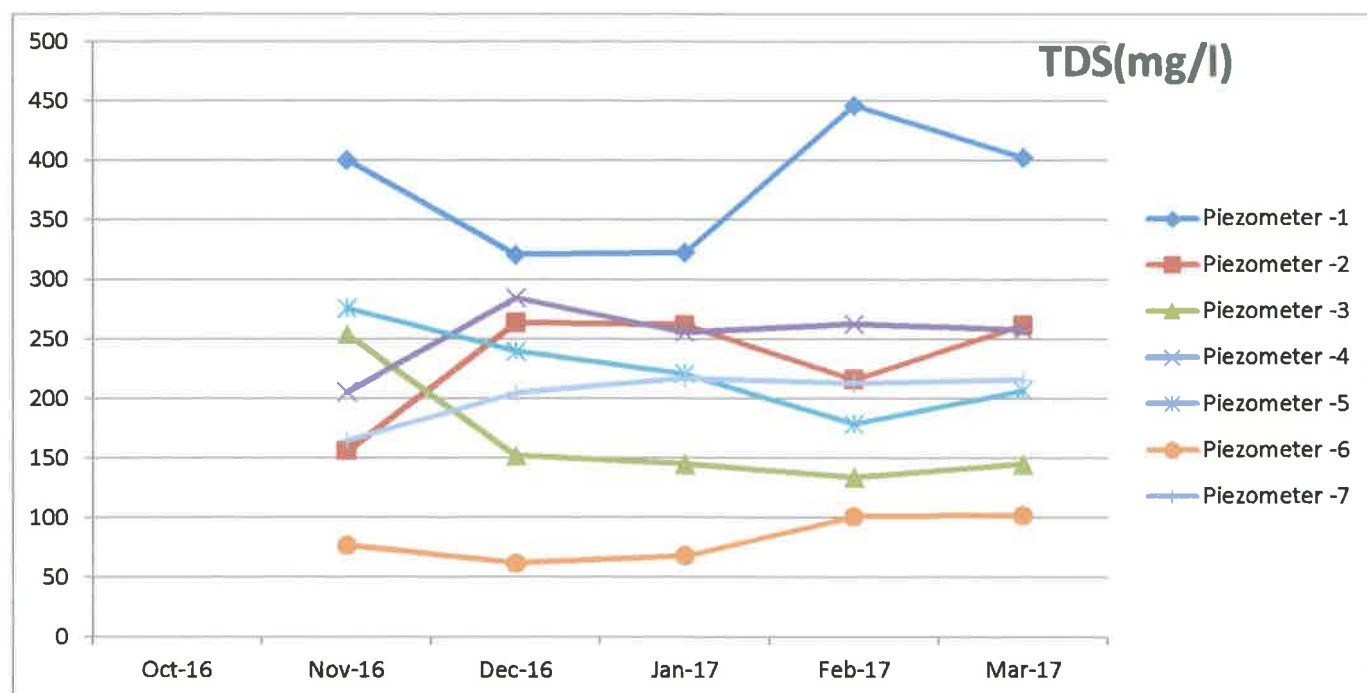
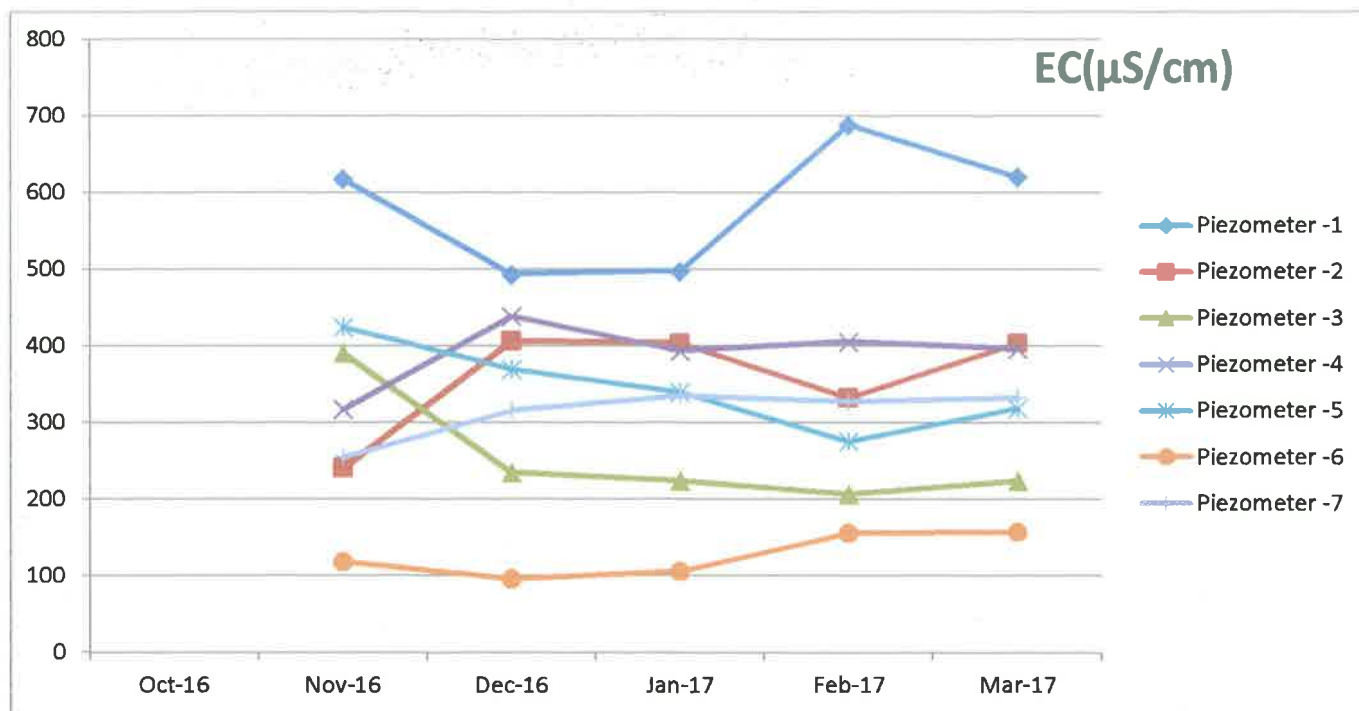
### Piezometer Monitoring for the month of November-2016

Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	26-Nov-16	10:35:51	29.4	8.00	618	401	0.26	0.480	
PM-2	26-Nov-16	13:58:20	28.7	8.15	241	156	0.08	6.094	
PM-3	26-Nov-16	14:09:40	29.6	8.02	391	254	0.12	6.266	
PM-4	26-Nov-16	14:43:32	29.3	6.96	318	206	0.10	3.100	
PM-5	26-Nov-16	11:16:27	28.2	7.53	425	276	0.13	2.200	
PM-6	26-Nov-16	15:10:35	28.6	7.16	119	77	0.04	1.300	
PM-7	26-Nov-16	2:32:55	29.3	7.6	255	165	0.08	3.030	

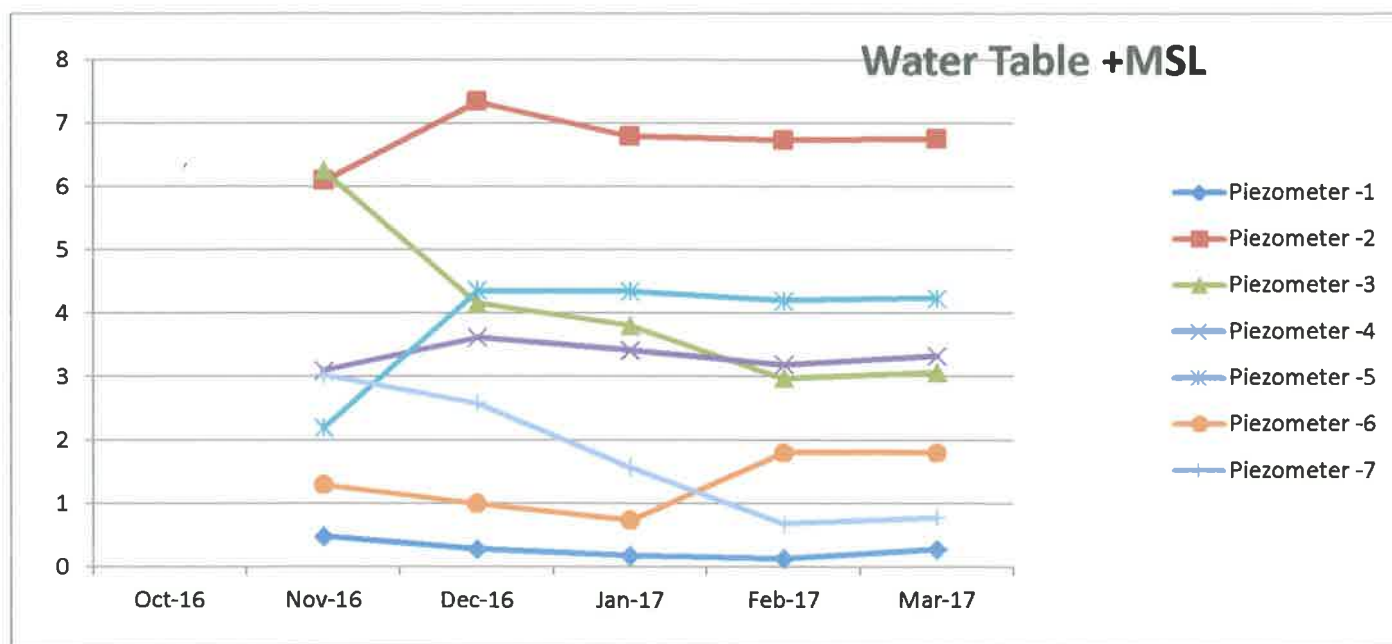
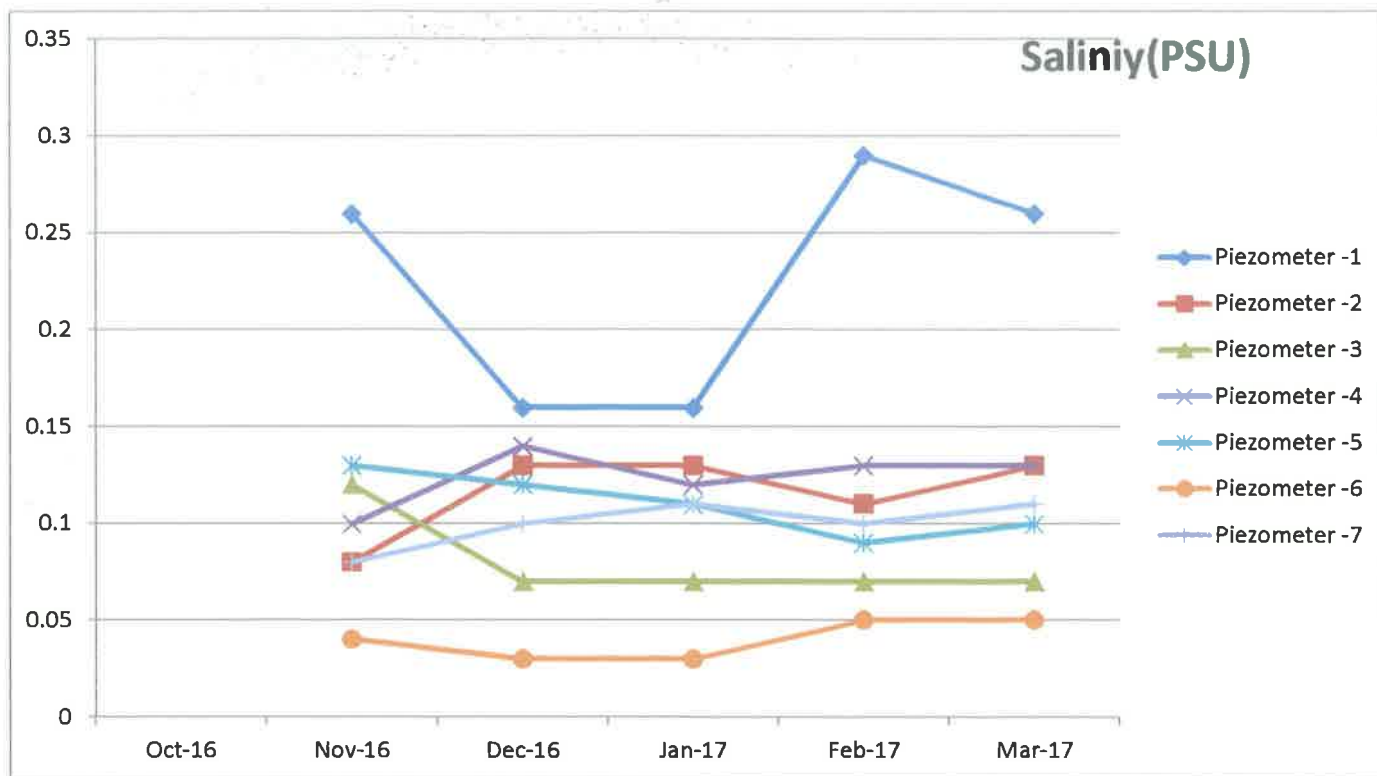
### Piezometer Monitoring for the month of December-2016

Location	Date	Time	Temp (C)	pH	EC (uS/cm @25C)	TDS (mg/L)	SAL (PSU)	Water Table	+MSL
PM-1	30-Dec-16	15:07:46	28.6	8.25	494	321	0.16	0.280	
PM-2	30-Dec-16	14:28:40	28.4	8.15	407	264	0.13	7.344	
PM-3	30-Dec-16	14:39:40	29.7	8.22	235	152	0.07	4.166	
PM-4	30-Dec-16	14:51:31	28.9	8.07	439	285	0.14	3.620	
PM-5	30-Dec-16	13:38:02	27.8	7.33	370	240	0.12	4.360	
PM-6	30-Dec-16	13:28:54	27.5	7.73	96	62	0.03	1.000	
PM-7	30-Dec-16	14:10:08	27.8	7.78	316	205	0.1	2.580	











Annexure - 8

TSPL/MIN/AERB/16-17/1071

10-05-2017  
Srikakulam.

To  
The Director,  
Industrial Plant Safety Division,  
Atomic Energy Regulatory Board,  
Niyamak Bhavan-A, Anushaktinagar,  
Mumbai-400 094.

Dear Sir,

We are herewith submitting Quarterly Health Physics Report for Jan to Mar, 2017.

Thanking You,

Yours truly,

**Vice President (Mines)**

**Trimex Sands Pvt Ltd:** Vatchavalasa (V), Gara Mandal, Srikakulam District - 532 404, Andhra Pradesh, India.  
Tel: +91 8942 283755, Fax: +91 8942 283758, email: info@trimexsands.com

**Hyderabad Office:** 2nd Floor, Sri Durga Towers, Plot No. 201, Road No. 10, Banjara Hills, Hyderabad - 500 034 Andhra Pradesh, India  
Tel: +91 40 2338 4380 / 3371 3600 Fax: +91 40 2338 4068

**Reg. Office:** Trimex Towers, No.1 Subbaraya Avenue, C.P. Ramaswamy Road, Alwarpet, Chennai - 600 018 Tamilnadu, India  
Tel: +91 44 2498 8822 / 8813 Fax: +91 44 2498 6047 web: www.trimexsands.com

**CIN:** U14299TN2004PTC071437

# **QUARTERLY HEALTH PHYSICS REPORT FOR NON DAE BEACH SAND MINERALS (BSM) FACILITY**

Date: 10-05-2017.

Name of the facility : TRIMEX SANDS PVT LTD.

Location of the facility : SRIKAKULAM, ANDHRAPRADESH

Period Reporting : Jun,2017 to Mar,2017.

## **1.0 A). DOSE STATICS (TLD lab report is enclosed)**

		No. of persons monitored	Collective dose (person-mSv)	Average Individual dose (mSv)	Maximum Individual dose (mSv)
<b>Quarter</b>	<b>Regular</b>	29	6.65	0.23	1.00
	<b>Temporary</b>	NIL	NIL	NIL	NIL
<b>Cumulative in the year</b>	<b>Regular</b>	29	6.65	0.23	1.00
	<b>Temporary</b>	NIL	NIL	NIL	NIL

## **1.1 INDIVIDUAL DOSE STATICS**

Dose range(mSv)	Number of person in year		
	Regular	Temporary	Total
Less than 2	29	NIL	29
2-6	NIL	NIL	NIL
>6-20	NIL	NIL	NIL
>20-30	NIL	NIL	NIL
>30	NIL	NIL	NIL
<b>Total</b>	29	NIL	29

## **2.0 MONAZITE ENRICHED TAILINGS DETAILS**

	Raw material used (From mines and stock)			Final Products (Which ever is applicable)					Tailings Generated		
	Feed	Pre - Concentration plant output	Procured raw material	Ilmenite	Rutile	Zircon	Garnet	Sillimanite	Silica Rich Tailings		Monazite Enriched Tailings
									Rejects from PCP	Rejects from MSP	
<b>Qty/ Yr (tons)</b>	1104732	162944(*)	----	59300	2028	971	9294	12154	941788	60253	594
<b>Monazite (%)</b>	0.125	IRZ - 0.666 GA - 0.095 SI - 0.036	---	0.031	0.071	0.210	0.030	0.010	0.055	0.518	63.725

(\*) 18350 MT of Concentrate material generated from Pre-Concentration Plant was stored inside the PCP premises


**METHOD OF DISPOSAL OF MONAZITE ENRICHED TAILINGS** (Tick whichever is applicable)

- i) ☐ Disposed by backfilling of mined out site  
 ii) ☒ Disposed in trenches within the plant boundary  
 iii) ☐ Sold to the other BSM facility

**3.0 RADIATION MONITORING RESULT** (whichever is applicable)

Location	Radiation Level ( $\mu\text{Ci/hr}$ )
Mining Area	0.5 - 0.7
Backfilled Area	0.1-0.2
<b>Pre Concentration Plant</b>	
• General Background	0.2-0.4
• Raw material Storage	0.5 - 0.7
• Pre Concentration Plant out put	IRZ con : 2-3 GA con : 0.1-0.4 Sil con : 0.1-0.3
• Pre Concentration Plant Tailings	0.1-0.2
<b>Mineral Separating plant (Physical mineral separation and /or Chemical processing)</b>	
• General Background of plant premises	0.3 - 0.5
• Raw material Storage	IRZ con : 2-3 GA con : 0.2-0.3 Sil con : 0.1-0.2
• Inside Mineral Separating plant(eg Magnetic, High tension separators)	0.6 - 0.9
• Monazite Enriched tailings storage area	40-80
• On Top of Trenches filled with monazite enriched tailings and topped with silica rich sand	0.3 - 0.4
• Inside chemical processing plant having minerals separation unit (roaster, calciner, digester, effluent, pipelines like iron oxide slurry pipe lines etc)	-NA-

The table is indicative nature .If necessary; facility may be including other area also.

  
 (Signature of Radiological Safety Officer)  
 Signature of the Employer with Official Seal & Date  
**RADIOLOGICAL SAFETY OFFICER**  
**TRIMEX SANDS PVT. LTD.**  
**VATSAVAI (ASA IV), GARA (M)**  
**SRIKAKULAM DIST - 534 004, A.P.**

# AVANTEC LABORATORIES (P) LTD.,

No. 17, Arignar Anna Industrial Estate, Mettukuppam Vanaqaram Chennai - 600 095

## Personnel Monitoring Service

Institution No. 015026  
Address TRIMEX SANDS PVT LTD  
VATSVALASA (V), GARA (M),  
SRIKAKULAM (DIST),  
SRIKAKULAM, ANDHRA PRADESH,  
INDIA - 532404

SERVICE FREQUENCY  
Report Date : 25/04/2017

YEAR 2017

Pers No.	Name	Wom At	Whole Body Dose (mSv)				Current Year	Beta Dose (mSv)	Beta Total (mSv)	Wrist Dose (mSv) = Total	Wrist Total mSv
			Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec					
1	0006 RAJUM	C	0.00	-	-	-	0.00	-	-	-	-
2	0008 RAMAKRISHNA.P	C	0.05	-	-	-	0.05	-	-	-	-
3	0011 SATYAM T	C	0.05	-	-	-	0.05	-	-	-	-
4	0013 KAMA RAJU T	C	0.05	-	-	-	0.05	-	-	-	-
5	0014 RAMA RAO.P	C	0.00	-	-	-	0.00	-	-	-	-
6	0015 VENKATA RAO.P	C	0.05	-	-	-	0.05	-	-	-	-
7	0016 RAMA RAO.T	C	0.00	-	-	-	0.00	-	-	-	-
8	0017 SIMHACHALAM THAMADA	C	0.50	-	-	-	0.50	-	-	-	-
9	0018 RADHA KRISHNA.K	C	0.05	-	-	-	0.05	-	-	-	-
10	0019 SIMACHALAM TELUKUTI	C	0.55	-	-	-	0.55	-	-	-	-
11	0020 RAMA.RAO.M	C	1.00	-	-	-	1.00	-	-	-	-
12	0021 NARAYANA RAO.D	C	0.55	-	-	-	0.55	-	-	-	-
13	0022 DANAYYA.T	C	0.45	-	-	-	0.45	-	-	-	-
14	0023 RAMA RAJU.S	C	0.00	-	-	-	0.00	-	-	-	-
15	0024 SRINUVASA RAO.B	C	0.45	-	-	-	0.45	-	-	-	-
16	0025 BHAGAVAN.D	C	0.00	-	-	-	0.00	-	-	-	-
17	0029 SHRIMYLAPELLI NAGA RAJU	C	0.05	-	-	-	0.05	-	-	-	-
18	0032 SHRI.SAMPATHI RAO PRASANN.	C	0.00	-	-	-	0.00	-	-	-	-
19	0034 D.VENKATESH.B	C	0.00	-	-	-	0.00	-	-	-	-
20	0035 SHRI.SHAIK NAZEER	C	0.00	-	-	-	0.00	-	-	-	-
21	0036 SHRI.ANVEESH MAMIDI	C	0.00	-	-	-	0.00	-	-	-	-
22	0037 SHRI.APALA NAIDU.P	C	0.05	-	-	-	0.05	-	-	-	-
23	0038 SHRI.BHANOJI RAO.B	C	0.60	-	-	-	0.60	-	-	-	-
24	0039 SHRI.RAMA RAO.D	C	0.05	-	-	-	0.05	-	-	-	-
25	0040 SHRI.GOVINDA RAO.J	C	0.65	-	-	-	0.65	-	-	-	-
26	0041 SHRI.RAMANA MURTHY.CH	C	0.00	-	-	-	0.00	-	-	-	-
27	0042 SHRI.TANADA APPANNA	C	0.55	-	-	-	0.55	-	-	-	-
28	0043 SHRI.NARAYANASWAMI.T	C	0.50	-	-	-	0.50	-	-	-	-
29	0044 SHRI.RAMA KRISHNA.K	C	0.45	-	-	-	0.45	-	-	-	-

Institution No. 015025

Pers No.	Name		Whole Body Dose (mSv)	Current Year	Beta Dose (mSv)	Beta Total (mSv)	Unfaded Dose (mSv) $(X/C) \cdot B = \text{Total}$	Weighted mSv
A:	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				
<hr/>								
<hr/>								

Notes :

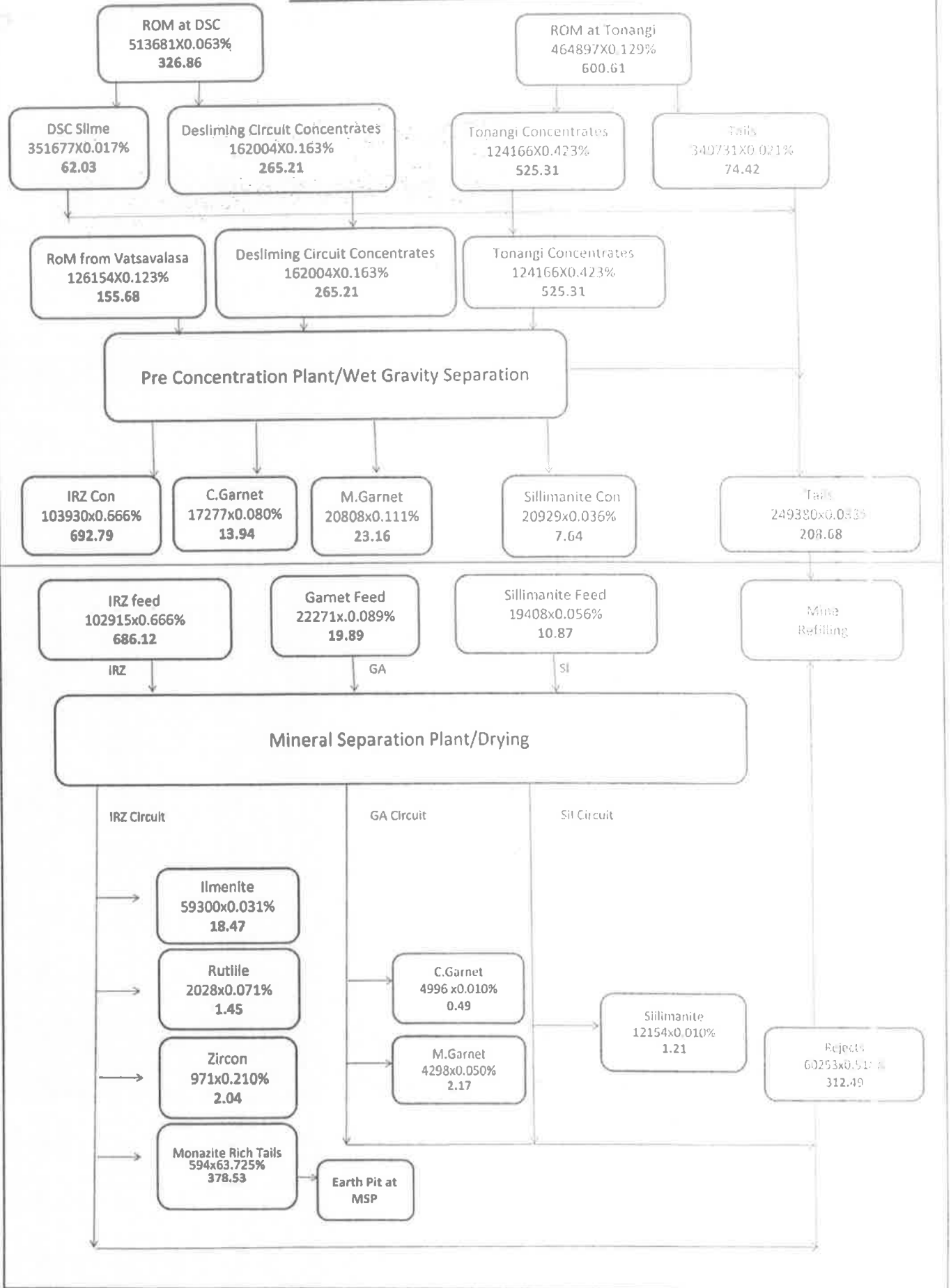
Notes :

1. All doses are reported in millisievert (mSv= $100\text{mRem}$ ).
3. When more than one card is used dose is added.
5. Annual effective dose in any calendar year shall not exceed 30 mSv.
7. \* means in the service period dosemeter not used
9. \*\*\* TLD cards are spoiled or contaminated.
2. No Dose reported for new person unless P.D.F. received.
4. Dose below measurable level for X-RAY=0.05 mSv, BE TA=0.50 mSv and GAMMA=0.10 mSv is shown zero.
6. Cumulative effective dose for a block of sliding 5 years (current year + previous 4 years) is 100 mSv
8. \* means Total dose>20mSv. Inform details of the radiation workplace to BARRC/AEANS
10. \*\*\* means letter sent regarding over exposure > 100 mSv.

Authenticated B

P. AYAPPAN  
SR. SCIENTIFIC

## MONAZITE MATERIAL BALANCE





TSPL/MIN/AERB/16-17/ 10SS

10-02-2017  
Srikakulam,

To  
The Director,  
Industrial Plant Safety Division,  
Atomic Energy Regulatory Board,  
Niyamak Bhavan-A, Anushaktinagar,  
Mumbai-400 094.

Dear Sir,

We are herewith submitting Quarterly Health Physics Report for Oct to Dec, 2016.

Thanking You,

Yours truly,

**Vice President (Mines)**



# **QUARTERLY HEALTH PHYSICS REPORT FOR NON DAE BEACH SAND MINERALS (BSM) FACILITY**

Date: 10-02-2017.

Name of the facility : TRIMEX SANDS PVT LTD.  
 Location of the facility : SRIKAKULAM, ANDHRAPRADESH  
 Period Reporting : Oct 2016 to Dec 2016.

## **1.0 A). DOSE STATICS (TLD lab report is enclosed)**

		No. of persons monitored	Collective dose (person-mSv)	Average Individual dose (mSv)	Maximum Individual dose (mSv)
<b>Quarter</b>	<b>Regular</b>	29	3.40	0.12	1.20
	<b>Temporary</b>	NIL	NIL	NIL	NIL
<b>Cumulative in the year</b>	<b>Regular</b>	34	4.70	0.14	1.30
	<b>Temporary</b>	NIL	NIL	NIL	NIL

## **1.1 INDIVIDUAL DOSE STATICS**

<b>Dose range(mSv)</b>	<b>Number of person in year</b>		
	<b>Regular</b>	<b>Temporary</b>	<b>Total</b>
<b>Less than 2</b>	34	NIL	34
<b>2-6</b>	NIL	NIL	NIL
<b>&gt;6-20</b>	NIL	NIL	NIL
<b>&gt;20-30</b>	NIL	NIL	NIL
<b>&gt;30</b>	NIL	NIL	NIL
<b>Total</b>	34	NIL	34

## **2.0 MONAZITE ENRICHED TAILINGS DETAILS**

	<b>Raw material used (From mines and stock)</b>			<b>Final Products (Which ever is applicable)</b>					<b>Tailings Generated</b>		
	<b>Feed</b>	<b>Pre - Concentration plant output</b>	<b>Procured raw material</b>	<b>Ilmenite</b>	<b>Rutile</b>	<b>Zircon</b>	<b>Garnet</b>	<b>Sillimanite</b>	<b>Silica Rich Tailings</b>		<b>Monazite Enriched Tailings</b>
									<b>Rejects from PCP</b>	<b>Rejects from MSP</b>	
<b>Qty/ Yr (tons)</b>	1279520	177683(*)	---	67956	1734	947	10836	8711	1101837	70159	632
<b>Monazite (%)</b>	0.085	IRZ - 0.569 GA - 0.128 SI - 0.115	---	0.053	0.066	0.206	0.067	0.030	0.027	0.379	07.53

(\*) 16708 MT of Concentrate material generated from Pre-Concentration Plant was stored inside the PCP premises.

**METHOD OF DISPOSAL OF MONAZITE ENRICHED TAILINGS** (Tick whichever is applicable)

- i) Disposed by backfilling of mined out site  
 ii) ☒ Disposed in trenches within the plant boundary  
 iii) Sold to the other BSM facility

**3.0 RADIATION MONITORING RESULT** (whichever is applicable)

Location	Radiation Level ( $\mu\text{Gy/hr}$ )
Mining Area	0.5 – 0.7
Backfilled Area	0.1–0.2
Pre Concentration Plant	
• General Background	0.2–0.4
• Raw material Storage	0.5 – 0.7
• Pre Concentration Plant out put	IRZ con : 2 – 3 GA con : 0.1–0.3 Sil con : 0.1–0.4
• Pre Concentration Plant Tailings	0.1–0.2
Mineral Separating plant (Physical mineral separation and /or Chemical processing)	
• General Background of plant premises	0.3 – 0.5
• Raw material Storage	IRZ con : 2 – 3 GA con : 0.1 – 0.4 Sil con : 0.2 – 0.4
• Inside Mineral Separating plant(eg Magnetic, High tension separators)	0.6 – 1.0
• Monazite Enriched tailings storage area	70–90
• On Top of Trenches filled with monazite enriched tailings and topped with silica rich sand	0.3 – 0.5
• Inside chemical processing plant having minerals separation unit (roaster ,caliciner, digester, effluent, pipelines like iron oxide slurry pipe lines etc)	-NA-

The table is indicative nature .If necessary; facility may be including other area also.



(Signature of Radiological Safety Officer)  
 Signature of the Employer with Official Seal & Date

**RADIOLOGICAL SAFETY OFFICER**  
**TRIMEX SANDS PVT LTD.,**  
**VATSAVALASA (V), GARA (M)**  
**SRIKAKULAM (DIST-532 404, A.P)**

**AVANTEC LABORATORIES (P) LTD.,**  
No. 17, Arignar Anna Industrial Estate, Mettukuppam, Vanagaram, Chennai - 600 095.  
Personnel Monitoring Service  
**DOSE REPORT**

Institution No. 015036  
Address : TRIMEX SANDS PVT LTD  
VATSAVALASA (V), GARA (M),  
SRIKAKULAM (DIST),  
SRIKAKULAM ANDHRA PRADESH,  
INDIA - 532404

SERVICE FREQUENCY : QUARTERLY YEAR: 2016  
Report Date : 28/01/2017

Pers. No.	Name	Worn At	Whole Body Dose (mSv)				Beta Dose (mSv)	Beta Total (mSv)	Wrist Dose (mSv) (X/G)*8 = Total	Wrist Total mSv
			Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				
1	0006 RAJU M	C	0.00	0.00	0.00	0.00				
2	0007 TELUKUTI RAMA RAO	C	0.00	0.00						
3	0008 RAMAKRISHNA P	C	0.00	0.00	0.00	0.15				
4	0010 SRI RAMULU D	C	0.00	0.00						
5	0011 SATTAM T	C	0.00	0.00	0.00	0.00				
6	0013 KAMA RAJU T	C	0.05	0.00	0.00	0.30				
7	0014 RAMA RAO P	C	0.00	0.00	0.00	0.15				
8	0015 VENKATA RAO P	C	0.05	0.00	0.00	0.15				
9	0016 RAMA RAO T	C	0.00	0.00	0.00	0.00				
10	0017 SIMHACHALAM THAMADA	C	0.10	0.00	0.00	0.00				
11	0018 RADHA KRISHNA K	C	0.00	0.00	0.00	0.30				
12	0019 SIMHACHALAM TELUKUTI	C	0.00	0.00	0.00	1.20				
13	0020 RAMA RAO M	C	0.00	0.00	0.00	0.35				
14	0021 NARAYANA RAO D	C	0.00	0.00	0.00	0.20				
15	0022 DANAYYA T	C	0.00	0.00	0.00	0.25				
16	0023 RAMA RAJU S	C	0.00	0.00	0.00	0.00				
17	0024 SRINIVASA RAO B	C	0.10	1.00	0.00	0.20				
18	0025 BHAGAVAN D	C	0.00	0.00	0.00	0.15				
19	0026 SHRI BALAGA SRAVAN KUMAR	C	0.00	0.00						
20	0029 SHRI MYLA PILLU NAGA RAJU	C	0.00	0.00	0.00	0.00				
21	0030 SHRI MYLA PILLU SRINU	C	0.00	0.00						
22	0032 SHRI SAMPATHI RAO PRASANNU	C	0.00	0.00	0.00					
23	0033 SHRI KAPU ARUN KUMAR	C	0.00	0.00		0.00				
24	0034 D. VENKATESHA B	C				0.00				
25	0035 SHRI SHAIK NAZEER	C				0.00				
26	0036 SHRI ANVESH MAMIDI	C				0.00				
27	0037 SHRI APPALA NAIDU P	C				0.00				
28	0038 SHRI BHANOJI RAO B	C				0.00				
29	0039 SHRI RAMA RAO D	C				0.00				

Institution No. 015000		Whole Body Dose (mSv)				Beta Dose (mSv)		Wrist Dose (mSv)	
No.	Worn At	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Current Year Total	Beta Dose (mSv)	Beta Total (mSv)	Wrist Dose (mSv) (A/C)+B = Total
30	0040 SHRI GOVINDA RAO J	C	*	*	0.00	0.00	...	...	...
31	0041 SHRI RAMANA MURTHY CH	C	*	*	0.00	0.00	...	...	...
32	0042 SHRI TAMADA APPANNA	C	*	*	0.00	0.00	...	...	...
33	0043 SHRI NARAYANASWAMI T	C	*	*	0.00	0.00	...	...	...
34	0044 SHRI PAMMA KRISHNA K	C	*	*	0.00	0.00	...	...	...

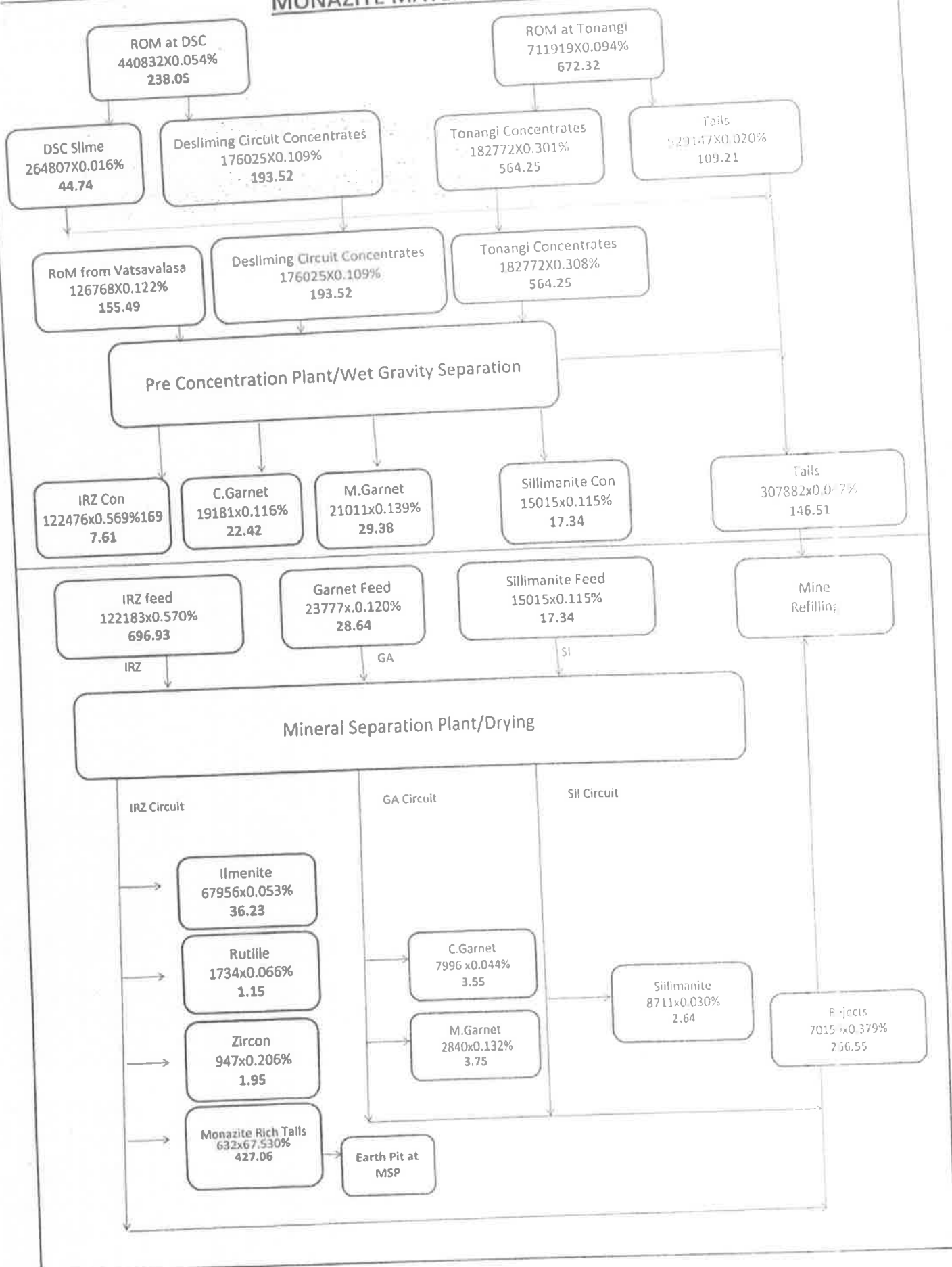
# Notes :

1. All doses are reported in millisievert (mSv=100mRem)
2. No Dose reported for new person unless PDF received.
3. When more than one card is used dose is added.
4. Dose below measurable level for X-RAY is 0.05 mSv, BETA=0.50 mSv and GAMMA=0.10 mSv is shown zero.
5. Annual effective dose in any calendar year shall not exceed 30 mSv.
6. Cumulative effective dose for a block of sliding 5 years (current year + previous 4 years) is 100 mSv
7. ... means in the service period dosimeter not used.
8. ... means Total dose > 20mSv, uniform details of the radiation workplace to RAR/CAERB.
9. ... TL D cards are spoiled or contaminated.
10. ... means letter sent regarding over exposure > 100 mSv.

Authenticated By

PAYAPPAN  
SR.Scientific Officer

# MONAZITE MATERIAL BALANCE



भारत सरकार/Government of India  
खान मंत्रालय/Ministry of Mines  
भारतीय खान ब्यूरो/Indian Bureau of Mines  
हैदराबाद क्षेत्रीय कार्यालय/Hyderabad Regional Office

Phone No. : (040)-27539992/2753993  
Fax No.(TF): (040)-27539991  
E-Mail : ro.hyderabad@ibm.gov.in  
No. AP/SRK/MP/Garnet-Silliminate-7/Hyd

603, 6<sup>th</sup> Floor,  
CGO Towers, Kavadiiguda,  
Secunderabad - 500 080.

Date: 2 MAR 2017

To  
✓ Sri T V Chowdary,  
M/s. Trimex Sands Pvt. Ltd.,  
Trimex Towers,  
No.1, Subbaraya Avenue,  
8P, Ramaswamy Rd., Alwarpet,  
Chennai - 600018.

Sub: Approval of Modified Mining Plan in respect of Srikurman Heavy Minerals Sands Mines of M/s. Trimex Sands Pvt. Ltd over an extent of 7.20 Sq.Km. in Vastsavalasa & Tonangi Villages, Gara Mandal, Srikakulam dist., A.P. submitted under Rule 17(3) of MCR, 2016.

Ref: 1. Your letter no. TSPL/IBM/MMP/2016/3 dated 03.01.2017.  
2. This office letter of even no. dated 17.01.2017.  
3. Your letter No. TSPL/IBM/MMP/2017/1 dated 31.01.2017.

Sir,

In exercise of the power conferred by the clause (b) of sub-section (2) of Section-5 of Mines and Minerals (Development and Regulation) Act, 1957 (as amended up to 27<sup>th</sup> March, 2015) and Powers delegated by the Controller General, Indian Bureau of Mines vide Order No.S.O.1857(E) dated 18<sup>th</sup> May,2016 and further as per Rule 3(2) of Atomic Mineral Concession Rules,2016 which states that "Mineral Concessions relating to atomic Minerals where the grade of atomic mineral contained in the ore is less than the threshold value will be governed by the provisions of the Minerals(other than atomic and Hydrocarbon Energy Minerals,2016 in force". I hereby approve the Modified Mining Plan .The approval is subject to the following conditions:

- The Modified Mining Plan is approved without prejudice to any other law applicable to the Mining lease area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval.
- It is also clarified that the approval of the aforesaid Modified Mining Plan does not in any way imply the approval of the Government in terms of any other provision of the Mines and Minerals (Development & Regulation) Act, 1957, or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- Indian Bureau of Mines has not undertaken verification of the applied Mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant.
- At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- The disposal of the radioactive waste generated if any, will be stacked/disposed as per the directives/instructions from the competent authority.

Yours faithfully,

(Pankaj Kumar Sheth)  
Regional controller of Mines

Encl: One copy of approved Modified Mining Plan  
containing Text-156, Annexure-68 & Plates-17

Copy for kind information to:

1. Sri Deepak Rathod, Trimex Towers, No. 1, Subbaraya Avenue, C.P. Ramswamy Road, Alwarpet, Chennai
2. The Director of Mines and Geology, Govt. of Andhra Pradesh, 4<sup>th</sup> and 5<sup>th</sup> Floors, Sri Anjaneya Towers, Ibrahimpatnam, Vijayawada, A.P. along with copy of Approved Mining Plan..
3. The Director of Mines Safety, Hyderabad Region, No.2, South Central Zone, DGMS, Room No.701, 7<sup>th</sup> Floor, CGO Towers, Praga Tools Premises, Kavadiiguda, Secunderabad- 500 080.

*I*

(Pankaj Kulshreshtha )  
Regional controller of Mines

**Labs and Consultants**

2172

**Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/4/0317

dt 04.04.2017

Description of Test:

Ambient Air Quality Monitoring inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

As per details given below

Date of monitoring:

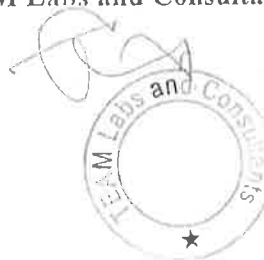
14.03.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	MSP- South East corner	18	44	7.0	14.2
2	MSP-North West corner	14	48	7.2	15.0
3	PCP-East gate	43	90	8.5	18.8
4	PCP-South West gate	22	52	7.1	15.8
5	Perlavanipet mines	25	60	7.5	16.2
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub>; Particulate matter of less than 10 µ size

MSP-Mineral Separation Plant

For TEAM Labs and Consultants





**Labs and Consultants****2173****Registered Office :****B-115, 116, 117 & 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.****Ph. : (O) 040-23748655 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com****ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi****TEST REPORT****Test Report No .TLC /V/Env/ TSPL-N/01/0317****dt 04.04.2017****Description of Test: Ambient Air Quality Monitoring inside core zone****Name of the client: Trlmex Sands Pvt. Ltd.****Location of sampling: New PCP Plant ,Tonangi****Date of monitoring: 13.03.2017**

No	Location	particulate matter PM <sub>2.5</sub> μ gms/M3	particulate matter PM <sub>10</sub> μ gms/M3	SO2 μ gms/M3	NOx μ gms/M3
1	DG Area	20	46	7.0	14.6
2	Security gate	24	53	7.2	15.0
	APPCB STANDARD	60	100	80	80

**PM<sub>2.5</sub> : Particulatematter of less than 2.5 μ size****PM<sub>10</sub>; Particulatematter of less than 10 μ size****For TEAM Labs and Consultants**

**Labs and Consultants****Registered Office :**

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ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/5/0317

dt 04.04.2017

Description of Test:

Ambient Air Quality Monitoring -Buffer zone

Name of the client:

Trimex Sands. PvtLtd.

Location of sampling:

surrounding villages as per details given

Date of monitoring:

13.03.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	Srikurmam	28	76	8.5	18.9
2	Pedda vatsavalasa	22	61	7.7	15.2
3	Komaravani peta	12	40	6.0	12.8
4	Tonangi	27	58	6.5	13.6
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub> : Particulate matter of less than 10 µ size

For TEAM Labs and Consultants



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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/4/0217

dt 10.03.2017

Description of Test:

Ambient Air Quality Monitoring inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

As per details given below

Date of monitoring:

15.02.2017

No	Location	particulate matter PM <sub>2.5</sub> μ gms/M3	particulate matter PM <sub>10</sub> μ gms/M3	SO <sub>2</sub> μ gms/M3	NO <sub>x</sub> μ gms/M3
1	MSP- South East corner	21	59	7.2	14.7
2	MSP-North West corner	25	65	7.7	15.8
3	PCP-East gate	37	86	8.2	15.6
4	PCP-South West gate	24	64	7.0	15.2
5	Perlavanipet mines	30	66	7.4	16.5
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 μ sizePM<sub>10</sub> : Particulate matter of less than 10 μ size

MSP-MIneral Separation Plant

For TEAM Labs and Consultants



**Labs and Consultants****2056****Registered Office :**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/01/0217

dt 10.03.2017

Description of Test: Ambient Air Quality Monitoring inside core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: New PCP Plant ,Tonangi

Date of monitoring: 14.02.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO <sub>2</sub> µ gms/M3	NO <sub>x</sub> µ gms/M3
1	DG Area	30	72	7.8	16.6
2	Security gate	15	60	6.8	14.4
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> : Particulate matter of less than 2.5 µ sizePM<sub>10</sub> : Particulate matter of less than 10 µ size

For TEAM Labs and Consultants



**Labs and Consultants****2058****Registered Office :**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/5/0217

dt 10.03.2017

Description of Test: Ambient Air Quality Monitoring –Buffer zone

Name of the client: Trimex Sands. PvtLtd.

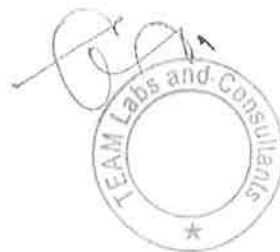
Location of sampling: surrounding villages as per details given

Date of monitoring: 14.02.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	Srikurmam	16	65	7.8	16.2
2	Pedda vatsavalasa	25	70	8.0	16.6
3	Komaravani peta	13	45	6.0	13.1
4	Tonangi	20	52	6.8	13.9
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulatematter of less than 2.5 µ sizePM<sub>10</sub>; Particulatematter of less than 10 µ size

For TEAM Labs and Consultants



**TEAM****Labs and Consultants**ORIGINAL

Form No. TCU/L&amp;S/RF-138

1815

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**TEST REPORT**

Test Report No. TLC /V/Env/ TSPL/4/0117

dt 02.02.2017

Description of Test:

Ambient Air Quality Monitoring inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

As per details given below

Date of monitoring:

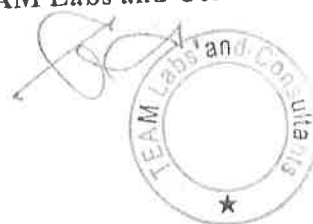
24.01.2017

No	Location	particulate matter PM <sub>2.5</sub> μ gms/M3	particulate matter PM <sub>10</sub> μ gms/M3	SO2 μ gms/M3	NOx μ gms/M3
1	MSP- South East corner	19	56	7.0	14.1
2	MSP-North West corner	24	60	7.2	15.4
3	PCP-East gate	42	92	8.5	16.9
4	PCP-South West gate	28	70	7.2	16.6
5	Perlavanipet mines	32	68	7.0	16.2
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulatematter of less than 2.5 μ sizePM<sub>10</sub>; Particulatematter of less than 10 μ size

MSP-Mineral Separation Plant

For TEAM Labs and Consultants



**Labs and Consultants****Registered Office :**

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1816

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/01/0117

dt 02.02.2017

Description of Test:

Ambient Air Quality Monitoring inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

New PCP Plant ,Tonangl

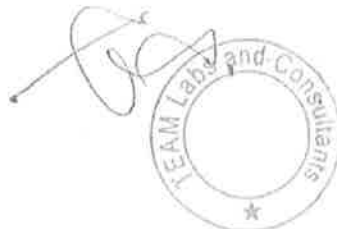
Date of monitoring:

23.01.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	DG Area	33	75	7.5	16.2
2	Security gate	14	58	6.6	13.3
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> : Particulatematter of less than 2.5 µ sizePM<sub>10</sub> : Particulatematter of less than 10 µ size

For TEAM Labs and Consultants



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Test Report No .TLC /V/Env/ TSPL/5/0117

dt 02.02.2017

Description of Test: Ambient Air Quality Monitoring -Buffer zone

Name of the client: Trimex Sands. PvtLtd.

Location of sampling: surrounding villages as per details given

Date of monitoring: 23.01.2017

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	Srikurmam	14	58	6.8	13.3
2	Pedda vatsavalasa	24	65	7.0	15.5
3	Komaravani peta	12	40	6.0	12.2
4	Tonangi	22	54	6.6	14.4
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub>; Particulate matter of less than 10 µ size

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Laboratory Recognised by Ministry Environment, Forests and Climate Change, GoI, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/4/1216

dt 03.01.2017

Description of Test:

Ambient Air Quality Monitoring Inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

As per details given below

Date of monitoring:

31.12.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	MSP- South East corner	17	47	6.6	13.3
2	MSP-North West corner	22	54	7.0	14.5
3	PCP-East gate	45	95	8.2	17.2
4	PCP-South West gate	25	65	7.0	15.3
5	Perlavanipet mines	30	62	6.7	15.0
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub>; Particulate matter of less than 10 µ size

MSP-Mineral Separation Plant

For TEAM Labs and Consultants

**Labs and Consultants****Registered Office :**

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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/01/1216

dt 03.01.2017

Description of Test:

Ambient Air Quality Monitoring inside core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

New PCP Plant ,Tonangi

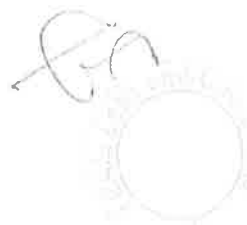
Date of monitoring:

30.12.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO <sub>2</sub> µ gms/M3	NO <sub>x</sub> µ gms/M3
1	DG Area	31	70	7.0	14.8
2	Security gate	19	54	6.0	12.5
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> : Particulate matter of less than 2.5 µ sizePM<sub>10</sub> : Particulate matter of less than 10 µ size

For TEAM Labs and Consultants



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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/5/1216

dt 03.01.2017

Description of Test: Ambient Air Quality Monitoring –Buffer zone

Name of the client: Trimex Sands. PvtLtd.

Location of sampling: surrounding villages as per details given

Date of monitoring: 30.12.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	Srikurmam	11	51	6.5	12.9
2	Pedda vatsavalasa	22	58	6.8	14.0
3	Komaravani peta	10	35	6.0	11.8
4	Tonangi	25	50	6.8	14.9
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub>; Particulate matter of less than 10 µ size

For TEAM Labs and Consultants



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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/4/1116

dt 05.12.2016

Description of Test: Ambient Air Quality Monitoring inside core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: As per details given below

Date of monitoring: 15.11.2016

No	Location	particulate matter PM <sub>2.5</sub> μ gms/M3	particulate matter PM <sub>10</sub> μ gms/M3	SO2 μ gms/M3	NOx μ gms/M3
1	MSP- South East corner	22	50	6.5	15.0
2	MSP-North West corner	22	58	6.0	14.9
3	PCP-East gate	28	65	6.5	15.5
4	PCP-South West gate	24	58	6.2	14.0
5	Perlavani pet mines	27	63	7.5	16.2
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 μ sizePM<sub>10</sub>; Particulate matter of less than 10 μ size

MSP-Mineral Separation Plant

For TEAM Labs and Consultants

**Labs and Consultants****1483****Registered Office :**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/01/1116

dt 05.12.2016

Description of Test: Ambient Air Quality Monitoring inside core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: New PCP Plant ,Tonangi

Date of monitoring: 16.11.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	DG Area	29	68	8.5	18.5
2	Security gate	25	58	6.8	14.0
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> : Particulatematter of less than 2.5 µ sizePM<sub>10</sub>; Particulatematter of less than 10 µ size

For TEAM Labs and Consultants



**Labs and Consultants**

1493

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/5/1116

dt 05.12.2016

Description of Test:

Ambient Air Quality Monitoring –Buffer zone

Name of the client:

Trimex Sands. PvtLtd.

Location of sampling:

surrounding villages as per details given

Date of monitoring:

16.11.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	Srikurmam	17	54	6.8	15.5
2	Pedda vatsavalasa	14	40	6.0	12.5
3	Komaravani peta	15	45	6.5	14.0
4	Tonangi	19	52	6.6	14.4
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulate matter of less than 2.5 µ sizePM<sub>10</sub> : Particulate matter of less than 10 µ size

For TEAM Labs and Consultants



**Labs and Consultants****1357****Registered Office :**

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Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/4/1016

dt 07.11.2016

Description of Test: Ambient Air Quality Monitoring inside core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: As per details given below

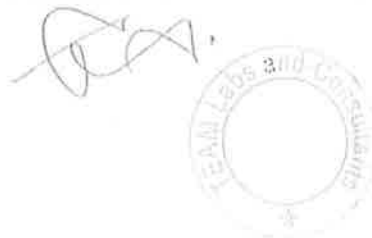
Date of monitoring: 17.10.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO <sub>2</sub> µ gms/M3	NO <sub>x</sub> µ gms/M3
1	MSP- South East corner	20	45	6.5	14.0
2	MSP-North West corner	24	50	6.0	13.5
3	PCP-East gate	30	66	7.0	16.2
4	PCP-South West gate	25	54	6.0	12.9
5	Perlavanipet mines	28	62	7.2	15.0
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> :Particulatematter of less than 2.5 µ sizePM<sub>10</sub>; Particulatematter of less than 10 µ size

MSP-Mineral Separation Plant

For TEAM Labs and Consultants



**Labs and Consultants**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/01/1016

dt 07.11.2016

Description of Test: Ambient Air Quality Monitoring Inside core zone

Name of the client: Trimex Sands Pvt. Ltd.

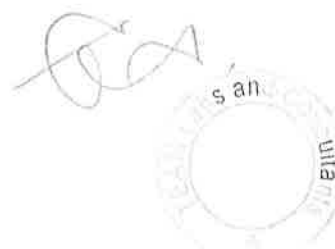
Location of sampling: New PCP Plant ,Tonangi

Date of monitoring: 18.10.2016

No	Location	particulate matter PM <sub>2.5</sub> µ gms/M3	particulate matter PM <sub>10</sub> µ gms/M3	SO2 µ gms/M3	NOx µ gms/M3
1	DG Area	24	58	6.0	12.2
2	Security gate	28	62	6.5	13.9
	APPCB STANDARD	60	100	80	80

PM<sub>2.5</sub> : Particulatematter of less than 2.5 µ sizePM<sub>10</sub> : Particulatematter of less than 10 µ size

For TEAM Labs and Consultants





**TRIMEX**

C/o

Annexure - 11

TSPL/ENV/MOEF/2016-17/1069

To  
The Regional Office (South Eastern Zone)  
Ministry of Environment, Forests and Climate Change  
1<sup>st</sup> & 2<sup>nd</sup> floor, HEPC building, No.34  
Cathedral Garden Road, Nungambakkam  
Chennai - 600034

Dear Sir,

Sub: Observation wells water quality data report – Submission - Reg.

Ref: Environmental Clearance vide No.J-11015/175/2011-1A, H (M)  
dated 17-04-2015 & CRZ Clearance vide F.No.11-67/2013-1 A-III dated 11-  
04-2015.

As per the reference cited above, please find herewith enclosed quarterly  
observation wells & Piezometer monitoring for the period of Jan to Mar 2017.

Thanking You,

Yours faithfully,

Vice President (Mines)

CC:

Regional Director, CGWB, Hyderabad-500068  
Central Pollution Control Board, Bengaluru  
AP Pollution Control Board, Hyderabad  
AP Pollution Control Board, Vizianagaram

Trimex Sands Pvt Ltd: Vatchavalasa (V), Gara Mandal, Srikakulam District - 532 404, Andhra Pradesh, India  
Tel: +91 8942 283755, Fax: +91 8942 283758, email: info@trimexsands.com

Hyderabad Office: 2nd Floor, Sri Durga Towers, Plot No. 201, Road No. 10, Banjara Hills, Hyderabad - 500016  
Tel: +91 40 2338 4380 / 3371 3600 Fax: +91 40 2338 4068

Reg. Office: Trimex Towers, No.1 Subbaraya Avenue, C.P. Ramaswamy Road, Alwarpet, Chennai - 600018  
Tel: +91 44 2498 8822 / 8813 Fax: +91 44 2498 6047 web: www.trimexsands.com

CIN: U14299TN2004PTC071437

**TRIMEX**

O/c

TSPI/ENV/MOEF/2016-17/1051

Srikakulam  
23-01-2017

To  
The Regional Office (South Eastern Zone)  
Ministry of Environment, Forests and Climate Change  
1<sup>st</sup> & 2<sup>nd</sup> floor, HEPC building, No.34  
Cathedral Garden Road, Nungambakkam  
Chennai - 600034

Dear Sir,

Sub: Observation wells water quality data report – Submission - Reg.

Ref: Environmental Clearance vide No.J-11015/175/2011-1A-II (M)  
dated 17-04-2015 & CRZ Clearance vide F.No.11-67/2013-1A-III dated 28-  
04-2015.

As per the reference cited above, please find herewith enclosed quarterly report of  
observation wells & Piezometer monitoring for the period of Oct to Dec, 2016.

Thanking You.

Yours faithfully,

  
Vice President (Mines)

CC:

Regional Director, CGWB, Hyderabad-500068  
Central Pollution Control Board, Bangalore  
AP Pollution Control Board, Hyderabad  
AP Pollution Control Board, Vizianagaram



Trimex Sands Pvt Ltd: Vatchavallasa (V) Gara Mandal, Srikakulam District, S.P. Mandal, Andhra Pradesh, India.  
Tel: +91 8942 283 155 Fax: +91 8942 283 156 email: info@trimexsands.com

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Tel: +91 40 2338 4380 Fax: +91 40 2338 4381

Reg. Office: Trimex Towers, No. 1 Subbaraya Avenue, P. B. Nagar, Vengal Rao Nagar, Hyderabad-500016  
Tel: +91 44 2498 8822 Fax: +91 44 2498 8823 web: www.trimexsands.com

CIN: U14299TN2004PTC071437

**TEAM**

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Annexure-12

2155

**Labs and Consultants****Registered Office :**

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**TEST REPORT**

Test Report No. TLC/V/Env/TSPL/9A/0317

dt 04.04.2017

Description of Test:

Phisico-chemical Analysis of Water

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

Water samples as per Details given

Date of Sample Collected :

14.03.2017

No	parameter	Pond at Vatchavalasa
1	pH	8.05
2	Colour Hazen units	5
3	Odour	un objectionable
4	Total Dissolved solids	740
5	Total Suspended Solids	5
6	Turbidity	1.8NTU
7	Total Hardness as CaCo3	150mgpl
8	Calcium as CaCo3	90mgpl
9	Magnesium as CaCo3	60mgpl
10	Chlorides Cl-	210mgpl
11	Flouride	0.5 mgpl
12	Sulphates	32mgpl
13	Nitrates	1.5mgpl
14	Phosphates	BDL
15	Iron	0.03mgpl
16	Lead	BDL
	Water table from groundlevel inmtrs	

For TEAM Labs and Consultants



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Test Report No. TLC/V/Env/TSPL/12/1216

dt 03.01.2017

Description of Test: Phisico-chemical Analysis of Water

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: Vatsavalasa Pond

Date of Sample Collected : 31.12.2016

No	parameter	Pond at Vatchavalasa
1	pH	8.25
2	Colour Hazen units	5
3	Odour	un objectionable
4	Total Dissolved solids	480
5	Total Suspended Solids	5
6	Turbidity	1.9NTU
7	Total Hardness as CaCo3	90mgpl
8	Calcium as CaCo3	60mgpl
9	Magnesium as CaCo3	30mgpl
10	Chlorides Cl-	150mgpl
11	Flouride	0.5 mgpl
12	Sulphates	32mgpl
13	Nitrates	0.5mgpl
14	Phosphates	BDL
15	Iron	0.04mgpl
16	Lead	BDL
	Water table from groundlevel inmtrs	-

For TEAM Labs and Consultants



<b>CSR Expenditure from Aril-2016 to March-2017</b>		
<b>S.NO.</b>	<b>Nature of Activity</b>	<b>Amount Spent Rs. (in Lakhs)</b>
1	Self-Employment Training / Educational Infrastructure	21.19
2	Medical Facilities / Infrastructure	22.48
3	Community Welfare Schemes / Infrastructure	32.64
4	Infrastructure like Roads / Irrigation / Hostels	37.01
5	Sports	0.09
6	Green Belt (Surrounding Villages)	0.08
7	Contribution to District Mineral Foundation Trust	160.56
<b>Grand Total :</b>		<b>274.05</b>



## Plantation Details

YEAR	TYPE OF SPECIES	No of Plants	
		Plan	Actual
Afforestation in Refilled areas :			
2016-2017	Casuarina, Acacia, Eucalyptus, Cashew	72169	1,33,250
Green Belt :			
2016-2017	Eucalyptus, Acacia, Badam, Neem etc.	5100	7250



## Afforestation in Back filled Areas



Annexure-15



Summary of production details in from Oct-2016 to Mar-2017 (units in MT)							
ROM	Ilmenite	Garnet	Sillimanite	Rutile	Zircon	Total Mineral Qty	Subgrade material & Rejects
2357451	127256	20130	20865	3762	1918	173931	2209095

**TEAM****ORIGINAL**

Form-No. TCL/LGF/RF-138

**2176****Labs and Consultants****Registered Office :**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/6/0317

dt 04.04.2017

Description of Test:

Ambient Noise level Monitoring -Buffer zone

Name of the client:

Trimex Sands. PvtLtd.

Location of sampling:

As per details given

Date of monitoring:

13.03.2017

Time Hrs	Srikurmam	Pedda vatsavalasa	Komaravani peta	Chinna Tonangi
Noise levels indB(A)				
11.00	52.8	41.7	43.8	49.1
12.00	54.1	40.1	42.5	46.5
13.00	53.5	47.0	42.6	43.8
14.00	58.5	42.6	41.9	45.2
15.00	53.7	42.0	45.8	43.9
16.00	52.9	43.1	43.5	42.4
17.00	56.3	43.9	41.9	43.9
18.00	55.9	44.6	46.5	46.4

For TEAM Labs and Consultants



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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/7/0317

dt 04.04.2017

Description of Test: Ambient Noise level Monitoring -Core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: As per details given

Date of monitoring: 14.03.2017

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
Noise levels indB(A)				
09.00	57.5	50.6	64.4	49.3
10.00	45.8	51.6	67.9	48.5
11.00	46.4	50.3	64.9	50.6
12.00	48.6	50.2	63.1	49.5
13.00	44.6	54.5	63.3	46.8
14.00	49.7	47.8	64.9	48.2
15.00	51.1	46.4	62.2	49.7
16.00	47.1	51.2	65.3	51.4

For TEAM Labs and Consultants



**Labs and Consultants****2173****Registered Office :**

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**TEST REPORT**

Test Report No :TLC /V/Env/ TSPL-N/02/0317

dt 04.04.2017

Description of Test:

Ambient Noise level Monitoring -Core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

New PCP Plant ,Tonangi

Date of monitoring:

13.03.2017

Time Hrs	Security gate	DG Area
Noise levels IndB(A)		
11.00	56.8	61.4
12.00	52.5	63.8
13.00	49.3	63.3
14.00	48.8	64.2
15.00	50.6	64.1
16.00	51.6	64.6
17.00	52.4	65.4
18.00	57.9	66.2

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Form-No. TCLL/GF/RF-138

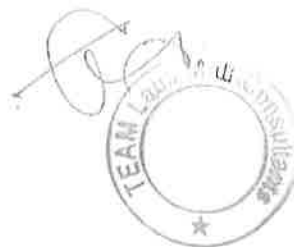
**Labs and Consultants****Registered Office :****2053**

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**TEST REPORT****Test Report No .TLC /V/Env/ TSPL/6/0217****dt 10.03.2017****Description of Test:****Ambient Noise level Monitoring -Buffer zone****Name of the client:****Trimex Sands. PvtLtd.****Location of sampling:****As per details given****Date of monitoring:****14.02.2017**

Time Hrs	Srikurmam	Pedda vatsavalasa	Komaravani peta	Chinna Tonangi
	Noise levels IndB(A)			
11.00	53.0	58.2	54.0	45.2

**For TEAM Labs and Consultants**

**TEAM****ORIGINAL**

Form-No. TCLL/GF/RF-138

**Labs and Consultants****2069****Registered Office :**

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Test Report No .TLC /V/Env/ TSPL/7/0217

dt 10.03.2017

Description of Test:

Ambient Noise level Monitoring -Core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

As per details given

Date of monitoring:

15.02.2017

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
	Noise levels indB(A)			
11.00	57.0	59.5	62.0	54.1

For TEAM Labs and Consultants



**TEAM****ORIGINAL**

Form-No. TCL/L/GF/RF-138

**Labs and Consultants****2061****Registered Office :**

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Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT****Test Report No .TLC /V/Env/ TSPL-N/02/0217****dt 10.03.2017****Description of Test:****Ambient Noise level Monitoring -Core zone****Name of the client:****Trimex Sands Pvt. Ltd.****Location of sampling:****New PCP Plant ,Tonangi****Date of monitoring:****14.02.2017**

Time Hrs	Security gate	DG Area
	Noise levels indB(A)	
12.00	53.2	61.2

**For TEAM Labs and Consultants**



**TEAM****ORIGINAL**

Form-No. TCLL/GF/RF-138

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/6/0117

dt 02.02.2017

Description of Test:

Ambient Noise level Monitoring -Buffer zone

Name of the client:

Trimex Sands. PvtLtd.

Location of sampling:

As per details given

Date of monitoring:

23.01.2017

Time Hrs	Srikurmam	Pedda vatsavalasa	Komaravanl peta	Chinna Tonangi
	Noise levels indB(A)			
11.00	50.2	57.0	52.2	43.3

For TEAM Labs and Consultants



**TEAM****ORIGINAL**

Form-No. TCL/L/GF/RF-138

**Labs and Consultants**

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Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.comISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/7/0117

dt 02.02.2017

Description of Test:

Ambient Noise level Monitoring -Core zone

Name of the client:

Trlmex Sands Pvt. Ltd.

Location of sampling:

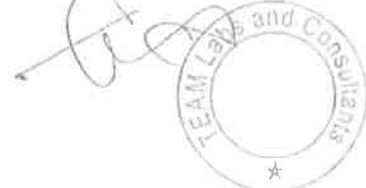
As per details given

Date of monitoring:

24.01.2017

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
	Noise levels indB(A)			
11.00	56.6	59.0	61.0	52.8

For TEAM Labs and Consultants



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**TEST REPORT****Test Report No .TLC /V/Env/ TSPL-N/02/0117****dt 02.02.2017****Description of Test:****Ambient Noise level Monitoring -Core zone****Name of the client:****Trlmex Sands Pvt. Ltd.****Location of sampling:****New PCP Plant ,Tonangi****Date of monitoring:****23.01.2017**

Time Hrs	Security gate	DG Area
	Noise levels indB(A)	
12.00	52.0	60.3

**For TEAM Labs and Consultants**

**Labs and Consultants****Registered Office :**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/6/1216

dt 03.01.2017

Description of Test:

Ambient Noise level Monitoring -Buffer zone

Name of the client:

Trimex Sands. PvtLtd.

Location of sampling:

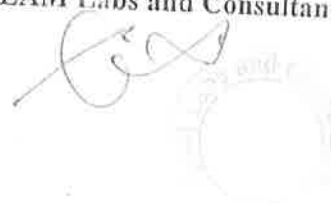
As per details given

Date of monitoring:

30.12.2016

Time Hrs	Srikurmam	Pedda vatsavalasa	Komaravani peta	Chinna Tonangi
Noise levels indB(A)				
9.00	46.8	45.9	40.8	46.5
10.00	52.6	48.4	39.7	49.7
11.00	49.2	56.1	51.2	41.9
12.00	56.5	55.4	48.6	43.4
13.00	48.1	53.8	45.1	47.6
14.00	50.9	56.1	47.5	48.1
15.00	53.6	49.2	44.6	50.3
16.00	52.4	49.8	42.8	47.2

For TEAM Labs and Consultants



**TEAM**ORIGINAL

Form-No TCL/L/GF/RF-138

**Labs and Consultants**

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**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/7/1216

dt 03.01.2017

Description of Test:

Ambient Noise level Monitoring –Core zone

Name of the client:

Trimex Sands Pvt. Ltd.

Location of sampling:

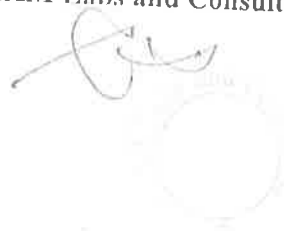
As per details given

Date of monitoring:

31.12.2016

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
Noise levels indB(A)				
09.00	53.8	50.8	62.8	50.6
10.00	51.2	53.5	60.6	50.2
11.00	55.9	57.8	59.5	48.5
12.00	57.3	60.5	61.8	49.6
13.00	56.5	56.1	62.5	56.2
14.00	53.6	55.4	60.4	51.5
15.00	59.2	62.5	59.2	52.3
16.00	51.7	52.9	61.8	50.7

For TEAM Labs and Consultants



**Labs and Consultants****Registered Office :****1642**

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ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Gol, New Delhi

**TEST REPORT****Test Report No .TLC /V/Env/ TSPL-N/02/1216****dt 03.01.2017****Description of Test:****Ambient Noise level Monitoring –Core zone****Name of the client:****Trimex Sands Pvt. Ltd.****Location of sampling:****New PCP Plant ,Tonangi****Date of monitoring:****30.12.2016**

Time Hrs	Security gate	DG Area
Noise levels indB(A)		
9.00	49.3	63.2
10.00	49.5	62.7
11.00	48.8	60.8
12.00	51.1	59.9
13.00	53.6	56.6
14.00	45.8	54.9
15.00	48.4	60.3
16.00	45.2	65.2

**For TEAM Labs and Consultants**

**TEAM****ORIGINAL**

Form-No. TCLL/GF/RF-138

**Labs and Consultants****1491****Registered Office :**

B-115, 116, 117 & 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.  
Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/6/1116

dt 05.12.2016

Description of Test:

Ambient Noise level Monitoring -Buffer zone

Name of the client:

Trlmex Sands. PvtLtd.

Location of sampling:

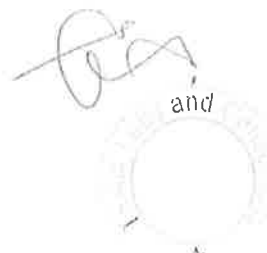
As per details given

Date of monitoring:

16.11.2016

Time Hrs	Pedda vatsavalasa	Srikurmam	Komaravani peta	Chinna Tonangi
	Noise levels indB(A)			
11.00	54.5	52.4	50.3	52.2

For TEAM Labs and Consultants



**Labs and Consultants****1492****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization

Laboratory Recognised by Ministry Environment, Forests and Climate Change, Gol, New Delhi

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/7/1116

dt 05.12.2016

Description of Test: Ambient Noise level Monitoring -Core zone

Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: As per details given

Date of monitoring: 15.11.2016

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
	Noise levels indB(A)			
11.00	55.2	57.2	61.5	54.0

For TEAM Labs and Consultants





**Labs and Consultants****1493****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization

Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/02/1116

dt 05.12.2016

Description of Test: Ambient Noise level Monitoring –Core zone

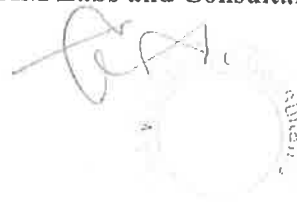
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: New PCP Plant ,Tonangl

Date of monitoring: 16.11.2016

Time Hrs	Security gate	DG Area
Noise levels IndB(A)		
11.00	58.0	62.8

For TEAM Labs and Consultants



**TEAM****ORIGINAL**

Form-No. TCL/JG/RF-138

**Labs and Consultants****1361****Registered Office :**

B-115, 116, 117 & 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.  
Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, GoI, New Delhi

**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/6/1016

dt 07.11.2016

Description of Test: Ambient Noise level Monitoring -Buffer zone

Name of the client: Trimex Sands. PvtLtd.

Location of sampling: As per details given

Date of monitoring: 18.10.2016

Time Hrs	Pedda vatsavalasa	Srikurmam	Komaravani peta	Chinna Tonangi
Noise levels indB(A)				
11.00	19.2	53.8	49.6	51.2

For TEAM Labs and Consultants



**Labs and Consultants****1362****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

*ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization*  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, Govt, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL/7/1016

dt 07.11.2016

Description of Test: Ambient Noise level Monitoring -Core zone

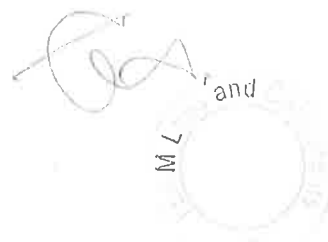
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: As per details given

Date of monitoring: 17.10.2016

Time Hrs	MSP- South East corner	MSP-North West corner	PCP-East gate	PCP-South West gate
	Noise levels indB(A)			
11.00	54.8	56.0	60.8	51.2

For TEAM Labs and Consultants



**Labs and Consultants****1363****Registered Office :**

B-115, 116, 117 &amp; 509, Annapoorna Block, Aditya Enclave, Ameerpet, Hyderabad - 530038.

Ph. : (O) 040-23748555 / 23748616, Fax : 040-23748666, Email : teamlabs@gmail.com

ISO 9001 : 2008, ISO 14001 : 2004 and OHSAS 18001 : 2007 Certified Organization  
Laboratory Recognised by Ministry Environment, Forests and Climate Change, GoI, New Delhi**TEST REPORT**

Test Report No .TLC /V/Env/ TSPL-N/02/1016

dt 07.11.2016

Description of Test: Ambient Noise level Monitoring –Core zone

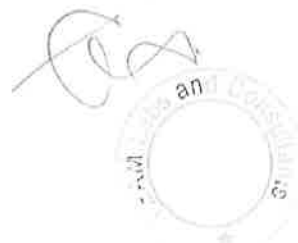
Name of the client: Trimex Sands Pvt. Ltd.

Location of sampling: New PCP Plant ,Tonangi

Date of monitoring: 18.10.2016

Time Hrs	Security gate	DG Area
Noise levels indB(A)		
11.00	57.5	68.9

For TEAM Labs and Consultants





PPE's issues Report		
S.NO.	Material Description	Oct-16 to Mar-17
1	Safety Shoes	296 Pairs
2	Safety Helmets	91 Nos.
3	Safety Belt	5 Nos.
4	Nose Mask	1702 Nos.
5	Respiratory Nose Mask	658 Nos.
6	Ear plugs	10 Nos.
7	Safety Eye Goggles	64 Nos.
8	Caution Tape	6 Nos.
9	Asbestos Hand gloves	65 Pairs
10	Knitted Hand Gloves	29 Pairs



### Expenditure for Environmental measures

Recurring Expenditures		
S.No	Description	During the Period 2016-17 (in Rs.)
1	Environmental Monitoring – Air, Water & Noise (outsourced).	1,30,000
2	Dust suppression on roads in factory	5,48,000
3	PPE cost for dust and sound (dust masks, ear muffs, etc.).	3,36,000
4	De dusting & Bag filter –addition of bag filter and maintenance.	6,15,000
5	Expenditure on refilling / pumping from PCP, leveling by dozer.	1,58,02,000
6	Slime management cost in mines.	6,86,53,000
7	Thickener Operation.	2,26,65,000
8	Afforestation, Nursery maintenance (Seeds, Saplings, Manure, Watering, Wages etc.)	48,10,000
9	Fencing 100mts from HTL	34,000
<b>Total :</b>		<b>11,35,93,000</b>



Annexure-19

TSPL/ENV/PCB/ES/2015-16/ 1007

Srikakulam,  
13.08.2016

To  
The Joint Chief Environment Engineer  
AP Pollution Control Board  
Paryavaran Bhavan, A3, IE  
Sanathnagar  
Hyderabad-38

Dear Sir,

Sub: Environmental Statement – Form-V - 2015-16 – Reg.  
Ref: APPCB/VSP/VZM/152/HO/CFO/2015 Dated 30.10.2015

As per the reference cited, please find herewith Environmental Statement in Form-V for the financial year 2015-16.

Thanking You

Yours faithfully

Vice President  
Mining

Cc:  
The Environment Engineer  
AP Pollution Control Board  
Regional Office, Plot no – 11  
1<sup>st</sup> floor, Shivaji Colony  
Pradeep Nagar, Vizianagaram-535002

**Trimex Sands Pvt Ltd:** Vatchavalasa (V), Gara Mandal, Srikakulam District - 532 404, Andhra Pradesh, India  
Tel: +91 8942 283755, Fax: +91 8942 283758, email: info@trimexsands.com

**Hyderabad Office:** 2nd Floor, Sri Durga Towers, Plot No. 201, Road No. 10, Banjara Hills, Hyderabad - 500 034, Andhra Pradesh, India  
Tel: +91 40 2338 4380 / 3371 3600 Fax: +91 40 2338 4068

**Reg. Office:** Trimex Towers, No.1 Subbaraya Avenue, C P, Ramaswamy Road, Alwarpet, Chennai - 600 033, Tamil Nadu, India  
Tel: +91 44 2498 8822 / 8813 Fax: +91 44 2498 6047 web: www.trimexsands.com

**CIN:** U14299TN2004PTC071437