



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007

Annexure No. VII



A Government Approved/Accredited Test House

TEST REPORT

EL-14-15/ 52		dt: 28/03/14		Lab No.	EC1403BA04		Page-1/1				
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order:		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A4)Near 'Binda Tehsil-Aklara'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14, 16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,24.02.14,25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Units	Results								
			A-4 (Dec)			A-4 (Jan)			A-4 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	63.48	74.35	69.87	64.17	78.53	71.97	64.58	76.12	69.95
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.35	2.12	BDL	BDL	0.96	BDL	BDL	1.50
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.56	4.67	4.11	2.60	5.06	3.94	2.40	3.75	3.12

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference
 BDL = Below Detection Limit, DL = Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL = 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 53		dt: 22/03/14		Lab No.	EC1403BA05		Page-1/1				
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order:		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A5)Near 'Dhanodi Tehsil -Jhalrapatan'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14, 16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,24.02.14,25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Units	Results								
			A-5(Dec)			A-5(Jan)			A-5 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	61.63	76.15	69.90	66.53	76.07	71.78	67.50	76.85	72.06
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.64	2.52	BDL	3.87	2.66	BDL	2.84	2.29
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.80	5.65	4.30	4.22	5.78	4.90	4.27	5.48	4.85

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL=Below Detection Limit. DL=Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



360

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-13-14/49		Lab No.	EC1403BA01		Page-1/1						
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalapath Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A1) Near 'Jhalarapatan'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	63.59	77.51	69.37	64.33	73.88	69.72	58.68	73.15	68.31
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.27	2.34	BDL	3.48	2.87	BDL	3.48	1.95
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.57	5.02	4.22	2.82	5.11	4.41	4.09	5.23	4.79

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-14-15/ 58		dt: 88/03/14		Lab No.	EC1403BA10			Page-1/1			
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalapath Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order:		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A10) Near 'Rewa River -Pipaliya'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13, 03.12.13, 09.12.13, 10.12.13, 16.12.13, 17.12.13, 23.12.13, 24.12.13, 06.01.14, 07.01.14, 15.01.14, 16.01.14, 20.01.14, 21.01.14, 27.01.14, 28.01.14, 03.02.14, 07.02.14, 10.02.14, 11.02.14, 17.02.14, 18.02.14, 24.02.14, 25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Units	Results								
			A-10 (Dec)			A-10 (Jan)			A-10 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	62.23	74.05	71.73	65.80	79.36	70.25	64.17	78.55	71.97
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.35	2.32	BDL	3.27	2.34	BDL	2.91	1.79
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.18	5.17	4.31	3.57	5.02	4.22	5.41	4.83	4.00

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL – Below Detection Limit, DL – Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL = 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-14-15/ 57		dt: 28/03/14		Lab No.	EC1403BA09		Page-1/1				
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order:		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A9) Near 'Sangam Rewa River'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13, 03.12.13, 09.12.13, 10.12.13, 16.12.13, 17.12.13, 23.12.13, 24.12.13, 06.01.14, 07.01.14, 15.01.14, 16.01.14, 20.01.14, 21.01.14, 27.01.14, 28.01.14, 03.02.14, 07.02.14, 10.02.14, 11.02.14, 17.02.14, 18.02.14, 24.02.14, 25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Units	Results								
			A-9 (Dec)			A-9 (Jan)			A-9 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	52.25	41.85	65.64	65.54	72.29	69.30	60.43	73.21	66.53
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	2.81	2.35	BDL	3.43	2.57	BDL	3.09	2.23
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.56	5.24	4.47	4.00	5.33	4.74	4.27	5.64	5.00

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference.

BDL=Below Detection Limit, DL=Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/70		dt: 18/03/14		Lab No.	EC1403BA22			Page-1/1			
Customer:			Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.								
Type of Sample:			Ambient Air								
Work Order:			MOU								
Mode of Collection of Sample:			SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER								
Sampling Location:			A22) Near 'Raipur'								
Sampling Team:			Customer Representative: Mr. Anjani & Team								
Date of Sampling:			02.12.13, 03.12.13, 09.12.13, 10.12.13, 16.12.13, 17.12.13, 23.12.13, 24.12.13, 06.01.14, 07.01.14, 15.01.14, 16.01.14, 20.01.14, 21.01.14, 27.01.14, 28.01.14, 03.02.14, 07.02.14, 10.02.14, 11.02.14, 17.02.14, 18.02.14, 24.02.14, 25.02.14,								
Date of Reporting:			18.03.14								
Testing Protocol:			National Ambient Air Quality Standards (NAAQS) 2009								
S.No	Test Parameters	Units	Results								
			A-22 (Dec)			A-22 (Jan)			A-22 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	55.60	73.68	62.33	59.97	71.76	67.67	55.67	76.79	67.44
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	4.41	2.63	2.45	3.91	3.0	2.26	3.04	2.78
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.71	5.42	4.66	2.35	5.95	4.81	3.33	5.67	4.71

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL=Below Detection Limit, DL=Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



364

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteeco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-13-14/ 50		dd: 29/03/14		Lab No.	EC1403BA02	Page-1/1					
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Shahdol Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A2) Near 'Narsinghpura'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	66.76	79.86	72.22	64.24	78.94	71.71	64.44	74.96	71.16
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.65	2.57	BDL	BDL	1.85	BDL	BDL	1.55
3.	Nitrogen Oxides (as NO _x)	µg/m ³	3.82	5.53	4.82	3.71	4.69	4.25	4.29	5.55	4.91

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-13-14/57		dt: 20/03/14		Lab No.		EC1403BA03		Page-1/1			
Customer:			Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.								
Type of Sample:			Ambient Air								
Work Order			MOU								
Mode of Collection of Sample:			SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER								
Sampling Location:			A3) Near 'Nayagaon'								
Sampling Team:			Customer Representative: Mr. Anjani & Team								
Date of Sampling:			02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14								
Date of Reporting:			18.03.14								
Testing Protocol:			National Ambient Air Quality Standards (NAAQS) 2009								
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	60.86	73.99	70.20	63.45	76.46	68.77	62.23	74.65	70.61
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.09	2.06	BDL	BDL	1.93	BDL	2.75	1.67
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	4.17	5.71	4.80	4.27	5.60	4.90	4.56	5.71	5.04

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference
BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



366

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-13-14/54		Dt: 28/03/14		Lab No.	EC1403BA06	Page-1/1					
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A6) Near 'Mandawar'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	65.07	74.28	70.41	62.27	73.47	68.06	67.54	74.78	70.05
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	BDL	0.87	BDL	2.75	1.67	BDL	BDL	1.52
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.17	5.10	4.49	3.95	5.17	4.44	2.46	3.97	3.11

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteeco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/72		dt : 28/03/14		Lab No.	EC1403BA24		Page-1/1				
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1696.05 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order:		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A24) Near 'Jhalawar'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14, 16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,24.02.14,25.02. 14.									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Units	Results								
			A-24 (Dec)			A-24(Jan)			A-24 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	54.09	75.62	68.59	50.14	69.86	61.68	55.17	69.71	60.88
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	4.14	2.29	BDL	3.42	2.45	BDL	3.26	2.04
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.41	5.97	4.69	4.12	6.11	4.86	4.56	5.44	5.10

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL=Below Detection Limit, DL=Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



368

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109

consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/7/	dt: 28/03/14	Lab No.	EC1403BA23	Page-1/1							
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalapatan Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.										
Type of Sample:	Ambient Air										
Work Order:	MOU										
Mode of Collection of Sample:	SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER										
Sampling Location:	A23)Near 'Jhalrapatan'										
Sampling Team:	Customer Representative: Mr. Anjani & Team										
Date of Sampling:	02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14, 16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,24.02.14,25.02. 14.										
Date of Reporting:	18.03.14										
Testing Protocol:	National Ambient Air Quality Standards (NAAQS) 2009										
S.No	Test Parameters	Units	Results								
			A-23 (Dec)			A-23 (Jan)			A-23 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	51.31	73.11	65.24	59.89	74.60	69.04	54.72	69.19	61.65
2.	Sulphur Dioxide (SO ₂)	µg/m ³	2.18	4.10	2.95	2.23	3.96	3.12	2.58	4.24	3.33
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.34	4.54	3.97	2.35	5.43	3.60	2.42	6.88	4.28

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL=Below Detection Limit, DL=Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



369

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteeco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-13-14/55		dt 20/03/14		Lab No.	EC1403BA07	Page-1/1					
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		A7) Near 'Motipura'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	60.88	72.89	66.93	61.83	70.20	66.13	57.76	70.80	64.05
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	BDL	1.48	BDL	BDL	1.16	BDL	2.19	1.72
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.64	5.24	4.32	3.35	4.69	3.97	3.29	5.42	4.51

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference
 BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



370

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-14-15/ 67	dt: 28/03/14	Lab No.	EC1403BA19	Page-1/1							
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.										
Type of Sample:	Ambient Air										
Work Order:	MOU										
Mode of Collection of Sample:	SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER										
Sampling Location:	A19) Near 'Chittraur'										
Sampling Team:	Customer Representative: Mr. Anjani & Team										
Date of Sampling:	02.12.13, 03.12.13, 09.12.13, 10.12.13, 16.12.13, 17.12.13, 23.12.13, 24.12.13, 06.01.14, 07.01.14, 15.01.14, 16.01.14, 20.01.14, 21.01.14, 27.01.14, 28.01.14, 03.02.14, 07.02.14, 10.02.14, 11.02.14, 17.02.14, 18.02.14, 24.02.14, 25.02.14.										
Date of Reporting:	18.03.14										
Testing Protocol:	National Ambient Air Quality Standards (NAAQS) 2009										
S.No	Test Parameters	Units	Results								
			A-19 (Dec)			A-19 (Jan)			A-19 (Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	56.67	76.77	64.67	58.86	75.51	69.36	55.73	64.34	55.73
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	4.67	2.71	BDL	3.63	2.65	BDL	4.46	2.12
3.	Nitrogen Oxides (as NO ₂)	µg/m ³	3.57	4.42	3.99	3.58	4.63	3.87	3.62	5.97	4.71

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference

BDL – Below Detection Limit, DL – Detection Limit

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL = 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-13-14/59		dt: 28/03/14		Lab No.	EC1403BA01	Page-1/1					
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.									
Type of Sample:		Ambient Air									
Work Order		MOU									
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER									
Sampling Location:		All) Near 'Ganeshpura'									
Sampling Team:		Customer Representative: Mr. Anjani & Team									
Date of Sampling:		02.12.13,03.12.13,09.12.13,10.12.13,16.12.13,17.12.13,23.12.13,24.12.13, 06.01.14,07.01.14,15.01.14,16.01.14,20.01.14, 21.01.14, 27.01.14, 28.01.14,03.02.14,07.02.14,10.02.14,11.02.14,17.02.14,18.02.14,18.02.14,24.02.14,25.02.14									
Date of Reporting:		18.03.14									
Testing Protocol:		National Ambient Air Quality Standards (NAAQS) 2009									
S.No	Test Parameters	Unit	Results								
			A-1(Dec)			A-1(Jan)			A-1(Feb)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1.	Particulate Matter (PM ₁₀)	µg/m ³	66.67	79.95	72.22	64.05	78.15	71.68	63.48	74.10	70.99
2.	Sulphur Dioxide (SO ₂)	µg/m ³	BDL	3.82	2.91	BDL	3.59	2.38	BDL	4.37	2.30
3.	Nitrogen Oxides (as NO _x)	µg/m ³	2.87	5.33	4.44	3.55	5.04	4.22	4.04	5.18	4.77

Note: The National Ambient Air Quality Standards, 2009 are enclosed along for reference
BDL= Below Detection Limit, DL= Detection Limits

Parameters	Test Methods
Particulate Matter (PM ₁₀)	IS: 5182 (P-23) 2004
Sulphur Dioxide (SO ₂)	IS: 5182 (P-2) 2001 (DL= 2.75 µg/m ³)
Nitrogen Oxides (as NO ₂)	IS: 5182 (P-6) 1975



372

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-13-14/74		16/03/14		Lab No.	EC1403BA24	Page-1/1
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalrapatan, Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Ambient Air				
Work Order		MOU				
Mode of Collection of Sample:		Sample / Monitoring Data provided by Customer				
Sampling Location:		A1) Near Jhalrapatan , A2) Near Narsinghpura, A3) Near Nayagaon, A4) Near Binda, A5) Near Dhanodi, A6) Near Mandawar, A7) Near Motipura, A9) Near Near Sangam Rewa River, A10) Near Rewa River Pipaliya, A11) Near Ganeshpura, A19) Near Chittraur, A22) Near Raipur, A23) Near Jhalrapatan, A24) Near Jhalawar				
Date of Sampling:		16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14				
Date of Reporting:		18.03.14				
S.No	Location	Unit	Free Silica in PM ₁₀	Test Method		
1.	A1	µg/m ³	0.61	Lab SOP based on AIOSH 7601		
2.	A2	µg/m ³	0.59	Lab SOP based on AIOSH 7601		
3.	A3	µg/m ³	0.50	Lab SOP based on AIOSH 7601		
4.	A4	µg/m ³	0.60	Lab SOP based on AIOSH 7601		
5.	A5	µg/m ³	0.51	Lab SOP based on AIOSH 7601		
6.	A6	µg/m ³	0.32	Lab SOP based on AIOSH 7601		
7.	A7	µg/m ³	0.79	Lab SOP based on AIOSH 7601		
8.	A9	µg/m ³	0.40	Lab SOP based on AIOSH 7601		
9.	A10	µg/m ³	0.59	Lab SOP based on AIOSH 7601		
10.	A11	µg/m ³	0.50	Lab SOP based on AIOSH 7601		
11.	A19	µg/m ³	0.60	Lab SOP based on AIOSH 7601		
12.	A22	µg/m ³	0.43	Lab SOP based on AIOSH 7601		
13.	A23	µg/m ³	0.89	Lab SOP based on AIOSH 7601		
14.	A24	µg/m ³	0.50	Lab SOP based on AIOSH 7601		



373

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109

consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-13-14/47		dt. 28/03/14		Lab No.	EC1403AN01-24	Page-1/1
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Ambient Noise: 1 hour Leq (10-11 am/4-5pm)				
Work Order		MOU				
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER				
Sampling Location:		N1) Near Jhalrapatan, N2) Near Narsinghpura, N3) Near Nayagaon, N4) Near Binda, N5) Near Dhanodi, N6) Near Mandawar, N7) Near Motipura, N9) Near Sangam Rewa River N10) Near Rewa River Pipaliya, N11) Near Ganeshpura, N19) Near Chittraur, N22) Near Raipur, N23) Near Jhalrapatan, N24) Near Jhalawar				
Date of Sampling:		16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14				
Date of Reporting:		18.03.14				
Testing Protocol:		Ambient Air Quality Standards for Noise				
S.No	Test	Location	Unit	Results	Test Method	
1.	Ambient day Time Noise Levels 1 Hour Leq	N1	dB(A)	52.1	IS: 9989: 1981 R-2002	
2.	Ambient day Time Noise Levels 1 Hour Leq	N2	dB(A)	50.1	IS: 9989: 1981 R-2002	
3.	Ambient day Time Noise Levels 1 Hour Leq	N3	dB(A)	50.2	IS: 9989: 1981 R-2002	
4.	Ambient day Time Noise Levels 1 Hour Leq	N4	dB(A)	51.1	IS: 9989: 1981 R-2002	
5.	Ambient day Time Noise Levels 1 Hour Leq	N5	dB(A)	53.1	IS: 9989: 1981 R-2002	
6.	Ambient day Time Noise Levels 1 Hour Leq	N6	dB(A)	50.4	IS: 9989: 1981 R-2002	
7.	Ambient day Time Noise Levels 1 Hour Leq	N7	dB(A)	51.3	IS: 9989: 1981 R-2002	
8.	Ambient day Time Noise Levels 1 Hour Leq	N9	dB(A)	50.2	IS: 9989: 1981 R-2002	
9.	Ambient day Time Noise Levels 1 Hour Leq	N10	dB(A)	51.1	IS: 9989: 1981 R-2002	
10.	Ambient day Time Noise Levels 1 Hour Leq	N11	dB(A)	54.1	IS: 9989: 1981 R-2002	
11.	Ambient day Time Noise Levels 1 Hour Leq	N19	dB(A)	50.2	IS: 9989: 1981 R-2002	
12.	Ambient day Time Noise Levels 1 Hour Leq	N22	dB(A)	50.3	IS: 9989: 1981 R-2002	
13.	Ambient day Time Noise Levels 1 Hour Leq	N23	dB(A)	51.1	IS: 9989: 1981 R-2002	
14.	Ambient day Time Noise Levels 1 Hour Leq	N24	dB(A)	50.2	IS: 9989: 1981 R-2002	

Handwritten signature

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-13-14/48		Dt: 20/03/14		Lab No.	EC1403AN01-24	Page-1/1
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Ambient Noise; 1 hour Leq (10-11 pm)				
Work Order		MOU				
Mode of Collection of Sample:		SAMPLE / MONITORING DATA PROVIDED BY CUSTOMER				
Sampling Location:		N1) Near Jhalrapatan, N2) Near Narsinghpura, N3) Near Nayagaon, N4) Near Binda, N5) Near Dhanodi, N6) Near Mandawar, N7) Near Motipura, N9) Near Near Sangam Rewa River N10) Near Rewa River Pipaliya, N11) Near Ganeshpura, N19) Near Chittraur, N22) Near Raipur, N23) Near Jhalrapatan, N24) Near Jhalawar				
Date of Sampling:		16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14				
Date of Reporting:		18.03.14				
Testing Protocol:		Ambient Air Quality Standards for Noise				
S.No	Test	Location	Unit	Results	Test Method	
1.	Ambient day Time Noise Levels 1 Hour Leq	N1	dB(A)	43.2	IS: 9989: 1981 R-2002	
2.	Ambient day Time Noise Levels 1 Hour Leq	N2	dB(A)	41.2	IS: 9989: 1981 R-2002	
3.	Ambient day Time Noise Levels 1 Hour Leq	N3	dB(A)	40.1	IS: 9989: 1981 R-2002	
4.	Ambient day Time Noise Levels 1 Hour Leq	N4	dB(A)	43.1	IS: 9989: 1981 R-2002	
5.	Ambient day Time Noise Levels 1 Hour Leq	N5	dB(A)	42.3	IS: 9989: 1981 R-2002	
6.	Ambient day Time Noise Levels 1 Hour Leq	N6	dB(A)	42.1	IS: 9989: 1981 R-2002	
7.	Ambient day Time Noise Levels 1 Hour Leq	N7	dB(A)	44.5	IS: 9989: 1981 R-2002	
8.	Ambient day Time Noise Levels 1 Hour Leq	N9	dB(A)	43.1	IS: 9989: 1981 R-2002	
9.	Ambient day Time Noise Levels 1 Hour Leq	N10	dB(A)	41.2	IS: 9989: 1981 R-2002	
10.	Ambient day Time Noise Levels 1 Hour Leq	N11	dB(A)	43.2	IS: 9989: 1981 R-2002	
11.	Ambient day Time Noise Levels 1 Hour Leq	N19	dB(A)	42.5	IS: 9989: 1981 R-2002	
12.	Ambient day Time Noise Levels 1 Hour Leq	N22	dB(A)	42.5	IS: 9989: 1981 R-2002	
13.	Ambient day Time Noise Levels 1 Hour Leq	N23	dB(A)	39.9	IS: 9989: 1981 R-2002	
14.	Ambient day Time Noise Levels 1 Hour Leq	N24	dB(A)	41.2	IS: 9989: 1981 R-2002	

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House

Annexure No. 1



TEST REPORT

EL-14-15/ 10	dt: 28/03/14	Lab No.	EC1403BS10	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area - 1695.06 Hect. Tehsil - Jhalawar Dist. - Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Soil			
Work Order:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Jhalawar'			
Quantity:	2 kg			
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14.			
Date of Reporting:	18.03.14.			
Testing Protocol:	EIA Guidance Manual- Mining of Minerals: Annexure-3			
S.No	Test Parameters	Units	Results	Test Method
1.	pH (1:2.5)	-	7.11	IS:2720 (P-26) 1987
2.	Texture	--	Sandy Clay	IS: 2720 (Part 4) 1985
3.	Color	--	Gray	Soil & Solid Waste Analysis Manual
4.	Water Holding Capacity	%	74.91	Based on Lab SOP LP-32 S4
5.	SAR	--	<10	By Calculation
6.	Bulk Density	gm/cc	1.19	IS:2720 (Part-III): 1980
7.	Organic Matter	%	0.78	IS:2720 Part-22) 1972
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0738	IS: 14767: 2000
9.	Permeability	mm/hour	2.19	IS: 2720 (P-17) 1986-R-2002



376

PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant - Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/09		Dt: 28/03/14		Lab No.	EC1403BS09	Page-1/1
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalrapatan Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Soil				
Work Order:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic Polybag Marked 'Near Jhalrapatan'				
Quantity:		2 kg				
Dates of Sampling:		16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14,				
Date of Reporting:		18.03.14.				
Testing Protocol:		EIA Guidance Manual- Mining of Minerals: Annexure-3				
S.No	Test Parameters	Units	Results	Test Method		
1.	pH (1:2.5)	-	7.17	IS:2720 (P-26) 1987		
2.	Texture	--	Sandy loam	IS: 2720 (Part 4) 1985		
3.	Color	--	Light Brown	Soil & Solid Waste Analysis Manual		
4.	Water Holding Capacity	%	24.41	Based on Lab SOP LP-32 S4		
5.	SAR	--	<10	By Calculation		
6.	Bulk Density	gm/cc	1.59	IS:2720 (Part-III): 1980		
7.	Organic Matter	%	0.70	IS:2720 Part-22) 1972		
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0341	IS: 14767: 2000		
9.	Permeability	mm/hour	2.14	IS: 2720 (P-17) 1986-R-2002		



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

377

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/02	dt: 28/03/14	Lab No.	EC1403BS02	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Soil			
Work Order:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Morukheri'			
Quantity:	2 kg			
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14.			
Date of Reporting:	18.03.14.			
Testing Protocol:	EIA Guidance Manual- Mining of Minerals: Annexure-3			
S.No	Test Parameters	Units	Results	Test Method
1.	pH (1:2.5)	-	7.28	IS:2720 (P-26) 1987
2.	Texture	--	Sandy Clay	IS: 2720 (Part 4) 1985
3.	Color	--	Light Brown	Soil & Solid Waste Analysis Manual
4.	Water Holding Capacity	-%	64.10	Based on Lab SOP LP-32 S4
5.	SAR	--	<10	By Calculation
6.	Bulk Density	gm/cc	1.9	IS:2720 (Part-III): 1980
7.	Organic Matter	%	0.86	IS:2720 Part-22) 1972
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0378	IS: 14767: 2000
9.	Permeability	mm/hour	3.23	IS: 2720 (P-17) 1986-R-2002



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

378

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739
A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 11	dt: 28/03/14	Lab No.	EC1403BS11	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Soil			
Work Order:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Rajpura'			
Quantity:	2 kg			
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14			
Date of Reporting:	18.03.14			
Testing Protocol:	EIA Guidance Manual- Mining of Minerals: Annexure-3			
S.No	Test Parameters	Units	Results	Test Method
1.	pH (1:2.5)	-	7.19	IS:2720 (P-26) 1987
2.	Texture	--	Sandy Clay	IS: 2720 (Part 4) 1985
3.	Color	--	Brown	Soil & Solid Waste Analysis Manual
4.	Water Holding Capacity	%	73.79	Based on Lab SOP LP-32 S4
5.	SAR	--	<10	By Calculation
6.	Bulk Density	gm/cc	1.65	IS:2720 (Part-III): 1980
7.	Organic Matter	%	2.57	IS:2720 Part-22) 1972
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0326	IS: 14767: 2000
9.	Permeability	mm/hour	2.11	IS: 2720 (P-17) 1986-R-2002



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

379

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/03	dt: 28/03/14	Lab No.	EC1403BS03	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Soil			
Work Order:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Ruparel'			
Quantity:	2 kg			
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14.			
Date of Reporting:	18.03.14.			
Testing Protocol:	EIA Guidance Manual- Mining of Minerals; Annexure-3			
S.No	Test Parameters	Units	Results	Test Method
1.	pH (1:2.5)	-	5.83	IS:2720 (P-26) 1987
2.	Texture	--	Sandy Loam	IS: 2720 (Part 4) 1985
3.	Color	--	Dark Grey	Soil & Solid Waste Analysis Manual
4.	Water Holding Capacity	%	26.30	Based on Lab SOP LP-32 S4
5.	SAR	--	<10	By Calculation
6.	Bulk Density	gm/cc	1.68	IS:2720 (Part-III): 1980
7.	Organic Matter	%	1.25	IS:2720 Part-22) 1972
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0409	IS: 14767: 2000
9.	Permeability	mm/hour	3.56	IS: 2720 (P-17) 1986-R-2002



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

380

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/06		dt: 28/03/14	Lab No.	EC1403BS06	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:	Soil				
Work Order:	MOU				
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Basyheri'				
Quantity:	2 kg				
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14.				
Date of Reporting:	18.03.14.				
Testing Protocol:	EIA Guidance Manual- Mining of Minerals: Annexure-3				
S.No	Test Parameters	Units	Results	Test Method	
1.	pH (1:2.5)	-	7.05	IS:2720 (P-26) 1987	
2.	Texture	--	Sandy Clay	IS: 2720 (Part 4) 1985	
3.	Color	--	Dark Brown	Soil & Solid Waste Analysis Manual	
4.	Water Holding Capacity	%	70.69	Based on Lab SOP LP-32 S4	
5.	SAR	--	<10	By Calculation	
6.	Bulk Density	gm/cc	1.6	IS:2720 (Part-III): 1980	
7.	Organic Matter	%	1.17	IS:2720 Part-22) 1972	
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0369	IS: 14767: 2000	
9.	Permeability	mm/hour	2.16	IS: 2720 (P-17) 1986-R-2002	



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

28/1

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/07	dt: 28/03/14	Lab No.	EC1403BS07	Page-1/1
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Soil			
Work Order:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic Polybag Marked 'Near Sunel'			
Quantity:	2 kg			
Dates of Sampling:	16.12.13, 17.12.13, 20.01.14, 21.01.14, 17.02.14, 18.02.14.			
Date of Reporting:	18.03.14.			
Testing Protocol:	EIA Guidance Manual- Mining of Minerals: Annexure-3			
S.No	Test Parameters	Units	Results	Test Method
1.	pH (1:2.5)	-	7.29	IS:2720 (P-26) 1987
2.	Texture	--	Sandy Clay	IS: 2720 (Part 4) 1985
3.	Color	---	Dark Brown	Soil & Solid Waste Analysis Manual
4.	Water Holding Capacity	%	69.60	Based on Lab SOP LP-32 S4
5.	SAR	--	<10	By Calculation
6.	Bulk Density	gm/cc	1.5	IS:2720 (Part-III): 1980
7.	Organic Matter	%	1.32	IS:2720 Part-22): 1972
8.	Electrical Conductivity of Saturation Extract (1:2)	mhos/cm	0.0308	IS: 14767: 2000
9.	Permeability	mm/hour	2.13	IS: 2720 (P-17) 1986-R-2002



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavarar.org www.ecoparyavarar.org

382

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House

Annexure No. XI



TEST REPORT

EL-14-15/43		dt: 25/03/14		Lab No.	EC1403BW31	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalapatan Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Binda'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.94	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4)1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5)1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	225.4	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1 (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.14	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	25.3	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	34.3	Max 200	Max 400	IS3025 (P-24)1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	620	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	1100	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	96	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	13.67	Max 45	No Relaxation	IS: 3025 (P-34)1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.44	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	NDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

383

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/43			dt. 28/03/14		Lab No.	EC1403BW31	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	0.04	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd)	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	

Authorized Signatory

384



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007



A Government Approved/Accredited Test House

TEST REPORT

EL-14-15/30		dt: 28/03/14		Lab No.	EC1403BW18	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Ruparel'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.69	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	652.8	Max 200	Max 600	IS: 3025(P-521) 1983 R-2002 Ad. (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	BDL	Max 0.3	No Relaxation	IS: 3025(P-53) 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	1056.7	Max 250	Max 1000	IS: 3025 (P-32): 1988 R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	39.9	Max 200	Max 400	IS: 3025 (P-24) 1986 R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	1950	Max 500	Max 2000	IS: 3025 (P-16): 1984 R-2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	3450	--	--	IS: 3025 (P-14) 1984, R-2002
11.	Alkalinity	mg/l	324	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	16.84	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.25	Max 1.0	Max 1.5	APHA 21 st ED, 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	1-SEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109

consulteco@yahoo.com ecolab@ecoparyavar.org www.ecoparyavar.org

308

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/30			dt: 25/03/14		Lab No.	EC1403BW18	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	0.3	Max 5	Max 15	IS 3025 (P-49) 1994 R 1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd).	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	



306



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/45		dt: 28/03/14		Lab No.	EC1403BW33	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Basyheri'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	6.69	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	212.5	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1(MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.19	Max 0.3	No Relaxation	IS: 3025(P-53); 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	14.9	Max 250	Max 1000	IS: 3025 (P-32); 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	14.3	Max 200	Max 400	IS3025 (P-24)1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	410	Max 500	Max 2000	IS: 3025 (P-16); 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	umhos/cm	715	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	80	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	2.33	Max 45	No Relaxation	IS: 3025 (P-34)1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.26	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

387

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/ 45		dt : 30/03/19		Lab No. EC1403BW33		Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
16.	Zinc (as Zn)	mg/l	0.7	Max 5	Max 15	IS: 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS:3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS:3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)
19.	Cadmium (as Cd).	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R-2003



380



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 33		Dt: 28/03/14		Lab No.	EC1403BW21	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Chittraur'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.34	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P-10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	980.5	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1(MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.61	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	580.0	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	243.8	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	3640	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	6900	--	--	IS: 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	480	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	12.96	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.35	Max 1.0	Max 1.5	APHA 21 st ED, 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

389

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/33			dt: 28/03/14		Lab No.	EC1403BW21	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd)	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	



380



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/34		Dt: 28/03/14		Lab No.	EC1403BW22	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'sunel'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.36	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	1036.8	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1 (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.28	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	287.1	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL= 1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	241.3	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	1760	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad. 1 (DL=5 mg/l)
10.	Electrical Conductivity	umhos/cm	3100	--	--	IS: 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	222	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL= 1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	13.67	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.23	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

391

9

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/ 34				Lab No. EC1403BW22		Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
15.	Copper (as Cu)	mg/l	0.04	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
16.	Zinc (as Zn)	mg/l	0.4	Max 5	Max 15	IS 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)
19.	Cadmium (as Cd)	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED, 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003



392



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 36		dt: 28/03/19 Lab No.		EC1403BW24		Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Raipur'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.27	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4)1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5)1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	514.6	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1 (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	BDL	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	114.9	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	9.9	Max 200	Max 400	IS:3025 (P-24)1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	550	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	860	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	344	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	25.92	Max 45	No Relaxation	IS: 3025 (P-34)1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.28	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109

consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

393

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/36			Dt: 28/03/14		Lab No.	EC1403BW24	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R 1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd),	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	



394



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739
A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/37		dt: 28/03/14		Lab No.	EC1403BW25	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalrapatan Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Jhalrapatan'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	6.64	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	243.2	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.56	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	71.2	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	15.7	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	330	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	510	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	222	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	1.71	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.26	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

395

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/ 37			dt: 28/03/14		Lab No.	EC1403BW25	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd).	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	2	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	



396



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN: U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 38		dt: 28/03/14		Lab No.	EC1403BW26	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Jhalawar'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.41	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P- 10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	471.0	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1 (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	BDL	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	153.9	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	12.8	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	1610	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	umhos/cm	2830	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	292	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	3.55	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.31	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

397

12

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/38			Dt: 28/03/14		Lab No.	EC1403BW26	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method	
				Desirable Limits	In Absence of Alternate Source		
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
16.	Zinc (as Zn)	mg/l	0.4	Max 5	Max 15	IS 3025 (P-49) 1994 R 1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)	
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)	
19.	Cadmium (as Cd)	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)	
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)	
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)	
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003	

Authorized Signatory

398



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/44		dt: 28/03/14		Lab No.	EC1403BW32	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Moru Kheri'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	7.95	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P-10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	412.2	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. I (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	0.21	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	14.9	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	40.7	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	660	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad. I (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	1140	--	--	IS: 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	300	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	24.29	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.33	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd ED 2012-4500



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

398

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/ 44				dt: 28/03/14		Lab No.	EC1403BW32	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method		
				Desirable Limits	In Absence of Alternate Source			
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)		
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)		
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)		
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)		
19.	Cadmium (as Cd).	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)		
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)		
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)		
22.	Coliforms	MPN/100ml	2	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)		
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003		



400



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/41		dt: 25/02/14		Lab No.	EC1403BW29	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottle Marked 'Soyat kallan'				
Quantity:		3 litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14,				
Date of Reporting:		18.03.14				
Testing Protocol:		IS: 10500-2012/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Clear colorless liquid				
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
1.	pH value	--	8.85	6.5 to 8.5	No relaxation	IS: 3025(P-11) 1983 R-2002
2.	Colour	--	<5	Max 5	Max 15	IS: 3025(P-4) 1983 R-2002
3.	Turbidity	NTU	<5	Max 1	Max 5	IS: 3025 (P-10) 1984 R-2002 (DL= 2 NTU)
4.	Odour	--	Agreeable	Agreeable	Agreeable	IS: 3025(P-5) 1983 R-2002
5.	Total Hardness (as CaCO ₃)	mg/l	550.4	Max 200	Max 600	IS: 3025(P-521) 1983R2002 Ad. 1 (MDL= 0.1 mg/l)
6.	Iron (as Fe)	mg/l	BDL	Max 0.3	No Relaxation	IS: 3025(P-53): 2003 (DL=0.1 mg/l)
7.	Chlorides (as Cl)	mg/l	80.4	Max 250	Max 1000	IS: 3025 (P-32): 1988R 1999 (DL=1 mg/l)
8.	Sulphate (as SO ₄)	mg/l	18.6	Max 200	Max 400	IS: 3025 (P-24) 1986R 1998 (DL= 1 mg/l)
9.	Dissolved solids	mg/l	1100	Max 500	Max 2000	IS: 3025 (P-16): 1984R2002 Ad.1 (DL=5 mg/l)
10.	Electrical Conductivity	µmhos/cm	1710	--	--	IS 3025 (P-14) 1984, R2002
11.	Alkalinity	mg/l	330	Max 200	Max 600	APHA 21 st ED 2005-2320 B (DL=1 mg/l)
12.	Nitrate (as NO ₃)	mg/l	16.33	Max 45	No Relaxation	IS: 3025 (P-34) 1988 R 1999 (DL= 0.1 mg/l)
13.	Fluoride (as F)	mg/l	0.23	Max 1.0	Max 1.5	APHA 21 st ED. 2005-4500D (DL=0.01 mg/l)
14.	Cyanide (as CN)	mg/l	BDL	Max 0.05	No relaxation	USEPA-335.4 Colorimetric Method APHA-22 nd Ed 2012-4500E



E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)

EL-14-15/41		dt: 28/03/14		Lab No.	EC1403BW29	Page-2/2
S.No	Test Parameters	Units	Results	Requirements		Test Method
				Desirable Limits	In Absence of Alternate Source	
15.	Copper (as Cu)	mg/l	BDL	Max 0.05	Max 1.5	IS: 3025 (Part 42): 1992R 1998 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
16.	Zinc (as Zn)	mg/l	BDL	Max 5	Max 15	IS 3025 (P-49) 1994 R 1999 Ad.1 (DL= 0.02 mg/l) (AAS: Chelation by Extraction)
17.	Lead (as Pb)	mg/l	BDL	Max 0.01	No relaxation	IS3025 (P-47) 1992R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
18.	Phenolic compounds (as C ₆ H ₅ OH)	mg/l	BDL	Max 0.001	Max 0.002	IS3025 (P-43) 1992 R 1998 Ad. 2 (DL=0.0001 mg/l)
19.	Cadmium (as Cd).	mg/l	BDL	Max 0.003	No relaxation	IS: 3025(P-41) 1992 R 1998 (DL=0.008 mg/l) (AAS: Chelation by Extraction)
20.	Total Arsenic (as As)	mg/l	BDL	Max 0.01	Max 0.05	IS: 3025(Part 37): 1988 R 1999 (DL=0.02 mg/l) (AAS: Chelation by Extraction)
21.	Chromium (as Cr)	mg/l	BDL	Max 0.05	No relaxation	APHA 21 st ED. 2005-3111 B (DL=0.02 mg/l) (AAS: Chelation by Extraction)
22.	Coliforms	MPN/100ml	Absent	Absent	--	IS: 1622-1981 R 2003 (DL= 2 MPN/100ml)
23.	E.coli/100ml	--	Absent	Absent	--	IS: 1622-1981 R 2003



402



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/13		Dt: 28/03/14		Lab No.	EC1403BW01	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Nanor'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14,					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.41	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	6.1	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	BDL	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	864	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	480	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	10	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	470	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	17	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071. Tele/Fax: 0172-4816225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

403

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/ 16	dt: 28/03/14	Lab No.	EC1403BW04	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Surface Water			
Work Order No. & Date:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic bottles marked 'Banor'			
Quantity:	3 Litre			
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.			
Date of Reporting:	18.03.14			
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5			
Remarks & Observation:	Liquid with very fine suspended impurities.			
S.No	Test Parameters	Units	Results	Test Method
1.	pH	-	7.80	IS: 3025 (P-11) 1984 R-2002
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993
3.	COD	mg/l	4	APHA 5220B
4.	DO	mg/l	5.8	IS: 3025 (P-38) 1989 R-1999
5.	Free Ammonia (as N)	mg/l	0.28	IS: 3025 (P-34) 1988 R-1999
6.	Electrical Conductivity	µmhos/cm	5.8	IS: 3025 (P-14) 1988 R-2002
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)
8.	SAR	%	<10	By Calculation
9.	Total Solids	mg/l	566	IS: 3025 (P-17) 1984 R-2002
10.	Total Suspended Solids	mg/l	16	IS: 3025 (P-16) 1984 R-2002
11.	Total Dissolved Solids	mg/l	550	IS: 3025 (P-17) 1984 R-2002
12.	Total Coliforms	MPN/100ml	12	IS: 1622-1981 R-2003

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteeco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/LS	dt: 28/03/14	Lab No.	EC1403BW03	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Surface Water			
Work Order No. & Date:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic bottles marked 'Bhumera'			
Quantity:	3 Litre			
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.			
Date of Reporting:	18.03.14			
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5			
Remarks & Observation:	Liquid with very fine suspended impurities.			
S.No	Test Parameters	Units	Results	Test Method
1.	pH	-	7.52	IS: 3025 (P-11) 1984 R-2002
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993
3.	COD	mg/l	8	APHA 5220B
4.	DO	mg/l	5.6	IS: 3025 (P-38) 1989 R-1999
5.	Free Ammonia (as N)	mg/l	0.27	IS: 3025 (P-34) 1988 R1999
6.	Electrical Conductivity	µmhos/cm	928	IS: 3025 (P-14) 1988 R 2002
7.	Boron	mg/l	BDL	APHA 21 st ED, 2005-4500 C (DL=0.5 mg/l)
8.	SAR	%	<10	By Calculation
9.	Total Solids	mg/l	539	IS: 3025 (P-17) 1984 R-2002
10.	Total Suspended Solids	mg/l	29	IS: 3025 (P-16) 1984 R-2002
11.	Total Dissolved Solids	mg/l	510	IS: 3025 (P-17) 1984 R-2002
12.	Total Coliforms	MPN/100ml	23	IS: 1622-1981 R 2003

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/19		Dt: 28/03/14		Lab No.	EC1403BW07	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Binda'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.68	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	6.0	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.29	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	736	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	431	IS: 3025 (P-17) 1984 R-200 ⁿ		
10.	Total Suspended Solids	mg/l	21	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	410	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	22	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

406

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/14		dt: 28/03/14		Lab No.	EC1403BW02	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Surface Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottles marked 'Dhanodi'				
Quantity:		3 Litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Liquid with very fine suspended impurities.				
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.48	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993		
3.	COD	mg/l	8	APHA 5220B		
4.	DO	mg/l	5.5	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.35	IS: 3025 (P-34) 1988 R-1999		
6.	Electrical Conductivity	µmhos/cm	908	IS: 3025 (P-14) 1988 R-2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	518	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	28	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	510	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	11	IS: 1622-1981 R-2004		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

407

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/27		dt: 28/03/14		Lab No.	EC1403BW15	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Surface Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottles marked 'Phujalpara'				
Quantity:		3 Litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-S				
Remarks & Observation:		Liquid with very fine suspended impurities.				
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.77	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	6.1	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.32	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	854	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	474	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	14	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	460	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	14	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071. Tele/Fax: 0172-4616225. IA: 9781303109
consulteco@yahoo.com ecolab@ecoparyavarani.org www.ecoparyavarani.org

408

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/17	dt: 28/03/14	Lab No.	EC1403BW05	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Surface Water			
Work Order No. & Date:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic bottles marked 'Khokhanda'			
Quantity:	3 Litre			
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.			
Date of Reporting:	18.03.14			
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5			
Remarks & Observation:	Liquid with very fine suspended impurities.			
S.No	Test Parameters	Units	Results	Test Method
1.	pH	-	7.71	IS: 3025 (P-11) 1984 R-2002
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993
3.	COD	mg/l	8	APHA 5220B
4.	DO	mg/l	5.2	IS: 3025 (P-38) 1989 R-1999
5.	Free Ammonia (as N)	mg/l	0.32	IS: 3025 (P-34) 1988 R1999
6.	Electrical Conductivity	µmhos/cm	1024	IS: 3025 (P-14) 1988 R-2002
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)
8.	SAR	%	<10	By Calculation
9.	Total Solids	mg/l	606	IS: 3025 (P-17) 1984 R-2002
10.	Total Suspended Solids	mg/l	26	IS: 3025 (P-16) 1984 R-2002
11.	Total Dissolved Solids	mg/l	580	IS: 3025 (P-17) 1984 R-2002
12.	Total Coliforms	MPN/100ml	24	IS: 1622-1981 R-2003

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/25		Dt: 28/03/14		Lab No.	EC1403BW13	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Kalamandi Kallan'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.52	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	5.9	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.28	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	972	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	543	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	13	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	530	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	20	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

4/0

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/28		Dt: 28/03/14		Lab No.	EC1403BW16	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Surface Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottles marked 'Sangam Rewa River'				
Quantity:		3 Litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Liquid with very fine suspended impurities.				
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.49	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	6.1	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.30	IS: 3025 (P-34) 1988 R-1999		
6.	Electrical Conductivity	µmhos/cm	835	IS: 3025 (P-14) 1988 R-2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	466	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	16	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	450	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	26	IS: 1622-1981 R-2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector 74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303106
consuiteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

411

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

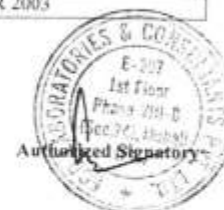
A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/18		dt: 28/03/14		Lab No.	EC1403BW06	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area - 1695.06 Hect. Tehsil - Jhalawar Dist. - Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Rewa River-Pipaliya'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.72	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	5.9	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.30	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	5.9	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	588	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	18	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	570	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	27	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
 consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

Applicant - Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/20		dt: 28/03/14	Lab No.	EC1403BW08	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:	Surface Water				
Work Order No. & Date:	MOU				
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:	Plastic bottles marked 'Gundi'				
Quantity:	3 Litre				
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:	18.03.14				
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:	Liquid with very fine suspended impurities.				
S.No	Test Parameters	Units	Results	Test Method	
1.	pH	-	7.49	IS: 3025 (P-11) 1984 R-2002	
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993	
3.	COD	mg/l	4	APHA 5220B	
4.	DO	mg/l	6.1	IS: 3025 (P-38) 1989 R-1999	
5.	Free Ammonia (as N)	mg/l	0.36	IS: 3025 (P-34) 1988 R1999	
6.	Electrical Conductivity	µmhos/cm	788	IS: 3025 (P-14) 1988 R 2002	
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)	
8.	SAR	%	<10	By Calculation	
9.	Total Solids	mg/l	473	IS: 3025 (P-17) 1984 R-2002	
10.	Total Suspended Solids	mg/l	23	IS: 3025 (P-16) 1984 R-2002	
11.	Total Dissolved Solids	mg/l	450	IS: 3025 (P-17) 1984 R-2002	
12.	Total Coliforms	MPN/100ml	13	IS: 1622-1981 R 2003	

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

413

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739
A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/29		dt: 28/03/14		Lab No.	EC1403BW17	Page-1/2
Customer:		Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.				
Type of Sample:		Surface Water				
Work Order No. & Date:		MOU				
Mode of Collection of Sample:		SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER				
Packing, Markings, Seal:		Plastic bottles marked 'Kanwara'				
Quantity:		3 Litre				
Dates of Sampling:		23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.				
Date of Reporting:		18.03.14				
Testing Protocol:		Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5				
Remarks & Observation:		Liquid with very fine suspended impurities.				
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.64	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993		
3.	COD	mg/l	8	APHA 5220B		
4.	DO	mg/l	5.5	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.31	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	824	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	461	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	31	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	430	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	27	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071. Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavarani.org www.ecoparyavarani.org

414

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/24		Dt: 28/03/14		Lab No.	EC1403BW12	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalapada Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked Khairabad Pond'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14,					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.38	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993		
3.	COD	mg/l	8	APHA 5220B		
4.	DO	mg/l	5.4	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.28	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	988	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	567	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	27	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	540	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	22	IS: 1622-1981 R 2003		

DL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 TeleFax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

415

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739
A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/23		dt. 28/03/14 Lab No. EC1403BW11		Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area - 1695.06 Hect. Tehsil - Jhalrapatan Dist. - Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Surface Water			
Work Order No. & Date:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic bottles marked 'Ramniwas Pond'			
Quantity:	3 Litre			
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.			
Date of Reporting:	18.03.14			
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5			
Remarks & Observation:	Liquid with very fine suspended impurities.			
S.No	Test Parameters	Units	Results	Test Method
1.	pH	-	7.62	IS: 3025 (P-11) 1984 R-2002
2.	BOD (3 days 27°C)	mg/l	<5	IS: 3025 (P-44) 1993
3.	COD	mg/l	8	APHA 5220B
4.	DO	mg/l	5.3	IS: 3025 (P-38) 1989 R-1999
5.	Free Ammonia (as N)	mg/l	0.27	IS: 3025 (P-34) 1988 R1999
6.	Electrical Conductivity	µmhos/cm	980	IS: 3025 (P-14) 1988 R 2002
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)
8.	SAR	%	<10	By Calculation
9.	Total Solids	mg/l	576	IS: 3025 (P-17) 1984 R-2002
10.	Total Suspended Solids	mg/l	26	IS: 3025 (P-16) 1984 R-2002
11.	Total Dissolved Solids	mg/l	550	IS: 3025 (P-17) 1984 R-2002
12.	Total Coliforms	MPN/100ml	21	IS: 1622-1981 R 2003

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

416

Applicant - Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/8/		Dt: 28/03/14		Lab No.	EC1403BW09	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Gomti Sagar Dam'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.71	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	5.8	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.36	IS: 3025 (P-34) 1988 R1999		
6.	Electrical Conductivity	µmhos/cm	880	IS: 3025 (P-14) 1988 R 2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	504	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	24	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	480	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	15	IS: 1622-1981 R 2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

417

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services

ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/22	dt: 28/03/14	Lab No.	EC1403BW10	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil - Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.			
Type of Sample:	Surface Water			
Work Order No. & Date:	MOU			
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER			
Packing, Markings, Seal:	Plastic bottles marked 'Khandia Pond'-Jhalawar			
Quantity:	3 Litre			
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.			
Date of Reporting:	18.03.14			
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5			
Remarks & Observation:	Liquid with very fine suspended impurities.			
S.No	Test Parameters	Units	Results	Test Method
1.	pH	-	7.56	IS: 3025 (P-11) 1984 R-2002
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993
3.	COD	mg/l	4	APHA 5220B
4.	DO	mg/l	5.9	IS: 3025 (P-38) 1989 R-1999
5.	Free Ammonia (as N)	mg/l	0.26	IS: 3025 (P-34) 1988 R-1999
6.	Electrical Conductivity	µmhos/cm	1028	IS: 3025 (P-14) 1988 R-2002
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)
8.	SAR	%	<10	By Calculation
9.	Total Solids	mg/l	614	IS: 3025 (P-17) 1984 R-2002
10.	Total Suspended Solids	mg/l	14	IS: 3025 (P-16) 1984 R-2002
11.	Total Dissolved Solids	mg/l	600	IS: 3025 (P-17) 1984 R-2002
12.	Total Coliforms	MPN/100ml	17	IS: 1622-1981 R-2003

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

U18

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)



Eco Laboratories & Consultants Pvt. Ltd.

Environment Due-diligence, Monitoring and Analysis Services
ISO-14001:2004 OHSAS-18001:2007 CIN : U74140PB2011PTC034739

A Government Approved/Accredited Test House



TEST REPORT

EL-14-15/d6		dt: 28/03/14		Lab No.	EC1403BW14	Page-1/2
Customer:	Sh. Indra jeet Singh Jhala Ordinary Sand (Bajri) Area – 1695.06 Hect. Tehsil – Jhalawar Dist. – Jhalawar (Raj.) C/o Udaipur Min-Tech Pvt. Ltd.					
Type of Sample:	Surface Water					
Work Order No. & Date:	MOU					
Mode of Collection of Sample:	SAMPLE/ MONITORING DATA PROVIDED BY CUSTOMER					
Packing, Markings, Seal:	Plastic bottles marked 'Dhabariya'					
Quantity:	3 Litre					
Dates of Sampling:	23.12.13, 24.12.13, 27.01.14, 28.01.14, 24.02.14, 25.02.14.					
Date of Reporting:	18.03.14					
Testing Protocol:	Designated Best Use by CPCB/ EIA Guidance Manual- Mining of Minerals: Annexure-5					
Remarks & Observation:	Liquid with very fine suspended impurities.					
S.No	Test Parameters	Units	Results	Test Method		
1.	pH	-	7.64	IS: 3025 (P-11) 1984 R-2002		
2.	BOD (3 days 27°C)	mg/l	<3	IS: 3025 (P-44) 1993		
3.	COD	mg/l	4	APHA 5220B		
4.	DO	mg/l	6	IS: 3025 (P-38) 1989 R-1999		
5.	Free Ammonia (as N)	mg/l	0.34	IS: 3025 (P-34) 1988 R-1999		
6.	Electrical Conductivity	µmhos/cm	884	IS: 3025 (P-14) 1988 R-2002		
7.	Boron	mg/l	BDL	APHA 21 st ED. 2005-4500 C (DL=0.5 mg/l)		
8.	SAR	%	<10	By Calculation		
9.	Total Solids	mg/l	491	IS: 3025 (P-17) 1984 R-2002		
10.	Total Suspended Solids	mg/l	11	IS: 3025 (P-16) 1984 R-2002		
11.	Total Dissolved Solids	mg/l	480	IS: 3025 (P-17) 1984 R-2002		
12.	Total Coliforms	MPN/100ml	21	IS: 1622-1981 R-2003		

BDL= Below Detection Limit; DL= Detection Limit



PTO

E-207, Industrial Area, Phase VIII-E (Sector-74), Mohali (Punjab) 160071 Tele/Fax: 0172-4616225 M: 9781303109
consulteco@yahoo.com ecolab@ecoparyavaran.org www.ecoparyavaran.org

419

Applicant – Indrajeet Singh Jhala

River Bed Mining of Ordinary Sand (Bajri)