

Quality of Water of Polluted River stretches in Punjab for the month of November, 2019

Satluj : Roop Nagar to Harike Bridge : Priority I

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ s/Cm	T.Coli MPN/100ml	F. Coli MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU	Water Quality Index
1	Ropar Head-Works	1019	5/11/19	SW982	ZO Lab Ldh	8.3	9.0	<1	208	1400	460	BDL	0.21	0.15	C	S
2	River Satluj D/S of Rishab- Paper Mills	1293	5/11/19	SW 983	ZO Lab Ldh	8.3	8.4	<1	225	1700	700	BDL	0.22	0.20	C	S
3	River Satluj U/S Buddha Nallah	1690	5/11/19	SW 989	ZO Lab Ldh	7.9	8.1	1.2	267	4900	1700	0.045	0.21	0.26	C	S
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	6/11/19	SW 991	ZO Lab Ldh	7.9	4.0	10.8	317	1,70,000	79,000	0.086	0.53	0.33	D	U
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	18/11/19	SW 1014	ZO Lab Ldh	7.4	3.4	8.2	563	70,000	21,000	0.069	0.98	0.29	E	U
6	River Satluj at D/s East Bein	1381	18/11/19	SW 1015	ZO Lab Jal.	7.6	4.8	5.2	558	46,000	21,000	0.098	0.87	0.30	D	U
7	River Satluj at Harike	1022	18/11/19	SW 1016	ZO Lab Ldh	7.7	6.6	1.8	340	4300	790	0.063	0.61	0.28	C	S

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	COD mg/l	Turb NTU	TSS mg/l	TDS mg/l	FDS mg/l	Cl mg/l	SO ₄ mg/l	TH mg/l	Ca mg/l	Mg mg/l	T.Alkn mg/l	P.Alkn mg/l	AmnN mg/l	NO ₃ -N mg/l	TKN mg/l	PO ₄ as P mg/l	F mg/l	Na mg/l	K mg/l
1	Ropar Head-Works	1019	5/11/19	SW982	ZO Lab Ldh	<5	5	8	127	112	7	6	96	24.8	8.3	74	BDL	BDL	5.02	BDL	0.04	0.22	4.7	2.1
2	River Satluj D/S of Rishab- Paper Mills	1293	5/11/19	SW 983	ZO Lab Ldh	<5	10	22	141	123	10	7	116	24	13.6	78	BDL	BDL	4.98	1.1	BDL	0.25	5.5	2.6
3	River Satluj U/S Buddha Nallah	1690	5/11/19	SW 989	ZO Lab Ldh	6	30	41	163	142	12	13	114	29.6	9.7	80	BDL	1.0	10.92	1.4	0.08	0.27	5.2	2.6
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	6/11/19	SW 991	ZO Lab Ldh	36	65	102	192	167	22	14	120	29.6	11.2	106	BDL	1.9	2.91	2.4	0.11	0.49	13.3	4.1
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	18/11/19	SW 1014	ZO Lab Ldh	28	40	62	344	298	72	15	176	36.8	20.4	194	BDL	4.6	1.78	5.8	0.25	0.22	29.9	8.9
6	River Satluj at D/s East Bein	1381	18/11/19	SW 1015	ZO Lab Jal.	24	45	65	339	294	74	14	190	35.2	24.8	178	BDL	3.9	2.11	5.2	0.08	0.29	27.5	6.1

7	River Satluj at Harike	1022	18/11/19	SW 1016	ZO Lab Ldh	10	55	42	214	180	34	9	136	34.4	12.2	148	BDL	2.1	3.20	2.8	0.14	0.31	16.4	4.6
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Note. 1. BDL means Below Method Detection Limit

2. DBU means Designated Best Use (Class-A,B,C,D & E)

3. Water Quality Index (S means Satisfactory, U means Unsatisfactory)

4. U/s means Upstream , D/s means Downstream

Quality of Water of Polluted River stretches in Punjab for the month of November, 2019
Ghaggar: Mubarkpur to Sardulgarh: Priority I

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond us/Cm	T.Coli MPN/ 100ml	F. Coli MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBDU	Water Quality Index
1	Ghaggar at Mubarikpur Rest House	1023	7/11/19	SW 1247	H/o Lab Patiala	7.5	6.1	4	288	15000	2100	0.19	0.96	0.21	D	U
2	Ghaggar at Bhankarpur	1295	7/11/19	SW 1248	H/o Lab Patiala	7.2	4.0	15	435	22000	2600	0.11	1.20	0.33	D	U
3	Ghaggar at Chattbir	1698	7/11/19	SW 1249	H/o Lab Patiala	7.2	4.3	11	417	21000	2400	0.08	1.31	0.29	D	U
4	Ghaggar at U/s Jharmal Nadi	1702	7/11/19	SW 1250	H/o Lab Patiala	7.2	4.4	8	323	17000	2000	0.10	1.23	0.23	D	U
5	Ghaggar at D/s Jharmal Nadi	1701	7/11/19	SW 1251	H/o Lab Patiala	7.3	3.1	15	451	17000	2200	0.11	1.34	0.41	E	U
6	Ghaggar at U/s Dhakanshu Nallah	1699	7/11/19	SW 1253	H/o Lab Patiala	7.3	4.0	4	328	22000	2200	0.06	1.61	0.28	D	U
7	Ghaggar at D/s Dhakanshu Nallah	1700	7/11/19	SW 1254	H/o Lab Patiala	7.2	3.0	17	638	22000	3900	0.10	1.92	0.35	E	U
8	Ghaggar at Rattanheri	1473	14/11/19	SW 1286	H/o Lab Patiala	7.4	4.1	13	620	24000	2700	0.20	1.93	0.51	D	U
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	14/11/19	SW 1287	H/o Lab Patiala	7.3	4.3	14	651	22000	2600	0.13	2.00	0.46	D	U
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	14/11/19	SW 1288	H/o Lab Patiala	7.3	3.6	18	802	28000	3100	0.13	2.41	0.52	E	U
11	Ghaggar at Khanauri	1024	14/11/19	SW 1291	H/o Lab Patiala	7.1	3.1	27	745	28000	3800	0.004	1.63	0.44	E	U
12	Ghaggar at Moonak	1703	14/11/19	SW 1293	H/o Lab Patiala	7.1	2.9	29	805	35000	5800	0.006	1.78	0.55	E	U
13	Ghaggar at U/s Sardulgarh	1705	20/11/19	SW 1347	H/o Lab Patiala	7.9	6.3	6	313	13000	1500	0.41	1.43	0.31	D	U
14	Ghaggar at D/s Sardulgarh	1704	20/11/19	SW 1348	H/o Lab Patiala	7.8	5.9	8	394	17000	1700	0.35	1.29	0.36	D	U

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1	Ghaggar at Mubarikpur Rest House	1023	7/11/19	SW 1247	H/o Lab Patiala	18	700	512	187	159	21	5	60	19	3	142	BDL	9.7	1.90	13.6	2.23	0.21	17	6
2	Ghaggar at Bhankarpur	1295	7/11/19	SW 1248	H/o Lab Patiala	66	480	397	283	241	30	10	112	33	7	184	BDL	11.2	0.78	15.7	2.3	0.27	29	11
3	Ghaggar at Chattbir	1698	7/11/19	SW 1249	H/o Lab Patiala	52	110	198	271	230	31	8	113	32	8	198	BDL	8.0	0.80	11.2	2.0	0.22	32	10
4	Ghaggar at U/s Jharmal Nadi	1702	7/11/19	SW 1250	H/o Lab Patiala	35	50	92	210	179	26	4	85	24	6	147	BDL	10.4	0.68	14.6	1.4	0.19	26	7
5	Ghaggar at D/s Jharmal Nadi	1701	7/11/19	SW 1251	H/o Lab Patiala	68	80	110	293	2319	42	12	115	31	9	201	BDL	11.1	0.72	15.5	5.2	0.23	33	13
6	Ghaggar at U/s Dhakanshu Nallah	1699	7/11/19	SW 1253	H/o Lab Patiala	20	30	93	213	181	19	5	62	18	4	164	BDL	6.1	0.59	8.5	1.0	0.17	29	10
7	Ghaggar at D/s Dhakanshu Nallah	1700	7/11/19	SW 1254	H/o Lab Patiala	73	40	76	415	353	58	15	198	51	17	293	BDL	10.2	0.83	14.3	1.7	0.63	62	26
8	Ghaggar at Rattanheri	1473	14/11/19	SW 1286	H/o Lab Patiala	59	40	148	372	316	66	17	178	48	14	233	BDL	13.4	0.98	18.8	2.9	0.61	59	24
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	14/11/19	SW 1287	H/o Lab	63	30	132	423	360	62	18	194	51	16	248	BDL	12.9	0.91	18.1	2.2	0.63	64	28

					Patiala																				
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	14/11/19	SW 1288	H/o Lab Patiala	81	35	151	521	443	74	26	264	71	21	283	BDL	12.7	0.98	17.8	3.8	0.72	90	33	
11	Ghaggar at Khanauri	1024	14/11/19	SW 1291	H/o Lab Patiala	118	30	78	484	411	68	22	284	74	24	292	BDL	8.7	1.12	12.2	2.38	0.69	63	21	
12	Ghaggar at Moonak	1703	14/11/19	SW 1293	H/o Lab Patiala	123	20	62	523	445	72	26	309	79	27	301	BDL	12.3	1.03	17.2	2.4	0.64	72	27	
13	Ghaggar at U/s Sardulgarh	1705	20/11/19	SW 1347	H/o Lab Patiala	29	15	29	204	173	19	√4	67	22	3	153	BDL	9.2	0.32	12.9	1.9	0.14	27	8	
14	Ghaggar at D/s Sardulgarh	1704	20/11/19	SW 1348	H/o Lab Patiala	38	15	31	256	218	29	8	97	27	7	190	BDL	10.0	0.51	14.0	2.14	0.21	29	11	

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Kali Bein (Sultanpur Lodhi to Confluence to Beas) : Priority IV

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ s/Cm	T.Coli MPN/100ml	F.Coli MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Water quality as per DBU	Water Quality Index
1	Kali Bein into Beas	2913	26/11/19	SW 782	Z.O. Lab Jalandhar	7.3	5.1	2.6	310	6300	1700	0.010	0.60	0.74	C	S

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1	Kali Bein into Beas	2913	26/11/19	SW 782	Z.O. Lab Jalandhar	16	39	16	200	152	27	18	117	32	9	134	BDL	1.0	0.7	1.8	0.16	0.14	15	5.1

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Beas (along Mukerian) : Priority V

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	pH	DO mg/l	BOD mg/l	Cond μ s/Cm	T. Coli MPN/ 100ml	F. Coli MPN/ 100ml	Free Amm. mg/l	SAR	B mg/l	Quality of water as per DBU	Water Quality Index
1	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	7/11/19	SW 763	ZO Lab Jal.	7.8	7.6	1.2	235	430	210	0.021	0.17	0.19	B	S

S.N.	Point of Sample Collection	Code	Date of receipt in lab	Lab Sample No.	Sample Collected & Analyzed by	COD mg/l	Turb NTU	TSS mg/l	TDS mg/l	FDS mg/l	Cl mg/l	SO ₄ Mg/l	TH mg/l	Ca mg/l	Mg mg/l	T.Alkn mg/l	P.Alkn mg/l	AmnN mg/l	NO ₃ -N mg/l	TKN mg/l	PO ₄ as P mg/l	F mg/l	Na mg/l	K mg/l
1	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	7/11/19	SW 763	ZO Lab Jal.	12	27	15	156	124	16	12	108	29	9	110	BDL	0.6	0.5	1.2	0.05	0.14	4.0	2.7

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