

Quality of Water of Polluted River stretches in Punjab for the month of December 2018

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	17/12/18	SW 235	ZO Lab Ldh	7.13	7.9	<1	253	1400	630	0.001	0.34	0.13	C	S
2	River Satluj D/S of Rishab- Paper Mills	1293	17/12/18	SW 234	ZO Lab Ldh	7.86	7.3	1.6	460	2100	1100	0.081	1.12	0.29	C	S
3	River Satluj U/S Buddha Nallah	1690	18/12/18	SW 244	ZO Lab Ldh	7.14	7.0	1.4	436	3200	1300	0.002	1.07	0.16	C	S
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	18/12/18	SW 246	ZO Lab Ldh	7.07	3.6	26	723	7,90,000	3,30,000	BDL	2.41	0.25	E	N
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	19/12/18	SW 261	ZO Lab Ldh	7.03	5.2	9	542	94,000	43,000	BDL	0.67	0.22	D	N
6	River Satluj at D/s East Bein	1381	17/12/18	SW 162	ZO Lab Jal.	7.7	3.8	10.2	610	35000	17000	0.252	1.06	0.12	E	N
7	River Satluj at Harike	1022	17/12/18	SW 163	ZO Lab Jal.	8.1	6.2	4.2	306	14000	7900	0.221	0.38	0.15	D	N

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	NO3-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	17/12/18	SW 235	ZO Lab Ldh	6.4	10	09	160	142	17	13	125	35.2	9.0	92	BDL	1.2	0.52	2.3	0.12	0.17	8.7	3.2
2	River Satluj D/S of Rishab- Paper Mills	1293	17/12/18	SW 234	ZO Lab Ldh	13	14	13	290	252	36	22	184	41.6	19.4	160	BDL	1.8	0.86	2.8	0.17	0.20	35	7.6
3	River Satluj U/S Buddha Nallah	1690	18/12/18	SW 244	ZO Lab Ldh	12	24	16	270	228	34	21	180	46.8	15.3	148	BDL	3.2	1.24	4.6	0.20	0.19	33	5.6
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	18/12/18	SW 246	ZO Lab Ldh	104	53	62	470	394	56	36	225	62.8	16.5	270	BDL	10.6	1.29	14	0.58	0.25	83	12
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	19/12/18	SW 261	ZO Lab Ldh	36	26	30	338	294	46	28	202	56.8	14.6	210	BDL	5.6	1.15	8.4	0.30	0.20	22	9.3
6	River Satluj at D/s East Bein	1381	17/12/18	SW 162	ZO Lab Jal.	42	69	30	350	260	68	38	114	34	7	160	BDL	8.4	1.4	15.2	0.48	0.20	26	4.9
7	River Satluj at Harike	1022	17/12/18	SW 163	ZO Lab Jal.	28	40	26	196	154	26	24	107	37	4	106	BDL	3.4	0.8	6.4	0.28	0.16	9	3.0

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, N means Not Satisfactory)

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

Quality of Water of Polluted River stretches in Punjab for the month of December 2018

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 μ s/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	10/12/18	SW 973	H/o Lab Patiala	7.8	6.5	11	493	24000	3400	0.186	0.81	0.17	D	N
2	Ghaggar at Bhankarpur	1295	10/12/18	SW 974	H/o Lab Patiala	7.6	5.5	30	660	28000	6300	0.232	1.26	0.19	D	N
3	Ghaggar at Chattbir	1698	10/12/18	SW 975	H/o Lab Patiala	7.7	6.4	16	759	28000	5800	0.264	1.37	0.16	D	N
4	Ghaggar at U/s Jharmal Nadi	1702	10/12/18	SW 976	H/o Lab Patiala	7.5	4.4	10	876	22000	3900	0.20	1.50	0.17	D	N
5	Ghaggar at D/s Jharmal Nadi	1701	10/12/18	SW 977	H/o Lab Patiala	7.6	3.1	17	987	24000	4100	0.275	1.76	0.13	E	N
6	Ghaggar at U/s Dhakanshu Nallah	1699	10/12/18	SW 979	H/o Lab Patiala	7.5	3.2	14	936	17000	2100	0.180	2.08	0.25	E	N
7	Ghaggar at D/s Dhakanshu Nallah	1700	10/12/18	SW 980	H/o Lab Patiala	7.4	2.9	16	946	21000	3300	0.149	2.16	0.15	E	N
8	Ghaggar at Rattanheri	1473	13/12/18	SW 982	H/o Lab Patiala	7.8	2.6	22	981	24000	4900	0.504	2.50	0.36	E	N
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	13/12/18	SW 985	H/o Lab Patiala	7.6	3.3	14	923	21000	3800	0.335	2.22	0.19	E	N
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	13/12/18	SW 987	H/o Lab Patiala	7.7	2.9	26	985	28000	5800	0.381	2.47	0.12	E	N
11	Ghaggar at Khanauri	1024	13/12/18	SW 983	H/o Lab Patiala	7.6	2.0	54	1042	35000	8400	0.253	2.69	0.24	E	N
12	Ghaggar at Moonak	1703	13/12/18	SW 984	H/o Lab Patiala	7.4	1.3	68	1500	43000	11000	0.159	2.90	0.22	E	N
13	Ghaggar at U/s Sardulgarh	1705	24/12/18	SW 1041	H/o Lab Patiala	7.9	5.6	20	745	17000	2600	0.405	2.46	0.15	D	N
14	Ghaggar at D/s Sardulgarh	1704	24/12/18	SW 1042	H/o Lab Patiala	7.4	5.2	29	826	24000	3400	0.138	2.53	0.17	D	N

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 P mg/l	F mg/l	Na mg/l	K mg/l
1	Ghaggar at Mubarikpur Rest House	1023	10/12/18	SW 973	H/o Lab Patiala	58	450	558	328	229	63	18	275	97	8	172	BDL	5.3	0.28	7.5	0.10	0.13	31	4
2	Ghaggar at Bhankarpur	1295	10/12/18	SW 974	H/o Lab Patiala	117	440	740	443	377	42	22	287	102	8	331	BDL	9.3	0.32	13.0	0.80	0.14	49	8
3	Ghaggar at Chattbir	1698	10/12/18	SW 975	H/o Lab Patiala	87	410	494	480	408	53	23	307	116	4	358	BDL	8.8	0.29	12.3	0.14	0.14	55	9
4	Ghaggar at U/s Jharmal Nadi	1702	10/12/18	SW 976	H/o Lab Patiala	57	220	137	565	480	120	26	327	125	3	352	BDL	10.0	0.32	14.2	0.68	0.25	62	13
5	Ghaggar at D/s Jharmal Nadi	1701	10/12/18	SW 977	H/o Lab Patiala	84	225	131	625	531	137	30	374	141	5	360	BDL	11	0.65	15	0.68	0.21	78	15
6	Ghaggar at U/s Dhakanshu Nallah	1699	10/12/18	SW 979	H/o Lab Patiala	74	70	47	610	519	119	24	339	131	3	373	BDL	9.0	0.51	12.6	1.10	0.20	88	12
7	Ghaggar at D/s Dhakanshu Nallah	1700	10/12/18	SW 980	H/o Lab Patiala	89	60	51	614	522	102	28	345	133	3	383	BDL	9.9	0.61	14.0	1.58	0.23	92	14
8	Ghaggar at Rattanheri	1473	13/12/18	SW 982	H/o Lab Patiala	105	170	155	625	532	120	32	303	77	27	397	BDL	14.4	0.65	20.0	2.50	0.32	100	22
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	13/12/18	SW 985	H/o Lab Patiala	72	300	194	595	506	105	25	298	86	20	385	BDL	13.4	0.59	18.8	2.0	0.30	88	23
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	13/12/18	SW 987	H/o Lab Patiala	128	340	224	628	534	110	32	309	101	14	400	BDL	12.7	0.67	17.8	2.0	0.31	100	26
11	Ghaggar at Khanauri	1024	13/12/18	SW 983	H/o Lab Patiala	256	530	388	656	558	130	52	303	79	26	377	BDL	10.1	0.70	14.2	1.63	0.39	108	28
12	Ghaggar at Moonak	1703	13/12/18	SW 984	H/o Lab Patiala	330	120	150	970	825	168	58	466	141	28	534	BDL	10.6	0.69	15.0	2.0	0.31	144	104
13	Ghaggar at U/s Sardulgarh	1705	24/12/18	SW 1041	H/o Lab Patiala	80	20	31	470	400	89	23	200	77	2	286	BDL	9	0.42	12.3	2.12	0.30	80	18
14	Ghaggar at D/s Sardulgarh	1704	24/12/18	SW 1042	H/o Lab Patiala	102	30	36	520	442	97	29	251	84	10	294	BDL	9.2	0.51	12.9	1.13	0.32	92	22

Note. 1. BDL means Below Method Detection Limit

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Quality of Water of Polluted River stretches in Punjab for the month of December 2018

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	17/12/18	SW 166	Z.O. Lab Jalandhar	7.6	6.3	4.4	565	3500	1700	0.050	1.92	0.22	D	N

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1	Kali Bein into Beas	2913	17/12/18	SW 166	Z.O. Lab Jalandhar	28	41	26	384	298	24	28	190	52	15	243	BDL	2.0	1.3	3.6	0.26	0.20	61	9.2

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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	18/12/18	SW 178	ZO Lab Jal.	7.7	7.4	2.1	262	840	460	0.021	0.35	0.08	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	River Beas 1 Km D/S effluent discharge point at Mukerian	1294	18/12/18	SW 178	ZO Lab Jal.	18	5.9	12	170	134	18	20	121	41	5	110	BDL	0.7	0.9	1.4	0.13	0.16	9	3.4

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