

Quality of Water of Polluted River stretches in Punjab for the month of August, 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	07-08-19	SW 862	ZO Lab Ldh	7.94	8.9	<1	220	350	79	BDL	0.26	0.13	B	S
2	River Satluj D/S of Rishab- Paper Mills	1293	07-08-19	SW 863	ZO Lab Ldh	8.05	8.3	<1	228	430	110	BDL	0.18	0.14	B	S
3	River Satluj U/S Buddha Nallah	1690	08-08-19	SW 869	ZO Lab Ldh	7.53	8.1	<1	224	920	280	BDL	0.17	0.21	C	S
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	08-08-19	SW 871	ZO Lab Ldh	7.01	5.8	8	370	79000	33000	BDL	0.37	0.28	D	U
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	09-08-19	SW 874	ZO Lab Ldh	7.31	5.9	3.2	316	22000	11000	BDL	0.29	0.30	D	U
6	River Satluj at D/s East Bein	1381	09-08-19	SW 875	ZO Lab Jal.	7.47	5.0	3.5	378	17000	7900	0.036	0.26	0.24	D	U
7	River Satluj at Harike	1022	09-08-19	SW 876	ZO Lab Ldh	7.41	5.8	2.2	311	7900	2300	0.021	0.28	0.29	D	U

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	07-08-19	SW 862	ZO Lab Ldh	<5	38	25	130	121	11	16	92	23.2	7.8	80	BDL	BDL	1.3	1.0	0.3	0.30	5.7	3.5
2	River Satluj D/S of Rishab- Paper Mills	1293	07-08-19	SW 863	ZO Lab Ldh	<5	36	24	138	129	10	18	96	24	8.7	84	BDL	BDL	1.4	1.2	0.4	0.35	4.0	3.9
3	River Satluj U/S Buddha Nallah	1690	08-08-19	SW 869	ZO Lab Ldh	8	54	28	138	125	11	20	102	24.8	9.7	80	BDL	BDL	1.4	1.6	0.4	0.30	3.9	3.0
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	08-08-19	SW 871	ZO Lab Ldh	36	68	40	220	204	42	24	146	35.2	14.1	118	BDL	3.2	1.6	7.1	0.8	0.50	10.3	4.5
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	09-08-19	SW 874	ZO Lab Ldh	20	58	35	188	176	21	22	112	27.2	10.7	98	BDL	BDL	1.6	1.4	0.6	0.36	7.0	3.8
6	River Satluj at D/s East Bein	1381	09-08-19	SW 875	ZO Lab Jal.	24	56	28	224	212	22	24	126	29.6	12.6	116	BDL	1.8	1.6	3.2	0.6	0.29	6.8	3.6
7	River Satluj at Harike	1022	09-08-19	SW 876	ZO Lab Ldh	16	46	26	186	177	20	21	118	28.8	11.2	104	BDL	1.4	1.4	2.7	0.5	0.26	6.9	3.9

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 August, 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 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	7/8/19	SW 646	H/o Lab Patiala	7.8	4.7	6	410	21000	2100	0.36	1.17	0.18	D	U
2	Ghaggar at Bhankarpur	1295	7/8/19	SW 647	H/o Lab Patiala	7.7	4.2	17	477	24000	2700	0.44	1.22	0.22	D	U
3	Ghaggar at Chattbir	1698	7/8/19	SW 648	H/o Lab Patiala	7.5	4.4	15	483	22000	2300	0.25	1.25	0.23	D	U
4	Ghaggar at U/s Jharmal Nadi	1702	7/8/19	SW 649	H/o Lab Patiala	7.5	4.0	9	500	17000	1700	0.22	1.34	0.20	D	U
5	Ghaggar at D/s Jharmal Nadi	1701	7/8/19	SW 650	H/o Lab Patiala	7.6	3.4	16	668	21000	2200	0.39	1.45	0.24	E	U
6	Ghaggar at U/s Dhakanshu Nallah	1699	7/8/19	SW 652	H/o Lab Patiala	7.6	4.1	9	480	15000	1700	0.28	1.65	0.22	D	U
7	Ghaggar at D/s Dhakanshu Nallah	1700	7/8/19	SW 653	H/o Lab Patiala	7.7	4.0	13	532	22000	2100	0.35	1.73	0.25	D	U
8	Ghaggar at Rattanheri	1473	8/8/19	SW 669	H/o Lab Patiala	7.3	2.2	17	838	24000	3400	0.14	2.49	0.30	E	U
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	8/8/19	SW 670	H/o Lab Patiala	7.3	3.4	15	722	28000	4000	0.14	2.28	0.20	E	U
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	8/8/19	SW 671	H/o Lab Patiala	7.7	2.9	21	840	35000	4600	0.44	2.37	0.28	E	U
11	Ghaggar at Khanauri	1024	8/8/19	SW 674	H/o Lab Patiala	7.6	3.6	10	472	17000	2100	0.42	1.07	0.26	E	U
12	Ghaggar at Moonak	1703	8/8/19	SW 676	H/o Lab Patiala	7.3	3.7	12	510	22000	2300	0.13	1.18	0.19	E	U
13	Ghaggar at U/s Sardulgarh	1705	14/8/19	SW 688	H/o Lab Patiala	7.7	4.9	9	362	15000	1700	0.40	1.07	0.25	D	U
14	Ghaggar at D/s Sardulgarh	1704	14/8/19	SW 689	H/o Lab Patiala	7.5	4.6	13	475	21000	2200	0.28	1.24	0.31	D	U

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	Ghaggar at Mubarikpur Rest House	1023	7/8/19	SW 646	H/o Lab Patiala	32	785	378	267	227	24	9	94	29	5	178	BDL	10.4	1.31	14.6	0.60	0.23	26	7
2	Ghaggar at Bhankarpur	1295	7/8/19	SW 647	H/o Lab Patiala	84	660	398	310	264	39	10	148	41	11	219	BDL	14.8	0.79	20.7	0.95	0.27	34	13
3	Ghaggar at Chattbir	1698	7/8/19	SW 648	H/o Lab Patiala	77	410	572	314	267	42	8	149	40	12	221	BDL	12.3	0.72	17.2	1.5	0.31	35	11
4	Ghaggar at U/s Jharmal Nadi	1702	7/8/19	SW 649	H/o Lab Patiala	46	660	593	325	276	37	11	153	38	14	231	BDL	11.0	0.74	15.4	0.85	0.19	38	14
5	Ghaggar at D/s Jharmal Nadi	1701	7/8/19	SW 650	H/o Lab Patiala	78	780	665	434	369	76	16	207	58	15	269	BDL	15.2	0.98	21.2	0.90	0.47	48	26
6	Ghaggar at U/s Dhakanshu Nallah	1699	7/8/19	SW 652	H/o Lab Patiala	45	110	274	312	265	36	12	112	33	7	215	BDL	11.2	0.69	15.7	0.62	0.42	40	19
7	Ghaggar at D/s Dhakanshu Nallah	1700	7/8/19	SW 653	H/o Lab Patiala	64	130	280	346	294	41	13	135	39	9	243	BDL	11.8	0.77	16.5	1.0	0.50	46	20
8	Ghaggar at Rattanheri	1473	8/8/19	SW 669	H/o Lab Patiala	87	290	502	551	468	83	21	232	63	18	341	BDL	13.7	0.68	19.2	1.02	0.51	87	32
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	8/8/19	SW 670	H/o Lab Patiala	75	230	397	474	403	69	19	190	51	15	312	BDL	14.2	0.75	19.9	1.58	0.43	72	27
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	8/8/19	SW 671	H/o Lab Patiala	90	280	477	547	465	71	23	238	67	17	343	BDL	14.6	0.83	20.4	3.1	0.50	84	30
11	Ghaggar at Khanauri	1024	8/8/19	SW 674	H/o Lab Patiala	50	110	178	304	258	40	12	130	37	9	227	BDL	10.7	0.70	15.0	0.83	0.25	28	12
12	Ghaggar at Moonak	1703	8/8/19	SW 676	H/o Lab Patiala	58	120	218	322	274	42	11	149	43	10	234	BDL	12.8	0.76	17.9	1.44	0.20	33	13
13	Ghaggar at U/s Sardulgarh	1705	14/8/19	SW 688	H/o Lab Patiala	47	200	248	231	196	25	7	61	24	5	187	BDL	13.2	0.58	18.5	0.85	0.19	22	8
14	Ghaggar at D/s Sardulgarh	1704	14/8/19	SW 689	H/o Lab Patiala	59	310	298	308	262	32	10	118	29	11	245	BDL	14.0	0.78	19.6	1.83	0.31	31	15

- 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 August, 2019

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	FColi MPN/100ml	Free Amm. mg/l	SAR	B mg/l	Water quality as per DBU	Water Quality Index
1	Kali Bein into Beas	2913	19/8/2019	SW 578	Z.O. Lab Jalandhar	7.6	7.1	2.1	270	2200	1100	0.035	0.87	0.98	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.Alk n mg/l	p.Alkn mg/l	Amn-N 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	Kali Bein into Beas	2913	19/8/2019	SW 578	Z.O. Lab Jalandhar	18	38	18	180	138	16	18	90	23	8	122	BDL	1.4	1.0	2.0	0.13	0.16	19	4.1

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

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	7/8/2019	551	ZO Lab Jal.	7.9	7.9	1.1	231	430	220	0.027	0.27	0.22	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	7/8/2019	551	ZO Lab Jal.	10	28	16	140	116	12	10	85	22	7	105	BDL	0.6	0.7	1.0	0.08	0.11	5.7	2.7

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