

Quality of Water of Polluted River stretches in Punjab for the month of December, 2023

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
1	Ropar Head-Works	1019	11.12.23	SW 269	ZO Lab LDH	8.0	8.0	BDL	297	790	170	BDL	0.36	0.16	C
2	River Satluj D/S of Rishab- Paper Mills	1293	11.12.23	SW 270	ZO Lab LDH	7.6	7.7	BDL	316	700	170	BDL	0.43	0.20	C
3	River Satluj U/S Buddha Nallah	1690	12.12.23	SW 277	ZO Lab LDH	7.9	7.1	1.4	318	840	310	0.045	0.39	0.28	C
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	12.12.23	SW 279	ZO Lab LDH	7.4	1.2	38	645	11,00,000	4,60,000	0.078	1.79	0.51	E
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	13.12.23	SW 283	ZO Lab LDH /HO Lab PAT	7.7	7.6	6.4	436	54,000	13,000	0.078	0.80	0.27	D
6	River Satluj at D/s East Bein	1381	13.12.23	SW 284	ZO Lab LDH /HO Lab PAT	7.6	4.7	7.4	484	70,000	23,000	0.070	1.11	0.29	D
7	River Satluj at Harike	1022	13.12.23	SW 285	ZO Lab LDH /HO Lab PAT	7.8	6.5	2.0	438	3500	1300	0.039	0.95	0.24	C

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	11.12.23	SW 269	ZO Lab LDH	BDL	14	15	181	158	14	31	118	30.4	10.2	118	BDL	BDL	2.4	BDL	BDL	0.17	8.9	3.9
2	River Satluj D/S of Rishab- Paper Mills	1293	11.12.23	SW 270	ZO Lab LDH	BDL	32	22	196	168	18	34	124	32	10.7	120	BDL	BDL	2.7	BDL	BDL	0.19	11	4.3
3	River Satluj U/S Buddha Nallah	1690	12.12.23	SW 277	ZO Lab LDH	10	60	58	197	170	14	28	120	28	12.2	142	BDL	1.0	3.2	1.6	0.20	0.19	9.8	3
4	River Satluj at 100 mts D/s after Budha Nallah confluence, Ludhiana	1020	12.12.23	SW 279	ZO Lab LDH	154	140	104	399	319	40	56	198	48.8	18.5	240	BDL	5.2	4.2	7.8	1.8	0.33	58	9
5	River Satluj at Boat Bridge, Dharamkot Nakodar Road	1021	13.12.23	SW 283	ZO Lab LDH	32	50	84	266	216	33	46	158	40.8	13.6	140	BDL	2.6	3.1	3.6	0.81	0.27	23	4.2
6	River Satluj at D/s East Bein	1381	13.12.23	SW 284	ZO Lab LDH	40	65	95	306	247	39	48	156	41.6	12.6	162	BDL	2.8	3.3	4.2	0.92	0.28	32	6.6
7	River Satluj at Harike	1022	13.12.23	SW 285	ZO Lab LDH	18	85	122	267	224	32	36	132	31.2	13.1	144	BDL	1.1	2.9	1.7	0.32	0.23	25	4.8

- 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 December, 2023

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
1	Ghaggar at Mubarikpur Rest House	1023	7/12/23	SW 2596	H/o Lab Patiala	7.7	5.1	9	541	21000	2100	2.06	0.32	0.51	D
2	Ghaggar at Bhankarpur	1295	7/12/23	SW 2597	H/o Lab Patiala	7.8	3.3	15	860	24000	2700	2.10	0.41	0.69	E
3	Ghaggar at Chattbir	1698	7/12/23	SW 2598	H/o Lab Patiala	7.7	3.5	17	847	28000	3200	2.06	0.37	0.68	E
4	Ghaggar at U/s Jharmal Nadi	1702	7/12/23	SW 2599	H/o Lab Patiala	7.5	3.8	13	681	24000	2700	2.01	0.24	0.54	E
5	Ghaggar at D/s Jharmal Nadi	1701	7/12/23	SW 2600	H/o Lab Patiala	7.7	3.3	15	805	28000	3300	2.12	0.37	0.64	E
6	Ghaggar at U/s Dhakanshu Nallah	1699	7/12/23	SW 2601	H/o Lab Patiala	7.6	3.6	13	675	24000	3400	2.02	0.30	0.61	E
7	Ghaggar at D/s Dhakanshu Nallah	1700	7/12/23	SW 2602	H/o Lab Patiala	7.6	3.2	18	891	28000	3800	2.30	0.31	0.79	E
8	Ghaggar at Rattanheri	1473	8/12/23	SW 2610	H/o Lab Patiala	7.8	3.0	19	910	35000	4600	2.25	0.47	0.78	E
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	8/12/23	SW 2611	H/o Lab Patiala	7.8	3.3	18	853	35000	3900	2.04	0.45	0.73	E
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	8/12/23	SW 2612	H/o Lab Patiala	7.9	2.8	20	953	35000	4700	2.16	0.56	0.80	E
11	Ghaggar at Khanauri	1024	8/12/23	SW 2615	H/o Lab Patiala	7.8	3.2	18	921	35000	4600	2.07	0.46	0.78	E
12	Ghaggar at Moonak	1703	8/12/23	SW 2617	H/o Lab Patiala	7.8	3.0	21	981	43000	7000	2.11	0.47	0.84	E
13	Ghaggar at U/s Sardulgarh	1705	14/12/23	SW 2620	H/o Lab Patiala	7.5	5.8	12	575	21000	2200	1.51	0.21	0.50	D
14	Ghaggar at D/s Sardulgarh	1704	14/12/23	SW 2621	H/o Lab Patiala	7.6	5.2	13	661	22000	3100	1.85	0.29	0.55	D

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1	Ghaggar at Mubarikpur Rest House	1023	SW 2596	H/o Lab Patiala	43	410	431	351	300	39	10	156	41	13	241	BDL	10.5	1.0	14.7	1.4	1.1	59	14
2	Ghaggar at Bhankarpur	1295	SW 2597	H/o Lab Patiala	78	450	435	561	477	83	19	327	91	24	293	BDL	11.8	1.6	16.5	1.7	1.3	87	49
3	Ghaggar at Chattbir	1698	SW 2598	H/o Lab Patiala	83	460	458	553	471	85	22	316	85	25	297	BDL	12.2	1.7	17.1	1.5	1.3	84	41
4	Ghaggar at U/s Jharmal Nadi	1702	SW 2599	H/o Lab Patiala	62	390	372	441	375	56	16	218	59	17	269	BDL	11.9	1.3	16.7	1.4	1.1	68	33
5	Ghaggar at D/s Jharmal Nadi	1701	SW 2600	H/o Lab Patiala	75	410	398	524	447	83	19	296	84	21	283	BDL	12.3	1.5	17.2	1.6	1.3	84	32
6	Ghaggar at U/s Dhakanshu Nallah	1699	SW 2601	H/o Lab Patiala	61	270	295	438	373	51	15	220	60	17	267	BDL	12.1	1.2	16.9	1.3	1.3	69	35
7	Ghaggar at D/s Dhakanshu Nallah	1700	SW 2602	H/o Lab Patiala	81	340	329	578	493	84	24	331	88	27	298	BDL	12.4	1.9	17.4	1.7	1.4	96	49
8	Ghaggar at Rattanheri	1473	SW 2610	H/o Lab Patiala	85	340	348	591	503	89	28	345	95	26	296	BDL	13.4	2.2	18.8	2.3	1.7	96	48
9	Ghaggar before mixing with Sagar Para drain (U/s sagar para Drain)	4159	SW 2611	H/o Lab Patiala	80	320	328	557	478	83	24	328	90	25	291	BDL	12.9	2.1	18.1	2.1	1.4	85	43
10	Ghaggar after mixing with Sagar Para drain (D/s Sagar Para Drain)	4160	SW 2612	H/o Lab Patiala	88	370	364	619	531	90	29	381	98	33	315	BDL	12.4	2.3	17.4	2.4	1.7	97	51
11	Ghaggar at Khanauri	1024	SW 2615	H/o Lab Patiala	85	360	358	601	513	88	27	390	92	39	296	BDL	13.0	2.3	18.2	2.3	1.6	94	50
12	Ghaggar at Moonak	1703	SW 2617	H/o Lab Patiala	95	380	403	641	547	91	29	410	98	40	324	BDL	13.5	2.4	18.9	2.4	1.7	98	53
13	Ghaggar at U/s Sardulgarh	1705	SW 2620	H/o Lab Patiala	51	40	54	374	319	40	15	184	47	16	256	BDL	10.6	1.1	14.8	1.6	1.1	47	27
14	Ghaggar at D/s Sardulgarh	1704	SW 2621	H/o Lab Patiala	63	50	63	429	365	50	20	206	51	19	278	BDL	11.7	1.3	16.4	1.7	1.1	61	31

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)