

ATAL BHUJAL YOJANA (AtalJal)

State : HARYANA

**Department : IRRIGATION & WATER
RESOURCE DEPARTMENT**

BLOCK : HODAL

DISTRICT : PALWAL

YEAR : 2024-2025

*Towards partial fulfilment of requirements for Disbursement of
Incentive under DLI -1*

HYDROGEOLOGICAL REPORT

(YEAR: 2024-25)

STATE	:	HARYANA
DISTRICT	:	PALWAL
BLOCK/TALUK	:	HODAL
BLOCK/TALUK HQs	:	HODAL

A	GENERAL INFORMATION				
1.	Geographical area (Ha)	:	30335		
2.	No. of Gram Panchayats	:	34		
3.	No. of towns	:	1		
4.	No. of villages	:	38		
5.	Population (2011)	:	Male	Female	Total
			92005	80937	172942
6.	Rainfall (mm)(2023)	:	Monsoon	Non-monsoon	Annual
			302	215	517
7.	River basin	:	Yamuna river basin		
8.	Major soil types	:	Tropical and Brown Soil		

B	LAND USE (2023-24)				
1.	Forest area (Ha)	:	258.98		
2.	Cultivable area (Ha)	:	23225		
3.	Net sown area (Ha)	:	19984		
4.	Gross cropped area (Ha)	:	39418		

C	CROPPING PATTERN (As in 2023-24)					
1.	Major crops grown	:	Kharif	Rabi	Summer	Perennial
			Paddy	Wheat	Pulses	NA
			Pulses	Mustard	Tomato	
			Sesame	Vegetable		
			Vegetable			
			Cotton			

D	IRRIGATION FACILITIES (As in 2023-24)						
1.	Net irrigated area (Ha)	:	19984				
2.	Gross irrigated area (Ha)	:	32549				
3.	Area under irrigation (Ha) (Source-wise)	:	DW	BW/TW	Tanks/Ponds	Canals	Others
		-	19142	0	842	0	

E	GEOLOGY & HYDROGEOLOGY				
1.	Predominant rock type	:	Sand, Silt and Clay		
2.	Major geological formations	:	Older Alluvium		
3.	Important water-bearing formations	:	Coarse grain sand		
4.	Status of coverage under NAQUIM	:	Covered		

F	GROUND WATER CONDITIONS										
1	No. of wells used for Water Level (WL) monitoring.	:	Open wells				BW/TW/ PZ				
		CGWB	SGWB	Atal Jal	Total	CGWB	SGWB	Atal Jal	Total		
		4	16	7	27	1	0	47	48		
2	Monitoring mechanism (Nos.)	:	Manual			DWLR			Telemetry		
		CGWB	SGWB	Atal Jal	CGWB	SGWB	Atal Jal	CGWB	SGWB	Atal Jal	
		5	16	34	0	0	20	0	0	20	
3	Monitoring frequency	:	Agency	No. of times monitored/year							
		CGWB	2 times/year Pre and Post Monsoon								
		SGWB	2 times/year Pre and Post Monsoon								
		Atal Jal	2 times/year Pre and Post Monsoon								
4	Period of water level data availability.	:	Agency	Period of WL data availability (From - To)							
			From (year)			To (year)					
		CGWB	2015			2024					
		SGWB	2015			2024					
		Atal Jal	2023			2024					
5	Water level range (m.bgl)	:	Minimum/Village				Maximum/Village				
	Pre-monsoon (May – June 2024)	:	2.45/Banchari_28849				17.85/Hodel				
	Post-monsoon (Oct/Nov 2024)	:	0.7/Bhiduki_28852				16.2/Hodel				
6	Seasonal WL fluctuation range (m)	:	Minimum/ Village				Maximum/ Village				
		-6.55/Banchari_28849				6.75/Gudhrana_28861					

G	GROUND WATER QUALITY								
1	No. of wells used for Water Quality (WQ) monitoring.	Open Wells				BW/TW/ PZ			
		CGWB	SGWB	Atal Jal	Total	CGWB	SGWB	Atal Jal	Total
		5	14	0	19	1	0	33	34
2	Monitoring frequency	Agency	No. of times monitored/year						
		CGWB	1 time/year						
		SGWB	1 time/year						
		Atal Jal	1 time/year						
3	Period of water quality data availability	Agency	Period of WQ data availability (Years)						
		CGWB	2015 to 2024						
		SGWB	2020 to 2024						
		Atal Jal	2023 to 2024						
4	Parameters analysed	Agency	Parameters Analysed						
		CGWB	pH,EC,TH,Ca,Mg,Na,K,CO ₃ ,HCO ₃ , SO ₄ ,Cl,F,NO ₃						
		SGWB	EC						
		Atal Jal	pH,EC,TDS,TH,Ca,Mg,Na,K,CO ₃ ,HCO ₃ , SO ₄ ,Cl,F,NO ₃						
5	Known ground water quality issues, if any	No Such Issue							

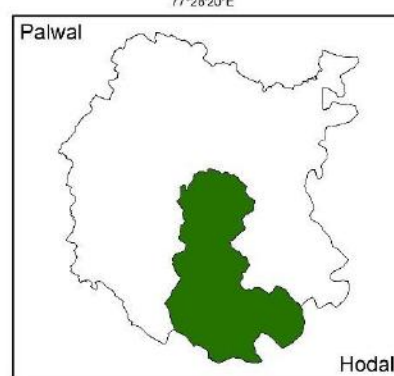
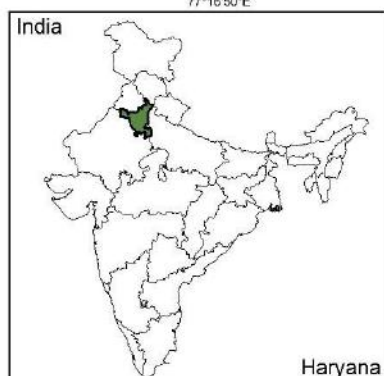
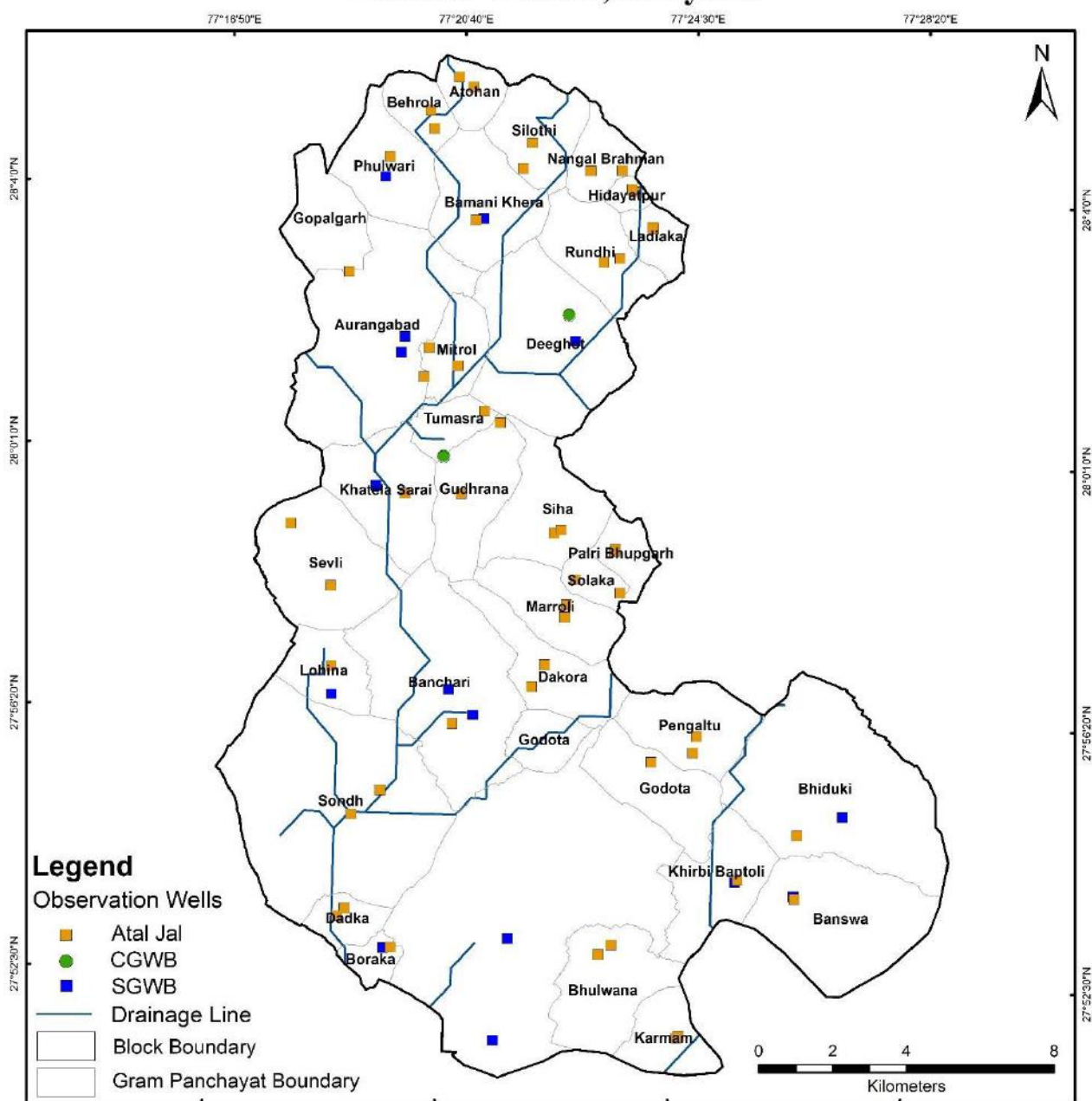
H. GROUND WATER RESOURCES								
1.	Latest assessment year	:	2023					
2.	Assessment Unit	:	Block					
3.	Annual extractable GW resource (ha.m)	:	7581.2					
4.	Current annual GW extraction (ha.m)	:	6306.2					
5.	Net GW availability for future use (ha.m)	:	1275.0					
6.	Stage of GW extraction (%)	:	82.89 %					
7.	Category of block/taluk/(2023)	:	Semi Critical					
8.	Category of block/taluk/ in previous assessments		2023	2020	2017	2013	2011	2009
			Semi Critical	Semi Critical	Critical	Over Exploited	Over Exploited	Over Exploited
								2004
								Safe

I. WATER-RELATED SCHEMES				
1.	Schemes with a bearing on ground water, being implemented in the block / taluk.			
	Centrally Sponsored /Central Sector Schemes	i)	PMKSY	
		ii)	MGNREGA	
		iii)	RKVY	
		iv)	NAQUIM	
		v)	JJM	
	State Schemes	i)	State Plan Scheme for providing assistance on adopting water saving technologies (2402)	
		ii)	MPMV	

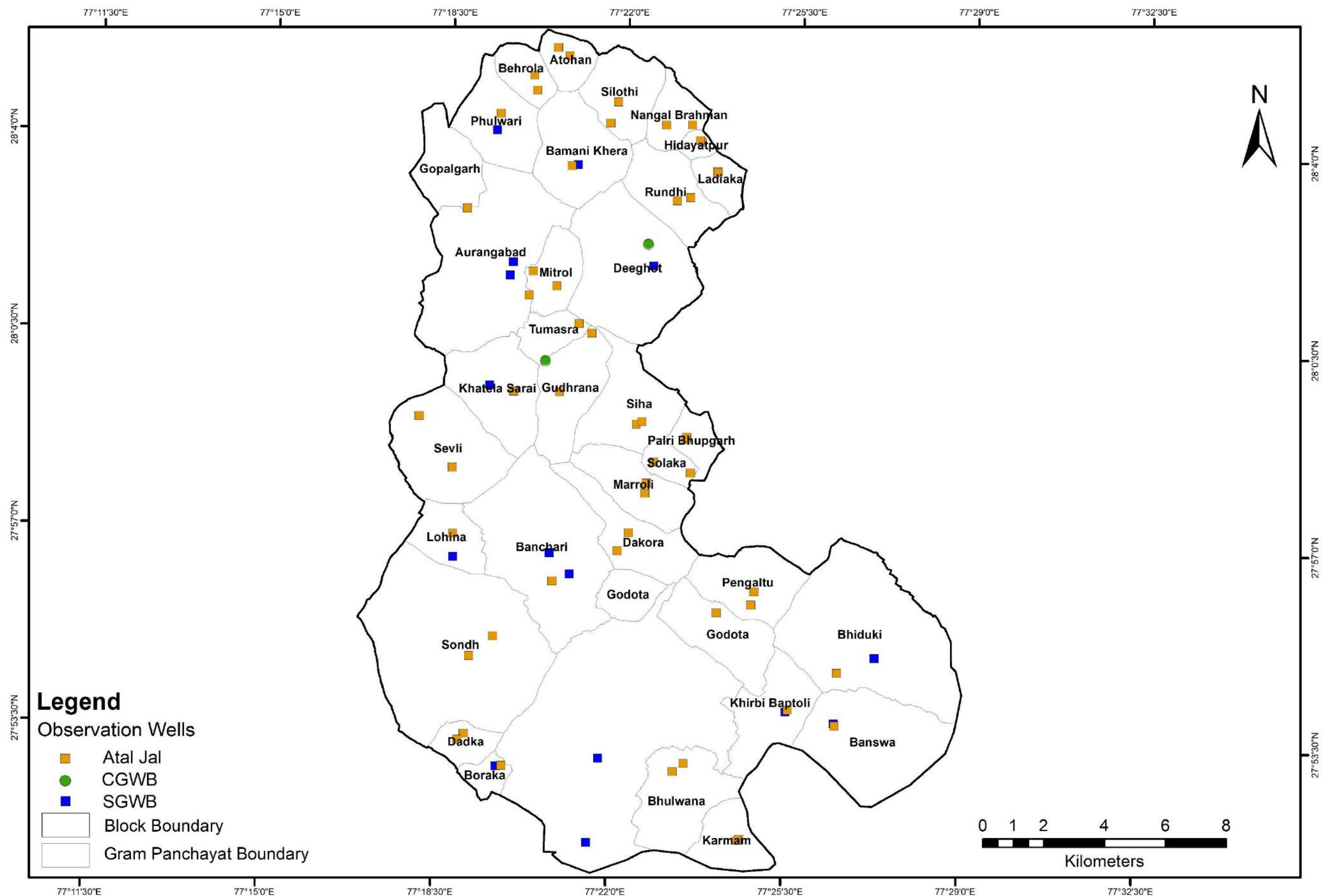
J. GROUND WATER RELATED ISSUES			
1.	Ground water related issues of the block/		
	i) Issues related to GW availability	:	No such issue
	ii) Issues related to GW quality	:	The shallow ground water of the block is alkaline in nature and is moderately to highly saline. It is found that more than half of the ground waters are not suitable for drinking purposes mainly due to fluoride content that exceeds the maximum permissible limit of 1.5mg/l. These waters are not suitable for customary irrigation as they may cause salinity and sodium hazards.
	iii) Other issues if any.	:	

K. ANNEXURES	
I.	Basic data of observation wells – Attached
II.	Historical water level data – Attached
III.	Historical water quality data – Attached

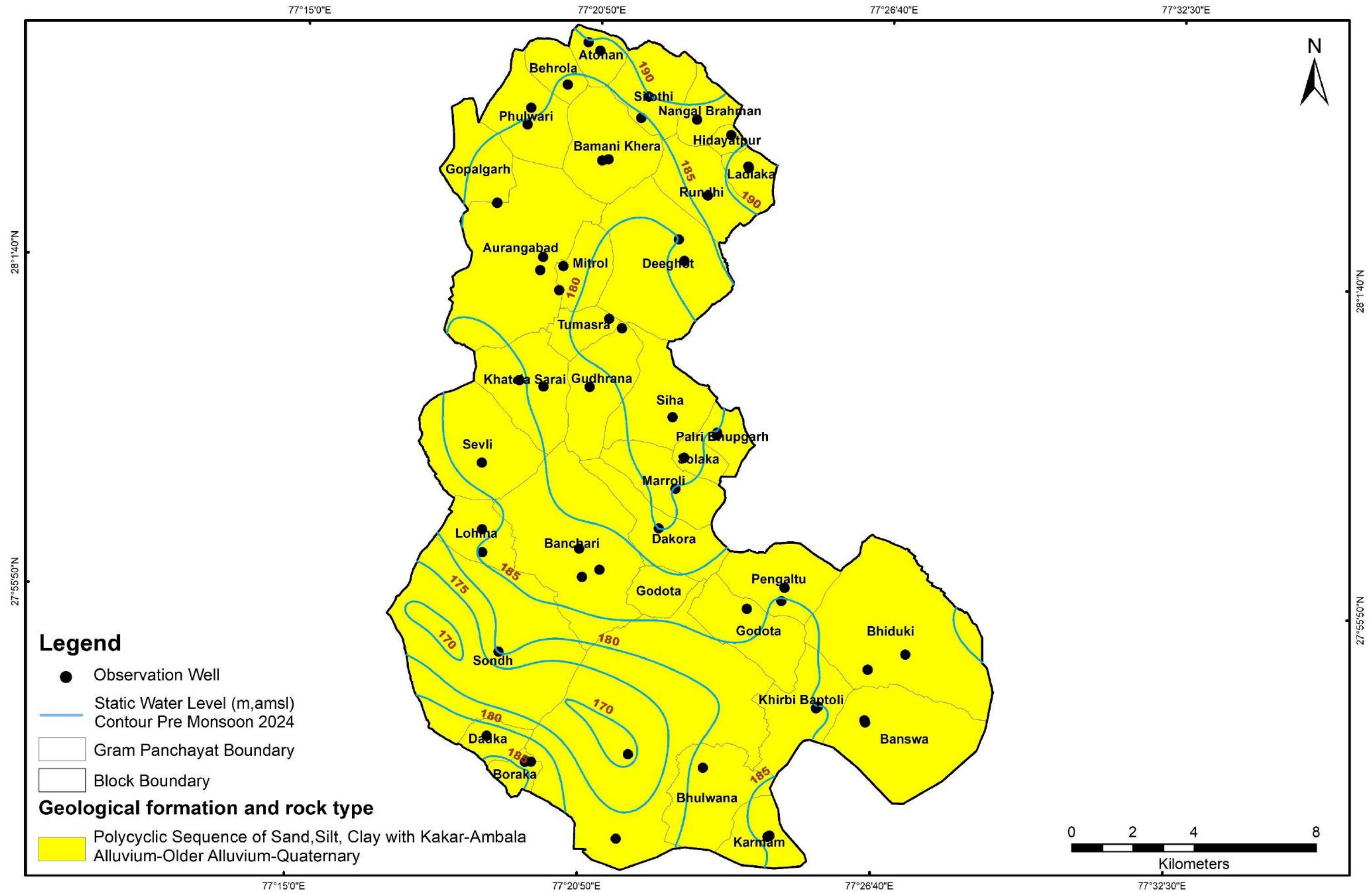
Location Map of Block- Hodal, District- Palwal, Haryana



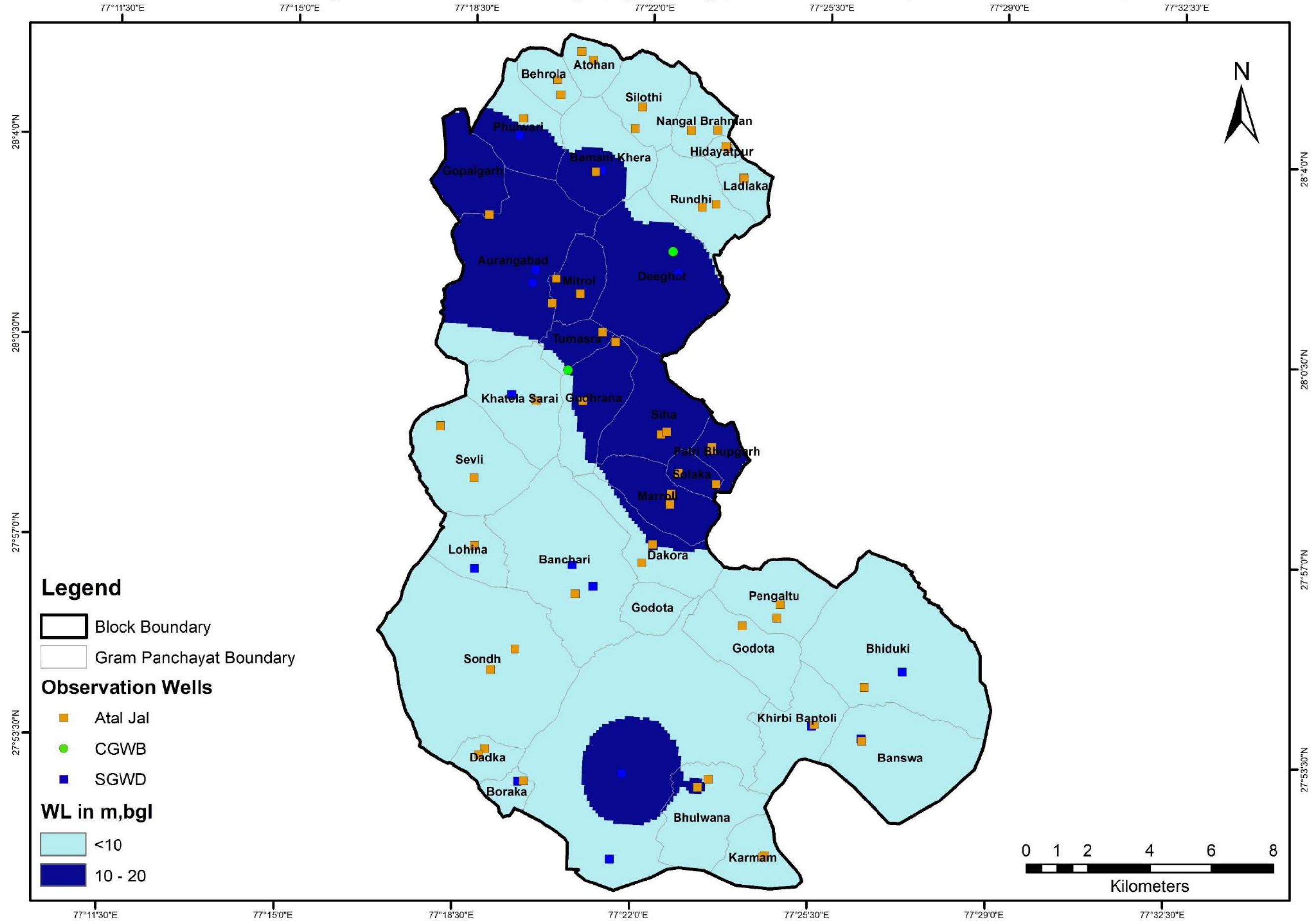
Location of Observation Wells for Monitoring Water Levels and Water Quality, Block- Hodal, District- Palwal, Haryana



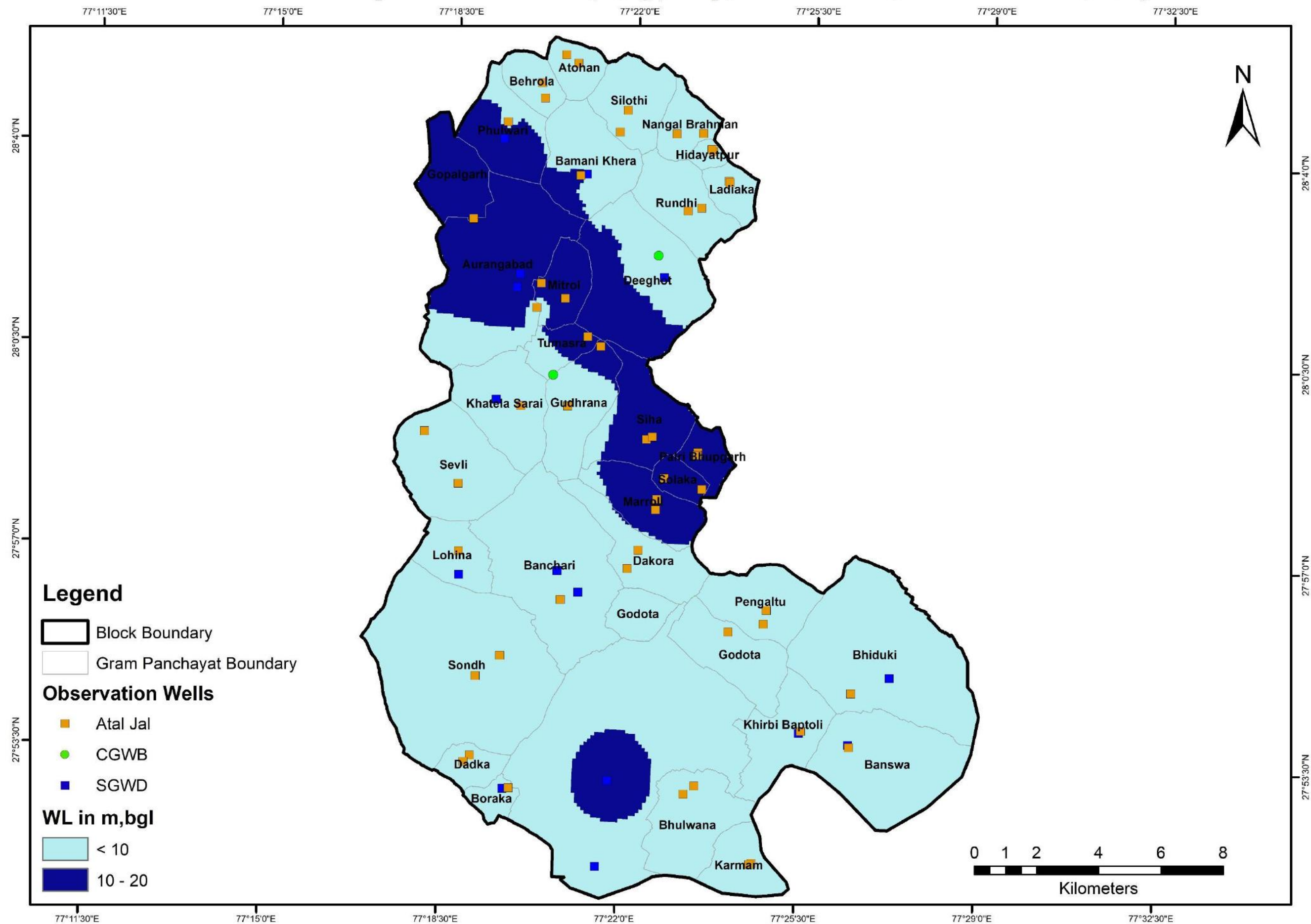
Hydrogeological Map, Block- Hodal, District- Palwal, Haryana



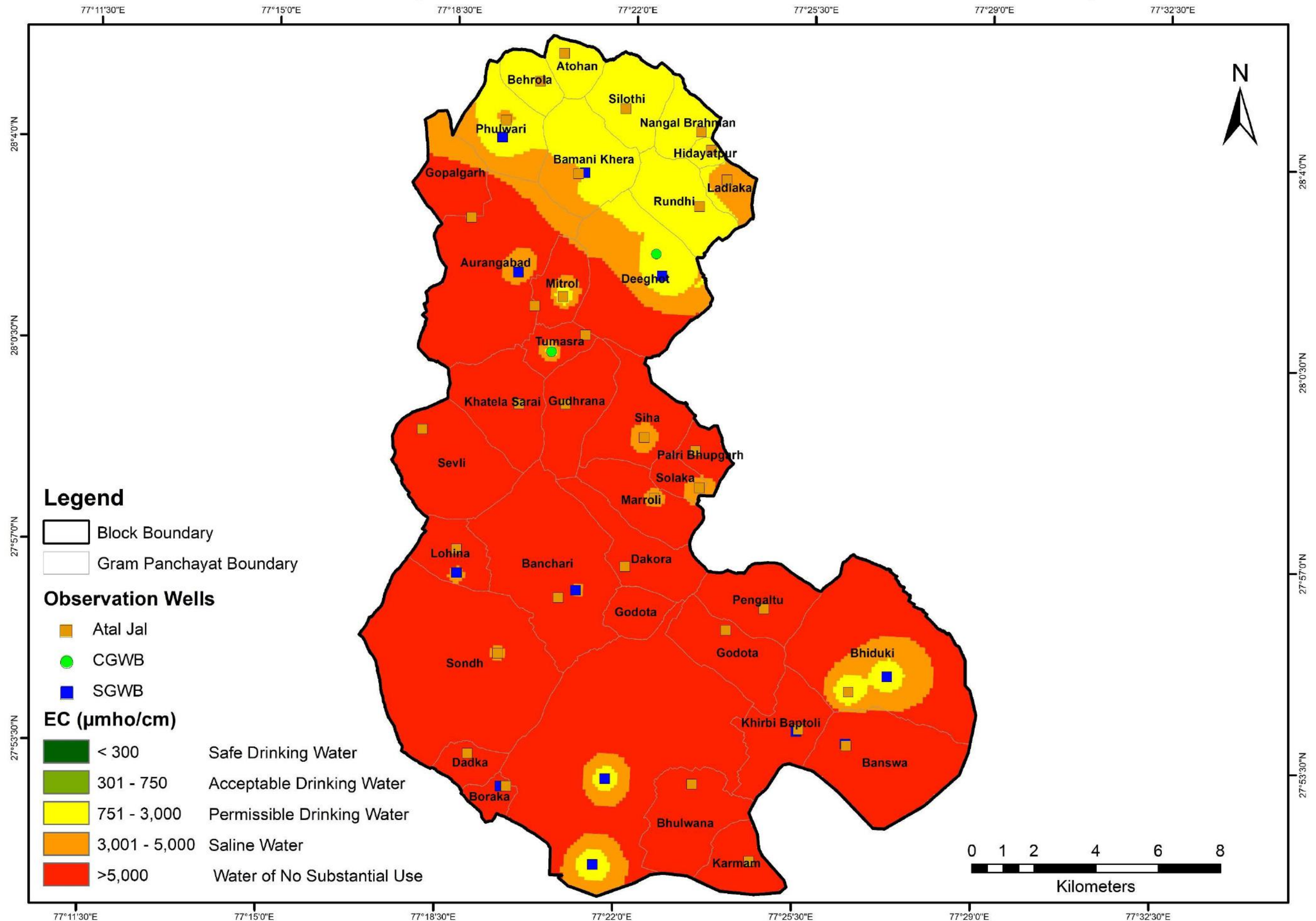
Pre Monsoon 2024 Depth to Water Level (m,bgl) Map, Block - Hodal, District - Palwal, Haryana



Post Monsoon 2024 Depth to Water Level (m,bgl) Map, Block - Hodal, District - Palwal, Haryana



Electrical Conductivity of Groundwater-2024, Block - Hodal, District - Palwal, Haryana



ANNEXURE: 1
BASIC DATA OF MONITORING WELLS

State	Haryana			District	Palwal				Block	Hodal					
S.No	Well ID	Gram Panchayat	Name of the village	Site Name	Latitude	Longitude	Type of Well	Reduced Level	Aquifer Type/Lithology	Height of Measuring (m, agl)	Depth (m,bgl)	Diameter (m)	Purpose of Monitoring (WL/WQ)	Monitoring Mechanism	Agency
1.	HR_GW_713	Atohan_28846	Atohan	Govt Middle School, Atohan	28.0949	77.3431	Piezometer	215	Trans-Yamuna Alluvial	0.50	53	0.10	Both	Telemetric	Atal Jal
2.	GWL-06-619-00467-00028846-001	Atohan_28846	Atohan	Near Devi Genral Store Atohan	28.0926	77.3471	Dug Well	196	Trans-Yamuna Alluvial	0.60	25	1.30	WL	Manual	Atal Jal-Private
3.	HR_GW_714	Aurangabad_28847	Aurangabad	Govt Sr Sec School, Aurangabad	28.0215	77.3358	Piezometer	212	Trans-Yamuna Alluvial	0.50	52	0.10	Both	Telemetric	Atal Jal
4.	HR_GW_715	Bamani Khera_236841	Bamani Khera	Govt Sr Sec School, Bamani Khera	28.0601	77.3488	Piezometer	216	Trans-Yamuna Alluvial	0.50	54	0.10	Both	Telemetric	Atal Jal
5.	HR_GW_730	Banchari_28849	Banchari	Govt Sr Sec School, Banchari	27.9370	77.3462	Piezometer	207	Trans-Yamuna Alluvial	0.50	60	0.10	Both	Telemetric	Atal Jal
6.	HR_GW_716	Banswa_28850	Banswa	Govt High School	27.8965	77.4417	Piezometer	215	Trans-Yamuna Alluvial	0.50	58	0.10	Both	Telemetric	Atal Jal
7.	GWL-06-619-00467-00028848-001	Behrola_28848	Behrola	Rakesh Genral Store Behrola	28.0822	77.3366	Bore Well	193	Trans-Yamuna Alluvial	0.53	15	0.15	WL	Manual	Atal Jal-Private
8.	PAL_HOD_BAH_1	Behrola_28848	Behrola	Mohit	28.0866	77.3354	Bore Well	197	Alluvial	0.29	18	0.70	WQ	Manual	Atal Jal
9.	HR_GW_717	Bhiduki_28852	Bhiduki	Govt High School	27.9121	77.4420	Piezometer	206	Trans-Yamuna Alluvial	0.50	48	0.10	Both	Telemetric	Atal Jal
10.	GWL-06-619-00467-00028853-001	Bhulwana_28853	Bhulwana	Near Panchayat Bhawan	27.8817	77.3882	Dug Well	192	Trans-Yamuna Alluvial	0.30	33	1.90	WL	Manual	Atal Jal-Private
11.	PAL_HOD_BHU_1	Bhulwana_28853	Bhulwana	Mukesh	27.8841	77.3917	Bore Well	189	Alluvial	0.46	18	1.11	WQ	Manual	Atal Jal
12.	HR_GW_718	Boraka_28854	Boraka	Govt Primary School, Boraka	27.8820	77.3311	Piezometer	208	Trans-Yamuna Alluvial	0.50	53	0.10	Both	Telemetric	Atal Jal
13.	GWL-06-619-00467-00028855-001	Dadka_28855	Dadka	Samshan Ghat Dadka	27.8893	77.3161	Dug Well	188	Trans-Yamuna Alluvial	0.40	25	2.30	WL	Manual	Atal Jal-Private
14.	PAL_HOD_DAD_1	Dadka_28855	Dadka	Tofik	27.8912	77.3181	Bore Well	188	Alluvial	0.53	17	1.06	WQ	Manual	Atal Jal
15.	GWL-06-619-00467-00028856-001	Dakora_28856	Dakora	Near Govt School Dakora	27.9520	77.3712	Bore Well	190	Trans-Yamuna Alluvial	0.44	18	0.15	WL	Manual	Atal Jal-Private
16.	PAL_HOD_DAK_1	Dakora_28856	Dakora	Ravinder	27.9466	77.3678	Tube Well	191	Alluvial	0.17	15	0.53	WQ	Manual	Atal Jal
17.	HR_GW_720	Godota_28860	Godota	Govt High School, Godota	27.9290	77.4013	Piezometer	216	Trans-Yamuna Alluvial	0.50	55	0.10	Both	Telemetric	Atal Jal
18.	HR_GW_731	Gopalgarh_28859	Gopalgarh	Govt Primary School, Gopalgarh	28.0466	77.3143	Piezometer	215	Trans-Yamuna Alluvial	0.50	60	0.10	Both	Telemetric	Atal Jal
19.	GWL-06-619-00467-00028859-001	Gopalgarh_28859	Gopalgarh	Near Govt School Gpoalgarg	28.0467	77.3143	Bore Well	193	Trans-Yamuna Alluvial	0.30	17	0.15	WL	Manual	Atal Jal-Private

S.No	Well ID	Gram Panchayat	Name of the village	Site Name	Latitude	Longitude	Type of Well	Reduced Level	Aquifer Type/Lithology	Height of Measuring (m, agl)	Depth (m,bgl)	Diameter (m)	Purpose of Monitoring (WL/WQ)	Monitoring Mechanism	Agency
20.	HR_GW_721	Gudhrana_28861	Gudhrana	Ahilyabai Holkar Bhawan, Gudhrana	27.9932	77.3468	Piezometer	212	Trans-Yamuna Alluvial	0.50	60	0.10	Both	Telemetric	Atal Jal
21.	GWL-06-619-00467-00028861-001	Gudhrana_28861	Gudhrana	Near Boudh Vihar Mandir	28.0108	77.3570	Bore Well	191	Trans-Yamuna Alluvial	0.80	17	0.15	WL	Manual	Atal Jal-Private
22.	GWL-06-619-00467-00264992-001	Hidayatpur_264992	Hidayatpur	New Sarpanch Home	28.0687	77.3915	Bore Well	194	Trans-Yamuna Alluvial	0.60	15	0.15	WL	Manual	Atal Jal-Private
23.	PAL_HOD_HID_1	Hidayatpur_264992	Hidaytpur	Rampal	28.0681	77.3921	Hand Pump	194	Alluvial	0.56	16	0.13	WQ	Manual	Atal Jal
24.	HR_GW_722	Karmam_28862	Karmam	Govt High School, Karmam	27.8623	77.4110	Piezometer	208	Trans-Yamuna Alluvial	0.50	60	0.10	Both	Telemetric	Atal Jal
25.	GWL-06-619-00467-00028862-001	Karmam_28862	Karman	Govt High School Karman	27.8619	77.4104	Bore Well	188	Trans-Yamuna Alluvial	0.47	15	0.15	WL	Manual	Atal Jal-Private
26.	HR_GW_733	Khatela Sarai_28863	Khatela Sarai	Govt Middle School, Khatela Sarai	27.9929	77.3315	Piezometer	211	Trans-Yamuna Alluvial	0.50	59	0.10	Both	Telemetric	Atal Jal
27.	HR_GW_732	Khirbi Baptoli_28864	Khirbi	Govt Middle School	27.9008	77.4259	Piezometer	215	Trans-Yamuna Alluvial	0.50	55	0.10	Both	Telemetric	Atal Jal
28.	HR_GW_723	Ladiaka_28865	Ladiaka	Govt Middle School, Ladiaka	28.0596	77.3974	Piezometer	217	Trans-Yamuna Alluvial	0.50	55	0.10	Both	Telemetric	Atal Jal
29.	GWL-06-619-00467-00028865-001	Ladiaka_28865	Ladiaka	Govt School Ladiaka	28.0593	77.3977	Bore Well	195	Trans-Yamuna Alluvial	0.45	17	0.15	WL	Manual	Atal Jal-Private
30.	HR_GW_724	Lohina_28866	Lohina	Govt High School, Lohina	27.9502	77.3126	Piezometer	210	Trans-Yamuna Alluvial	0.50	55	0.10	Both	Telemetric	Atal Jal
31.	GWL-06-619-00467-00028867-001	Marroli_28867	Maroli	New Sarpanch Home	27.9638	77.3764	Bore Well	193	Trans-Yamuna Alluvial	0.17	17	0.15	WL	Manual	Atal Jal-Private
32.	PAL_HOD_MAH_1	Marroli_28867	Maroli	Govt.	27.9668	77.3767	Bore Well	193	Alluvial	0.19	22	0.13	WQ	Manual	Atal Jal
33.	GWL-06-619-00467-00028868-001	Mitrol_28868	Mitrol	Govt Middle School Mitrol	28.0286	77.3369	Bore Well	192	Trans-Yamuna Alluvial	0.80	17	0.15	WL	Manual	Atal Jal-Private
34.	PAL_HOD_MIT_1	Mitrol_28868	Mitrol	Pushpender	28.0244	77.3449	Tube Well	191	Alluvial	0.46	20	0.12	WQ	Manual	Atal Jal
35.	GWL-06-619-00467-00028869-001	Nangal Brahman_28869	Nangal Brahman	Near Jainty House	28.0730	77.3799	Dug Well	195	Trans-Yamuna Alluvial	0.60	25	2.12	WL	Manual	Atal Jal-Private
36.	PAL_HOD_NAN_1	Nangal Brahman_28869	Nangal Brhman	Bir Singh	28.0733	77.3886	Bore Well	193	Alluvial	0.52	14	1.31	WQ	Manual	Atal Jal
37.	HR_GW_725	Palri Bhupgarh_28870	Palri	Govt Primary School	27.9807	77.3897	Piezometer	213	Trans-Yamuna Alluvial	0.50	59	0.10	Both	Telemetric	Atal Jal
38.	GWL-06-619-00467-00028870-001	Palri Bhupgarh_28870	Palri Bhoopgarh	Ex. Sarpanch Parduman Home	27.9800	77.3896	Bore Well	194	Trans-Yamuna Alluvial	0.17	20	0.15	WL	Manual	Atal Jal-Private
39.	HR_GW_734	Pengaltu_28871	Pengaltu	Govt Middle School	27.9356	77.4136	Piezometer	211	Trans-Yamuna Alluvial	0.50	58	0.10	Both	Telemetric	Atal Jal
40.	GWL-06-619-00467-00028871-001	Pengaltu_28871	Pengaltu	Near Airtel Tower Building	27.9316	77.4127	Dug Well	190	Trans-Yamuna Alluvial	0.55	25	2.20	WL	Manual	Atal Jal-Private

S.No	Well ID	Gram Panchayat	Name of the village	Site Name	Latitude	Longitude	Type of Well	Reduced Level	Aquifer Type/Lithology	Height of Measuring (m, agl)	Depth (m,bgl)	Diameter (m)	Purpose of Monitoring (WL/WQ)	Monitoring Mechanism	Agency
41.	HR_GW_726	Phulwari_28872	Phulwari	Govt High School, Phulwari	28.0750	77.3246	Piezometer	219	Trans-Yamuna Alluvial	0.50	58	0.10	Both	Telemetric	Atal Jal
42.	GWL-06-619-00467-00028873-001	Rundhi_28873	Rundhi	Near Sarpanch House Bhagwan Sahi	28.0507	77.3842	Bore Well	195	Trans-Yamuna Alluvial	0.20	17	0.15	WL	Manual	Atal Jal-Private
43.	PAL_HOD_RUN_1	Rundhi_28873	Rundhi	Govt.	28.0517	77.3887	Hand Pump	194	Alluvial	0.10	17	0.13	WQ	Manual	Atal Jal
44.	GWL-06-619-00467-00028874-001	Sevli_28874	Seoli	Near Naresh Csc Center Seoli	27.9698	77.3118	Dug Well	193	Trans-Yamuna Alluvial	0.40	25	2.00	WL	Manual	Atal Jal-Private
45.	PAL_HOD_SEV_1	Sevli_28874	Seoli	Chanderpal	27.9848	77.3003	Bore Well	191	Alluvial	0.20	15	0.31	WQ	Manual	Atal Jal
46.	GWL-06-619-00467-00028875-001	Siha_28875	Siha	Govt High School Siha	27.9850	77.3747	Bore Well	192	Trans-Yamuna Alluvial	0.30	18	0.15	WL	Manual	Atal Jal-Private
47.	PAL_HOD_SIH_1	Siha_28875	Siha	Govt.	27.9842	77.3728	Bore Well	191	Alluvial	0.44	15	0.15	WQ	Manual	Atal Jal
48.	HR_GW_728	Silothi_28876	Silothi	Govt High School, Silothi	28.0794	77.3637	Piezometer	213	Trans-Yamuna Alluvial	0.50	46	0.10	Both	Telemetric	Atal Jal
49.	GWL-06-619-00467-00028876-001	Silothi_28876	Silothi	Ex. Sarpanch Home	28.0730	77.3613	Bore Well	192	Trans-Yamuna Alluvial	0.74	20	0.15	WL	Manual	Atal Jal-Private
50.	GWL-06-619-00467-00028877-001	Solaka_28877	Sholaka	Near Asha Workar	27.9731	77.3790	Bore Well	193	Trans-Yamuna Alluvial	0.60	18	0.15	WL	Manual	Atal Jal-Private
51.	PAL_HOD_SOL_1	Solaka_28877	Sholaka	Usif Khan	27.9701	77.3914	Bore Well	191	Alluvial	0.30	16	0.14	WQ	Manual	Atal Jal
52.	GWL-06-619-00467-00028878-001	Sondh_28878	Sondh	Lal Das Temple	27.9142	77.3192	Dug Well	186	Trans-Yamuna Alluvial	1.20	33	2.26	WL	Manual	Atal Jal-Private
53.	PAL_HOD_SON_1	Sondh_28878	Sondh	Gola	27.9203	77.3270	Tube Well	186	Alluvial	0.64	20	1.28	WQ	Manual	Atal Jal
54.	HR_GW_719	Tumasra_28879	Tumasra	Govt Middle School, Tumsara	28.0135	77.3527	Piezometer	210	Trans-Yamuna Alluvial	0.50	60	0.10	Both	Telemetric	Atal Jal
55.	W280245077280001	Bhavana_265277	Achheja	Achheja	28.0458	77.4667	Dug Well	191	Alluvium	0.46	30	1.85	WQ	Manual	CGWB
56.	W280215077223001	Deeghot_28857	Dighaut	Dighaut	28.0375	77.3750	Piezometer	195	Unconfined to Semi Confined	1.40	203	0.11	WL	Manual	CGWB
57.	Pir_28.031_77.474	Karimpur_265279	Pirgow	Pirgow	28.0311	77.4742	Dug Well	196	Alluvium	0.55	29	0.21	WQ	Manual	CGWB
58.	W280030077203001	Tumasra_28879	Tumsara	Tumsara	28.0021	77.3417	Dug Well	193.26	Unconfined to Semi Confined	1.12	18	2.57	Both	Manual	CGWB
59.	Bad_28.069_77.433	Badoli	Badoli	Badoli	28.0693	77.4332	Dug Well	198	Alluvium	0.51	NA	2.50	WQ	Manual	CGWB
60.	Au_28.031_77.33	Aurangabad_28847	Aurangabad	Budha S/O Chiranjee Dharamshala In Front Of High School, Ow	28.0311	77.3301	Dug Well	190.5	Unconfined to Semi Confined	1.25	48	2.00	WL	Manual	SGWD

S.No	Well ID	Gram Panchayat	Name of the village	Site Name	Latitude	Longitude	Type of Well	Reduced Level	Aquifer Type/Lithology	Height of Measuring (m, agl)	Depth (m,bgl)	Diameter (m)	Purpose of Monitoring (WL/WQ)	Monitoring Mechanism	Agency
61.	Ka_28.02_77.3_29	Aurangabad_28847	Kambht	Panchyati South Of Village Near Bus Stand Lhs Of Bamni Khera To Hassanpur Road, Ow	28.0272	77.3292	Dug Well	195	Unconfined to Semi Confined	0.47	15	0.51	WL	Manual	SGWD
62.	Ba_28.061_77.351	Bamani Khera_236841	Bamni Khera	Shiv Lal S/O Nathu Lhs Of Bamni Khera To Hassanpur, Ow	28.0605	77.3509	Dug Well	191.96	Unconfined to Semi Confined	1.25	19	2.00	WL	Manual	SGWD
63.	Ba_27.939_77.352	Banchari_28849	Banchari	Mandir Well 100 Yrds From Village Towards Hodal On Gt Road, Ow	27.9393	77.3519	Dug Well	190.23	Unconfined to Semi Confined	1.25	19	2.00	WL	Manual	SGWD
64.	Ra_27.945_77.345	Banchari_28849	Rahimpur	Harijan Well East Of Village, Ow	27.9453	77.3450	Dug Well	189	Unconfined to Semi Confined	0.70	28	1.29	WL	Manual	SGWD
65.	Ba_27.89_777.441	Banswa_28850	Banswa	Baba Ki Bageeche Before Cannal Rhs Of Road, Ow	27.8971	77.4414	Dug Well	190.46	Unconfined to Semi Confined	1.25	15	2.00	WL	Manual	SGWD
66.	Bh_27.91_777.454	Bhiduki_28852	Bhiduki	Panchyati In Front Of Bhadi Choupal Near Post Office, Ow	27.9169	77.4543	Dug Well	189.81	Unconfined to Semi Confined	1.25	9	2.00	WL	Manual	SGWD
67.	Bu_27.882_77.329	Boraka_28854	Buraka	Mandir Well Near Pond, Ow	27.8819	77.3291	Dug Well	192.7	Unconfined to Semi Confined	1.25	11	2.00	WL	Manual	SGWD
68.	De_28.031_77.377	Deeghot_28857	Deeghot	Samlati Seva Ashram On Bus Stand, Ow	28.0312	77.3771	Dug Well	193.1	Unconfined to Semi Confined	1.25	40	2.00	WL	Manual	SGWD
69.	Gh_28.072_77.21	Godota_28860	Gharrota	Panchyati Near Veternary Hospital On Bhiduki Road, Ow	28.0718	77.2098	Dug Well	191.2	Unconfined to Semi Confined	1.25	25	2.00	WL	Manual	SGWD
70.	Sa_28.843_75.849	Khatela Sarai_28863	Sarai	Near Dharam Shalla, Ow	27.9946	77.3234	Dug Well	182.7	Unconfined to Semi Confined	1.25	40	2.00	WL	Manual	SGWD
71.	Kh_27.9_77.425	Khirbi Baptoli_28864	Khirbi	Shyam Lal S/O Nathiram South Of Village Near The End Of Approach Road, Ow	27.9003	77.4252	Dug Well	190.55	Unconfined to Semi Confined	1.25	40	2.00	WL	Manual	SGWD
72.	Lo_27.943_77.313	Lohina_28866	Lohina	Harijan Panchyati Well Near Nala On The Village Road, Ow	27.9434	77.3128	Dug Well	195.73	Unconfined to Semi Confined	1.25	40	2.00	WL	Manual	SGWD
73.	Ph_28.07_77.324	Phulwari_28872	Phulwari	Panchyati Near Khem Chand S/O Chhote Ram House, Ow	28.0701	77.3236	Dug Well	191.75	Unconfined to Semi Confined	1.25	21	2.00	WL	Manual	SGWD
74.	Ga_27.86_77.36	Garhi Patti	Garhi Patti	Ranglal S/O Cheeranjee Near Road In Front Of School, Ow	27.8600	77.3600	Dug Well	189.21	Unconfined to Semi Confined	1.25	16	2.00	WL	Manual	SGWD
75.	Ho_27.885_77.363	Hodel	Hodel	Lhs Hodal To Garhi Patti Road Near Dushera Ground, Kow	27.8850	77.3632	Dug Well	188.83	Unconfined to Semi Confined	1.25	21	2.00	WL	Manual	SGWD

ANNEXURE: 2
WATER LEVEL (WL) DATA OF MONITORING WELLS

State	Haryana	District	Palwal	Block	Hodal
Month of Pre-monsoon Water Level Measurement					May/June
Month of Post-monsoon water Level measurement					October/November

S.No.	Observation Point	Source	Well Types	Co-ordinate		Water Level (m)																			
						2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
				Latitude	Longitude	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	Atohan_28846	Atal Jal	Piezometer	28.0949	77.3431	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.25	6.29
2	Atohan_28846	Atal Jal	Dug Well	28.0926	77.3471	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.57	6.2	7.2	7.05
3	Aurangabad_28847	Atal Jal	Piezometer	28.0215	77.3358	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9	9.5
4	Bamani Khera_236841	Atal Jal	Piezometer	28.0601	77.3488	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	10.25
5	Banchari_28849	Atal Jal	Piezometer	27.9370	77.3462	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.95	2.67
6	Banswa_28850	Atal Jal	Piezometer	27.8965	77.4417	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1	4.28
7	Behrola_28848	Atal Jal	Bore Well	28.0822	77.3366	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.47	8.63	9.06	9.17
8	Bhiduki_28852	Atal Jal	Piezometer	27.9121	77.4420	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.25	0.7
9	Bhulwana_28853	Atal Jal	Dug Well	27.8817	77.3882	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	9.43	10.1	9.8
10	Boraka_28854	Atal Jal	Piezometer	27.8820	77.3311	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3	1.7
11	Dadka_28855	Atal Jal	Dug Well	27.8893	77.3161	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	4.7	5.2	4.85
12	Dakora_28856	Atal Jal	Bore Well	27.9520	77.3712	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.88	9.62	10.05	9
13	Godota_28860	Atal Jal	Piezometer	27.9290	77.4013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7	6.1
14	Gopalgarh_28859	Atal Jal	Piezometer	28.0466	77.3143	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.4	11.2
15	Gopalgarh_28859	Atal Jal	Bore Well	28.0467	77.3143	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.75	12.2	11.6	12.35
16	Gudhrana_28861	Atal Jal	Piezometer	27.9932	77.3468	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.25	3.5
17	Gudhrana_28861	Atal Jal	Bore Well	28.0108	77.3570	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2	11.65	12.15	11.65
18	Hidayatpur_264992	Atal Jal	Bore Well	28.0687	77.3915	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7	5.3	5.2	6.25
19	Karmam_28862	Atal Jal	Piezometer	27.8623	77.4110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.83	0.92
20	Karmam_28862	Atal Jal	Bore Well	27.8619	77.4104	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.18	1.6	2.8	1.15
21	Khatela Sarai_28863	Atal Jal	Piezometer	27.9929	77.3315	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5	7.1
22	Khirbi Baptoli_28864	Atal Jal	Piezometer	27.9008	77.4259	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.15	0.78
23	Ladiaka_28865	Atal Jal	Piezometer	28.0596	77.3974	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.55	2.4
24	Ladiaka_28865	Atal Jal	Bore Well	28.0593	77.3977	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	3.45	4.1	4.75
25	Lohina_28866	Atal Jal	Piezometer	27.9502	77.3126	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5	2.79
26	Marroli_28867	Atal Jal	Bore Well	27.9638	77.3764	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.32	12.2	12.9	11.93
27	Mitrol_28868	Atal Jal	Bore Well	28.0286	77.3369	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.4	10.3	10.75	10.3
28	Nangal Brahman_28869	Atal Jal	Dug Well	28.0730	77.3799	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1	5.44	6.2	6.8
29	Palri Bhupgarh_28870	Atal Jal	Piezometer	27.9807	77.3897	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.75	12.5
30	Palri Bhupgarh_28870	Atal Jal	Bore Well	27.9800	77.3896	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.25	12.65	12.85	13.25
31	Pengaltu_28871	Atal Jal	Piezometer	27.9356	77.4136	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2	3.9
32	Pengaltu_28871	Atal Jal	Dug Well	27.9316	77.4127	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.65	5.25	5.6	5.95
33	Phulwari_28872	Atal Jal	Piezometer	28.0750	77.3246	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1	9.61
34	Rundhi_28873	Atal Jal	Bore Well	28.0507	77.3842	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.13	6.4	7.15	8.35
35	Sevli_28874	Atal Jal	Dug Well	27.9698	77.3118	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.75	5.85	6.4	5.85
36	Siha_28875	Atal Jal	Bore Well	27.9850	77.3747	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.6	13	13.05	12.85
37	Silothi_28876	Atal Jal	Piezometer	28.0794	77.3637	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.5
38	Silothi_28876	Atal Jal	Bore Well	28.0730	77.3613	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.24	6.75	8.36	9.35

S.No.	Observation Point	Source	Well Types	Co-ordinate		Water Level (m)																			
				Latitude	Longitude	2015		2016		2017		2018		2019		2020		2021		2022		2023		2024	
						Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
39	Solaka_28877	Atal Jal	Bore Well	27.9731	77.3790	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.45	13.6	14.4	13.85
40	Sondh_28878	Atal Jal	Dug Well	27.9142	77.3192	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.77	4.4	5.1	4.65
41	Tumasra_28879	Atal Jal	Piezometer	28.0135	77.3527	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.25	12.07
42	Deeghot_28857	CGWB	Piezometer	28.0375	77.3750	9.34	11.64	11.95	10.8	12.06	11.38	13.02	12.15	13.2	13.15	NA	13.36	13.91	13.35	12.07	12.95	13.3	13.16	13.84	12
43	Tumasra_28879	CGWB	Dug Well	28.0021	77.3417	9.58	9.33	7.8	6.72	5.42	5.43	6.21	5.56	6.99	5.22	7.23	8.88	9.89	10.61	NA	NA	NA	NA	NA	NA
44	Aurangabad_28847	SGWD	Dug Well	28.0311	77.3301	2	2.05	12.45	12.6	12.78	12.93	12.83	12.53	13.6	13.5	14.08	13.6	15.45	13.5	14.56	13.65	13.95	12.4	10	11.8
45	Aurangabad_28847	SGWD	Dug Well	28.0272	77.3292	3.85	3.98	4.35	4	4.1	3.9	4.12	3.95	4.15	4.1	4.25	4.1	NA	NA	6.1	5.7	6.7	5.8	13.05	11.8
46	Bamani Khera_236841	SGWD	Dug Well	28.0605	77.3509	9.5	9.55	10.1	9.9	10	9.8	10.15	9.95	10.5	10.2	10.85	10.7	10.25	13.7	11.9	12.45	12.7	10.75	11.9	9.7
47	Banchari_28849	SGWD	Dug Well	27.9393	77.3519	7.3	7.35	9.65	9.35	9.57	9.32	9.62	9.22	10	9.7	10.97	10.32	10.52	11.07	11.4	9.55	10.45	9.3	2.45	9
48	Banchari_28849	SGWD	Dug Well	27.9453	77.3450	19	19.05	19.45	19.45	20.05	20.2	20.3	19.65	21.55	21.4	22.35	22.05	NA	NA	24.15	NA	24.25	23.65	2.45	2.3
49	Banswa_28850	SGWD	Dug Well	27.8971	77.4414	6.6	6.5	7.1	6.95	7.08	6.73	7.13	6.83	7.1	6.95	7.38	7.18	7.53	6.18	7.85	6.75	7.2	5	6.4	4.8
50	Bhiduki_28852	SGWD	Dug Well	27.9169	77.4543	5.65	5.7	6.55	6.3	6.2	6.05	6.23	6.1	6.7	6.45	6.95	6.6	5.4	6.1	6.3	5.5	6.65	5.1	4.7	4.8
51	Boraka_28854	SGWD	Dug Well	27.8819	77.3291	6.2	6.32	6.9	6.6	6.9	6.6	6.95	6.65	7.2	6.7	7.35	7	7.45	7.2	7.8	6.1	7.95	6	3.5	6.25
52	Deeghot_28857	SGWD	Dug Well	28.0312	77.3771	10.1	10.15	11.3	11.15	11.35	11.2	11.45	11.2	12.2	12.1	12.6	12.25	12.7	12.75	13.2	13	13.65	12.85	10.3	9.7
53	Godota_28860	SGWD	Dug Well	28.0718	77.2098	13.55	13.72	14.35	14.55	15.07	15.22	15.32	15.02	16.6	16.3	17.07	16.32	NA	NA	17.85	16.2	17.95	17	5.85	6.15
54	Khatela Sarai_28863	SGWD	Dug Well	27.9946	77.3234	9.7	9.78	10.6	10.75	11.05	10.95	13.1	12.8	13.75	13.45	14.25	13.75	14.7	13.1	14.2	14	13.85	14.1	5.8	5.75
55	Khirbi Bapoli_28864	SGWD	Dug Well	27.9003	77.4252	4.6	4.85	5.35	5.1	5.15	4.75	5.15	4.95	10.25	9.95	10.5	10.35	11	11	11.45	11.2	11.85	10.9	6	3.2
56	Lohina_28866	SGWD	Dug Well	27.9434	77.3128	10.2	10.25	11.1	11.4	11.7	11.5	11.75	11.4	12.2	11.85	12.55	12.4	12.85	11.9	13.1	12.85	13.45	12.65	4.3	3.95
57	Phulwari_28872	SGWD	Dug Well	28.0701	77.3236	9.85	9.95	10.45	10.6	10.7	10.7	10.75	10.2	11.2	11	11.7	11.5	13.55	14.2	13.05	12.65	12.85	12.9	12.1	12.7
58	Garhi Patti	SGWD	Dug Well	27.8600	77.3600	5.6	5.72	6.6	6.55	7.3	7.15	7.35	7	7.55	7.4	7.85	7.65	8.05	7.25	8.3	8.05	8.65	7.95	8.9	7.6
59	Hodel	SGWD	Dug Well	27.8850	77.3632	11.4	11.52	12	12.2	12.57	12.12	12.37	12.07	13.6	13.4	14.42	14.12	16.5	16.85	17.1	16.7	17.45	16.5	17.85	16.2

ANNEXURE: 3
HISTORICAL WATER QUALITY (WQ) DATA OF MONITORING WELLS

State	Haryana	District	Palwal	Block	Hodal														
Month of Collection of samples for WQ monitoring*					May/June														
Gram Panchayat	Source	Type of well	Latitude	Longitude	Year	pH	EC	TDS	TH	Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	F	NO ₃
Atohan_28846	Atal Jal	Pizeometer	28.0949	77.3431	2024	7.88	892	536	72.16	20.64	5.01	121	1	0.428	59.54	68.2	202.5	0.35	0
Aurangabad_28847	Atal Jal	Pizeometer	28.0215	77.3358	2024	7.2	14633	8499	1124	297.2	92.63	1915	12	1.475	988.5	1005	3153	7.6	99.75
Badoli	CGWB	Dug Well	28.0693	77.4332	2015	8.72	1146	ND	296.0	4.1	69.5	125.0	12.0	58.5	202.3	125.0	125.1	0.45	7.35
Badoli	CGWB	Dug Well	28.0693	77.4332	2016	8.05	2725	ND	475.1	64.8	76.1	410.0	35.0	0.0	372.5	330.0	528.1	0.98	9.33
Badoli	CGWB	Dug Well	28.0693	77.4332	2017	7.69	1465	ND	470.0	68.0	73.0	114.0	4.9	0.0	452.0	88.0	184.0	0.63	0.00
Badoli	CGWB	Dug Well	28.0693	77.4332	2018	Sample not collected from this location													
Badoli	CGWB	Dug Well	28.0693	77.4332	2019	8.48	1659	ND	370.0	28.0	73.0	242.0	9.0	72.0	268.0	99.0	312.0	0.33	17.56
Badoli	CGWB	Dug Well	28.0693	77.4332	2020	8.23	1870	ND	178.6	16.8	33.2	352.0	8.7	0.0	537.3	89.0	283.6	0.30	11.00
Badoli	CGWB	Dug Well	28.0693	77.4332	2021	8.75	2658	ND	400.0	16.0	87.6	415.0	6.0	62.4	190.4	241.0	553.0	0.36	19.00
Badoli	CGWB	Dug Well	28.0693	77.4332	2022	Sample not collected from this location													
Badoli	CGWB	Dug Well	28.0693	77.4332	2023	7.73	1754	ND	725.6	28.1	13.1	82.0	0.6	0.0	268.5	nd	475.0	0.80	10.34
Badoli	CGWB	Dug Well	28.0693	77.4332	2024	7.57	2773	0	610.5	80.16	99.71	365	9	Nil	761.5	114	460.9	0.85	8
Bamani Khera_236841	Atal Jal	Pizeometer	28.0601	77.3488	2024	8.37	4341	2433	319.6	86.69	25.04	548	3	6.17	273.8	291.8	906.4	2.05	24.25
Banchari_28849	Atal Jal	Pizeometer	27.937	77.3462	2024	7.57	21660	12854	1701	450	140.2	2897	18	5.204	1485	761.5	4763	5.7	154
Banswa_28850	Atal Jal	Pizeometer	27.8965	77.4417	2024	7.72	14814	8916	1175	313.7	95.13	2009	13	5.131	1035	1055	3307	8	105
Behrola_28848	Atal Jal	Borewell	28.0866	77.3354	2024	7.54	1505	925	121.3	32.38	9.82	208	1	0.359	109.6	84.8	342	0.85	5.5
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2015	8.65	1590	ND	296.0	16.4	62.0	225.0	35.0	58.5	285.6	272.0	125.1	0.98	35.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2016	8.6	915	ND	181.9	16.2	34.4	130.0	3.4	55.5	124.2	112.0	97.3	0.80	17.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2017	7.88	1325	ND	250.0	44.0	24.0	174.0	4.8	0.0	391.0	127.0	113.0	1.70	20.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2018	8.1	1212	ND	255.0	51.0	31.0	187.0	4.3	0.0	511.0	90.0	90.0	1.51	20.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2019	8.74	1114	ND	150.0	40.0	12.0	219.0	6.6	120.0	366.0	12.0	78.0	0.86	1.63
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2020	8.45	1271	ND	126.1	16.8	20.4	235.0	3.5	42.8	450.2	25.0	120.5	0.30	11.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2021	8.8	1281	ND	130.1	28.1	14.6	240.0	3.0	78.0	380.8	0.0	120.5	2.79	30.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2022	8.23	1158	ND	250.2	52.1	29.2	192.0	5.0	0.0	525.4	51.0	106.4	1.98	21.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2023	7.7	1412	ND	421.0	57.0	67.0	126.0	6.2	0.0	287.0	171.0	185.0	1.70	32.00
Bhavana_265277	CGWB	Dug Well	28.0458	77.4667	2024	7.68	1472	0	240.2	16.03	48.64	235	4.67	Nil	524.8	62	170.2	2.2	16
Bhiduki_28852	Atal Jal	Pizeometer	27.9121	77.442	2024	8.08	1171	746	103.1	24.77	10.01	168	1	1.017	88.93	92.9	279.6	0.5	3.25
Bhulwana_28853	Atal Jal	Borewell	27.8841	77.3917	2024	6.19	8712	5624	748	198.4	61.37	1268	8	0.095	649.9	638.5	2090	5.8	64
Boraka_28854	Atal Jal	Pizeometer	27.882	77.3311	2024	7.62	25679	16228	2144	569.7	175.2	3657	23	7.406	1883	960.3	6017	7.25	196
Dadka_28855	Atal Jal	Borewell	27.8912	77.3181	2024	7.04	20905	11555	1526	404.8	125.2	2604	17	1.381	1339	1337	4285	11.25	138
Dakora_28856	Atal Jal	Tubewell	27.9466	77.3678	2024	7.44	7125	4342	576.2	153.8	46.64	979	6	1.294	498.7	487.3	1615	4.65	48
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2015	8.63	3218	ND	449.2	20.4	96.7	540.0	60.0	93.6	285.6	545.0	521.1	0.79	1.18
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2016	8.2	4420	ND	353.8	52.6	54.0	800.0	336.0	0.0	620.9	990.0	680.9	1.16	10.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2017	7.68	4870	ND	1098.0	104.0	156.0	888.0	203.0	0.0	732.0	1022.0	993.0	0.85	30.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2018	7.74	4241	ND	363.0	51.0	57.0	671.0	272.0	0.0	748.0	652.0	598.0	0.93	18.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2019	8.75	2550	ND	250.0	16.0	51.0	503.0	37.0	144.0	366.0	297.0	361.0	0.90	14.09
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2020	Sample not collected from this location													
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2021	8.37	4243	ND	412.3	12.4	92.7	790.0	24.0	124.8	523.6	687.0	553.0	1.05	28.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2022	8.81	2703	ND	547.0	21.0	120.2	371.0	8.9	62.0	324.0	274.0	471.0	0.84	34.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2023	7.8	3410	ND	719.0	134.0	93.4	469.0	21.0	0.0	514.0	587.0	467.0	1.20	31.00
Deeghot_28857	CGWB	Hand Pump	28.0375	77.375	2024	8.54	2741	0	170.1	20.04	29.18	587	36	72	746.9	276	283.6	1.47	21

Gram Panchayat	Source	Type of well	Latitude	Longitude	Year	pH	EC	TDS	TH	Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	F	NO ₃
Godota_28860	Atal Jal	Pizeometer	27.929	77.4013	2024	7.3	20499	11464	1515	400.4	125.2	2584	16	2.494	1328	680.6	4252	10.35	136.8
Gopalgarh_28859	Atal Jal	Pizeometer	28.0466	77.3143	2024	7.75	12810	7866	1041	276.6	85.12	1773	11	4.81	905.2	931.1	2922	7.05	92
Gudhrana_28861	Atal Jal	Pizeometer	27.9932	77.3468	2024	7.5	20441	12284	1629	429.3	135.2	2769	18	4.251	1426	727.8	4561	11.05	147
Hidayatpur_264992	Atal Jal	Handpump	28.0681	77.3921	2024	6.69	1733	1060	141.5	36.43	12.27	239	2	0.055	119.9	101	389.5	0.97	7.25
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2015	8.5	2080		173.5	24.5	27.3	405.0	5.0	81.9	440.3	165.0	264.0	0.80	16.00
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2016	8.72	1802		141.5	28.3	17.2	400.0	3.4	88.8	440.3	308.0	104.2	7.10	14.00
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2017	8.03	1530		280.0	40.0	44.0	206.0	1.5	0.0	683.0	10.0	106.0	3.20	0.00
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2018	Sample not collected from this location													
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2019	Sample not collected from this location													
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2020	8.18	1621		252.2	29.5	43.4	257.0	5.9	0.0	450.2	142.0	212.7	0.50	11.00
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2021	Sample not collected from this location													
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2022	Sample not collected from this location													
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2023	Sample not collected from this location													
Karimpur_265279	CGWB	Dug Well	28.0311	77.4742	2024	7.79	1914	0	240.2	8.016	53.5	350	4.31	Nil	390.5	270	276.5	1.1	11
Karmam_28862	Atal Jal	Pizeometer	27.8623	77.411	2024	7.73	18942	10895	1443	383.9	117.7	2455	16	6.411	1264	646.9	4040	9.8	129.5
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2015	8.5	1774	ND	71.5	12.3	9.9	385.0	5.0	105.3	357.0	162.0	194.5	0.59	0.58
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2016	8.7	1505	ND	192.1	24.3	31.9	280.0	0.8	66.6	259.6	150.0	215.4	2.55	9.40
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2017	8.2	1590	ND	440.0	72.0	63.0	216.0	12.0	0.0	464.0	210.0	227.0	1.90	0.00
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2018	8	1821	ND	304.0	43.0	48.0	282.0	11.0	0.0	498.0	142.0	250.0	2.94	6.20
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2019	8.52	5200	ND	901.0	44.0	192.0	651.0	338.0	84.0	207.0	835.0	1092.0	0.55	21.46
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2020	8.47	1236	ND	220.7	33.7	33.2	181.0	20.0	57.1	261.4	51.0	177.3	1.32	13.00
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2021	8.79	1323	ND	230.2	24.0	41.3	194.0	12.0	46.8	253.8	0.0	262.3	1.66	26.00
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2022	8.39	2034	ND	400.3	36.1	75.4	298.0	47.0	75.6	525.4	103.0	283.6	1.02	4.00
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2023	7.36	1976	ND	540.0	93.0	74.8	167.0	82.0	0.0	286.0	117.0	433.0	1.68	7.00
Khambi_28763	CGWB	Dug Well	27.9708	77.4167	2024	7.3	5474	0	720.6	12.02	167.8	780	400	Nil	866.5	867	865	0.95	110
Khatela Sarai_28863	Atal Jal	Pizeometer	27.9929	77.3315	2024	7.43	21670	13267	1752	466.5	142.7	2990	19	3.896	1536	786.2	4918	5.9	159.3
Khirbi Bapoli_28864	Atal Jal	Pizeometer	27.9008	77.4259	2024	7.48	10734	6518	865.9	227	72.6	1469	9	2.157	757.8	772.7	2420	5.8	75.25
Ladiaka_28865	Atal Jal	Pizeometer	28.0596	77.3974	2024	7.93	4502	2675	350.5	94.94	27.54	603	4	2.48	307.5	319.9	993.2	2.25	27.25
Lohina_28866	Atal Jal	Pizeometer	27.9502	77.3126	2024	7.03	25970	16444	2175	577.9	177.8	3706	24	1.924	1908	972.7	6104	7.3	198.8
Marroli_28867	Atal Jal	Borewell	27.9668	77.3767	2024	8.06	4460	2560	343.7	89.05	29.46	577	4	3.238	296.7	277.3	950.1	2.34	25.75
Mitrol_28868	Atal Jal	Tubewell	28.0244	77.3449	2024	7.77	1142	632	80.86	20.24	7.36	142	1	0.387	69.59	51	237.5	0.58	2
Nangal Brahman_28869	Atal Jal	Borewell	28.0733	77.3886	2024	6.4	2426	1529	202.2	52.62	17.19	345	2	0.043	180	156	570	1.4	13
Palri Bhupgarh_28870	Atal Jal	Pizeometer	27.9807	77.3897	2024	7.34	13479	7632	1010	268.3	82.62	1720	11	1.83	888.2	903	2835	6.8	89
Pengaltu_28871	Atal Jal	Pizeometer	27.9356	77.4136	2024	7.91	18181	11798	1557	412.8	127.7	2659	17	10.47	1360	699.7	4378	10.6	140.8
Phulwari_28872	Atal Jal	Pizeometer	28.075	77.3246	2024	7.18	3123	1759	237.1	61.92	20.03	396	3	0.285	199.7	212	655.7	1.45	15.75
Rundhi_28873	Atal Jal	Handpump	28.0517	77.3887	2024	7.44	1535	920	121.3	32.38	9.82	207	1	0.285	109.7	84.8	342	0.85	5.25
Sevli_28874	Atal Jal	Borewell	27.9848	77.3003	2024	7.93	5127	2865	384.1	101.2	31.91	646	4	2.64	327.3	313.5	1064	3.25	29.75
Siha_28875	Atal Jal	Borewell	27.9842	77.3728	2024	6.42	3558	2293	303.2	80.96	24.55	517	3	0.067	269.9	246	855.1	2.1	22.5
Silothi_28876	Atal Jal	Pizeometer	28.0794	77.3637	2024	7.39	1003	628	82.47	20.64	7.51	142	1	0.162	69.83	78.3	231.4	0.4	2
Solaka_28877	Atal Jal	Borewell	27.9701	77.3914	2024	6.97	2942	1858	242.6	64.77	19.64	419	3	0.193	219.8	194.8	693.5	1.7	17
Sondh_28878	Atal Jal	Tubewell	27.9203	77.327	2024	7.51	4586	2572	343.7	89.05	29.46	580	4	0.913	299.1	278.5	950.1	2.36	26
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2015	8.45	4740	ND	745.2	12.3	173.6	605.0	285.0	117.0	880.5	263.0	861.6	0.71	17.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2016	8.45	3465	ND	535.7	72.9	86.0	590.0	8.3	66.6	395.1	486.0	618.4	3.35	2.40
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2017	7.59	5190	ND	2022.0	248.0	340.0	230.0	100.0	0.0	781.0	533.0	908.0	1.06	209.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2018	7.74	3565	ND	686.0	82.0	117.0	521.0	6.6	0.0	604.0	261.0	737.0	1.53	22.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2019	8.83	5920	ND	1020.0	56.0	214.0	873.0	166.0	156.0	732.0	522.0	1198.0	0.72	27.10

Gram Panchayat	Source	Type of well	Latitude	Longitude	Year	pH	EC	TDS	TH	Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	F	NO ₃
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2020	8.37	5561	ND	987.8	16.8	229.8	797.0	98.0	128.5	769.7	452.0	1013.9	0.35	87.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2021	8.87	5781	ND	1000.8	12.0	235.9	804.0	110.0	171.6	713.9	284.0	1134.4	0.35	142.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2022	7.89	5798	ND	990.8	64.1	201.9	886.0	87.0	0.0	627.9	121.0	1659.1	0.56	36.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2023	7.41	5749	ND	810.0	102.0	134.9	908.0	78.0	0.0	476.0	1163.0	901.0	0.64	34.00
Tumasra_28879	CGWB	Dug Well	28.0083	77.3417	2024	8.21	2318	0	300.2	36.07	51.07	445	5.4	Nil	527.2	214	390	1.96	23
Tumasra_28879	Atal Jal	Pizeometer	28.0135	77.3527	2024	7.92	17919	10329	1371	363.3	112.7	2328	15	9.382	1191	1221	3828	9.3	122.5

Name of District	Name of Block	Source	Name of village/ OW data	Latitude	Longitude	EC June 2020	EC June-2021	EC June-2022	EC June-2023	EC June-2024
Palwal_619	Hodal_467	Atal Jal	Atohan_28846	28.0949	77.3431	ND	ND	ND	ND	892
Palwal_619	Hodal_467	SGWB	AURANGABAD	28.0311	77.3301	1850	ND	3100	2800	2800
Palwal_619	Hodal_467	Atal Jal	Aurangabad_28847	28.0215	77.3358	ND	ND	ND	ND	14633
Palwal_619	Hodal_467	Atal Jal	Bamani Khera_236841	28.0601	77.3488	ND	ND	ND	ND	4341
Palwal_619	Hodal_467	SGWB	BAMNI KHERA	28.0605	77.3509	1500	1700	1100	800	900
Palwal_619	Hodal_467	SGWB	BANCHARI	27.9393	77.3519	3500	3600	2500	3200	3300
Palwal_619	Hodal_467	Atal Jal	Banchari_28849	27.937	77.3462	ND	ND	ND	ND	21660
Palwal_619	Hodal_467	SGWB	BANSWA	27.8971	77.4414	2650	2700	3200	1000	3100
Palwal_619	Hodal_467	Atal Jal	Banswa_28850	27.8965	77.4417	ND	ND	ND	ND	14814
Palwal_619	Hodal_467	Atal Jal	Behrola_28848	28.0866	77.3354	ND	ND	ND	ND	1505
Palwal_619	Hodal_467	SGWB	BHIDUKI	27.9169	77.4543	3200	3700	2500	2050	2100
Palwal_619	Hodal_467	Atal Jal	Bhiduki_28852	27.9121	77.442	ND	ND	ND	ND	1171
Palwal_619	Hodal_467	Atal Jal	Bhulwana_28853	27.8841	77.3917	ND	ND	ND	ND	8712
Palwal_619	Hodal_467	Atal Jal	Boraka_28854	27.882	77.3311	ND	ND	ND	ND	25679
Palwal_619	Hodal_467	SGWB	BURAKA	27.8819	77.3291	2400	2450	2700	2350	2400
Palwal_619	Hodal_467	Atal Jal	Dadka_28855	27.8912	77.3181	ND	ND	ND	ND	20905
Palwal_619	Hodal_467	Atal Jal	Dakora_28856	27.9466	77.3678	ND	ND	ND	ND	7125
Palwal_619	Hodal_467	SGWB	DEEGHOT	28.0312	77.3771	2300	2350	2100	2000	2000
Palwal_619	Hodal_467	SGWB	GARHI PATTI	27.86	77.36	1300	1300	1200	2000	2000
Palwal_619	Hodal_467	SGWB	GHARROTA	28.0718	77.2098	3900	3950	3500	2200	2500
Palwal_619	Hodal_467	Atal Jal	Godota_28860	27.929	77.4013	ND	ND	ND	ND	20499
Palwal_619	Hodal_467	Atal Jal	Gopalgarh_28859	28.0466	77.3143	ND	ND	ND	ND	12810
Palwal_619	Hodal_467	Atal Jal	Gudhrana_28861	27.9932	77.3468	ND	ND	ND	ND	20441
Palwal_619	Hodal_467	Atal Jal	Hidayatpur_264992	28.0681	77.3921	ND	ND	ND	ND	1733
Palwal_619	Hodal_467	SGWB	HODEL	27.885	77.3632	2000	ND	3100	2100	2200
Palwal_619	Hodal_467	Atal Jal	Karmam_28862	27.8623	77.411	ND	ND	ND	ND	18942
Palwal_619	Hodal_467	Atal Jal	Khatela Sarai_28863	27.9929	77.3315	ND	ND	ND	ND	21670
Palwal_619	Hodal_467	SGWB	KHIRBI	27.9003	77.4252	14500	ND	3100	2800	2900
Palwal_619	Hodal_467	Atal Jal	Khirbi Baptoli_28864	27.9008	77.4259	ND	ND	ND	ND	10734
Palwal_619	Hodal_467	Atal Jal	Ladiaka_28865	28.0596	77.3974	ND	ND	ND	ND	4502
Palwal_619	Hodal_467	SGWB	LOHINA	27.9434	77.3128	3000	3050	2900	2600	2600
Palwal_619	Hodal_467	Atal Jal	Lohina_28866	27.9502	77.3126	ND	ND	ND	ND	25970
Palwal_619	Hodal_467	Atal Jal	Marroli_28867	27.9668	77.3767	ND	ND	ND	ND	4460
Palwal_619	Hodal_467	Atal Jal	Mitrol_28868	28.0244	77.3449	ND	ND	ND	ND	1142
Palwal_619	Hodal_467	Atal Jal	Nangal Brahman_28869	28.0733	77.3886	ND	ND	ND	ND	2426
Palwal_619	Hodal_467	Atal Jal	Palri Bhupgarh_28870	27.9807	77.3897	ND	ND	ND	ND	13479
Palwal_619	Hodal_467	Atal Jal	Pengaltu_28871	27.9356	77.4136	ND	ND	ND	ND	18181
Palwal_619	Hodal_467	SGWB	PHUL WARI	28.0701	77.3236	1200	3700	4200	2100	2200

Name of District	Name of Block	Source	Name of village/ OW data	Latitude	Longitude	EC June 2020	EC June-2021	EC June-2022	EC June-2023	EC June-2024
Palwal_619	Hodal_467	Atal Jal	Phulwari_28872	28.075	77.3246	ND	ND	ND	ND	3123
Palwal_619	Hodal_467	Atal Jal	Rundhi_28873	28.0517	77.3887	ND	ND	ND	ND	1535
Palwal_619	Hodal_467	SGWB	SARAI	28.8433	75.8487	1900	1950	2700	2500	2500
Palwal_619	Hodal_467	Atal Jal	Sevli_28874	27.9848	77.3003	ND	ND	ND	ND	5127
Palwal_619	Hodal_467	Atal Jal	Siha_28875	27.9842	77.3728	ND	ND	ND	ND	3558
Palwal_619	Hodal_467	Atal Jal	Silothi_28876	28.0794	77.3637	ND	ND	ND	ND	1003
Palwal_619	Hodal_467	Atal Jal	Solaka_28877	27.9701	77.3914	ND	ND	ND	ND	2942
Palwal_619	Hodal_467	Atal Jal	Sondh_28878	27.9203	77.327	ND	ND	ND	ND	4586
Palwal_619	Hodal_467	Atal Jal	Tumasra_28879	28.0135	77.3527	ND	ND	ND	ND	17919