BOARD REPORT

TO:	VILLAGE PRESIDENT & BOARD OF TRUSTEES
FROM:	BRAD MERKEL, DIRECTOR OF PUBLIC WORKS
SUBJECT:	PRESENTATION OF THE WELL TESTING REPORT.
AGENDA:	June 16, 2026
DATE:	June 10, 2026

ISSUE

Jesse Balluff with Water Wells Solutions will present the Annual Well Testing Report.

DISCUSSION

NA

COST

NA

ATTACHMENTS

Annual Well Testing Report

RECOMMENDATION

Jesse Balluff presents the Annual Well Testing Report.

February 2, 2026

Village of Sugar Grove
10 Municipal Drive
Sugar Grove, IL 60554
Attn: Brad Merkel – Public Works Director

RE: Sugar Grove Well 5, 7, 8, 9 & 10 Preventative Maintenance Testing Report

Mr. Merkel –

Water Well Solutions is pleased to present the enclosed preventative maintenance testing report for the Village of Sugar Grove wells # 5, 7, 8, 9, 10. This report outlines a record of your wells and pumping equipment, in addition to an analysis of the data we could collect. This data was collected in March 2026. Below is a summary of each well's component conditions (pump, motor, electrical, well capacity, etc).

WELL 5

Well 5 was drilled in 1967 to a total depth of 200ft, with 51ft of casing and an 8" open borehole below casing. The well is currently equipped with a 30HP lineshaft turbine pump, with a 30HP, 230v VHS US motors, a L&B 4SDH discharge head, a L&B 8RKHC-8stg all bronze bowl with 5ft of 6" PVC suction, set to 40ft on 5" x 1" coated column assembly.

- **Pump performance:** The bowl assembly is currently performing excellently at design and similar to previous years. Current capacity is 330 GPM @ 209.8 ft TDH
- **Meg reading:** Excellent. Currently reading 11,000 megaohms (11 gigaohms), with internal resistance of 0.16 ohms.
- **Electrical:** Amps (up to 62.2 A) is within the motor's FLA (74). The current imbalance is within 3.5%.
- **Vibration:** Vibrations are slightly increased from last year (up to 0.13 in/s) but within the recommended 0.2 in/s operating limit.
- **Static Water Level:** SWL has declined slightly since last year, now 14ft. However, in comparison to historical trends, its within the typical range.
- **Specific Capacity:** SpQ (30 gpm/ft-dd) has remained steady since last year and is within historical values.
- **Date of last rehab/pump service:** 1992. The date of last rehab is over 30 years ago based on the records provided. Of note, preventative maintenance removal, inspection and repairs are recommended within 7-10 year cycles.
- **Overall recommendation**: continuous monitoring of the well. Based on the date of last rehab, we highly recommend budgeting a maintenance removal and inspection in next few years.

WELL 7

Well 7 was drilled in 1989 to a total depth of 100ft, with 80ft of 16" casing and 20ft of 16" SS screen from 80-100ft, no.3 gravel pack from 52ft-100ft (42" borehole). The well is currently equipped with a 50HP lineshaft turbine pump, with a 50HP, 230/**460v** VHS US motors, a L&B TF613 discharge head, a L&B 10RKHC-6stg bowl, set to 70ft on 6" x 1-3/16" column assembly.

- **Pump performance:** The bowl assembly is currently performing excellently at design and similar to previous years. Current capacity is 603 GPM @ 219.7 ft TDH

- **Meg reading:** Excellent. Currently reading 11,000 megaohms (11 gigaohms), with internal resistance of 0.36 ohms.
- **Electrical:** Amps (up to 52.5 A) is within the motor's FLA (59.5). The current imbalance is within 3%.
- **Vibration:** Vibrations are slightly increased from last year (up to 0.09 in/s) but within the recommended 0.2 in/s operating limit.
- **Static Water Level:** SWL has declined slightly since last year, now 43ft, however is similar to 2016 levels.
- **Specific Capacity:** SpQ (40.2 gpm/ft-dd) has declined since last year since last year and similar to pre-rehab levels.
- **Date of last rehab/pump service:** 2016. The date of last rehab is approaching the 10 year mark. Of note, preventative maintenance removal, inspection and repairs are recommended within 7-10 year cycles.
- **Overall recommendation**: continuous monitoring of the well. Based on the date of last rehab, WWS recommends budgeting a maintenance removal and inspection in the future.

WELL 8

Well 8 was drilled in 2002 to a total depth of 1,495ft, with 1,080ft of 14" casing and 13" open hole below the casing.. The well is currently equipped with a submersible 200HP, 460v, 12" BJ Type H mercury sealed motor, a BJ 10MQH-23stg bowl, 500MCM cable, set to 718ft on 6" column assembly.

- **Pump performance:** The bowl assembly is currently performing similar to 2025, although slightly below previous years and design curve ~14%. Current capacity is 691 GPM @ 788.8 ft TDH
- **Meg reading:** Good. Currently reading 88.5 megaohms, with internal resistance of 0.17 ohms. This is slightly below previous years (109-111 megaohms in 2023-2025).
- **Electrical:** Amps (up to 259.6 A) is within the motor's FLA (263). The current imbalance is within 2%. Of note previous years were slightly above FLA, however currently are below FLA.
- **Static Water Level:** SWL has remained steady compared to last year, currently 480ft. SWL has been higher in the past, however SWL appears to be within historical limits.
- **Specific Capacity:** SpQ (5.57 gpm/ft-dd) has remained steady for over a decade now.
- **Date of last rehab/pump service:** 2013. The date of last rehab is approaching the 13 year mark. Of note, preventative maintenance removal, inspection and repairs are recommended within 7-10 year cycles.
- **Overall recommendation**: continuous monitoring of the well. Based on the date of last rehab and the motor being a mercury sealed motor, WWS recommends budgeting a maintenance removal and inspection in the future. It is best that the BJ type H motors have scheduled maintenance which can be completed by WWS to avoid catastrophic failure.
  Additionally, our serviceman recommended insertion of a cap and gasket on the sampling pipe on the pitless.

WELL 9

Well 9 was drilled in 2004 to a total depth of 1,420ft, with 1,185ft of 14" casing and 13" open hole below the casing. In 2005, the well was modified to a shallower depth of 1339ft via gravel pack from 1420-1344ft and a bentonite plug to 1339ft; with an Aquastream/Lamnaflo unit installed from 1163 to 1333ft. The well is currently equipped with a submersible 200HP, 460v, 12" BJ Type H mercury sealed motor, a BJ 10MQH-19stg bowl, 500MCM cable, set to 700ft on 6" column assembly, and an Aquastream unit as outlined above.

- **Pump performance:** The bowl assembly is currently performing excellently at the design and similar to previous years. Current capacity is 690 GPM @ 785 ft TDH

- **Meg reading:** Declining. Currently reading as low as 3 megaohms, with internal resistance of 0.18 ohms. This declining trend has been documented over the past years. It was as high as 226 megaohms in 2022, however, in 2025 the 6.32 megaohms and has since additionally declined.
- **Electrical:** Amps (up to 249.4 A) is within the motor's FLA (263). The current imbalance is within 4%, nearing the recommended <5% limit.
- **Static Water Level:** SWL has remained steady currently 460ft.
- **Specific Capacity:** SpQ (6.39 gpm/ft-dd) has remained steady for over the past 5 years.
- **Date of last rehab/pump service:** 2005, when installed new. The date of last rehab is approaching the 21 year mark. Of note, preventative maintenance removal, inspection and repairs are recommended within 7-10 year cycles.
- **Overall recommendation**: Based on the date of last rehab and the motor being a mercury sealed motor, WWS recommends budgeting a maintenance removal and inspection in the future. It is best that the BJ type H motors have scheduled maintenance which can be completed by WWS to avoid catastrophic failure.
  Additionally, the meter reader does not work properly per our foreman, and there are multiple minor leaks in system piping.

WELL 10

Well 10 was drilled in 2006 to a total depth of 1,432ft, with 1,267 of 18" casing and 17" open hole below the casing. The well is currently equipped with a submersible 300HP, 460v, 14" BJ Type H mercury sealed motor, a BJ/Flowserve 12EMM-13stg bowl, 500MCM cable, set to 881ft on 10" column assembly.

- **Pump performance:** The bowl assembly is currently performing excellently at the design and similar to previous years. Current capacity is 1,082 GPM @ 723.54 ft TDH
- **Meg reading:** Good. Currently reading 239 to 1887 megaohms, with internal resistance of 0.15 ohms. Last year recorded 1,121 megaohms.
- **Electrical:** Amps (up to 334 A) is within the motor's FLA (367). The current imbalance is within 2%.
- **Static Water Level:** SWL has increased since last year, currently 517ft and above historical levels.
- **Specific Capacity:** SpQ (8.45 gpm/ft-dd) has remained steady for over the past 3 years, however it was up to 15 gpm/ft-dd in 2021.
- **Date of last rehab/pump service:** 2024, pump was new in 2021.
- **Overall recommendation**: continuous monitoring of the well.

Attached are the well test data sheets and record for your review and assessment. Please review this information and contact me to discuss it in more detail that is convenient for you.

Water Well Solutions, values our relationship with the Village of Sugar Grove and look forward to working with you. As always, please feel free to contact me directly on my cell at (630) 945-2230 or via email at jesse.balluff@wwssg.com

Sincerely,

Jesse Balluff
Project Manager
Water Well Solutions Illinois, LLC.

Water Well Solutions

Office: (630) 365-9099 www.wwssg.com

PUMPING TEST DATA SHEET

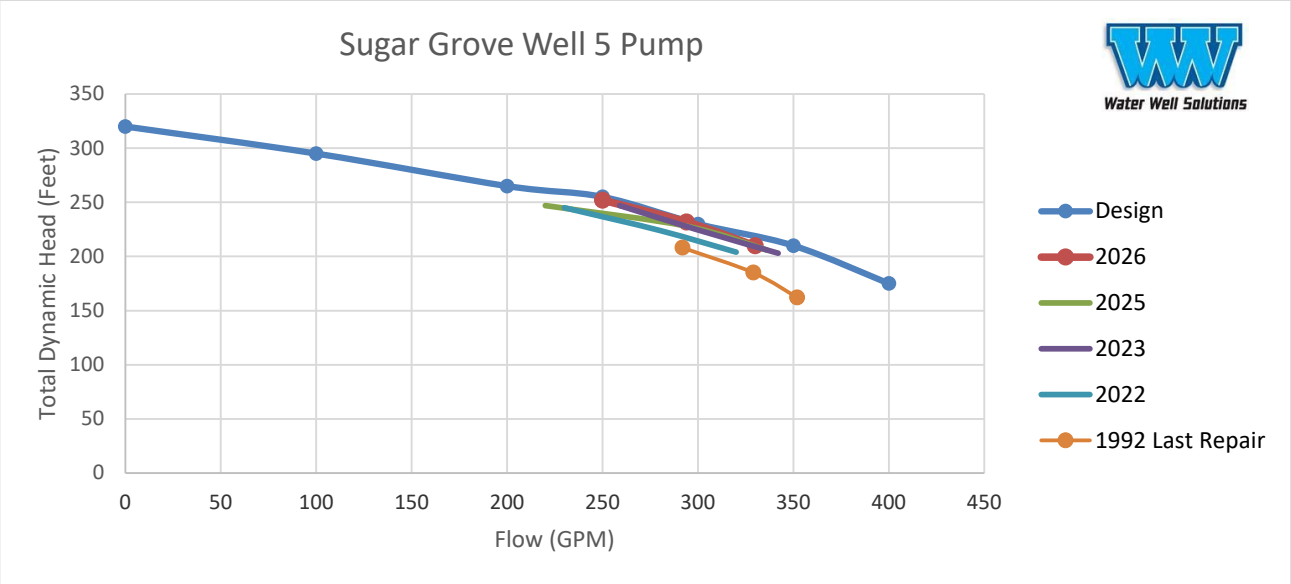
Project	Village of Sugar Grove				**Date Tested**	3/2/2026	
Location	Well No. 5				**Job No.**	20027	
Depth of Well	191	**Diameter Of Well**	8	**Pump Size**	30HP VTP	**Orifice**	
Ground Elevation		**Measuring Point Elevation**				**Well Type**	Limestone/Sandstone
Airline Length	40	**Non-Pumping Water Level**	14	**Tested By**	D. Knutson		

Time	Orifice Reading	G.P.M.	Airline Reading	Pumping Level	Drawdown	Discharge Pressure (psi)	Total Dynamic Head	Specific Capacity	Remarks
			26	14					
10:10		260	20	20	6	100	251	43.33	
10:15		256	19	21	7	100	252	36.57	
10:20		252	19	21	7	100	252	36.00	
10:25		250	19	21	7	100	252	35.71	
10:30		250	19	21	7	100	252	35.71	
10:40		250	19	21	7	100	252	35.71	
10:40		295	17	23	9	90	230.9	32.78	
10:45		295	17	23	9	90	230.9	32.78	
10:50		294	16	24	10	90	231.9	29.40	
10:55		294	16	24	10	90	231.9	29.40	
11:00		294	16	24	10	90	231.9	29.40	
11:10		294	16	24	10	90	231.9	29.40	
11:10		331	16	24	10	80	208.8	33.10	
11:15		331	15	25	11	80	209.8	30.09	
11:20		332	15	25	11	80	209.8	30.18	
11:25		330	15	25	11	80	209.8	30.00	
11:30		330	15	25	11	80	209.8	30.00	
11:40		330	15	25	11	80	209.8	30.00	

NOTES:

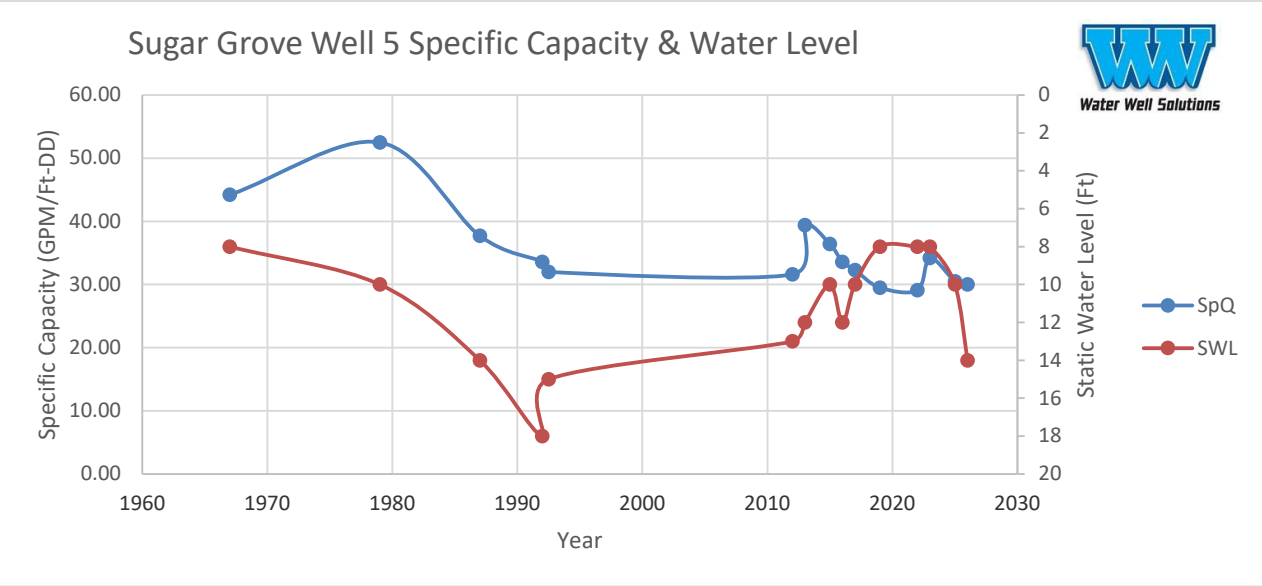
Packing should be repalced

Pumping Equip used:

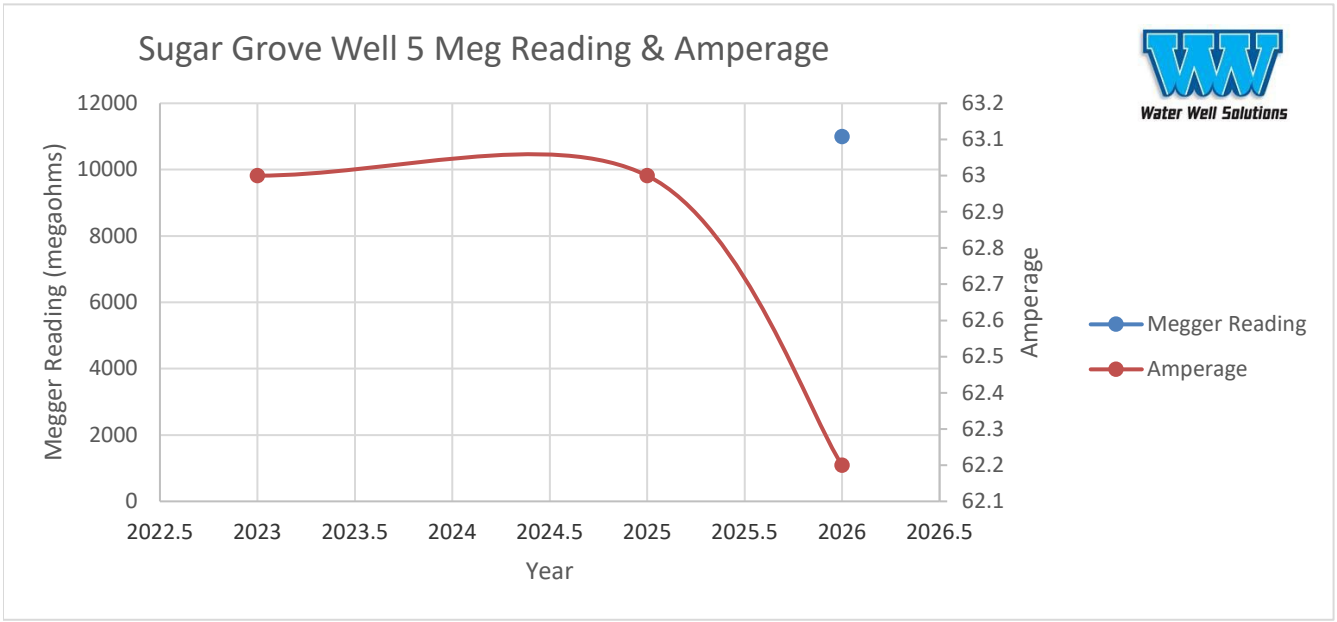


Design Curve		2026		2025		2023		2022	
L&B 8RKHC-8stg (all bronze)									
Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head
0	320	250	252	220	247	259	247	230	245
100	295	294	231.9	294	228	299	225	280	224
200	265	330	209.8	336	206	342	203	320	204
250	255								
300	230								
350	210								
400	175								

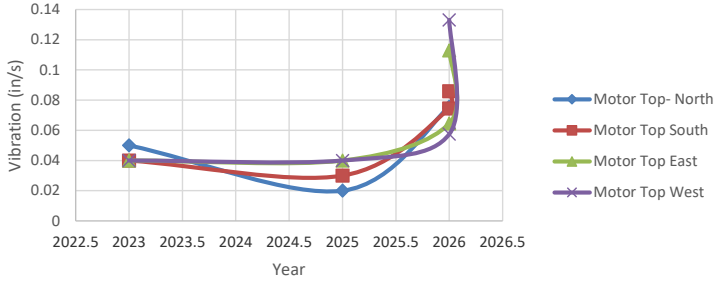
1992- last repair	
Flow Rate	Total Head
292	208
329	185
352	162

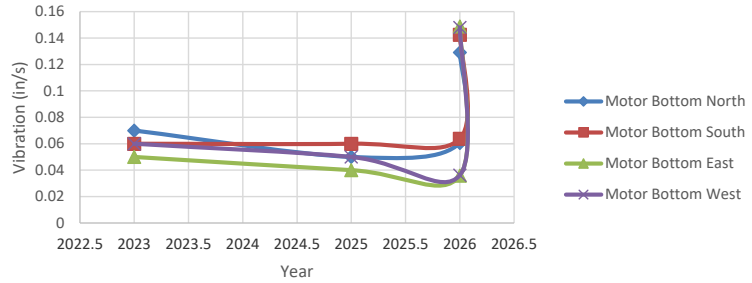


Specific Capacity (GPM/Ft-drawdown)		Static Watel Level (ft)	
Year		**Year**	
1967	44.20	1967	8
1979	52.5	1979	10
1987	37.7	1987	14
1992	33.6	1992	18
1992.5	32	1992.5	15
2012	31.6	2012	13
2013	39.4	2013	12
2015	36.4	2015	10
2016	33.6	2016	12
2017	32.3	2017	10
2019	29.5	2019	8
2022	29.1	2022	8
2023	34.2	2023	8
2025	30.5	2025	10
2026	30	2026	14



Megger Reading		Amperage- FLA 74	
Year		**Year**	
2026	11000	2023	63
		2025	63
		2026	62.2





Vibration (in/s) - Motor Top				
Year	**North**	**South**	**East**	**West**
2023	0.05	0.04	0.04	0.04
2025	0.02	0.03	0.04	0.04
2026	0.08	0.07	0.06	0.06
2026	0.07	0.09	0.11	0.13

Vibration (in/s) - Motor Bottom				
Year	**North**	**South**	**East**	**West**
2023	0.07	0.06	0.05	0.06
2025	0.05	0.06	0.04	0.05
2026	0.06	0.06	0.04	0.04
2026	0.13	0.14	0.15	0.15

Electric Readings

	Village of Sugar Grove		
Project Name	Well No. 5	**Project #**	20027
Date	3/2/2026		

No Load Voltage

AB	244	AC	244	BC	246

Line to Ground

A	122	B	122	C	214

Megg Readings

A	11gig	B		C	

Lead to Lead

AB	0.16	AC	0.16	BC	0.16

Load Voltage at 100 PSI

AB	241	AC	243	BC	244

Line to Ground

A	118	B	119	C	211

AMPS

A	54.8	B	57.1	C	56.2

AVG 56.03 -2.2% % unbalanced

Load Voltage at 90 PSI

AB	241	AC	243	BC	244

Line to Ground

A	121	B	121	C	212

AMPS

A	56.1	B	59.2	C	58.1

AVG 57.80 -2.9% % unbalanced

Load Voltage at 80 PSI

AB	242	AC	243	BC	244

Line to Ground

A	121	B	121	C	211

AMPS

A	58.1	B	62.2	C	60.4

AVG 60.23 -3.5% % unbalanced

Water Well Solutions

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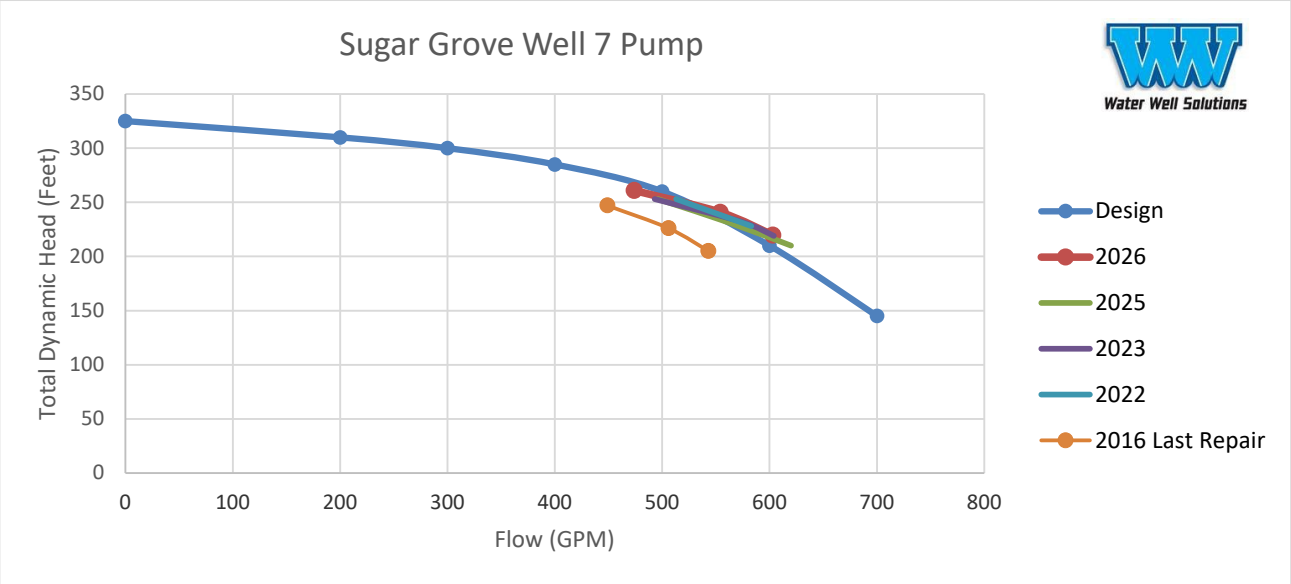
PUMPING TEST DATA SHEET

Project	Village of Sugar Grove				**Date Tested**	3/2/2026	
Location	No. 7				**Job No.**	20027	
Depth of Well	100	**Diameter Of Well**	16	**Pump Size**	50HP	**Orifice**	
Ground Elevation		**Measuring Point Elevation**				**Well Type**	Sand & Gravel
Airline Length	70	**Non-Pumping Water Level**	43	**Tested By**	D. Knutson		

Time	Orifice Reading	G.P.M.	Airline Reading	Pumping Level	Drawdown	Discharge Pressure (psi)	Total Dynamic Head	Specific Capacity	Remarks
			27	43					
1:50		485	18	52	9	90	259.9	53.89	
2:00		476	18	52	9	90	259.9	52.89	
2:10		476	18	52	9	90	259.9	52.89	
2:20		474	17	53	10	90	260.9	47.40	
2:20		553	16	54	11	80	238.8	50.27	
2:30		554	15	55	12	80	239.8	46.17	
2:40		553	14	56	13	80	240.8	42.54	
2:50		554	14	56	13	80	240.8	42.62	
2:50		602	13	57	14	70	218.7	43.00	
3:00		603	13	57	14	70	218.7	43.07	
3:10		603	13	57	14	70	218.7	43.07	
3:20		603	12	58	15	70	219.7	40.20	

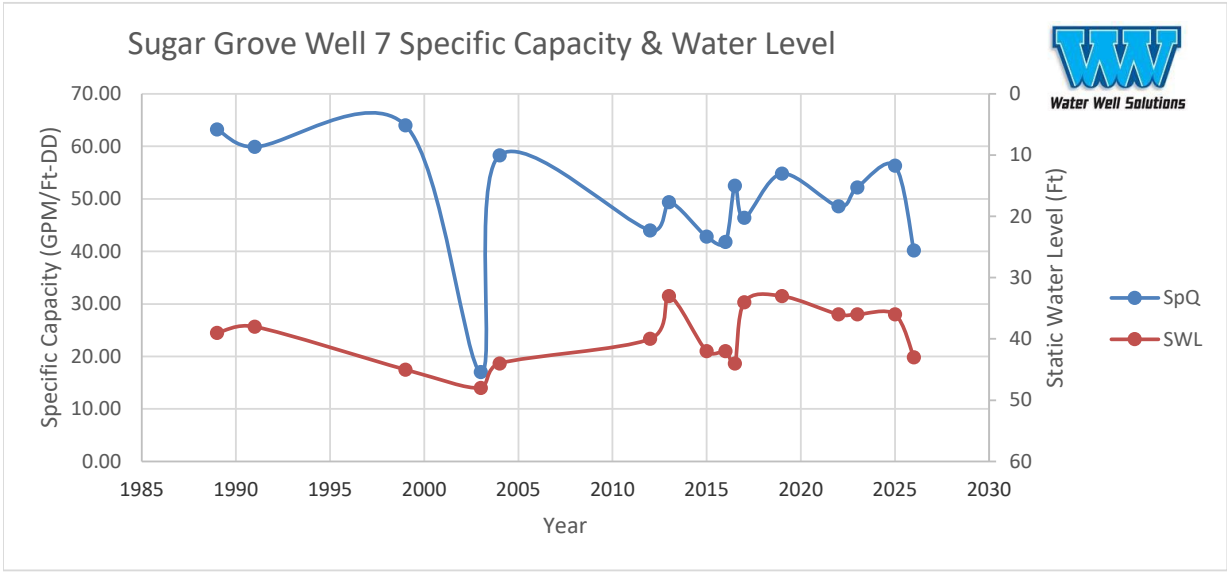
NOTES:

Pumping Equip used:

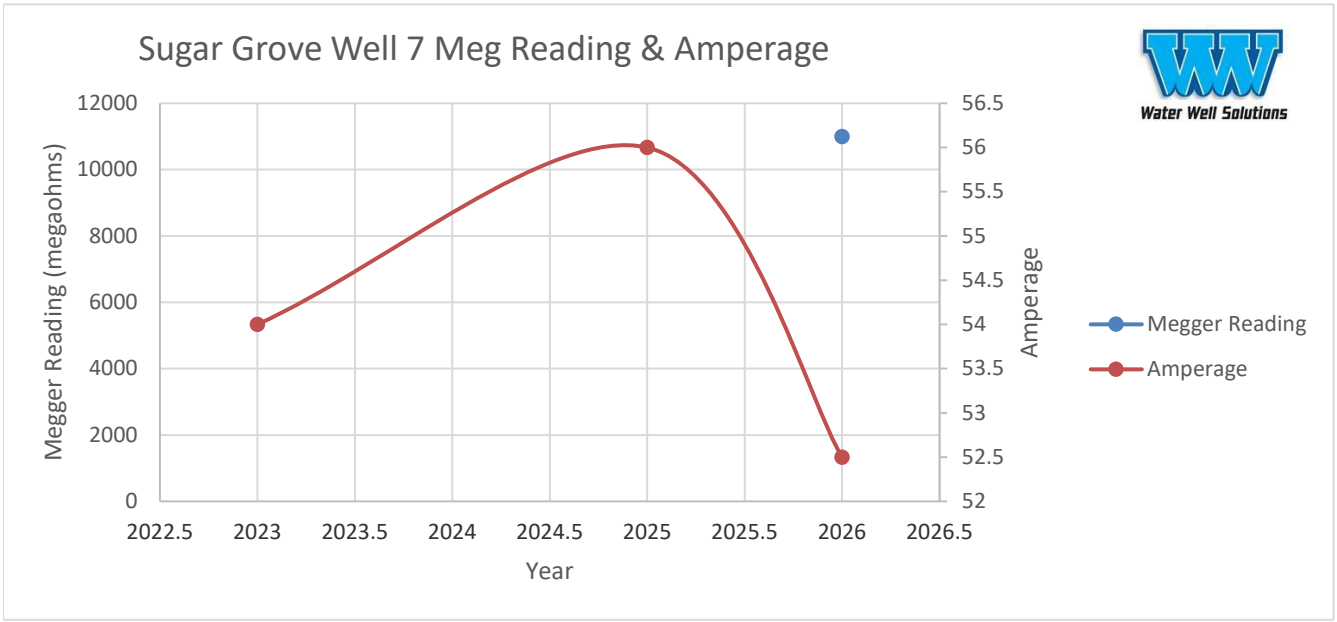


Design Curve		2026		2025		2023		2022	
L&B 10RKHC-6stg									
Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head
0	325	474	260.9	496	253	493	253	513	253
200	310	554	240.8	563	231	574	232	572	232
300	300	603	219.7	620	210	604	219	583	228
400	285								
500	260								
600	210								
700	145								

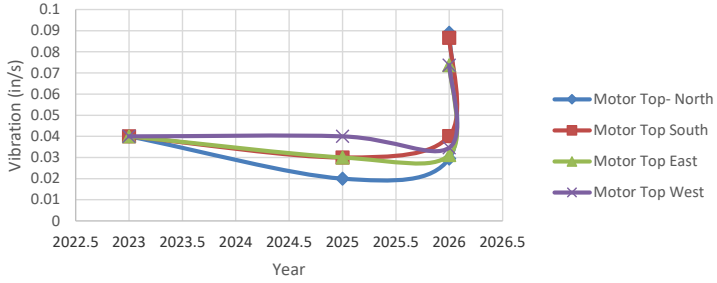
2016- last repair	
Flow Rate	Total Head
449	247
506	226
543	205

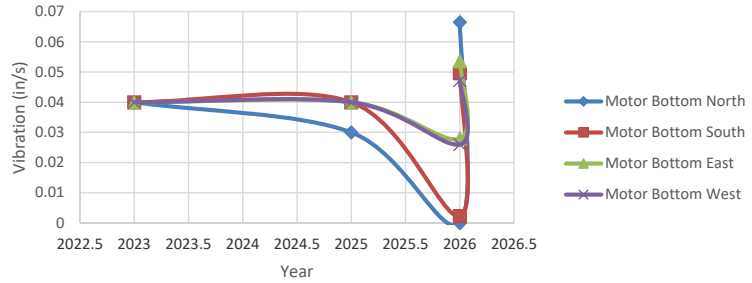


Specific Capacity (GPM/Ft-drawdown)		Static Watel Level (ft)	
Year		**Year**	
1989	63.20	1989	39
1991	59.9	1991	38
1999	64	1999	45
2003	17	2003	48
2004	58.3	2004	44
2012	44	2012	40
2013	49.4	2013	33
2015	42.8	2015	42
2016	41.8	2016	42
2016.5	52.5	2016.5	44
2017	46.4	2017	34
2019	54.8	2019	33
2022	48.6	2022	36
2023	52.2	2023	36
2025	56.3	2025	36
2026	40.2	2026	43



Megger Reading		Amperage- FLA 59.5	
Year		**Year**	
2026	11000	2023	54
		2025	56
		2026	52.5





Vibration (in/s) - Motor Top				
Year	**North**	**South**	**East**	**West**
2023	0.04	0.04	0.04	0.04
2025	0.02	0.03	0.03	0.04
2026	0.03	0.04	0.03	0.03
2026	0.09	0.09	0.07	0.07

Vibration (in/s) - Motor Bottom				
Year	**North**	**South**	**East**	**West**
2023	0.04	0.04	0.04	0.04
2025	0.03	0.04	0.04	0.04
2026	0.00	0.00	0.03	0.03
2026	0.07	0.05	0.05	0.05

Electric Readings

Project Name Village of Sugar Grove Well No. 7 **Project #** 20027

Date 3/2/2026

No Load Voltage

AB	479	AC	477	BC	472

Line to Ground

A	290	B	300	C	240

Megg Readings

A	11	B		C	

Lead to Lead

AB	0.36	AC	0.35	BC	0.35

Load Voltage at 90 PSI

AB	468	AC	467	BC	471

Line to Ground

A	284	B	293	C	239

AMPS

A	48.9	B	50.9	C	49.2

AVG 49.67 2% % unbalanced

Load Voltage at 80 PSI

AB	470	AC	469	BC	463

Line to Ground

A	284	B	294	C	240

AMPS

A	49.7	B	51.6	C	50.6

AVG 50.63 2% % unbalanced

Load Voltage at 70 PSI

AB	470	AC	469	BC	474

Line to Ground

A	283	B	293	C	240

AMPS

A	50	B	52.5	C	50.6

AVG 51.03 3% % unbalanced

Water Well Solutions

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PUMPING TEST DATA SHEET

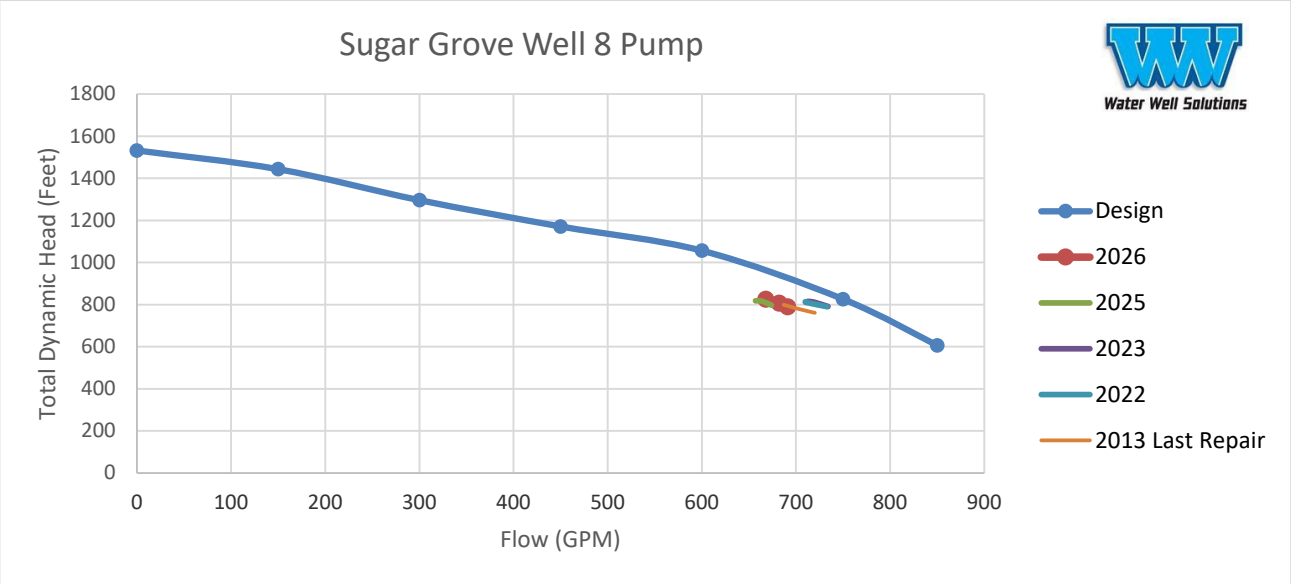
Project	Village of Sugar Grove				**Date Tested**	3/3/2026	
Location	No. 8				**Job No.**	20027	
Depth of Well	1494	**Diameter Of Well**	14	**Pump Size**	200HP, BJ	**Orifice**	
Ground Elevation		**Measuring Point Elevation**				**Well Type**	Sandstone
Airline Length	724	**Non-Pumping Water Level**	480	**Tested By**	D. Knutson		

Time	Orifice Reading	G.P.M.	Airline Reading	Pumping Level	Drawdown	Discharge Pressure (psi)	Total Dynamic Head	Specific Capacity	Remarks
			244	480					
8:05		678				100			
8:15		672	137	587	107	100	818	6.28	
8:25		671	134	590	110	100	821	6.10	
8:35		668	130	594	114	100	825	5.86	
8:35		684	128	596	116	90	803.9	5.90	
8:45		684	126	598	118	90	805.9	5.80	
8:55		684	125	599	119	90	806.9	5.75	
9:05		682	125	599	119	90	806.9	5.73	
9:05		694	123	601	121	80	785.8	5.74	
9:15		693	120	604	124	80	788.8	5.59	
9:25		692	120	604	124	80	788.8	5.58	
9:35		691	120	604	124	80	788.8	5.57	

NOTES:

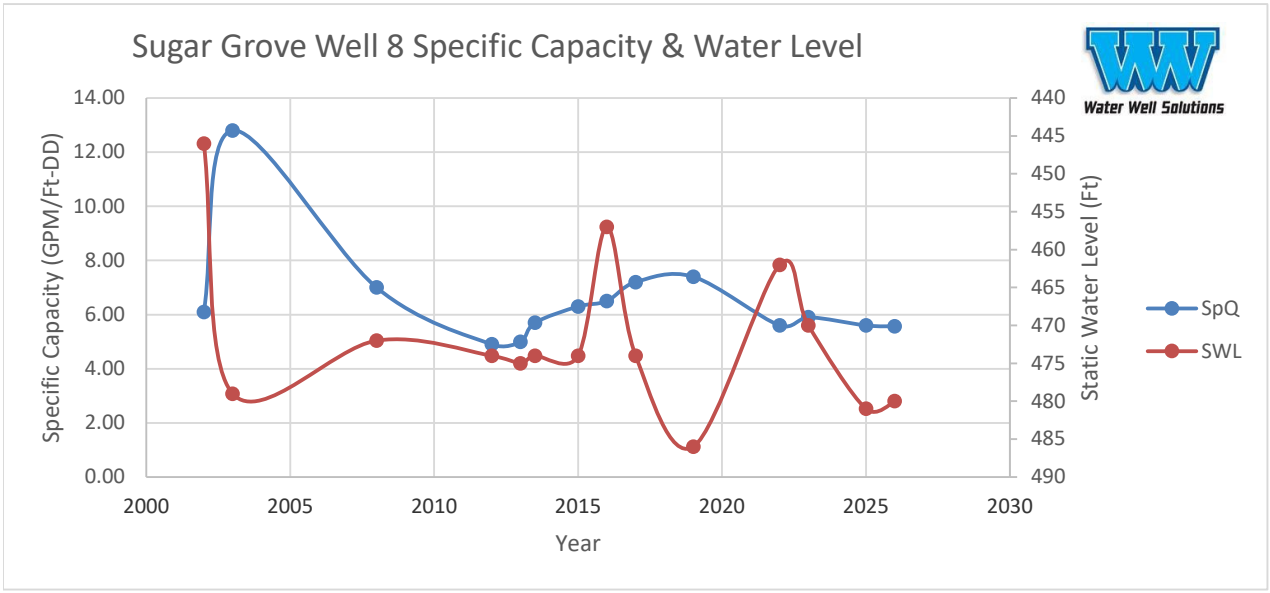
Sampling pipe on pitless needs cap and gasket

Pumping Equip used:

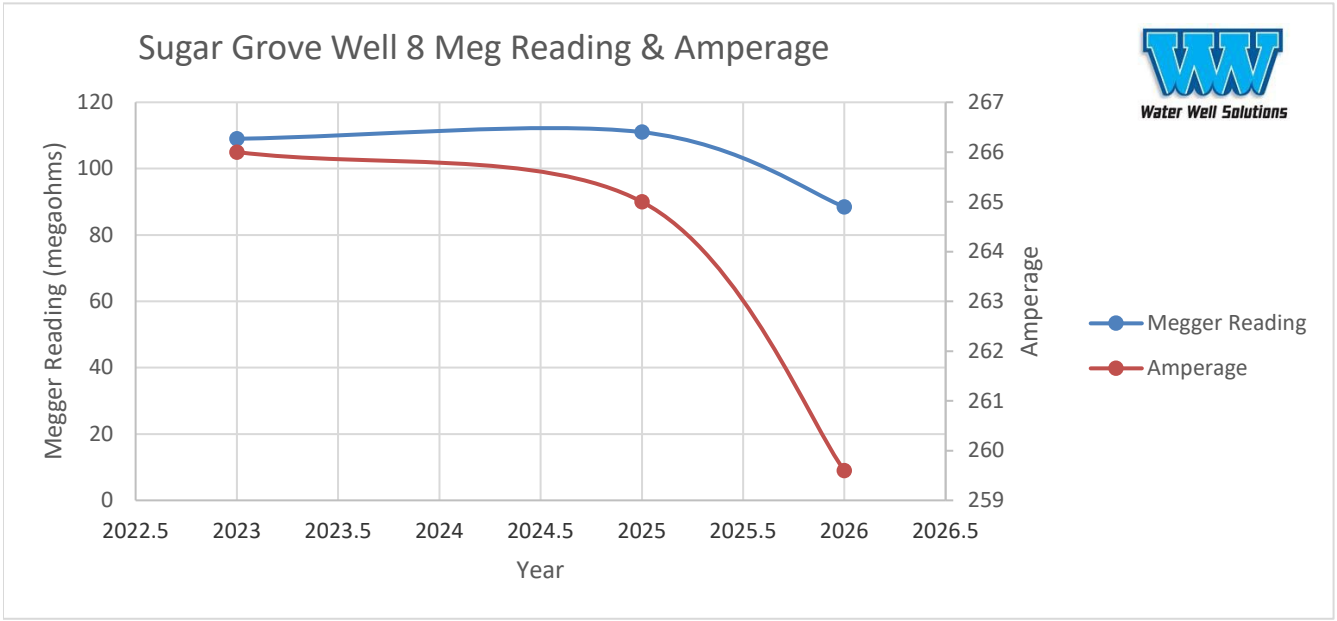


Design Curve		2026		2025		2023		2022	
BJ 10MQH-23stg									
Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head
0	1532	668	825	657	818	712	815	710	814
150	1443	682	806.9	664	816	719	812	710	811
300	1296	691	788.8	674	797	734	791	733	790
450	1171								
600	1056								
750	826								
850	606								

2013- last repair	
Flow Rate	Total Head
687	799
704	778
720	761



Specific Capacity (GPM/Ft-drawdown)		Static Watel Level (ft)	
Year		**Year**	
2002	6.10	2002	446
2003	12.8	2003	479
2008	7	2008	472
2012	4.9	2012	474
2013	5	2013	475
2013.5	5.7	2013.5	474
2015	6.3	2015	474
2016	6.5	2016	457
2017	7.2	2017	474
2019	7.4	2019	486
2022	5.6	2022	462
2023	5.9	2023	470
2025	5.6	2025	481
2026	5.57	2026	480



Megger Reading		Amperage- FLA 263	
Year		**Year**	
2023	109	2023	266
2025	111	2025	265
2026	88.5	2026	259.6

Electric Readings

Water Well Solutions

Project Name Village of Sugar Grove Well No. 8 **Project #** 20027

Date 3/3/2026

No Load Voltage

AB	483	AC	487	BC	488

Line to Ground

A	281	B	281	C	281

Megg Readings

A	88.5 meg	B		C	96.2

Lead to Lead

AB	0.15	AC	0.15	BC	0.17

Load Voltage at 100 PSI

AB	473	AC	477	BC	479

Line to Ground

A	275	B	276	C	276

AMPS

A	250.4	B	258.4	C	256.3

AVG 255.03 -2% % unbalanced

Load Voltage at 90 PSI

AB	475	AC	478	BC	479

Line to Ground

A	275	B	276	C	276

AMPS

A	250.4	B	256.9	C	255.8

AVG 254.37 -2% % unbalanced

Load Voltage at 80 PSI

AB	474	AC	477	BC	479

Line to Ground

A	276	B	276	C	276

AMPS

A	250.6	B	259.6	C	255.1

AVG 255.10 2% % unbalanced

Water Well Solutions

Office: (630) 365-9099 www.wwssg.com

PUMPING TEST DATA SHEET

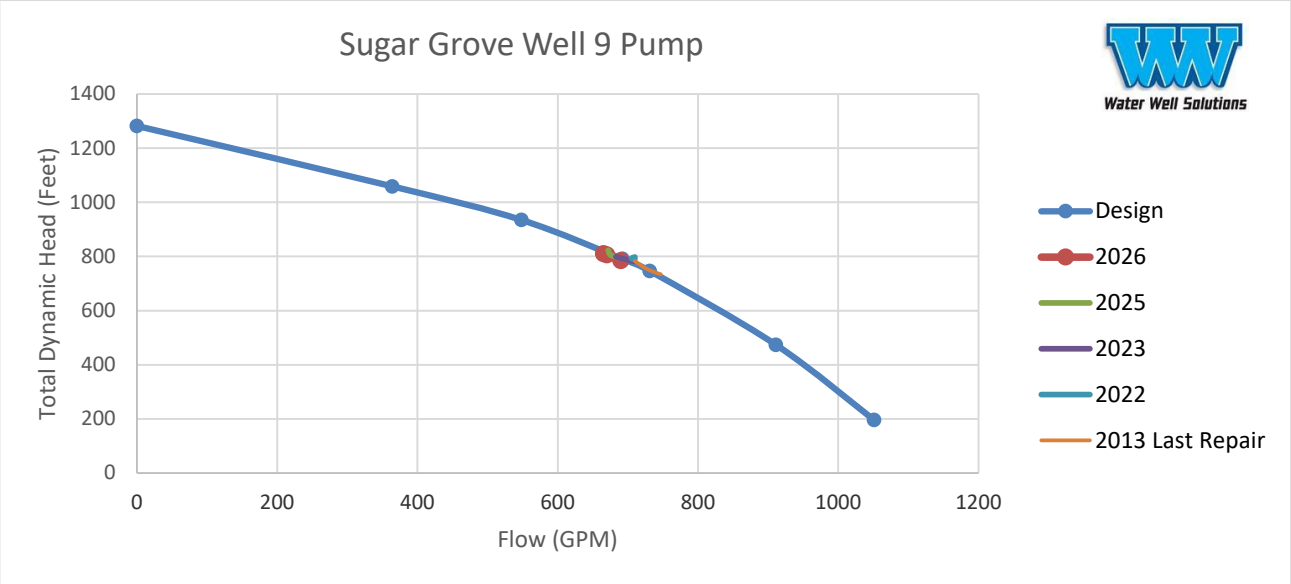
Project	Village of Sugar Grove				**Date Tested**	3/3/2026	
Location	No. 9				**Job No.**	20027	
Depth of Well	1333	**Diameter Of Well**	14	**Pump Size**	200HP	**Orifice**	
Ground Elevation		**Measuring Point Elevation**				**Well Type**	Sandstone
Airline Length	710	**Non-Pumping Water Level**	460	**Tested By**	D. Knutson		

Time	Orifice Reading	G.P.M.	Airline Reading	Pumping Level	Drawdown	Discharge Pressure (psi)	Total Dynamic Head	Specific Capacity	Remarks
			250	460					
10:30		670				110			
10:40		670	158	552	92	110	806.1	7.28	
10:50		668	155	555	95	110	809.1	7.03	
11:00		665	154	556	96	110	810.1	6.93	
11:00		675	151	559	99	105	801.55	6.82	
11:10		675	149	561	101	105	803.55	6.68	
11:20		670	148	562	102	105	804.55	6.57	
11:30		670	147	563	103	105	805.55	6.50	
11:30		695	144	566	106	94	783.14	6.56	open valve
11:40		695	144	566	106	94	783.14	6.56	
11:50		690	142	568	108	94	785.14	6.39	
12:00		690	142	568	108	94	785.14	6.39	

NOTES:

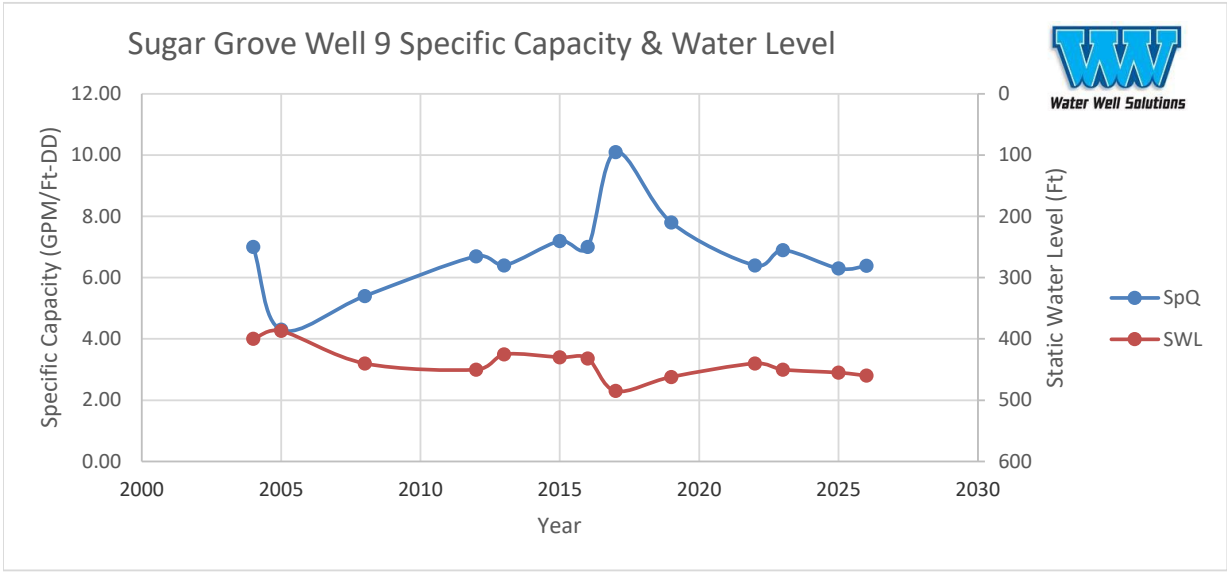
Meter reader does not work properly. Minor leaks noted in system piping

Pumping Equip used:

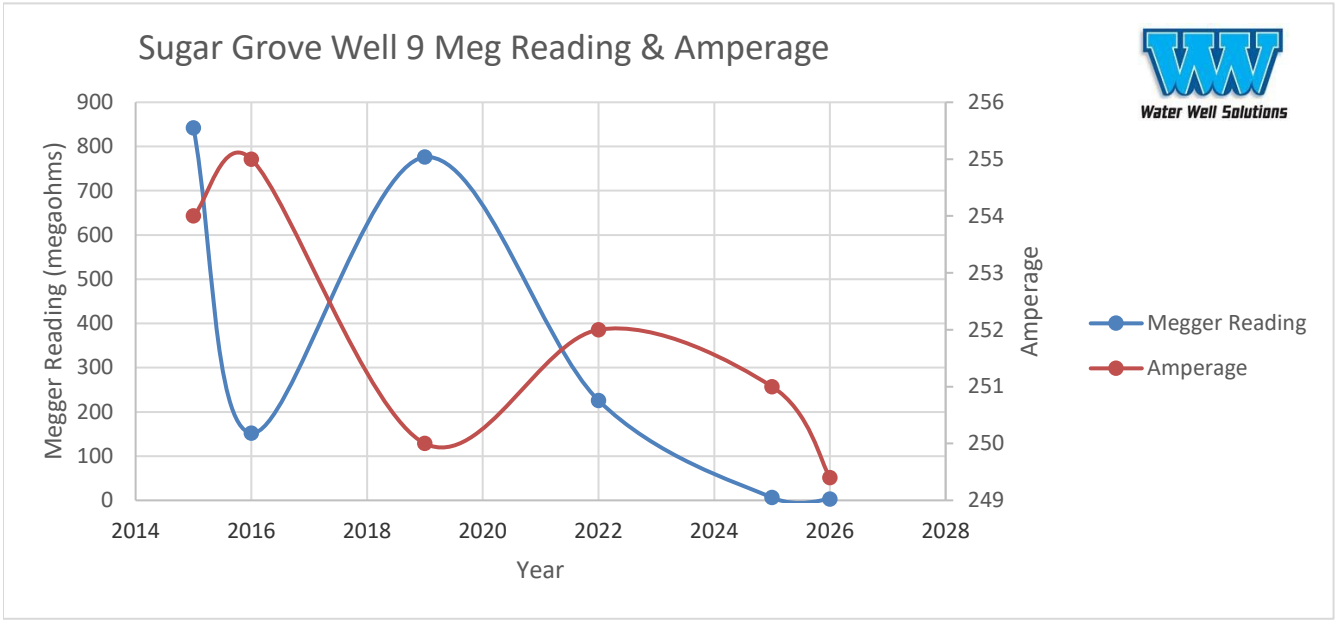


Design Curve		2026		2025		2023		2022	
BJ 10MQH-19stg									
Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head
0	1282	665	810.1	672	823	683	799	710	798
364	1059	670	805.55	675	806	691	793	705	793
548	935	690	785.14	686	796	708	782	710	789
692	791								
731	747								
911	474								
1051	196								

2005 - new install	
Flow Rate	Total Head
710	783
720	765
731	749
747	734



Specific Capacity (GPM/Ft-drawdown)		Static Watel Level (ft)	
Year		**Year**	
2004	7.00	2004	400
2005	4.3	2005	387
2008	5.4	2008	440
2012	6.7	2012	450
2013	6.4	2013	425
2015	7.2	2015	430
2016	7	2016	432
2017	10.1	2017	485
2019	7.8	2019	462
2022	6.4	2022	440
2023	6.9	2023	450
2025	6.3	2025	455
2026	6.39	2026	460



Megger Reading		Amperage- FLA 263	
Year		**Year**	
2015	842	2015	254
2016	152	2016	255
2019	776	2019	250
2022	226	2022	252
2025	6.32	2025	251
2026	3	2026	249.4

Electric Readings

Water Well Solutions

Village of Sugar Grove

Project Name Well No. 9 **Project #** 20027

Date 3/3/2026

No Load Voltage

AB	486	AC	481	BC	486

Line to Ground

A	279	B	281	C	279

Megg Readings

A	3.1 meg	B	3.0 meg	C	3.4 meg

Lead to Lead

AB	0.18	AC	0.17	BC	0.16

Load Voltage at 110 PSI

AB	476	AC	472	BC	476

Line to Ground

A	274	B	276	C	274

AMPS

A	238.8	B	243.1	C	231.3

AVG 237.73 2% % unbalanced

Load Voltage at 105 PSI

AB	476	AC	472	BC	476

Line to Ground

A	274	B	276	C	274

AMPS

A	238	B	246.1	C	230.9

AVG 238.33 3% % unbalanced

Load Voltage at 94 PSI

AB	476	AC	471	BC	475

Line to Ground

A	274	B	276	C	274

AMPS

A	241.6	B	249.4	C	231.7

AVG 240.90 4% % unbalanced

Water Well Solutions

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PUMPING TEST DATA SHEET

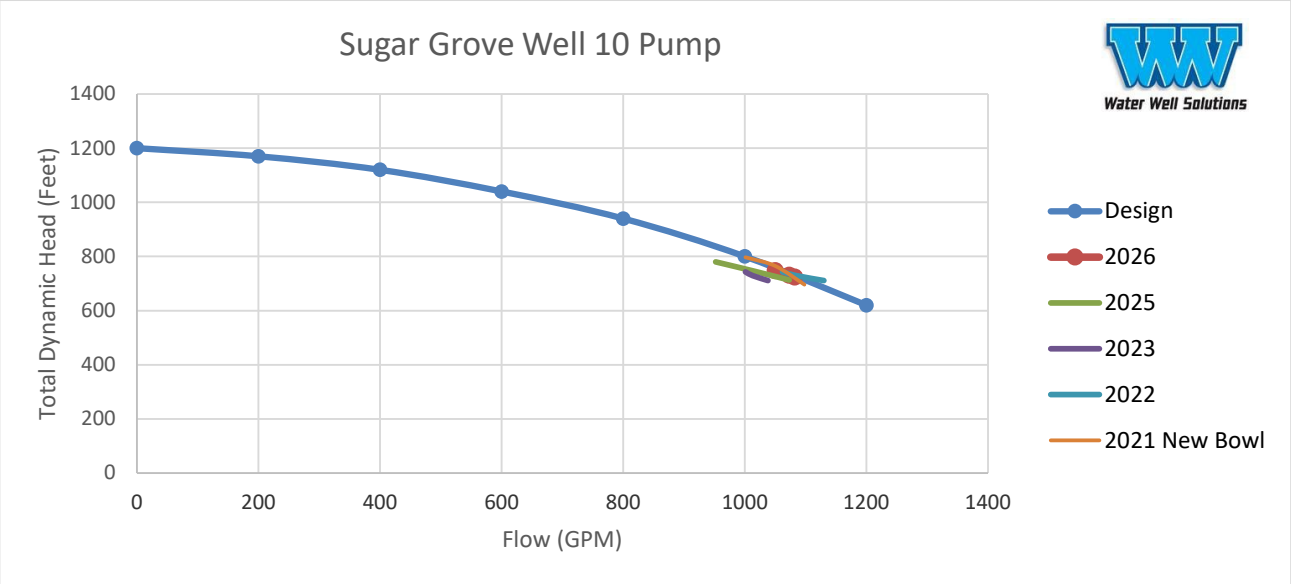
Project	Village of Sugar Grove				**Date Tested**	3/4/2026	
Location	No. 10				**Job No.**	20027	
Depth of Well	1432	**Diameter Of Well**	18	**Pump Size**	300HP, BJ	**Orifice**	
Ground Elevation		**Measuring Point Elevation**				**Well Type**	Sandstone
Airline Length	887	**Non-Pumping Water Level**	517	**Tested By**	D. Knutson		

Time	Orifice Reading	G.P.M.	Airline Reading	Pumping Level	Drawdown	Discharge Pressure (psi)	Total Dynamic Head	Specific Capacity	Remarks
			370	517					
8:20		1058	290	597	80	50			
8:30		1056	262	625	108	50	740.5	9.78	
8:40		1052	257	630	113	50	745.5	9.31	
8:50		1050	255	632	115	50	747.5	9.13	
8:50		1078	252	635	118	40	727.4	9.14	
9:00		1072	249	638	121	40	730.4	8.86	
9:10		1073	246	641	124	39	731.09	8.65	regen started
9:20		1073	246	641	124	39	731.09	8.65	
9:20		1082	245	642	125	34	720.54	8.66	open valve
9:30		1084	244	643	126	34	721.54	8.60	
9:40		1082	243	644	127	34	722.54	8.52	
9:50		1082	242	645	128	34	723.54	8.45	

NOTES:

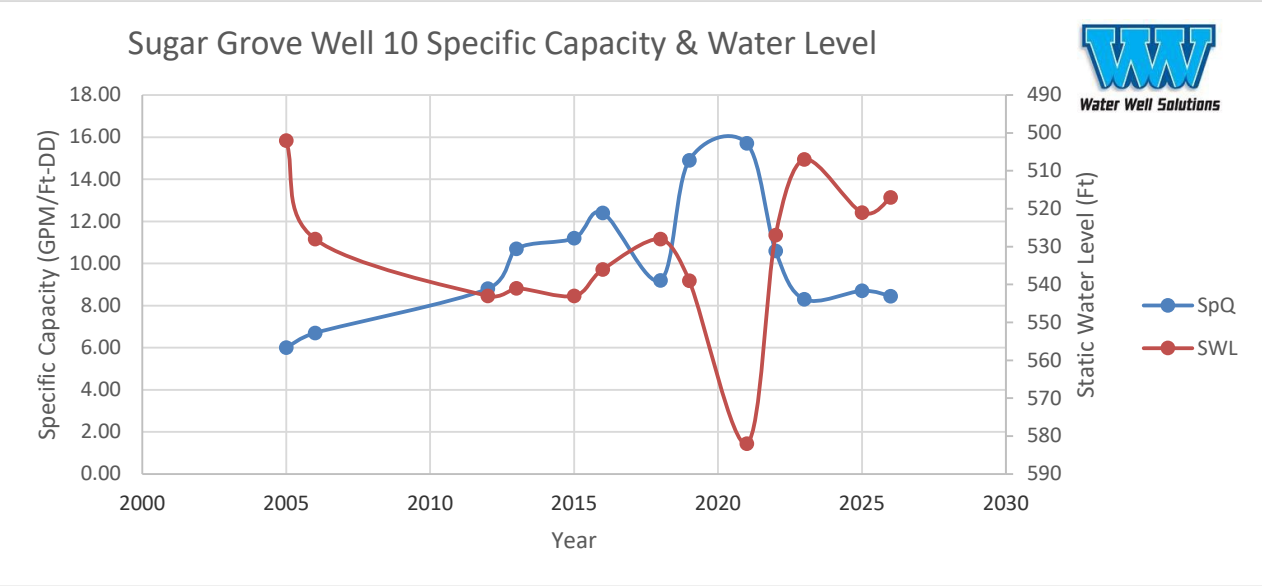
Added 1/2 brass tee, bushing and gauge and pumped into system.

Pumping Equip used:

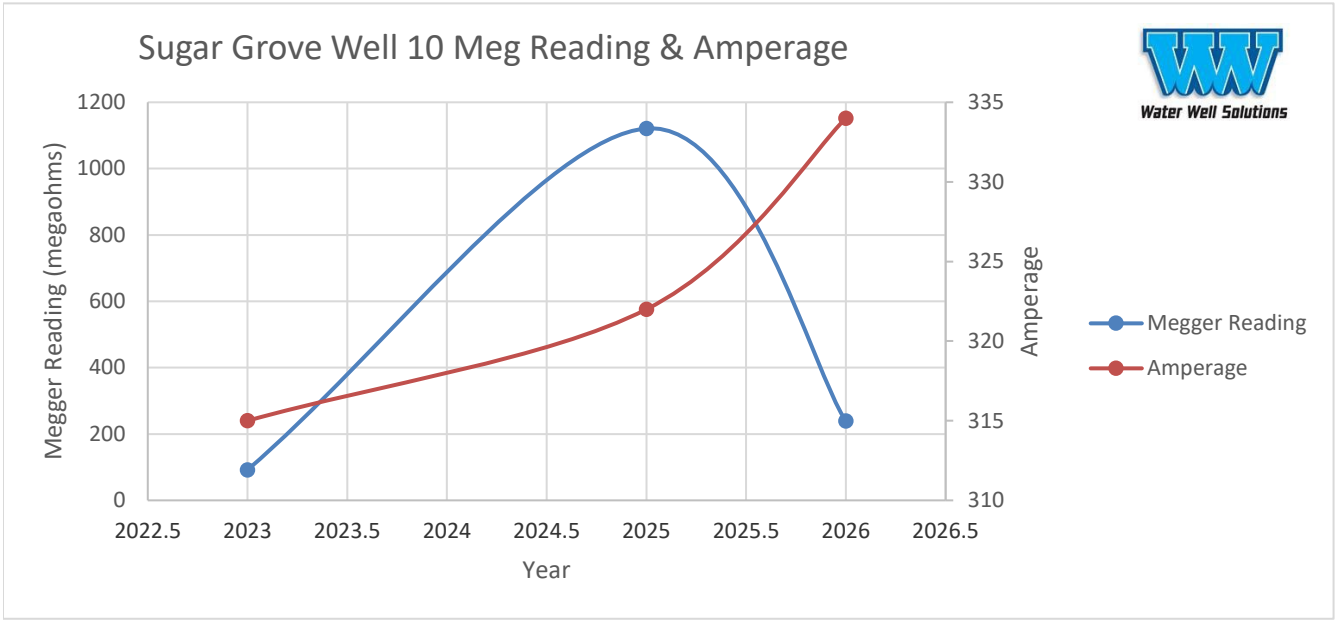


Design Curve		2026		2025		2023		2022	
BJ 12EMM-13stg									
Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head	Flow Rate	Total Head
0	1200	1050	747.5	952	780	1001	743	1062	743
200	1170	1073	731.09	1013	747	1013	729	1085	729
400	1120	1082	723.54	1073	713	1038	711	1130	711
600	1040								
800	940								
1000	800								
1200	620								

2021- New Bowl	
Flow Rate	Total Head
1001	797
1050	765
1098	696



Specific Capacity (GPM/Ft-drawdown)		Static Watel Level (ft)	
Year		**Year**	
2005	6.00	2005	502
2006	6.7	2006	528
2012	8.8	2012	543
2013	10.7	2013	541
2015	11.2	2015	543
2016	12.4	2016	536
2018	9.2	2018	528
2019	14.9	2019	539
2021	15.7	2021	582
2022	10.6	2022	527
2023	8.3	2023	507
2025	8.7	2025	521
2026	8.45	2026	517



Megger Reading		Amperage- FLA 367	
Year		**Year**	
2023	92	2023	315
2025	1121	2025	322
2026	239	2026	334

Electric Readings

Project Name Village of Sugar Grove Well No. 10 **Project #** 20027

Date 3/4/2026

No Load Voltage

AB	476	AC	473	BC	474

Line to Ground

A	274	B	274	C	275

Megg Readings

A	239 meg	B	1220 meg	C	1887 meg

Lead to Lead

AB	0.15	AC	0.15	BC	0.15

Load Voltage at 50 PSI

AB	469	AC	468	BC	477

Line to Ground

A		B		C	

AMPS

A	332	B	333	C	325

AVG 330.00 -2% % unbalanced

Load Voltage at 40 PSI

AB	469	AC	468	BC	477

Line to Ground

A		B		C	

AMPS

A	331	B	334	C	326

AVG 330.33 1% % unbalanced

Load Voltage at 34 PSI

AB	469	AC	467	BC	477

Line to Ground

A		B		C	

AMPS

A	333	B	334	C	327

AVG 331.33 1% % unbalanced