



October 23, 2026

City of Dyersville
Attn: Terry Recker
340 1st Ave. E
Dyersville, IA 52040

Re: Pump Inspection & Televising Report – Dyersville Well #4

Terry,

Municipal Well & Pump would like to thank you for the opportunity to pull and inspect the submersible pump assembly at Well #4. Outlined below is a summary of our findings and recommendations regarding the pump equipment, along with the associated costs for replacement materials.

Pump Assembly Details

- **Pump Type:** Berkeley 7TMH100-750 Submersible Bowl Assembly
- **Motor Type:** Hitachi 100 HP, 460 V, 3-Phase, 3450 RPM Submersible Motor
- **Column Pipe:** 6" Diameter
- **Setting Depth:** 471 Feet
- **Submersible Cable:** 2/0 with Ground Wire
- **Check Valves:** (2) 6" Flomatic 80DI

Inspection Findings:

Column Pipe and Check Valves

- Eight (8) sections of the column pipe exhibit significant pitting and corrosion throughout the pipe.
- Fifteen (15) sections of column pipe have corrosion occurring near the threads of the pipe and the threads on these pieces are starting to wash out. The faces on these sections of pipe are also starting to wear down, but are not a major concern.
 - Please note that these sections of pipe appear to be in good enough condition to reinstall if the ends are cut and rethreaded. However, after sandblasting the pipe, some areas of concern may appear that weren't visible during our initial inspection with the epoxy-coating on the pipe.
- All the couplings have threads that are washed out and corroded.
- Both check valves have significant erosion issues on the interior, and the threads are washed out.
- The 6" x 8" swage nipple coming out of the pitless spool is corroded and will need to be replaced.
- **Recommendation:** Replace 8 sections of column pipe completely and have the remaining 15 sections cut and rethreaded. All couplings, check valves, and the swage nipple are in rough shape and will need to be replaced.



Bowl Assembly and Motor

- The bowl assembly removed from the well is in poor condition. The bowls are extremely soft, and the metal thickness has significantly deteriorated. When separating the bowls to inspect the interior of the pump, one of the bowls broke, leaving a hole.
- The submersible motor is in good condition and can be reused.
- **Recommendation:** Replace the bowl assembly with your spare pump that was previously rebuilt. Reinstall submersible motor.

Submersible Cable

- The insulation on the submersible cable is in fair condition. During inspection, a hi-pot test was performed, using a megohmmeter with the cable submerged in water to test the cable insulation.
- The insulation-resistance readings for each conductor are listed below.
 - Red – 139 megaohms
 - Yellow – 320 megaohms
 - Black – 624 megaohms
- The red conductor produced a noticeably lower insulation-resistance reading than the yellow and black conductors. Although this result does not automatically indicate insulation failure, it warrants consideration when determining whether the cable should be reused.
 - Please note that we cannot warranty reused cable if an issue does occur during or shortly after reinstallation.
- **Recommendation:** Based on the test results, the existing submersible cable may be suitable for reinstallation; however, its insulation condition is not ideal, and its remaining service life cannot be guaranteed. Municipal Well & Pump cannot warranty reused cable for failure during or following reinstallation. Replacement with new submersible cable is recommended for increased reliability and peace of mind, but it is ultimately the City's decision. Pricing for replacement cable is provided below as an optional item.

Pitless Spool

- The pitless spool is in poor condition with significant corrosion, but this was determined during the last pump pull.
- **Recommendation:** A new pitless spool was ordered at the beginning of the project and will be replaced during reinstallation of the pump equipment.

Televising Results

- The pitless unit and upper casing showed minimal concerns.
- Significant scale buildup was observed in the section of casing below the static water level.
- There was a small blockage at 722', but we were able to knock it down the well with the camera.
- The borehole has minimal voids and cracks in the formation and has some buildup throughout the open-borehole section of the well.
- See attached Well Televising Report for additional information.



- Recommendation:** Due to the observed decrease in flow rate and declining static water level at Well #4, I would recommend a full well rehabilitation. The proposed rehabilitation would include brushing the casing, bailing accumulated fill from the well, performing an airshock treatment on the open borehole section, and applying chemical treatment to help break down mineral deposits and other buildup within the well. Following rehabilitation, we recommend televising the well again to evaluate the results and assess the condition of the casing and open borehole. If the cost of a full rehabilitation is a concern, we would be happy to discuss alternative approaches. One option would be to begin with only brushing, bailing, and airshock treatment.

Pricing

Item #	Item Description	Quantity	Units	Unit Price	Extended Price
1	Pitless Spool Replacement 4-5 Wk Lead Time	1.00	LS	\$13,130.00	\$ 13,130.00
2	Pull & Inspect Pump Assembly	1.00	LS	5,560.00	5,560.00
3	Reinstall Pump Assembly	1.00	LS	6,220.00	6,220.00
4	Televis Well	1.00	LS	1,800.00	1,800.00
	Post-Inspection Equipment:				
5	6" x 21' Epoxy-Coated Column Pipe T&C (8 pcs)	168.00	FT	122.30	20,546.40
6	Cut & Rethread Used Pipe (Both ends - 15 pcs)	30.00	EA	62.00	1,860.00
7	Replacement Couplings	15.00	EA	170.70	2,560.50
8	6" Flomatic 80DI-VFD Check Valve	2.00	EA	1,820.00	3,640.00
9	2/0 Submersible Cable - <i>Optional</i>	500.00	FT	26.20	13,100.00
	Rehab Options:				
10	Brush & Bail Well, Retelevise Well	1.00	LS	3,930.00	3,930.00
11	Airshock Well	1.00	LS	7,120.00	7,120.00
12	Watersafe AR Chemical Treatment	1.00	LS	31,120.00	31,120.00
13	Install & Remove Temporary Pump for Chemical Treatment	1.00	LS	7,040.00	7,040.00
Total Project Proposal					\$ 117,626.90



Notes

- Items 1 through 4 were provided in the initial proposal and Work Agreement.
- Current lead time on these materials is approximately 4 weeks after approval.
- Material prices are valid for 30 days from the date of this report. After this period, prices can be readjusted to reflect the current market prices.
- No materials will be ordered without prior approval from the City of Dyersville.

Please review these findings and recommendations. If you have any questions or require additional details, feel free to contact me directly. Thank you again for the opportunity to work with the City of Dyersville on this project.

Municipal Well & Pump

Nick Wellen

Nick Wellen
970-768-6222



Well Televising Report

Job #	LW26-3122
Completed by	Klemme, Andy
Date	2026-10-15

Project Name	Dyersville Well #4
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Customer Information					
Customer:	Dyersville, City of				
Address:	340 1st Ave. E.				
City:	Dyersville	ST:	IA	ZIP:	52040
Phone #		Fax: #			
Contact		MWP Salesman	Nick		

Well #
4

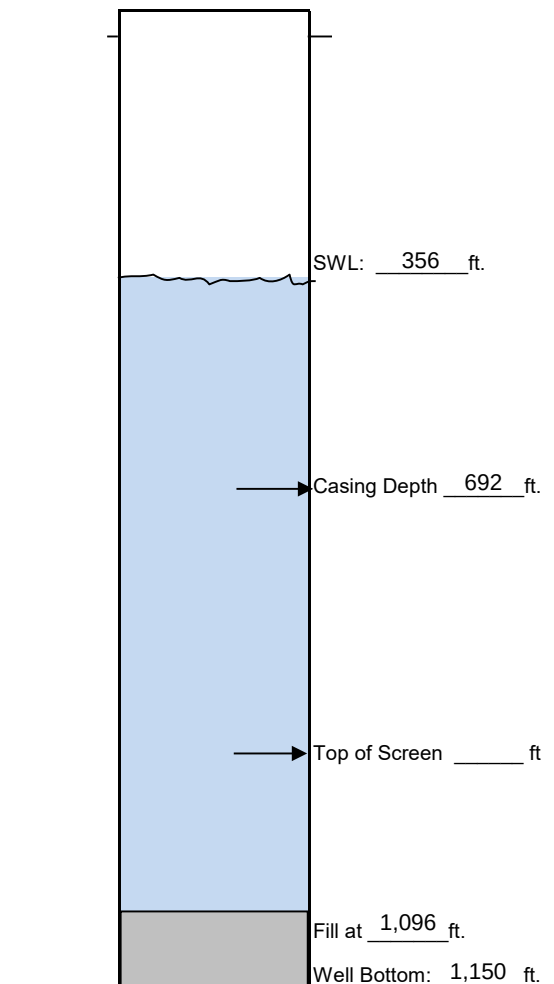
TV Equipment Used	Sprinter TV Van
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Well Information			
Casing Size	14"	Liner Size	
Original Depth	1,150	Current Depth	1,096
Bottom of Casing	692	SWL	356

Well Diagram

Results
<p>Lots of scale build up and iron casing below static In line check valve was leaking back into the well through the pitless Hit a small blockage at 722' was able to knock it down with the camera. Not a lot of voids or cracks in formation, Hit bottom at 1096', Appears to have around 50' of fill in bottom of the well,</p>

Recommendations
<p>Brush and bail fill, I think this well is a good candidate for an air shock with the medium gun and a chemical treatment with acid, Please Note this is a lime stone well build pressure with the acid</p>



Form Revised: 6/06/2018

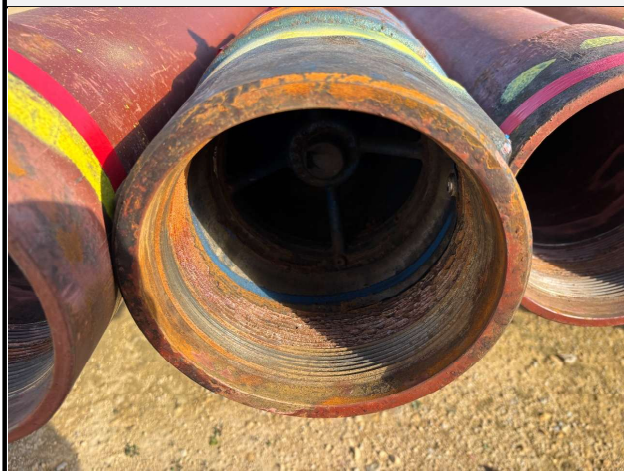
1. Bowl Assembly



2. Bowl Assembly



3. Check Valve Threads



4. Swage Nipple Corrosion



5. Column Pipe - Interior Pitting



6. Pitless Spool



Project Name Dyersville well 4

Job # LW26-3122

Well # 4

1.



2.



3.



4.



5.



6.

