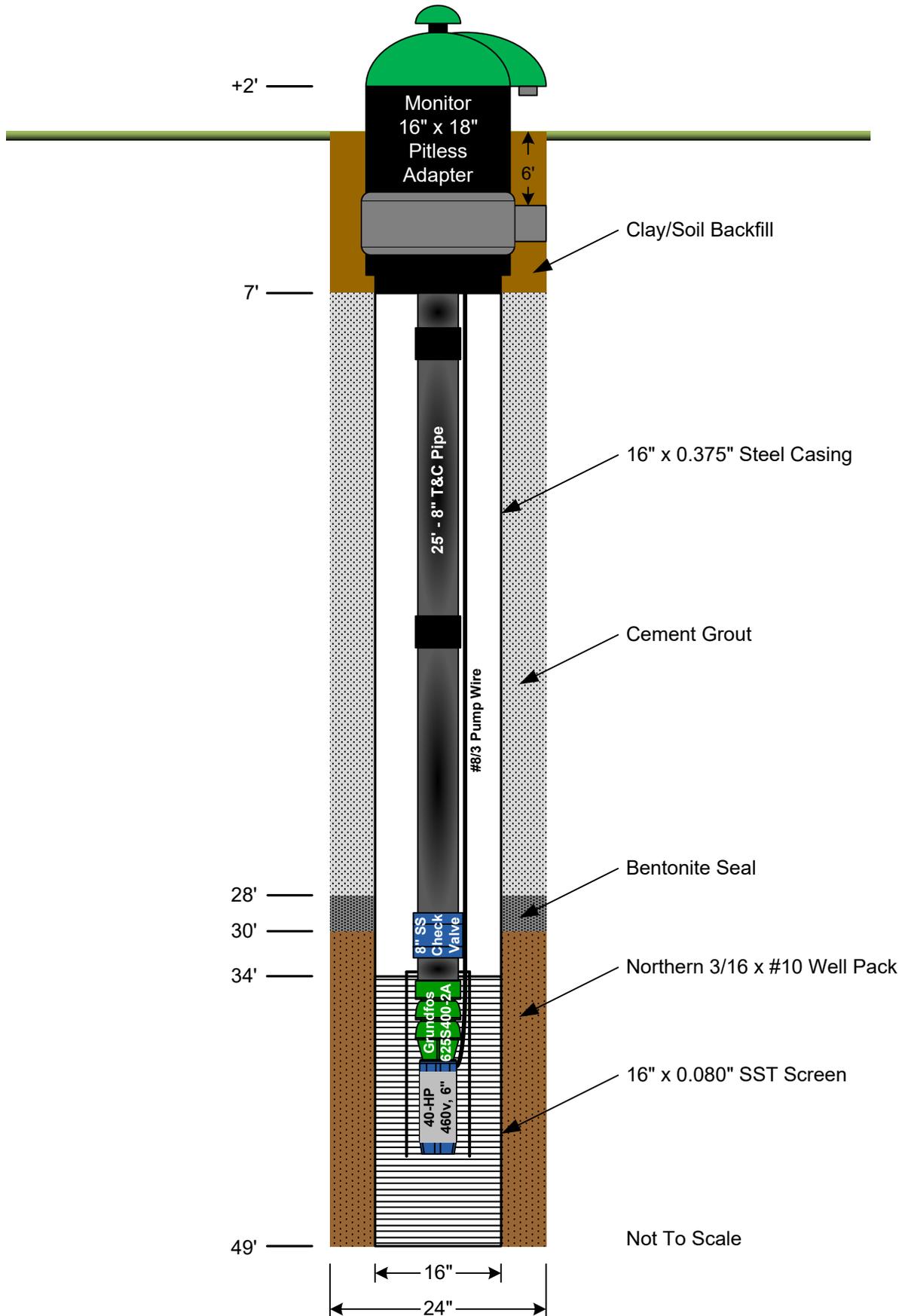






Osceola County Rural Water System  
Ten Kley Well Field – As-Built Drawing - Well T-1  
July 25, 2023



**Layne Christensen Company**  
 4601 N. 252nd Street  
 Valley, NE 68064  
 (402) 359-2042 / 2310 Fax

# SUBMERSIBLE PUMP INSTALLATION REPORT



**JOB NAME:** Osceola Co. RWS  
**Address:** 2270 Walnut Avenue  
**City, State:** May City, IA 51354

**DATE PROJECT COMPLETED:** 03/18/24

**PUMP NO:** \_\_\_\_\_  New Pump  Repair  
**Pump Trouble:** New pump installation in new well.

PUMP SIZE		
	Diameter	Lengths
<b>Discharge</b>	<input type="checkbox"/> Above	
	<input checked="" type="checkbox"/> Below	
<b>Column</b>	<input checked="" type="checkbox"/> Screw	1 x 20'
	<input type="checkbox"/> Flange	1 x 5'
<b>Pitless Unit</b>	16" x 18"	9'

Column setting to bowl: 26 ft. + pitless unit

**BOWL ASSEMBLY:**

Manufacturer: Grundfos  
 Diameter: 6 Shaft Diameter: \_\_\_\_\_  
 Type: 625S400-2 No. Stages: 2  
 Bowl Length: 2' 7" Bowl Material: SST  
 Check valve in column:  Yes  No Size: 8" SS  
 Submersible cable size: #4  
 Special paint, coatings, zinc sleeves, etc: N/A

**MOTOR:**

Make: Grundfos HP: 40  
 Speed: 3460 rpm Volts: 460  
 Diameter: 6" Length: 3' 2"  
 Serial # 00307676  
 Amperes: 62.0

**MEGGER CHECK:**

	On Ground		Installed In Well	
<b>Motor leads</b>				
<b>Cable leads</b>				

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**WELL:**

No: T-1 Year Drilled: 2023  
 Location: Ten Kley Well Field - SE of WTP  
 Diameter: 16" Depth: 51'  
 Measured from top of 16 " diameter pitless  
 which is 2 feet above ground level  
 Tape to water: 7.8'  
 Airline length: 35' A.L. Material: 1/4" Toro  
 Static Gauge: \_\_\_\_\_ Static Level: \_\_\_\_\_  
 Pumping Gauge: \_\_\_\_\_ Pumping Level: \_\_\_\_\_  
 Disch. Pressure: \_\_\_\_\_ psi when pumping into  
 system at \_\_\_\_\_ gpm

**INSTALLER:**

Dooling / Carrera  
 Rig Used: 10T Pump Rig

## PUMP REPAIR

CONDITION OF PUMP WHEN PULLED	NEW PARTS INSTALLED
Column: <u>N/A</u>	Column: <u>25' - 8" black T&amp;C drop pipe</u> <u>1 - 6" x 8" SS threaded bowl adapter</u> <u>1 - 8" Flomatic SS check valve</u>
Bowl: <u>N/A</u>	Bowl: <u>Grundfos 625S400-2 pump end</u>
Motor: <u>N/A</u>	Motor: <u>Grundfos 40-HP, 2/60/460V, 6", 3450 rpm motor</u> <u>10" x 5' 9" PVC motor shroud</u>
Head: <u>N/A</u>	Head: <u>Baker 16" x 18" pitless unit</u>
SHOP/MACHINE WORK: <u>N/A</u>	1. DRAIN PORTS OPEN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 2. CHLORINATE WELL? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 3. ALIGN PUMP HEAD WITH DIAL INDICATOR? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 4. GROUTED BASE PLATE? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 5. PUMP RUNS: <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Bad







# WELL TEST DATA REPORT

## PUMPING TEST PAGE 1



**PROJECT:** Osceola County RWS  
**LOCATION:** May City, Iowa  
**WELL NO:** T-1  
**WELL DIAMETER:** 16.00 inches I.D.  
**WELL DEPTH:** 51.0 feet - from top of casing  
**TOP OF SCREEN:** 36.0 feet - from top of casing  
**STATIC LEVEL:** 7.9 feet - from top of casing  
**ORIFICE SIZE:** 6" x 5"

**DATE TESTED:** 06/12/23 - 06/15/23  
**TESTED BY:** L. Carrera  
**DRIVER:** 40-HP Submersible  
**COLUMN AND SHAFT:** 6" Steel T&C  
**BOWL SIZE & MAKE:** 850S  
**MANUFACTURER:** Grundfos  
**SERIAL NUMBER:**

**SWL: 8.83'**    **SWL: 8.75'**

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	AIRLINE READING (FEET)	WELL T-1 PWL (FEET)	DRAW DOWN (FEET)	SPEC. CAPACITY (GPM/FT)	OB. 1 (2") Water Level (FEET)	OB. 1 (6") Water Level (FEET)	REMARKS (SAND CONTENT)
1 min.		932		24.4	16.5	56.4	12.2		Start Time 2:10 p.m.
2		932						8.8	
3		932		24.6	16.7	55.9	12.3		
4		932						8.9	
5		932		24.7	16.8	55.6	13.3		
6		932		24.8	16.8	55.4	13.3	8.9	
7		932		24.8	16.9	55.3	13.4		
8		932						8.9	
9		932		24.8	16.9	55.2	13.4		
10		932		24.8	16.9	55.1	13.4	9.0	
12		932		24.8	16.9	55.1	13.4		
14		932							
16		932						9.0	
18		932		24.9	16.9	55.1	13.5		
20		932						9.0	
25		932		25.2	17.2	54.1	13.6	9.1	
30		932						9.1	
35		932		25.3	17.4	53.7	13.7		
40		932		25.4	17.4	53.5	13.8	9.2	
45		932		25.4	17.5	53.4	13.8	9.3	
50		932		25.4	17.5	53.4	13.8	9.3	
55		932		25.5	17.6	53.1	13.9		
60		932						9.3	No sand detected
70		932		25.6	17.7	52.8	14.0	9.3	
80		932		25.7	17.8	52.3	14.0	9.4	
90		932		25.8	17.8	52.3	14.1	9.4	
100		932		25.8	17.8	52.3	14.1	9.4	
110		932		25.8	17.9	52.2	14.2	9.5	
120		932		26.0	18.0	51.7	14.3	9.5	

# WELL TEST DATA REPORT

## PUMPING TEST PAGE 2



**PROJECT:** Osceola County RWS  
**LOCATION:** May City, Iowa  
**WELL NO:** T-1  
**WELL DIAMETER:** 16.00 inches I.D.  
**WELL DEPTH:** 51.0 feet - from top of casing  
**TOP OF SCREEN:** 36.0 feet - from top of casing  
**STATIC LEVEL:** 7.9 feet - from top of casing  
**ORIFICE SIZE:** 6" x 5"

**DATE TESTED:** 06/12/23 - 06/15/23  
**TESTED BY:** L. Carrera  
**DRIVER:** 40-HP Submersible  
**COLUMN AND SHAFT:** 6" Steel T&C  
**BOWL SIZE & MAKE:** 850S  
**MANUFACTURER:** Grundfos  
**SERIAL NUMBER:**

**SWL: 8.83'**    **SWL: 8.75'**

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	AIRLINE READING (FEET)	WELL T-1 PWL (FEET)	DRAW DOWN (FEET)	SPEC. CAPACITY (GPM/FT)	OB. 1 (2") Water Level (FEET)	OB. 1 (6") Water Level (FEET)	REMARKS (SAND CONTENT)
140		932							
160		932		26.0	18.0	51.7	14.3	9.5	
180		932							
200		932							
220		932							
240		932							No sand detected
300		932							
360		932							
420		932							
480		932							
600		932							
720		932							
840		932							
960		932							
1080		932		27.2	19.2	48.4	15.7	9.8	
1320		932		27.2	19.3	48.3	15.7	9.8	
1560		932		27.3	19.4	48.2	15.7	9.8	
1800		932							
2040		932							
2160		932							
2400		932							
2640		932		27.3	19.4	48.0	15.7	9.8	
2880		932		27.3	19.4	48.0	15.7	9.7	
3120		932							
3360		932							
3600		932							
3840		932		27.5	19.6	47.6	15.7	9.9	
4080		932		27.5	19.5	47.7	15.7	9.9	No sand detected
4320		932		27.5	19.5	47.7	15.7	9.9	Stopped at 2:10 p.m.

# WELL TEST DATA REPORT

## RECOVERY PAGE 1



**PROJECT:** Osceola County RWS  
**LOCATION:** May City, Iowa  
**WELL NO:** T-1  
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**MANUFACTURER:** Grundfos  
**SERIAL NUMBER:**

**SWL: 8.83'**   **SWL: 8.75'**

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	AIRLINE READING (FEET)	WELL T-1 PWL (FEET)	DRAW DOWN (FEET)	SPEC. CAPACITY (GPM/FT)	OB. 1 (2") Water Level (FEET)	OB. 1 (6") Water Level (FEET)	REMARKS (SAND CONTENT)
1 min.		0		10.7			11.6		
2		0							
3		0						9.7	
4		0							
5		0							
6		0		10.7			11.4		
7		0							
8		0						9.5	
9		0							
10		0		10.5			11.3		
12		0						9.5	
14		0		10.5			11.3		
16		0							
18		0						9.4	
20		0		10.4			11.2		
25		0							
30		0		10.3			11.1	9.4	
35		0		10.2			11.0	9.4	
40		0							
45		0							
50		0		10.0			10.8	9.3	
55		0		10.0			10.7	9.3	
60		0							
70		0							
80		0		9.8			10.5	9.2	
90		0		9.8			10.5	9.2	
100		0							
110		0							
120		0							

# WELL TEST DATA REPORT

## RECOVERY PAGE 2



**PROJECT:** Osceola County RWS  
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140		0							
160		0							
180		0		9.4			10.1	9.8	
200		0							
220		0							
240		0							
300		0							
360		0							
420		0							
480		0		9.1			9.9	9.0	
600		0							
720		0							
840		0							
960		0							
1080		0							
1320		0							
1560		0							
1800		0							
2040		0							
2160		0							
2400		0							
2640		0							
2880		0							
3120		0							
3360		0							
3600		0							
3840		0							
4080		0							
4320		0							