

VILLAGE OF GILBERTS

RESOLUTION 03-2021

A RESOLUTION AUTHORIZING APPROVAL OF AN AGREEMENT WITH MUNICIPAL WELL AND PUMP FOR REPAIR SERVICES AT WELL 4 IN AN AMOUNT NOT TO EXCEED \$150,000

WHEREAS, the Village of Gilberts (“Village”) operates and maintains a water treatment system, including two deep water wells; and

WHEREAS, the Well 4 motor exhibited high amperage readings which could lead to problems in the Village’s water treatment system; and

WHEREAS, in order to fully assess and diagnose the cause of the high amperage readings, Municipal Well and Pump pulled and inspected the motor on an expedited basis; and

WHEREAS, the Municipal Well and Pump has provided an inspection report and repair options for the Village to consider;

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF GILBERTS, ILLINOIS, as follows:

Section 1. **Recitals.** The recitals set forth above are hereby incorporated into and made a part of this Resolution as though set forth in this Section 1.

Section 2. **Approval; Authorization.** The Village Board of Trustees hereby authorizes the Village Administrator to execute an agreement and other necessary documents with Municipal Well and Pump to conduct repairs consistent with Option 2 as outlined in Attachment A, in an amount not-to-exceed \$150,000.


Section 3. **Waiver of Competitive Bidding.** To the extent any competitive bidding requirements apply to the agreement between the Village and Municipal Well and Pump for motor inspection services they are hereby waived pursuant to Section 8-9-1 of the Illinois Municipal Code (65 ILCS 5/8-9-1).

Section 4. **Effective Date.** This Resolution shall be in full force and effect after its approval in the manner provided by law.

PASSED BY VOTE OF THE BOARD OF TRUSTEES of the Village of Gilberts, Kane County, Illinois, this 12 day of Jan. 2021.

	<u>Ayes</u>	<u>Nays</u>	<u>Absent</u>	<u>Abstain</u>
Trustee Dan Corbett	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustee Kurt Kojzarek	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustee Nancy Farrell	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustee Jeanne Allen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustee Lou Hacker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustee Guy Zambetti	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
President Rick Zirk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPROVED THIS 12 DAY OF Jan., 2021



Village President, Rick Zirk



ATTEST:


Courtney Baker, Village Clerk



December 31, 2020

Village of Gilberts
Mr. John Castillo, Utilities Superintendent
73 Industrial Drive
Gilberts, IL 60136

Re: Gilberts Well #4

Dear Mr. Castillo:

We have completed removal and inspection of the well pump #4 equipment in addition to televising of the well. The breakdown of the various component inspections are as follows:

300HP Byron Jackson Motor

The motor was disconnected from the bowl assembly on site. With the cable attached, the string megged 0 megohm with the DC voltage of the megger only getting to 300-volts. (It should get to 1,000-volts DC) The cable pigtail was removed from the motor and the motor megged 15-gigohms, however, the motor was seized and could not be rotated. The cable megged 1-megohm, without being attached to the motor.

It is an option to have the motor shipped to Sunstar and have the unit further inspected for repair or replacement. Pricing for this option will be shown. Other options will be the purchase of either a new motor or the purchase of a rebuilt unit. Pricing, in addition to delivery times will need to be reviewed and discussed.

Byron Jackson 13/12MQ Bowl Assembly

The bowl assembly was returned to our shop and disassembled for inspection. Upon disassembly, the bowl is found to be not rebuildable and must be replaced.

This unit has been rebuilt once before, but most importantly severe deterioration has started on the interior cast iron vanes and castings. Washing out of the cast iron in the wear ring area eliminates the feasibility of rebuilding the unit and a new bowl must be purchased. This deterioration is caused by "graphitization". Graphitization is a metallurgical term whereby the cast iron becomes soft. Cast iron, being made up mostly of iron and carbon, gets soft or graphitizes by the iron being leached out of the cast iron and you are basically left with carbon or graphite. When you scrape the cast iron, the carbon looks just like scraping pencil lead. The attached report shows the condition, with pictures.

A new bowl assembly will require about 2 to 3 weeks to build and test. The bowl assembly we are proposing is a Gould's 12CMC-14 stage bowl with Sub-adapter, stainless steel screen bronze bearings, 416-stainless steel wear rings, 316stainless steel impellers, stainless steel shaft, bolting. We have the parts in stock, but we require machining of the wear rings and testing of the motor and bowl.

This bowl is basically identical to the units installed in wells 5 and 6.

8-inch Column Pipe

The 8-inch schedule 40 column pipe is in fair to good condition. The steel pipe itself appears to be good, however, the threaded ends are starting to corrode and erode at the threads. This will require that the pipe ends be cut off and new threads machined on the ends. In addition, new couplings will be installed on the pipe and two new check valves also installed.

When we cut the ends off, a new piece of pipe will be provided to make up the cumulative length that was cut off. His length will be a little less due to the cable failure and the short piece of cable we cut off.

The coating on the exterior and interior is showing signs of failure and is in poor shape. It is imperative that the pipe be sand blasted and recoated to go along with the new threads and couplings. This process will take two to three weeks.

Submersible Cable

The submersible cable had shorted out at the surface near the pitless spool piece about five feet below the surface. We sent those pictures out in an earlier report. It is our opinion that this short occurred due to a lightning strike/power surge. In addition, the megger readings during removal were unacceptable and the megger could not get up to the required 1,000-volts for testing. This indicated a severe short or compromise in the cable/motor.

The exterior of the cable was in good shape, and megger readings were taken every 105-feet and continued to show a dead short.

Once at the surface, the motor pigtail was removed from the motor and the cable and pigtail megged 1-megohm at 1,000-volts. Better, but still far short from where we need to be. We then cut the cable above the splice, taking the splice and the motor pigtail out of the equation, the readings increased dramatically. With that done, the cable megged 2200-megohms at 1,000-volts.

The cable was tank tested at our shop to confirm the readings. This is where the cable is submerged under water with the cable ends exposed and meggered once again.

This was done and the readings were very acceptable at 16.2-gigohms, 12.4-gigohms and 18.5-gigohms. In addition, the cable will be turned "end for end".

Pitless adapter Spool Piece

The pitless spool piece will get new o-rings which is standard. In addition, we will install a new schedule 80 nipple into the pitless spool and have it coated along with the pipe.

Well Televising

Well Televising was performed on December 21, 2020. The static water level is 491-feet. The downward view had significant particles present. The side view was not as cloudy and clarity improved as we went deeper.

The well televising indicates the well is in excellent condition. The casing has some scale build-up, which is typical and can be removed with brushing. As can the sediment on the ledges of the open rock formation.

The total depth is at 1,315-feet, and drilled depth was reported to be 1,335-feet indicating about 20-feet of fill in the bottom of the well. This can be taken care of when the casing and formation are brushed clean. We will contain the fill material, which is typically rust, scale and some sand on site. Disposal to be by Village.

Motor Explanation with Options

There are options that are available with regard to the repair and/or replacement of the 300HP submersible motor.

Repair Existing Motor

Option one is repairing the existing motor. This is an expensive item due to the disposal of the mercury from the mercury seal. Mercury seals are no longer allowed by the Illinois EPA and must be disposed of properly. A new motor pigtail will also be required with this motor. This option requires a 7 to 8-week turnaround time.

Rebuilt 300HP Hitachi Motor

One of our suppliers has a reconditioned/rebuilt 300HP Hitachi motor on the shelf. This unit would come with a full one-year warranty.

New 300HP SME SS motor

Our supplier in Arizona has one 300HP submersible motor in stock. It is all stainless-steel construction. We prefer this option due to the stainless-steel construction and the unit is new. It too comes with a one-year warranty.

Rebuilt Byron Jackson by SME

SME can provide a rebuilt 300HP Byron Jackson motor with a full one-year warranty. Delivery of this unit would be 6 to 7 weeks after receipt of order.

Manufacturer	Horsepower	Turnaround Time	Price	
BJ/Sunstar	300	7 to 8 weeks	61,455.00	
Hitachi	300	Stock	53,725.00	
SME New SS	300	Stock	55,240.00	
SME Rebuilt BJ	300	6-7 weeks	38,528.00	

Any submittal information you might require can be provided. Complete operation and maintenance manuals will be provided at the end of the project.

After review, should you have any questions or comments, please do not hesitate to contact our office

Respectfully Submitted,
MUNICIPAL WELL & PUMP



Richard N Milaeger
Vice President

CC: Mr. Aaron Grosskopf, Public Works Director

Enclosure: Cost Breakdown



Pump / Motor Inspection Report

Job #	MD21-1026
Date	12/15/2020
Well #	4

Customer Information							
Customer:	Gilberts, Village of				Contact Name:	Castillo/Grosskopf	
Address:	87 Galligan Road				MWP Salesman	Dick	
City:	Gilberts	ST:	IL	ZIP:	60136	Completed By	Wesley Derksen
Phone #		Fax: #					

Pump Data									
Description of Equipment	300HP Submersible Well Pump								
Pump Setting (feet)	760	Type of Pump	Submersible						
Design Data	Capacity	1,000	GPM	@	931	TDH	@	1740	RPM

Motor Data							
Manufacturer Name:	BJ		Model:	34396114		Type (WPI, TEFC, SUB, Ver)	SUB
HP	300	RPM		Design	4 pole	Code	
Volts	460	Hertz	60	Phase	3	Amps	
Service Factor	1.1	Temp Rating		Bearings # (Upper / Lower)	Kingbury		
Serial Number	343961145618			Frame #	14H300-4		
Condition	Seized shaft. Megs 15 gig ohm		Ohm L1-L2		L1-L3		L2-L3

Right Angle Gear Data							
N/A							
Manufacturer Name:				Model:			
Serial Number				HP	Tractor PTO		Rot. Fig. (1, 2, 3)
Steady Bearing Adapter ID	Overall Height		Base Diameter Upper		Base Diameter Lower		
Base to Top of Drive Coupl	Condition						

Discharge Head							
Manufacturer Name:	Baker pitless		Model:	20"x18"		Material	
Discharge Diameter	Top Col Flange		Adj. Butt Flange				
Serial Number	New orings, blast and coat, replace sch 80nippi			Condition	Threads on sch 80 nipple po or		

Stuffing Box							
N/A							
Water Lube	Oil Lube		Bearing OD	Bearing ID	Length		
Threads per Inch	LH	RH	Packing Size		Grease Ports (Y/N)		
Packing Type	Teflon		Graph	Condition			

Column Pipe Data								
Length:	740'			@	Ft.		Thickness	40
Material	Coated	Outside Diam	8.5	Threads per Inch		Thread Length		
Thread Condition	Getting thin		Pipe Condition	Recoat	End Face Condition	Qty 16 rethread.		
Comb Couplings	Yes <input type="radio"/> No <input checked="" type="radio"/>		Comments	All threaded ens need to be cut & threaded w/new couplings				

Column Coupling Data							
Type	Std. Steel <input checked="" type="radio"/> Comb Cplg <input type="radio"/>		Length		Outside Diam		
Material				Thread Condition			
Remarks				Coupling Condition			

Bearing Retainer Data							
N/A							
Shoulder Width	# of Spokes		Hub Length		Hub ID		
Type: (Yes/No if it Applies)	Threaded	Drop-In	Combination Coup.				
Thread Condition				End Face Condition			
Bearing Retainer Condition	Remarks						

Bearing Data							
N/A							
Length	Style	Snap In	Lock Ring	Bearing ID		OD	
Bearing Condition							

Pump / Motor Inspection Report (continued)

Job #	MD21-1026
Date	12/15/2020
Well #	4

Customer:	Gilberts, Village of
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Lineshaft Data		N/A								
Length:		@	Ft.	In.	@	Ft.	In.	@	Ft.	In.
Material		Diameter		Threads per Inch		Thread Length				
Thread Condition		Shaft Cond.		Staightness						
Motor Shaft	Material:	Length		Diameter		TPI		Thread L.		
Head Shaft	Material:	Length		Diameter		TPI		Thread L.		
Remarks										

Lineshaft Coupling Data		N/A					
Length		Outside Diameter		Material			
Thread Condition		End Face Condition					

Jump Coupling		N/A					
Location		Outside Diam		Threads/Inch	Upper	Lower	
Thread Condition		Coupling Condition		Diameter	Upper	Lower	

Shaft Sleeve Data		N/A					
Length		Outside Diameter		Inside Diameter		Material	
Remarks							

Bowl Assembly							
Manufacturer Name:	Byron Jackson	Model:	13 MQ	Stages	14	Outside Diameter	13
Shaft Stick Up		Shaft Diam.	1 15/16	Thread / In		Impeller Type	Closed
Bearing Type		Bearing O.D.		Bear I.D.		Length	Imp Mod#
Discharge Nozzle Pipe Dia	8	Suction Nozzle Pipe Dia.		Discharge Nozzel Thread Type		Taper	
Oil Lube Stick Up (inches)		Tube Bearing Thread/In	L.H.	R.H.			
Serial Number	00-RN 1272						
Imp. Shaft Condition	Pitted and worn at bearing areas		Bowl Condition	Washed out cases, rebuilt once already.			
Thread Condition			Overall Remarks	Not rebuildable			

Suction Pipe							
Length		Diameter		Schedule:		Wall Thickness	
Thread Type	Butt 3/4 Taper	T.O.E.		T.B.E.			
Condition							

Strainer							
Length		Diameter		Material		Type	Cone Basket
Attach		Weld	Thread	Coupling		Condition	

Sub Discharge Elbow						Yes	No
Column Diameter		Elbow Diam.		Column Coupled directly below Plate?			
Plate Thickness		Plate Diam.		Junction Box coupled to Plate?			
No. of Lifting Eyes		Eye Diam.		Airline sealed with compression coupling?			
Vent Diameter		No. of Bolts		Elec. Wires seal with compression couplings?			
Bolt Diameter		Condition of Sub Dischg Elb					

Submersible Cable							
Size	500 MCM	Ground Wire	#6	Wire Material	Copper		
Stranded or Solid	Stranded	Wire Type	Rd Par Fit Jk	Insulation Type			
Meg Ohm Reading		Condition	1.0 meg ohm with flat jacket. 2200 meg no splice.				

Overall Comments
 740' 8" pipe. Cut and rethread both ends. Couplings are washed in the centers of couplings. Best to cut and thread both ends, replace qty 2 check valves. 300 hp Byron Jackson motor seized, mercury is contained in the seal section. Blast and recoat pitless spool nipple is good. No set screws in couplings. Cable megs .3 ohm with motor won't build past 300 volts. Cable megs 1.0 meg with flat cable removed from motor. builds to 1,000 volts. Cut off splice just megging cable alone in air. Megs 2200 meg ohm. 1000 volts. 8" Schedule 80 half nipple in pitless spool needs replacement.

1. Splice



2. Splice intact



3. Cable guard intact



4. Cable guarded properly



5. Oil can turned



6. No mercury found





Bowl Assembly Inspection Report

Job #	
MD21-1026	

Project Name	Gilberts Well #4
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Well #	4
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Work Completed by	Wesley Derksen
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Date	12/23/2020
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Bowl Information

Bowl Manufact.	Byron Jackson			Bowl Model	13 MQ / 12MQ		
# of Stages	14	Thread Diameter	n/a	TPI	n/a	Lateral	1"
Shaft Diameter	1 15/16"	Shaft Length	211"	Discharge Type (NPT or Butt)	NTP	Stick Up	
Suction (inches)	14-inch	Discharge Size (inch)	8	Impeller Number of Vanes	5		

Shaft Tolerance	Bearing Inside Diameter	Difference
Discharge Case		
1st Stage		
2nd Stage		
3rd Stage		
4th Stage		
5th Stage		
6th Stage		
7th Stage		
8th Stage		
9th Stage		
10th Stage		
11th Stage		
12th Stage		
Suction Nozzle		
Stuffing Box		

Impeller Skirt Outside Dia.	Wear Ring Inside Dia.	Difference	Wear Ring Outside Dia.	Impeller Top Diameter	Impeller Bottom Diameter
6.418"	6.482"	0.064"	7.25	8.90	10
6.422"	6.488"	0.066"	7.25	8.90	10
6.400"	6.450"	0.050"	7.25	8.90	10
6.415"	6.485"	0.070"	7.25	8.90	10
6.410"	6.455"	0.045"	7.25	8.90	10
6.425"	6.470"	0.045"	7.25	8.90	10
6.420"	6.490"	0.070"	7.25	8.90	10
6.420"	6.470"	0.050"	7.25	8.90	10
6.425"	6.460"	0.035"	7.25	8.90	10
6.420"	6.500"	0.080"	7.25	8.90	10
6.420"	6.500"	0.080"	7.25	8.90	10
6.420"	6.435"	0.015"	7.25	8.90	10
Distance from bottom of shaft to bottom of Impeller skirt					
Distance from bottom of shaft to bottom of suction case					

Stuffing Box Dimensions

OD	ID	Length

Bearing Dimensions

	OD	Length
Top Case		
Suction Case		
Intermediate		

Directions:

- Number all bowls and impellers in sequential order as you are disassembling the pump
- Note any imperfections below, take pictures with the bowl/impellar number showing

Recommended Shaft Clearance: Minimum = .008" , Maximum = .010"

Wear Ring Clearance: Nominal = .015, Minimum = .012, Maximum = .018

Recommended Bearing & Wear Ring Press Fit: 0.003- (+0,-0.001)

Revised: 6/8/18

Comments: (example: casting, condition, mineralogical plugging, etc.)

See next page of form.



Bowl Assembly Inspection Report

Job #
MD21-1026

Project Name	Gilberts Well #4
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Well #	4
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Work Completed by	Wesley Derksen
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Date	12/23/2020
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Bowl Information

Bowl Manufact.	Byron Jackson			Bowl Model	13 MQ		
# of Stages	14	Thread Diameter		TPI			
Shaft Diameter	1.938"	Shaft Length	211"	Discharge Type (NPT or Butt)	NTP	Stick Up	
Suction (inches)		Discharge Size (inch)	8	Impeller Number of Vanes	5		

Shaft Tolerance	Bearing Inside Diameter	Difference
Discharge Case		
13th Stage		
14th Stage		
15th Stage		
16th Stage		
17th Stage		
18th Stage		
19th Stage		
20th Stage		
21st Stage		
Stuffing Box		

Impeller Skirt Outside Dia.	Wear Ring Inside Dia.	Difference	Wear Ring Outside Dia.	Impeller Top Diameter	Impeller Bottom Diameter
6.400"	6.478"	0.078"	7.25	8.90	10
6.420"	6.485"	0.065"	7.25	8.90	10
Distance from bottom of shaft to bottom of Impeller skirt					20.750"

Recommended Shaft Clearance:

Minimum = .008"
Maximum = .010"

Recommended Wear Ring Clearance:

Nominal = .015
Minimum = .012
Maximum = .018

Bearing Dimensions

	OD	Length
Top Case		
Suction Case		
Intermediate		

Recommended Bearing & Wear Ring Press Fit:

0.003-(+0,-0.001)

Comments: (example: casting, condition, mineralogical plugging, etc.)

Shaft face to adapter face, 7 5/8". Sand collar face to shaft face 17 5/8". Shaft wore and undercut, deep pits. Bowl has Washing on inside, was rebuilt once before. Not rebuildable. Bowl has orings. Bowl vanes are wore and severe graphitization is occurring.

Project Name Gilberts Well #4

Job # MD21-1026

Well # 4

1. Pitting on shaft



2. Wear on shaft



3. Bowl washed at wear ring critical area



4. Vanes very poor and soft



5. Undercut on suction case



6. Cut adapter case due to motor seizure.





Column Pipe Removal Sheet with Megger Readings

Job #	MD21-1026
Completed by:	Wesley Derksen
Well #	4

Project Name	Gilberts Well #4	Date	12/18/2020
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Customer Information					
Customer:	Gilberts, Village of				
Address:	87 Galligan Road				
City:	Gilberts	ST:	IL	ZIP:	60136
Phone #		Fax: #			
Contact	John Castillo & Aaron Grosskopf	MWP Salesman	Dick		

Pump Setting:	740
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JOINT #	Length	Megger Reading	JOINT #	Length	Megger Reading	JOINT #	Length	Megger Reading
1	9'11"		25	21		49		
2	21		26	21		50		
3	21		27	21		51		
4	21		28	20'9"		52		
5	21		29	21		53		
6	X 21		30	20'11"		54		
7	21		31	20'8"		55		
8	21		32	21'		56		
9	20'8"		33	20'		57		
10	21		34	21		58		
11	20'4"		35	21		59		
12	20'9"		36	21		60		
13	21'		37			61		
14	21'		38			62		
15	21'		39			63		
16	20'9"		40			64		
17	21		41			65		
18	20'6"		42			66		
19	20'8"		43			67		
20	X 20'11"		44			68		
21	20'10"		45			69		
22	21		46			70		
23	21		47			71		
24	21		48			72		

Megger Readings taken in:	GigOhms	Directions:	(1) Check Valve location is denoted by " X " (2) Enter "-" for Infinity
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Job Notes: Megger 1000 volt, can't build past 300 volts. Removed flat cable off motor. Motor megger 15 gig. Motor seized. Cable megs 1.0 meg ohm no motor. 740' pipe with 10' bury pitless



Well Pump Field High Potential Test

Customer: Village of Gilberts **Date:** December 28, 2020 **Job No.:** MD21-1026

Well No.: 4 **Location:** CABLE TANK TESTED AT MWP FACILITY

Well Pump Description: 300HP Byron Jackson set to 760-ft. on 8" column

Cable Description: 500MCM jacketed, Round

Installer: Municipal Well & Pump on March 20, 2014

Test Voltage: 1,000-volts DC **Test Time:** Ten (10) minutes **Ramp Test:** Yes ~~X~~No

Test Location: In-Situ **Weather:** Shop **Temperature:** 18-degrees F

Humidity: 73% **Test Equipment:** FLUKE 1550B Digital MegOhmMeter

Test Engineer: Matt Martinez **Time:** Afternoon

READINGS WITH VOLTAGE CONSTANT

TIME IN MIN.	LEG H1	LEG H2	LEG H3
10-min.	16.2-Gig-ohms	12.4-Gig-ohms	18.5-Gig-ohms

Comments:

Test was done due to unacceptable meg readings prior to and during removal. The cable eventually tested good once the motor pigtail and splice was cut off. We were also concerned because cable shorted out to the well casing at the surface. Whereas we cannot make ANY guarantees as to the cables warranty, all test readings indicate acceptable data.

Signature: *Dick Milaeger*

FLUKE 155(V1.3

Reading	Test Tag	Results			Test Duration	Calculated Results		
		Ohms	V DC	A DC		Capacitanc	PI	DAR
1	CAM1	16.2 GOhr	1034 V DC	64.0 nA DC	0:10:00	0.15 μ F	3.49	1.56
2	CAM2	12.4 GOhr	1034 V DC	83.1 nA DC	0:10:00	0.15 μ F	2.87	1.5
3	CAM3	18.5 GOhr	1034 V DC	55.8 nA DC	0:10:00	0.15 μ F	3.59	1.67

Test Conditions

Voltage	Ramp
1000	Off
1000	Off
1000	Off

Test

Time Limit	Ended By
0:10:00	Time limit
0:10:00	Time limit
0:10:00	Time limit



Well Televising Report

Job #	MD21-1026
Completed by	Stelsel, Andy
Date	12/22/2020

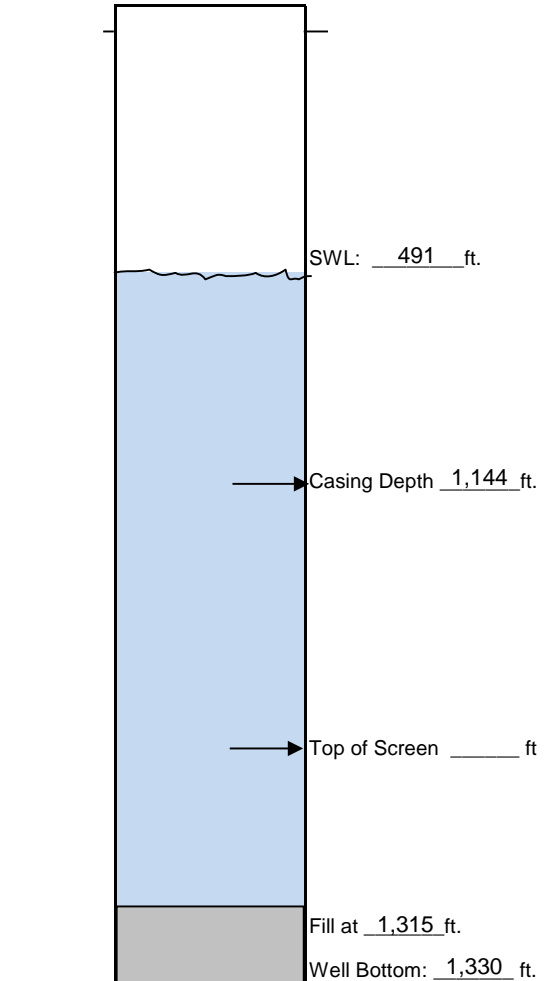
Project Name	Gilberts Well #4
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Customer Information					
Customer:	Gilberts, Village of				
Address:	87 Galligan Road				
City:	Gilberts	ST:	IL	ZIP:	60136
Phone #		Fax: #			
Contact	Castillo/Grosskopf	MWP Salesman	Dick		

Well #
4

Well Information			
Casing Size	18"	Liner Size	
Original Depth	1,330	Current Depth	1,330
Bottom of Casing	1,144	SWL	491

Well Diagram



Results
<p>Thick oil at static level. Well appears to be crooked in open hole. Oil particles in fill at the bottom of the well. Casing has much loose scale on it. Deposits are sitting on all ledges in the open hole.</p>

Recommendations
<p>Bail oil. Brush casing. Treat open hole. Bail fill.</p>

Form Revised: 6/06/2018

Please note for item #1 this is a contractor typo and the motor will be new. The Village has confirmed this with Municipal Well & Pump.



Project Proposal

Re: Gilbert's Well #4 Repair Proposal-Opt. B

Item #	Item Description	Quantity	Units	Unit Price	Extended Price
1	Rebuilt 300HP SME SS Motor, 3/460-V, 1800rpm	1	each	\$ 55,240.00	\$ 55,240.00
2	New Submersible bowl assembly, 1,000GPM w/Test	1	each	33,070.00	33,070.00
3	Motor/Bowl adaption	1	each	3,970.00	3,970.00
4	Estimated freight	1	Est.	4,570.00	4,570.00
5	2-8-inch check valves	2	each	1,995.00	3,990.00
6	Mobilization	1	Lsum	4,660.00	4,660.00
7	Brush well casing & Bore Hole/Bail	10	Hours	470.00	4,700.00
8	Install Well Pump	40	Hours	470.00	18,800.00
9	Start-up, Testing and Sampling	12	Hours	470.00	5,640.00
10	Demobilization	1	Lsum	3,230.00	3,230.00
11	Mercury Remediation (Old motor)	1	Lsum	10,180.00	10,180.00
12	New Pipe piece in pitless adapter	1	Lsum	1,520.00	1,520.00
13	SME Motor is currently available.				-
14	Bowl parts are currently in stock				-
15					-
16	Mercury remediation has to be done whether			-	-
17	motor is repaired or not.				-
18				-	-
19				-	-
20				-	-
21				-	-
22				-	-
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36				-	-
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42				-	-
43				-	-
44				-	-
45				-	-
46				-	-
47				-	-
48				-	-
Total Project Proposal					\$ 149,570.00

Dated: January 7, 2021

By: _____

Dick Milaeger

Dick Milaeger
Vice President Sales
Municipal Well & Pump

Please note for item #1 this is a contractor typo and the motor will be new. This was confirmed with Municipal Well & Pump.



Project Proposal

Re: Gilbert's Well #4 Repair Proposal

Item #	Item Description	Quantity	Units	Unit Price	Extended Price
1	Rebuilt 300HP SME SS Motor, 3/460-V, 1800rpm	1	each	\$ 55,240.00	\$ 55,240.00
2	New Submersible bowl assembly, 1,000GPM w/Test	1	each	33,070.00	33,070.00
3	Motor/Bowl adaption	1	each	3,970.00	3,970.00
4	Estimated freight	1	Est.	4,570.00	4,570.00
5	Pick-up column pipe for machining	12	Hours	470.00	5,640.00
6	Machine pipe ends and thread same	72	ends	96.00	6,912.00
7	34-8-inch couplings	34	each	176.00	5,984.00
8	2-8-inch check valves	2	each	1,995.00	3,990.00
9	8-inch Sch. 80 nipple for pitless	1	each	760.00	760.00
10	Sand Blast & Coat 8-inch pipe	740	feet	41.00	30,340.00
11	Deliver column pipe to site	12	Hours	470.00	5,640.00
12	Mobilization	1	Lsum	4,660.00	4,660.00
13	Brush well casing & Bore Hole/Bail	20	Hours	470.00	9,400.00
14	Install Well Pump	40	Hours	470.00	18,800.00
15	Start-up, Testing and Sampling	12	Hours	470.00	5,640.00
16	Demobilization	1	Lsum	3,230.00	3,230.00
17	Mercury Remediation (Old motor)	1	Lsum	10,180.00	10,180.00
18				-	-
19	SME Motor is currently available.			-	-
20	Bowl parts are currently in stock			-	-
21				-	-
22	Mercury remediation has to be done whether			-	-
23	motor is repaired or not.			-	-
24				-	-
25				-	-
26				-	-
27				-	-
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32				-	-
33				-	-
34				-	-
35				-	-
36				-	-
37				-	-
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39				-	-
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43				-	-
44				-	-
45				-	-
46				-	-
47				-	-
48				-	-
Total Project Proposal					\$ 208,026.00

Dated: January 5, 2021

By:

Dick Milaeger

Dick Milaeger
Vice President Sales
Municipal Well & Pump