

Memo

To: Mayor and Council
From: Robin Bowman, Public Works Superintendent
CC: Joe Kohlmann, City Administrator
Date: June 10, 2014
Re: Well No. 2 Inspection and Repair

The City of Tonka Bay has two deep wells that serve as the water supply for our City. Based on our current inspection program, each well is inspected every 6 years. Planned for in the 2014 Water Operation Budget is the inspection of Well No. 2. Well No. 1 will be due for inspection in 2015.

The Inspection consists of the pump being pulled off of well No.2 and completely disassembled and inspected for worn or damaged parts. After the inspection, a report is generated by the well contractor detailing any repairs that are needed under the quote amount. The cost for repairs are based on the shop labor rate and unit part replacement cost listed on the proposal form. If we find anything that could cost more than budgeted, staff will bring back more information and cost at that time.

Staff reviewed all proposals and needed to ask three companies for clarification to keep all quotes consistent- one has declined. The remaining companies can complete the work late summer/fall, that's a good time of year for the City, as water usage starts to go down.

In the past only two bids would be received, I've asked five Contractors for quotes they are as follows:

Contractor	High Quote	Low Quote	Avg of H & L
Bergerson – Caswell Inc.	\$25,290.00	\$10,400.00	\$17,845.00
Keys Well Drilling Co	\$25,065.00	\$12,250.00	\$18,657.50
Traut Wells	\$43,595.00	\$23,280.00	\$33,437.50
McCarthy Wells	declined to send updated info do to back log of work on 6-3-14		
Thein Well Company	\$26,658.00	\$12,620.00	\$19,639.00

Recommendation

To approve Bergerson–Caswell Inc. based on the high and low average quote amount of \$17,845.00 but not to exceed Water Operating Fund has \$22,500.00 identified for this project. Unless City Administrator approves needed repairs to expedite well # 2 back on line.

Funding

Water Operating Fund has \$22,500.00 identified for this project. If needed we do have funds for repair work to the pump motor and unforeseen issues if needed in 49440-220 Repair, Supplies and Maintenance \$6,750.

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: Thein Well Company
 Contact Person: Zack Thein
 Street Address: 11355 Hwy 71 NE
 P.O. Box: _____
 City, State, Zip: Spicer, MN 56288
 Phone #: (320) 796-2111
 Toll Free #: _____
 Fax #: 320-796-2114
 Email Address: zack@theinwell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,500.00	LS	\$6,500.00
2	Shop Time for Cleaning & Repairing Pump	\$85.00	HR	\$850.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$410.00	up to 18	\$7,380.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$287.00	up to 2	\$574.00
5	Sand blasting pipe and epoxy painting pipe	\$85.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$250.00	LS	\$250.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$200.00	3 needed	\$600.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	included in # 6	HR	Unknown
10	Install Level Monitor Tube	\$190.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,000.00	LS	\$1,000.00
12	Cost for & Install New Transducer	\$1,500.00	LS	\$1,500.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,200.00	LS	\$1,200.00

14	Clean Screen Using High Velocity Jet	<u>\$265.00</u>	HR	<u>\$265.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$265.00</u>	LS	<u>\$265.00</u>
16	Bailing	<u>\$265.00</u>	HR	<u>Unknown</u>
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$475.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$185.00	up to 18	\$3,330.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$129.00	up to 2	<u>\$258.00</u>
20	Furnish Bowl Shaft – 1-1/2" diameter	\$376.00	EA	\$376.00
21	Replace 8"x10 tail pipe .322 wall	\$395.00	EA	\$395.00
22	Replace Base shaft	\$400.00	EA	\$400.00
23	Vibration Test pre & post	\$100.00	LS	\$100.00
24	Repair Cement motor base	\$265.00	HR	Unknown
25	Miscellaneous items	\$750.00		\$750.00
26	Others	\$0.00		\$0.00
	Warranty - Be specific			
			1 YEAR AFTER REINSTALLATION	
		High Total		\$26,658.00

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: **TheIn Well Company**
 Contact Person: **Zack Thein**
 Street Address: **11355 Hwy 71 NE**
 P.O. Box:
 City, State, Zip: **Spicer, MN 56288**
 Phone #: **(320) 796-2111**
 Toll Free #:
 Fax #: **320-796-2114**
 Email Address: **zack@theinwell.com**

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,500.00	LS	\$6,500.00
2	Shop Time for Cleaning & Repairing Pump	\$85.00	HR	\$850.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$410.00	up to 18	\$0.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$287.00	up to 2	\$0.00
5	Sand blasting pipe and epoxy painting pipe	\$85.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$250.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Bach Stage	\$200.00	3 needed	\$0.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	Included In # 6	HR	Unknown
10	Install Level Monitor Tube	\$190.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,000.00	LS	\$1,000.00
12	Cost for & Install New Transducer	\$1,500.00	LS	\$1,500.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,200.00	LS	\$1,200.00

14	Clean Screen Using High Velocity Jet	\$265.00	HR	\$265.00
15	Wire Brush Interior Surface of Well Casing	\$265.00	LS	\$265.00
16	Balling	\$265.00	HR	Unknown
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$0.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$185.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$129.00	up to 2	\$0.00
20	Furnish Bowl Shaft – 1-1/2" diameter	\$376.00	EA	\$0.00
21	Replace 8"x10 tail pipe .322 wall	\$395.00	EA	\$0.00
22	Replace Base shaft	\$400.00	EA	\$0.00
23	Vibration Test pro & post	\$100.00	LS	\$100.00
24	Repair Cement motor base	\$265.00	HR	Unknown
25	Miscellaneous items	\$750.00		\$750.00
26	Others	\$0.00		\$0.00

Warranty - Be specific

1 YEAR AFTER REINSTALLATION

Low Total	\$12,620.00
High Total	\$26,658.00
Avg.	\$19,639.00

Well # 2 Rehabilitation

City

of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371

Vendor Name: Keys Well Drilling Co
 Contact Person: _____
 Street Address: 1156 Homer Street
 P.O. Box: _____
 City, State, Zip: Saint Paul, MN 55116-3232
 Phone #: (651) 646-7871
 Toll Free #: _____
 Fax #: (651) 641-0216

Email Address: nlckkeys@keyswell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$3,800.00	LS	\$3,800.00
2	Shop Time for Cleaning & Repairing Pump	\$80.00	HR	\$1,600.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$350.00	up to 18	\$6,300.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$250.00	up to 2	\$500.00
5	Sand blasting pipe and epoxy painting pipe	\$15.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$480.00	LS	\$480.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$300.00	3 needed	\$900.00
8	Reassemble Bowl	\$80.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$80.00	HR	Unknown
10	Install Level Monitor Tube	\$1.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,400.00	LS	\$1,400.00
12	Cost for & Install New Transducer	\$1,200.00	LS	\$1,200.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,500.00	LS	\$1,500.00

14		<u>\$240.00</u>	HR	<u>\$240.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$2,000.00</u>	LS	<u>\$2,000.00</u>
16	Bailing	<u>\$150.00</u>	HR	<u>Unknown</u>
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$475.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$160.00	up to 18	\$2,880.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$115.00	up to 2	<u>\$230.00</u>
20	Furnish Bowl Shaft – 1-1/2" diameter	\$400.00	EA	\$400.00
21	Replace 8"x10 tail pipe .322 wall	\$250.00	EA	\$250.00
22	Replace Base shaft	\$400.00	EA	\$400.00
23	Vibration Test pre & post	\$120.00	LS	\$120.00
24	Repair Cement motor base	\$80.00	HR	Unknown
25	Miscellaneous items	\$100.00		\$100.00
26	Others "Furnish brass spider with insert"	\$100.00		\$100.00
	Warranty - Be specific		18months from date of install or 1 year from date of start up, Parts & Labor	
		High Total		\$25,065.00

Price quote for:

Well # 2 Rehabilitation

City

**of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: Keys Well Drilling Co
 Contact Person: _____
 Street Address: 1156 Homer Street
 P.O. Box: _____
 City, State, Zip: Saint Paul, MN 55116-3232
 Phone #: (651) 646-7871
 Toll Free #: _____
 Fax #: (651) 641-0216
 Email Address: nckkcoys@keyswoll.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$3,800.00	LS	\$3,800.00
2	Shop Time for Cleaning & Repairing Pump	\$80.00	HR	\$1,600.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$350.00	up to 18	\$0.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$250.00	up to 2	\$0.00
5	Sand blasting pipe and epoxy painting pipe	\$15.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$480.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Bach Stage	\$300.00	3 needed	\$0.00
8	Reassemble Bowl	\$80.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$80.00	HR	Unknown
10	Install Level Monitor Tube	\$1.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,400.00	LS	\$1,400.00
12	Cost for & Install New Transducer	\$1,200.00	LS	\$1,200.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,500.00	LS	\$1,500.00

14		<u>\$240.00</u>	HR	<u>\$240.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$2,000.00</u>	LS	<u>\$2,000.00</u>
16	Bailing	\$150.00	HR	Unknown
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$0.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$160.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$115.00	up to 2	\$0.00
20	Furnish Bowl Shaft - 1-1/2" diameter	\$400.00	EA	\$0.00
21	Replace 8"x10 tail pipe .322 wall	\$250.00	EA	\$0.00
22	Replace Base shaft	\$400.00	EA	\$0.00
23	Vibration Test pre & post	\$120.00	LS	\$120.00
24	Repair Cement motor base	\$80.00	HR	Unknown
25	Miscellaneous items	\$100.00		\$100.00
26	Others "Furnish brass spider with insert"	\$100.00		\$100.00
	Warranty - Be specific		18months from date of install or 1 year from date of start up, Parts & Labor	
		Low Total		\$12,250.00
		High Total		\$25,065.00
		Avg.		\$18,657.50

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: **MARK J TRAUT WELLS, INC.**
 Contact Person: **JOE TRAUT**
 Street Address: **141 28TH AVE SOUTH**
 P.O. Box:
 City, State, Zip: **WAITE PARK, MN 56387**
 Phone #: **320-251-5090**
 Toll Free #:
 Fax #: **320-259-0594**
 Email Address: **jtraut@lrautwells.com**

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$4,800.00	LS	\$4,800.00
2	Shop Time for Cleaning & Repairing Pump	\$80.00	HR	\$1,600.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$500.00	up to 18	\$9,000.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$350.00	up to 2	\$700.00
5	Sand blasting pipe and epoxy painting pipe	\$115.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$750.00	LS	\$750.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$400.00	3 needed	\$1,200.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$115.00	HR	Unknown
10	Install Level Monitor Tube	\$2.00	190 LF	\$380.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,300.00	LS	\$1,300.00
12	Cost for & Install New Transducer	\$2,700.00	LS	\$2,700.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$8,500.00	LS	\$8,500.00

14	Clean Screen Using High Velocity Jet	<u>\$375.00</u>	HR	<u>\$375.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$2,500.00</u>	LS	<u>\$2,500.00</u>
16	Bailing	<u>\$250.00</u>	HR	<u>Unknown</u>
17	Furnish & Install rubber Line shaft bearings	\$35.00	19 needed	\$665.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$350.00	up to 18	\$6,300.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$250.00	up to 2	<u>\$500.00</u>
20	Furnish Bowl Shaft – 1-1/2" diameter	\$475.00	EA	\$475.00
21	Replace 8"x10 tail pipe .322 wall	\$250.00	EA	\$250.00
22	Replace Base shaft	\$475.00	EA	\$475.00
23	Vibration Test pre & post	\$325.00	LS	\$325.00
24	Repair Cement motor base	\$195.00	HR	Unknown
25	Miscellaneous Items	\$400.00		\$400.00
26	Others	\$400.00		\$400.00
	Warranty - Be specific			
			1 YEAR AFTER REINSTALLATION	
		High Total		\$43,595.00

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: MARK J TRAUT WELLS, INC.
 Contact Person: JOE TRAUT
 Street Address: 141 28TH AVE SOUTH
 P.O. Box: _____
 City, State, Zip: WAITE PARK, MN 56387
 Phone #: 320-251-5090
 Toll Free #: _____
 Fax #: 320-259-0594
 Email Address: joeltraut@trautwells.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$4,800.00	LS	\$4,800.00
2	Shop Time for Cleaning & Repairing Pump	\$80.00	HR	\$1,600.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$500.00	up to 18	\$0.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$350.00	up to 2	\$0.00
5	Sand blasting pipe and epoxy painting pipe	\$115.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$750.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$400.00	3 needed	\$0.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$115.00	HR	Unknown
10	Install Level Monitor Tube	\$2.00	190 LF	\$380.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,300.00	LS	\$1,300.00
12	Cost for & Install New Transducer	\$2,700.00	LS	\$2,700.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$8,500.00	LS	\$8,500.00

14	Clean Screen Using High Velocity Jet	<u>\$375.00</u>	HR	<u>\$375.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$2,500.00</u>	LS	<u>\$2,500.00</u>
16	Bailing	\$250.00	HR	Unknown
17	Furnish & Install rubber Line shaft bearings	\$35.00	19 needed	\$0.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$350.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$250.00	up to 2	\$0.00
20	Furnish Bowl Shaft - 1-1/2" diameter	\$475.00	EA	\$0.00
21	Replace 8"x10 tall pipe .322 wall	\$250.00	EA	\$0.00
22	Replace Base shaft	\$475.00	EA	\$0.00
23	Vibration Test pre & post	\$325.00	LS	\$325.00
24	Repair Cement motor base	\$195.00	HR	Unknown
25	Miscellaneous items	\$400.00		\$400.00
26	Others	\$400.00		\$400.00

Warranty - Be specific

1 YEAR AFTER REINSTALLATION

Low Total	\$23,280.00
High Total	\$43,595.00
Avg.	\$33,437.50

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: McCarthy Wells
 Contact Person: Tim McCarthy
 Street Address: 590 Citation Dr - Suite 1
 P.O. Box: _____
 City, State, Zip: Shakopee, MN. 55379
 Phone #: (952) 854-5333
 Toll Free #: _____
 Fax #: (952) 445-1950
 Email Address: tim@mccarthyywell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,200.00	LS	\$6,200.00
2	Shop Time for Cleaning & Repairing Pump	\$95.00	HR	\$2,375.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$384.00	up to 18	\$6,912.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$270.00	up to 2	\$540.00
5	Sand blasting pipe and epoxy painting pipe	\$0.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$0.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage "F&I 8" brass spider w/insert"	\$103.00	3 needed	\$309.00
8	Reassemble Bowl	\$0.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$0.00	HR	Unknown
10	Install Level Monitor Tube	\$0.00	190 LF	\$0.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$0.00	LS	\$0.00
12	Cost for & Install New Transducer	\$0.00	LS	\$0.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$0.00	LS	\$0.00

14	Clean Screen Using High Velocity Jet	<u>\$0.00</u>	HR	<u>\$0.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$0.00</u>	LS	<u>\$0.00</u>
16	Balling	<u>\$0.00</u>	HR	<u>Unknown</u>
17	Furnish & Install rubber Line shaft bearings	\$16.50	19 needed	\$313.50
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings	\$0.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$0.00	up to 2	<u>\$0.00</u>
20	Furnish Bowl Shaft – 1-1/2" diameter	\$575.00	EA	\$575.00
21	Replace 8"x10 tail pipe .322 wall	\$380.00	EA	\$380.00
22	Replace Base shaft "head shaft"	\$575.00	EA	\$575.00
23	Vibration Test pre & post	\$0.00	LS	\$0.00
24	Repair Cement motor base	\$0.00	HR	Unknown
	F&I bronze wear ring	\$144.00	EA	\$144.00
25	Miscellaneous items	\$120.00		\$120.00
	F&I line shaft couplings	\$22.00	EA	\$22.00
26	Others	\$0.00		\$0.00

Warranty - Be specific

1 YEAR AFTER REINSTALLATION

High Total \$18,465.50

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: McCarthy Wells
 Contact Person: Tim McCarthy
 Street Address: 590 Citation Dr - Suite 1
 P.O. Box: _____
 City, State, Zip: Shakopee, MN, 55379
 Phone #: (952) 854-5333
 Toll Free #: _____
 Fax #: (952) 445-1950
 Email Address: tlm@mccarthywell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,200.00	LS	\$6,200.00
2	Shop Time for Cleaning & Repairing Pump	\$95.00	HR	\$2,375.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$384.00	up to 18	\$0.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$270.00	up to 2	\$0.00
5	Sand blasting pipe and epoxy painting pipe	\$0.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$0.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage "F&I 8" brass spider w/insert"	\$103.00	3 needed	\$0.00
8	Reassemble Bowl	\$0.00	HR	Unknown
9	Paint Column, Bowl & Motor	\$0.00	HR	Unknown
10	Install Level Monitor Tube	\$0.00	190 LF	\$0.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$0.00	LS	\$0.00
12	Cost for & Install New Transducer	\$0.00	LS	\$0.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$0.00	LS	\$0.00

14	Clean Screen Using High Velocity Jet	\$0.00	HR	\$0.00
15	Wire Brush Interior Surface of Well Casing	\$0.00	LS	\$0.00
16	Bailing	\$0.00	HR	Unknown
17	Furnish & Install rubber Line shaft bearings	\$16.50	19 needed	\$0.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$0.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$0.00	up to 2	\$0.00
20	Furnish Bowl Shaft -- 1-1/2" diameter	\$575.00	EA	\$0.00
21	Replace 8"x10 tail pipe .322 wall	\$380.00	EA	\$0.00
22	Replace Base shaft "head shaft"	\$575.00	EA	\$0.00
23	Vibration Test pre & post	\$0.00	LS	\$0.00
24	Repair Cement motor base	\$0.00	HR	Unknown
	F&I bronze wear ring	\$144.00	EA	\$144.00
25	Miscellaneous items	\$120.00		\$120.00
	F&I line shaft couplings	\$22.00	EA	\$22.00
26	Others	\$0.00		\$0.00

Warranty - Be specific

1 YEAR AFTER REINSTALLATION

Low Total	\$8,861.00
High Total	\$18,465.50
Avg.	\$13,663.25

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: Thein Well Company
 Contact Person: Zack Thein
 Street Address: 11355 Hwy 71 NE
 P.O. Box: _____
 City, State, Zip: Spicer, MN 56288
 Phone #: (320) 796-2111
 Toll Free #: _____
 Fax #: 320-796-2114
 Email Address: zack@thoinwell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,500.00	LS	\$6,500.00
2	Shop Time for Cleaning & Repairing Pump	\$85.00	HR	\$850.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$410.00	up to 18	\$7,380.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$287.00	up to 2	\$574.00
5	Sand blasting pipe and epoxy painting pipe	\$85.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$250.00	LS	\$250.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$200.00	3 needed	\$600.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	included in # 6	HR	Unknown
10	Install Level Monitor Tube	\$190.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,000.00	LS	\$1,000.00
12	Cost for & Install New Transducer	\$1,500.00	LS	\$1,500.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,200.00	LS	\$1,200.00

14	Clean Screen Using High Velocity Jet	<u>\$265.00</u>	HR	<u>\$265.00</u>
15	Wire Brush Interior Surface of Well Casing	<u>\$265.00</u>	LS	<u>\$265.00</u>
16	Bailing	<u>\$265.00</u>	HR	<u>Unknown</u>
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$475.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$185.00	up to 18	\$3,330.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$129.00	up to 2	<u>\$258.00</u>
20	Furnish Bowl Shaft – 1-1/2" diameter	\$376.00	EA	\$376.00
21	Replace 8"x10 tail pipe .322 wall	\$395.00	EA	\$395.00
22	Replace Base shaft	\$400.00	EA	\$400.00
23	Vibration Test pre & post	\$100.00	LS	\$100.00
24	Repair Cement motor base	\$265.00	HR	Unknown
25	Miscellaneous items	\$750.00		\$750.00
26	Others	\$0.00		\$0.00
	Warranty - Be specific		1 YEAR AFTER REINSTALLATION	
		High Total		\$26,658.00

Price quote for:

**Well # 2 Rehabilitation
City of Tonka Bay
4901 MANITOU ROAD TONKA BAY, MN 55371**

Vendor Name: Thein Well Company
 Contact Person: Zack Thein
 Street Address: 11355 Hwy 71 NE
 P.O. Box: _____
 City, State, Zip: Spicer, MN 56288
 Phone #: (320) 796-2111
 Toll Free #: _____
 Fax #: 320-796-2114
 Email Address: zack@theinwell.com

Base Quote: *Pull up electric motor, pump base, column pipe and turbine pump. Inspect & provide written report repair and reassemble pump, straighten line shafts, and paint. Reinstall pump and motor and piping. Repair cement motor base as necessary.*

NO	Information Requested	Cost	Unit	Total
<i>all items are on as needed basis for repair some may not be needed</i>				
1	Remove & Reinstall Turbine Pump & Electric Motor	\$6,500.00	LS	\$6,500.00
2	Shop Time for Cleaning & Repairing Pump	\$85.00	HR	\$850.00
3	8"x 10' Schedule 40, T & Column Pipe With Coupling	\$410.00	up to 18	\$0.00
4	8"x 5' Schedule 40, T & Column Pipe With Coupling	\$287.00	up to 2	\$0.00
5	Sand blasting pipe and epoxy painting pipe	\$85.00	HR	Unknown
6	Furnish & Install Complete Set Of Bowl Bearings	\$250.00	LS	\$0.00
7	Machine Bowl, Furnish & Install Bronze Impeller Wear Ring at Each Stage	\$200.00	3 needed	\$0.00
8	Reassemble Bowl	\$85.00	HR	Unknown
9	Paint Column, Bowl & Motor	Included in # 6	HR	Unknown
10	Install Level Monitor Tube	\$190.00	190 LF	\$190.00
11	Television Inspection of Well w/Mobilization/Demobilization	\$1,000.00	LS	\$1,000.00
12	Cost for & Install New Transducer	\$1,500.00	LS	\$1,500.00
13	Transport to & Erect on The Job Site, A Well Rig With All Necessary Equipment, Tools & Materials For Cleaning The Screen Using High Velocity Jetting Procedure	\$1,200.00	LS	\$1,200.00

14	Clean Screen Using High Velocity Jet	\$265.00	HR	\$265.00
15	Wire Brush Interior Surface of Well Casing	\$265.00	LS	\$265.00
16	Bailing	\$265.00	HR	Unknown
17	Furnish & Install rubber Line shaft bearings	\$25.00	19 needed	\$0.00
18	Furnish line shaft 1-3/16" x 10 feet SS Alternates & couplings.	\$185.00	up to 18	\$0.00
19	Furnish line shaft 1-3/16" x 5 feet. SS Alternates & couplings.	\$129.00	up to 2	\$0.00
20	Furnish Bowl Shaft - 1-1/2" diameter	\$376.00	EA	\$0.00
21	Replace 8"x10 tail pipe .322 wall	\$395.00	EA	\$0.00
22	Replace Base shaft	\$400.00	EA	\$0.00
23	Vibration Test pre & post	\$100.00	LS	\$100.00
24	Repair Cement motor base	\$265.00	HR	Unknown
25	Miscellaneous items	\$750.00		\$750.00
26	Others	\$0.00		\$0.00

Warranty - Be specific

1 YEAR AFTER REINSTALLATION

Low Total	\$12,620.00
High Total	\$26,658.00
Avg.	\$19,639.00