

B2021-0531 Just Residence

From: Sam Maynard (smaynard@snwbuilders.com)

To: jdmillea@solanocounty.com

Cc:

Date: Friday, July 23, 2021, 03:53 PM PDT

Hello John,

I've attached the Just residence well potability and flow reports to this email. Please note: the flow test broke suction at 1 hour 10 minutes after flowing about 820 gallons which is 11.7 gallons/min at 60 psi. We realize this isn't the ideal 4-hour flow test that the county hopes to see but the Just's have a very powerful pump that is not suitable for very low variable speeds. As you can see from the report and doing the math there is sufficient water to protect the home during a fire and provide more than adequate water for drinking and home use. We hope this report is sufficient for the county's needs to satisfy plan check comments.

We submitted the septic leach field application earlier this week and now with this well report we are complete with plan check comments. Will you please confirm and let us know if the county requires any other information from us in order to obtain a building permit at this time.

Thank you,



Sam Maynard
Partner, SNW Builders, Inc.

D: 530-505-9139 | C: 707-410-7570 | smaynard@snwbuilders.com
Mail: PO Box 1164, Winters, CA 95694 | Office: 10 Abbey St., Winters, CA

www.linkedin.com/in/samuelkmaynard/

CONSTRUCTION | DESIGN | ENGINEERING



Well Report.pdf
1.4MB



Flow Results.pdf
1.8MB



Water Report.pdf
44.2kB

WELL INSPECTION REPORT

PROPERTY: 3974 Ciarlo Lane

DATE: 7/15/2021

Ordered By: Kendra Just

Eaton Job Number: 21786

Well Identification Or Location On Property: Domestic Well

This inspection reflects the visible condition of the pumping and related equipment at the time of the inspection only. Hidden or concealed defects cannot be included in this report.

No warranty is either expressed or implied. This report is neither an insurance policy nor a warranty service. The following is an opinion report, expressed as a result of the inspection.

Overall: The pump and related equipment appears to be constructed in a workmanlike manner, consistent with the local building trades and codes in affect at the time of construction, and has had average maintenance over the years.

However: The below mentioned item(s) will need attention either during the transaction process or soon thereafter*:

NOTES: During the inspection there was a few items that we noticed need to be replaced or added to the pumping system. A well vent needs to be added to the well seal and a pressure releif should be added to the discharge to protect the system if it over pressures. The tank also seems to have a ruptured bladder and should be replaced with a new one, also the pressure switch should be changed out since the contacts are burnt. We tried to get the depth of the well but we could not get our sounder past 280' in the well. We tried to perform a four hour flow test for fire protection but we were only able to run the pump for a hour an ten minutes before the pump broke suction. The pump produces a high volume of water under great pressure. We tried chocking back the pump to decrese the volume without harming any of the pumping equipment. We were only able to slow it down to 11.7 gallons per minute at 60psi.

COLIFORM WATER SAMPLE

The water was sampled and subsequently tested by Denele Analytical a registered California State Certified lab in Woodland, California. The water was tested for the presences or absence of coliform bacteria, and found to be negative for total coliform bacteria and negative for E. coli bacteria.

(See Denele Analytical Water Test Report)

NITRATE WATER SAMPLE

The water was sampled and subsequently tested by Denele Analytical a registered California State Certified lab in Woodland, California. The Nitrate water test indicates 1.10 mg/L and the state has set a Maximum Contaminant Level (MCL) of 10 mg/L.

(See Denele Analytical Water Test Report and Nitrate Fact Sheet)

WELL DATA

Motor			
HP:	1.5	Hp	
Volt:	230	V	
Panel:	Control Box		
Phase:	1	ph	
Wire Size: #	10		
Running Amps:	11.2, 10.5		
Running Volts:	239		
Max amps:	11.6		
Pressure Switch:	Square D		
On PSI:	40		
Off PSI:	60		
Pump Make:	Grundfos 16S15-14		
Motor Make:	Grundfos		
Tank:	119 Gallon Bladder Tank		

STATIC WATER LEVEL: 208'

PUMPING RATE: 19.4 GPM Open Flow

17.7 GPM at 40 PSI Back Pressure

PUMPING LEVEL: 228' Open Flow

248' GPM at 40 PSI Back Pressure

PUMP SETTING: 262'

CASING DIAMETER: 5" STEEL or PVC

WELL DEPTH: Unable To Obtain**PHYSICAL PROPERTIES OF WATER****COLOR:** Clear**ODOR/SMELL:** None**EQUIPMENT OVERVIEW**

	Installed	Condition	Comments
<u>Sanitary Well Seal:</u>	Yes	Fair	
<u>Back Flow Preventer:</u>	Yes	Fair	Old But Works
<u>Pressure Switch:</u>	Yes	Poor	Burnt Contacts
<u>Pressure Gauge:</u>	Yes	Fair	
<u>Pressure Relief:</u>	No	N/A	Should Be Installed
<u>Air Vent:</u>	No	N/A	Should Be Installed
<u>Bleed Back Valve:</u>	N/A	N/A	
<u>Air Volume Control:</u>	N/A	N/A	
<u>Panel:</u>	Yes	Fair	Grundfo Control Box
<u>Sand Separator or Filter:</u>	N/A	N/A	
<u>Low Flow Protection:</u>	N/A	N/A	
<u>Plumbing Equipment:</u>	Yes	Fair	1-1/4"
<u>Concrete Pad:</u>	Yes	Fair	84"x84"
<u>Bacteriological Filtration:</u>	N/A	N/A	

Installation Key

Yes = Installed and Operable

No = Not Installed or

Present but Non-Operable

Condition Key

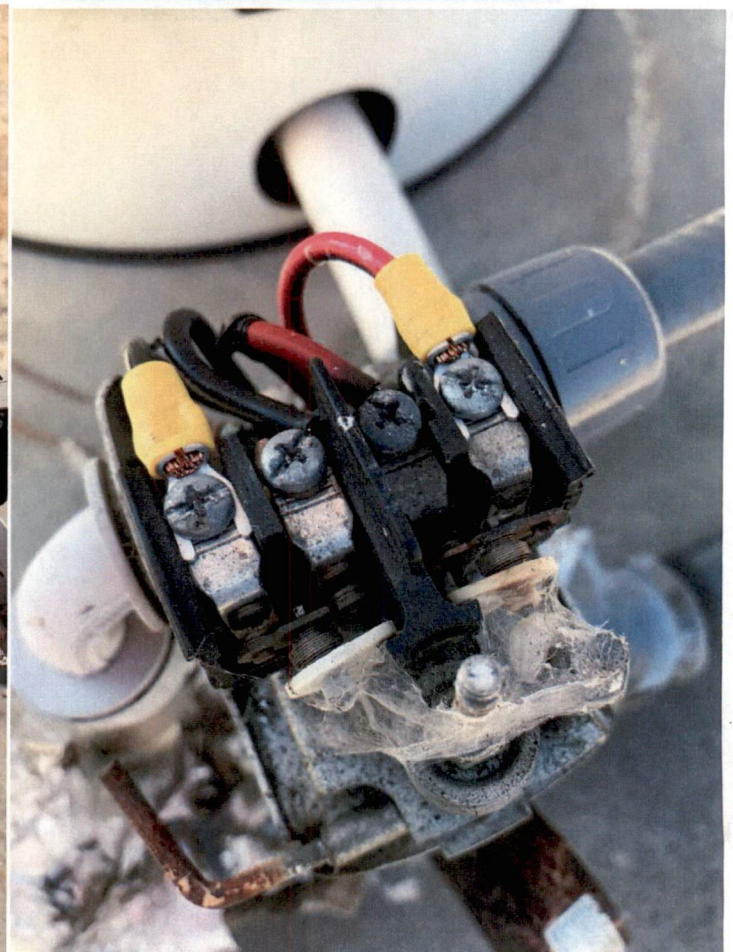
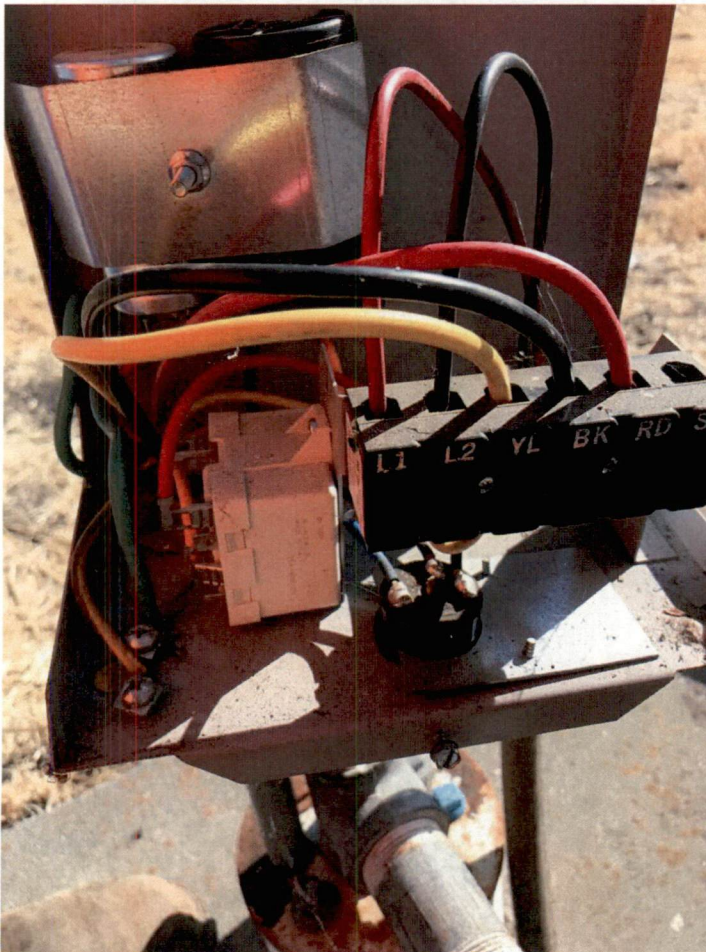
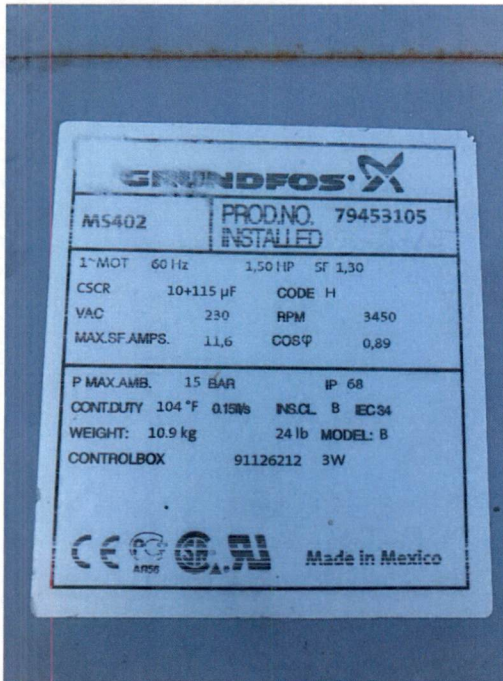
Good = Excellent or New

Fair = Serviceable but may show

signs of age and or normal use

Poor = Needs attention or may

not meet County or State Standards





The inspection report to be prepared for Client is solely and exclusively for the client's own information and may not be relied upon by any other person. Client agrees to maintain the confidentiality of the inspection report and agrees not to disclose any part of it to any other person. Client may distribute copies of the inspection report to buyer and the real estate agent directly involved in the transaction.

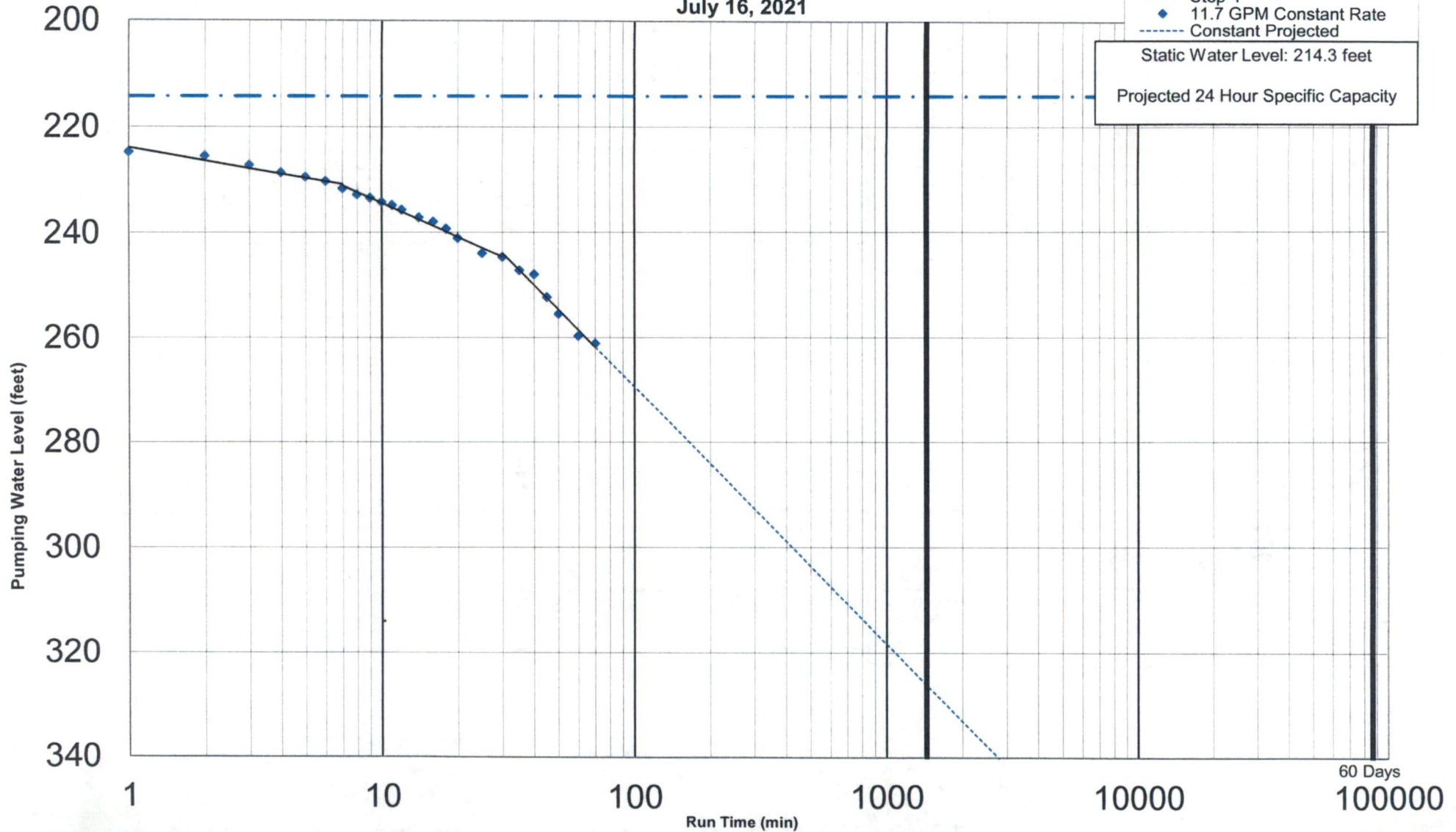
Thank you for choosing Eaton Pumps to perform a well inspection. If you have questions regarding this inspection report, please contact me at (530) 661-6737

Sincerely,

Joel Nafziger

Joel Nafziger

July 16, 2021





Static Water Level: 214.3 Feet								
Step Test Results								
GPM	PWL	Yield	24 Hr Projected		\$/kW H: \$0.15		Sand	Notes
			PWL	Yield	HP Motor	\$/Acre Ft		
Constant Rate Test Results								
11.7	261.17	0.2	326.09	0.1	2	\$103.88	0.0 ppm	

Job Name:	Kendra Just
Job Number:	21786
Well Number:	0
Testing Dates:	July 16, 2021 - July 16, 2021

Constant Rate	
SWL: 214.3	
11.7	GPM
1	224.75
2	225.5
3	227.17
4	228.58
5	229.42
6	230.25
7	231.67
8	232.83
9	233.42
10	234.25
11	234.83
12	235.75
14	237.17
16	238
18	239.33
20	241.08
25	243.92
30	244.67
35	247.25
40	248
45	252.33
50	255.58
60	259.75
70	261.17

Projected 24 Hour Specific Capacity	
11.7 Constant Rate	0.1 gpm/ft dd
Step	gpm/ft dd
Step	gpm/ft dd
Step	gpm/ft dd
Step	gpm/ft dd

[illegible]

Step Test Results			
Static Water Level		:	<u>214.3</u>
	GPM		GPM
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
14		14	
16		16	
18		18	
20		20	
25		25	
30		30	
35		35	
40		40	
45		45	
50		50	
60		60	
70		70	
80		80	
90		90	
100		100	
120		120	



10 West Kentucky Ave.
Woodland, CA 95695
530-661-6737

Invoice

Date	Invoice #
11/7/2022	25823

Bill To
KENDRA JUST 3974 CIARLO LANE VACAVILLE, CA 95688

P.O. No.	Terms	Project
	DUE ON RECEIPT	22727

Quantity	Description	Rate	Amount
	MATERIALS		
1	1-1/2HP 230V 1PH MOTOR	907.53	907.53T
1	1-1/2HP 16GPM PUMP END 16S15-14	895.75	895.75T
3	1-1/4" SCH120 x 20' PVC PIPE	85.09	255.27T
305	10/3 FLAT JACKET SUBMERSIBLE WIRE (FT)	2.82	860.10T
1	CONTROL BOX 1-1/2HP 230V	189.71	189.71T
10	1-1/4" GALV COUPLING	6.46	64.60T
1	1-1/4" x 12" BRASS NIPPLE	50.40	50.40T
2	1-1/4" 80BE CHECK VALVE VFD	89.87	179.74T
1	WIRE SPLICE KIT 10-12-14	4.91	4.91T
1	5" x 1-1/4" WELL SEAL	54.00	54.00T
1	WELL SEAL VENT	19.25	19.25T
1	WELL SEAL VENT ASSEMBLY	88.65	88.65T
1	PRESSURE SWITCH 40/60PSI	26.50	26.50T
6	1-1/4" SS DROP PIPE COUPLER	17.19	103.14T
2.5	SERVICE CALL, INSPECT PUMP AND FOUND BAD MOTOR	135.00	337.50
4.5	REMOVE/INSTALL PUMP, EXTEND PUMP, RUN PUMP TO TEST	250.00	1,125.00
	OLD PUMP SETTING : 280' NEW PUMP SETTING: 302'		

Paid ck# 1156 mailed 2/28

SALES TAX (7.25%) \$268.22

Total \$5,430.27

WE ACCEPT VISA & MASTERCARD DEBIT/CREDIT CARDS AS PAYMENT
A 3% CONVENIENCE FEE WILL BE ADDED TO AN INVOICE TOTAL GREATER THAN \$5000.

A finance charge of 0.83% per month will be charged on all past due balances in excess of 30 days.

Hello,

We apologize this has taken us a while to pay and we thank you for your patience with us.

When our new pump was installed it did not turn on as well. Come to find out it was an electrical problem all the way up by our house. PG & E had knicked a wire when they were installing our new lines/poles which was causing a short all the way down to the well. To get the new pump that you installed we had to have an electrician come out and fix the wiring.

I guess my question to you would be on the service call, an inspection of our pump was done, a determination was made that the motor was bad. Was it indeed bad or was it just an electrical problem?

The reason why I am asking is because we are going to be asking PG&E to pay for our new pump and need a little info from you. It only seems reasonable that they should ultimately have to pay for it.

Thank you, Kendra & Brian Just



Denele Analytical, Inc.

1232 South Ave. Turlock, CA 95380

Phone (209) 634-9055 - Fax (209) 634-9057

www.denelelabs.com

Sample Analysis Report

Customer

Eaton Pumps
10 W. Kentucky Ave.
Woodland, CA 95695

Grower**PCA:**

PURCHASE ORDER: 21786

RECEIVED DATE: 7/15/21 1:12 PM

SUBMITTED BY: M. Ydiarte

ANALYZED DATE: 7/16/21

Water Potability Test - P/A (WPT-P/A)

SOURCE: Clear Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
3974 Ciarlo Lane	W1196004A	Nitrate Nitrogen (NO3-N)	EPA 353.2	1.10	mg/L
		Total Coliform (TC)	SM 9223 B (Colilert)	Absent	CFU/100mL
		Escherichia Coli (E Coli)	SM 9223 B (Colilert)	Absent	CFU/100mL

Laboratory Quality Control	LCS %	MS %	MSD %	RPD %
----------------------------	-------	------	-------	-------

The warranty of Denele Analytical is limited to the accuracy of the analyses of the samples as received. Denele Analytical assumes no responsibility for which the customer uses our test results, nor liability for any other warranties, express or implied. These terms and conditions shall supercede any conflicting terms and conditions submitted on customer purchase orders or other forms submitted for work.



10 West Kentucky Ave.
Woodland, CA 95695
530-661-6737

Invoice

Date	Invoice #
7/22/2021	23880

Bill To
KENDRA JUST

P.O. No.	Terms	Project
	DUE ON RECEIPT	21786-K JUST/ RE I...

Quantity	Description	Rate	Amount
1	WELL INSPECTION, WATER NITRATE & BACTERIOLOGY ANALYSIS	500.00	500.00
1	FIRE SUPPRESSION FLOW TEST	500.00	500.00
JOB LOCATION: 3974 CIARLO LANE			

	SALES TAX (7.25%)	\$0.00
	Total	\$1,000.00

WE NOW ACCEPT VISA & MASTERCARD DEBIT/CREDIT CARDS AS PAYMENT
A 3% CONVENIENCE FEE WILL BE ADDED TO AN INVOICE TOTAL GREATER THAN \$5000.

A finance charge of 0.83% per month will be charged on all past due balances in excess of 30 days.

Well
Pump Installation
2015

Worsham's Pump Company
4844 Cole Road
Vacaville, CA
95688-9618

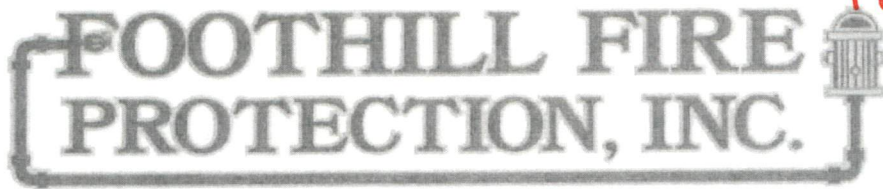
707-448-5904

Brian Just
3974 Ciarlo Lane
Vacaville, CA 95688

DATE	INVOICE #
3/2/2015	150304

Please put the
Invoice Number on
your check

		TERMS	Phone
		As Contracted	317-3736
QUANTITY	DESCRIPTION	RATE	AMOUNT
1	10S15-21 Submersible Pump	1,556.00	1,556.00T
1	1.5 Hp Control Box	133.00	133.00T
1	splice kit, tape, fittings and pipe dope	180.00	180.00T
9	1.25" Threaded Schedule 120 Coupling	2.60	23.40T
205	#10 x 3 Flat Jacketed Wire	2.83	580.15T
1	1.25" 80E Check Valve	52.00	52.00T
	Material Subtotal		2,524.55
4	Labor	135.00	540.00
A Finance charge of 1.5 % per month will be charged on past due accounts.		Sales Tax (7.625%)	\$192.50
		Total	\$3,257.05
		Payments/Credits	-\$3,257.05
		Balance Due	\$0.00



FIELD COPY

DESIGN • INSTALLATION • INSPECTION • REPAIR

Main Office: 4000 Alvis Court, Rocklin, CA 95677 • Phone: (916) 663-3582 / Fax: (916) 663-3583
Chico Office: 170 Erma Court, Chico, CA 95928 • Phone: (530) 826-3013 / Fax: (530) 893-3013
Greater Bay Office: 2150 Portola Ave, Suite D-108, Livermore, CA 94551 • Phone: (925) 209-6164
C.L.# C-16 783132

07/30/2021

Derek Frost
Foothill Fire Protection Inc.
4000 Alvis Ct.
Rocklin, CA. 95677
(916)663-3582

To: Solon County Building Department.
Job Name: Just Residence
Job Location: 3974 Ciarlo Lane.
City: Vacaville.
State: CA.
Zip: 95688
Permit # B2021-0531

To whom it may concern:

Foothill Fire is in receipt of the recent well flow test that was performed by Eaton Drilling on July 16, 2021. We have reviewed the data and find it to be insufficient to meet the fire demand. Foothill Fire has recommended a Talco Home Hydrant Pump and Tank system to meet the gpm. and psi. required. Foothill Fire Protection is under contract to do the design and installation on this project. The Home Hydrant will be part of the design and submitted along with spec sheets for the Talco HH4-150C. If you should have any questions, please feel free to contact me.

Sincerely,

Derek Frost
Residential Sales & Design.
Foothill Fire Protection Inc.