

# ALCORN PUMP



## WATER FILTRATION

WA License #'s (ALCORH824KJ) (ALCORPF825RP) (ALCORPF8259P)

AZ ROC License # 339937

Bonded and Insured

## WELL INSPECTION REPORT

**CUSTOMER NAME:**

██████████ - Buyer

██████████ - Agent

**INSPECTION DATE:**

2/26/2024

**PROPERTY ADDRESS:**

████████████████████  
████████████████████  
████████████████████

**INSPECTOR NAME:**

Josh Inman, CPI - Service Manager

# WATER SOURCE INFORMATION

SOURCE: DRILLED  OTHER  \_\_\_\_\_ Single Family Well  Shared Well  Community Well

WELLOG LOCATED ONLINE: YES  NO  IF SO, WELL ID: \_\_\_\_\_ WELL DEPTH: 205'

WELL LOCATION: Outside  Inside Pump House  Vault/Underground  Unknown  Other

GOOD ACCESS TO WELL HEAD: YES  NO  CASING TYPE & DIAMETER: Steel 8"

DISTANCE FROM POTENTIAL POLLUTION SOURCES: 100' +

WELL HEAD INFORMATION: CAP  SANITARY SEAL  VENTED? YES  NO  VERMIN PROOF? YES

NO  OVERALL CONDITION: GOOD  OPERABLE  NEEDS REPLACEMENT

**NOTES:** Roof of pump shed would have to be removed to replace the well pump. Barn/Irrigation well

# WELL PUMP AND CONTROL EQUIPMENT

TYPE OF SYSTEM: Submersible pump, Pressure tank, Control box

SUBMERSIBLE PUMP: YES  NO  LOCATION OF PUMP: In well

BRAND/MODEL: Unknown HP: 3 HP PHASE: Single

VOLTAGE: 230 MAX AMP: 17.0 RUNNING AMP: 18.6 PUMPING RATE: 10.5 GPM

OHMS VALUES: RY: 4.5 BY: 1.8 RB: 5.7 WIRE SIZE: # 10 Flat jacket

PUMP'S RUNNING DURATION FROM CUT IN TO CUT OUT: 7 seconds

GROUNDING? YES  NO  CONDITION: GOOD  OPERABLE  NEEDS REPLACEMENT

CONTROL BOX: YES  NO  BRAND: Franklin Electric

HP: 3 HP CONDITION: GOOD  OPERABLE  NEEDS REPLACEMENT

VFD CONTROLLER: YES  NO  BRAND: \_\_\_\_\_

HP: \_\_\_\_\_ CONDITION: GOOD  OPERABLE  NEEDS REPLACEMENT

## WELL PUMP AND CONTROLLER NOTES:

No contactor in control box. The ohms values are at the high end of the manufacture specs which is a sign of age and wear. Pump was constantly cycling on and off due to bad pressure tank.

Control box date code: 12/27/2002

Starting meter – 3681 Ending meter – 3786 Pump duration - 10 min Gallons pumped - 105

Average GPM – 10.5

## WATER STORAGE

**RESERVOIR:** YES  NO  **BURIED?** YES  NO  **TYPE:** \_\_\_\_\_

**QUANTITY:** \_\_\_\_\_ **SIZE:** \_\_\_\_\_ **LOCATION:** \_\_\_\_\_

**CONDITION:** GOOD  OPERABLE  NEEDS REPLACEMENT

**NOTES:**

No reservoir on site.

## BOOSTER PUMP AND CONTROL EQUIPMENT

**BOOSTER PUMP(s):** YES  NO  **LOCATION OF PUMP(s):** \_\_\_\_\_ **QTY:** \_\_\_\_\_

**WIRE SIZE:** \_\_\_\_\_ **BRAND/MODEL:** \_\_\_\_\_

**VOLTAGE:** \_\_\_\_\_ **MAX AMP:** \_\_\_\_\_ **RUNNING AMP:** \_\_\_\_\_ **PUMPING RATE:** \_\_\_\_\_

**OHMS VALUES:** RY: \_\_\_\_\_ BY: \_\_\_\_\_ RB: \_\_\_\_\_

**PUMP'S RUNNING DURATION FROM CUT IN TO CUT OUT:** \_\_\_\_\_

**GROUNDING?** YES  NO  **CONDITION:** GOOD  OPERABLE  NEEDS REPLACEMENT

**CONTROL BOX:** YES  NO  **QUANTITY:** \_\_\_\_\_ **BRAND:** \_\_\_\_\_

**HP** \_\_\_\_\_ **CONDITION:** GOOD  OPERABLE  NEEDS REPLACEMENT

**VFD CONTROLLER:** YES  NO  **QUANTITY:** \_\_\_\_\_ **BRAND:** \_\_\_\_\_

**HP:** \_\_\_\_\_ **CONDITION:** GOOD  OPERABLE  NEEDS REPLACEMENT

**NOTES:**

No booster system on site.

## PRESSURE TANK/'S

PRESSURE TANK/'S: YES  NO  NUMBER OF TANKS: 1  2  3  4  5

MAKE: Amtrol Proline TYPE: Diaphram GOOD ACCESS? YES  NO

LOCATION: Pump shed DATE CODE: 12/27/2002

SIZE: 86 Gallon PSI: 0 BURIED? YES  NO

PRESSURE SWITCH: Square D RANGE: 30-50 PSI SENSOR: N/A

CONDITION: GOOD  OPERABLE  NEEDS REPLACEMENT

### NOTES:

Pressure tank is water logged

Pressure switch has burnt electrical contacts

Pressure gauge is broken

## PLUMBING AND ELECTRICAL

WIRING FROM C/B TO TOP OF WELL HEAD IS? # 10 Flat jacket

WIRING FROM TOP OF WELL HEAD DOWN TO MOTOR? # 10 Submersible Flat jacket

IS THERE A PUMP HOUSE? YES  NO  NOTES: Pressure tank and Control box in pump shed

IS WIRING UP TO CODE? YES  NO

CONDITION OF WIRING: GOOD  OPERABLE  NEEDS REPLACEMENT

IS WIRING IN CONDUIT? YES  NO  IS WIRING SAFE? YES  NO

IS PLUMBING UP TO CODE? YES  NO

CONDITION OF PLUMBING: GOOD  OPERABLE  NEEDS REPLACEMENT

### NOTES:

3/4 PVC SCH 40 plumbing inside of pump shed shows of age (discolored)

# FILTRATION AND WATER TESTING

IS THERE CURRENT FILTRATION EQUIPMENT? YES  NO

BRAND: \_\_\_\_\_ TYPE: \_\_\_\_\_

SIZE? \_\_\_\_\_ APPROX. AGE: \_\_\_\_\_

CONDITION OF FILTRATION: GOOD  OPERABLE  NEEDS REPLACEMENT

## NOTES:

No Filtration equipment

## FIELD WATER TESTING PERFORMED BY INSPECTOR

### Raw H2O Mineral Test

### Treated H2O Mineral Test

### Good Operational H2O Parameters

7.8 PH

\_\_\_\_\_ PH

PH 6.8-7.8

ND Iron

\_\_\_\_\_ Iron

Iron 0.5 ppm

12 Grains Hard

\_\_\_\_\_ Grains Hard

Hardness Soft – 3 Grains

N/A TDS

\_\_\_\_\_ TDS

## LABORATORY TESTING

WATER SAMPLES TAKEN BY ALCORN PUMP & SENT TO THE LAB: YES  NO  \_\_\_\_\_

WERE SAMPLES TAKEN POST FILTRATION? YES  \_\_\_\_\_ NO  \_\_\_\_\_

SAMPLES WERE TAKEN AT/FROM: Mineral testing at yard hydrant outside of pump shed

TAKEN TYPE: BACTERIA  ARSENIC  NITRATE  LEAD  OTHER  : \_\_\_\_\_

**THE WATER SAMPLES TAKEN HAVE BEEN SUBMITTED TO THE LAB, PLEASE NOTE WE ARE THE THIRD-PARTY HANDLER & WATER SAMPLES CAN TAKE 7-10 BUSINESS DAYS BEFORE RECEIVED BACK FROM THE LAB! ONCE THE RESULTS ARE RECEIVED BACK, WE WILL FORWARD THOSE OVER VIA EMAIL ONCE THE INVOICE IS PAID AND SAMPLES HAVE BEEN REVIEWED.**

### NOTES ON WATER TESTING:

The EPA does not regulate private wells, private well owners are responsible for the safety of their water source:  
<https://www.epa.gov/private-wells>

## SUMMARY

### SUMMARY OF THE WELL INSPECTION AS FOLLOWS:

The well and pump related equipment are located behind the barn in a separate shed. Water is pumped by a submersible pump in the well up to the pressure tank located in the shed. Water leaves the pump shed in a single 3/4" Sch 40 PVC waterline.

The well pump shows signs of wear and age in both the electrical ohms values of the motor windings and in the running amperage. The ohms values are at the high end of manufacture specs and the running amperage exceeds maximum manufacture specs. The pressure tank has no air in it and is waterlogged which causes the well pump to cycle on and off during use far more than it should which is putting additional wear and tear on the well pump. The pressure switch has a lot of carbon build up on the electrical contacts and is not sized appropriately for this well pump system and its components. Also noted, the pressure gauge is not functioning properly. As seen in the pictures the electrical wiring inside of the pump shed is not in conduit.

## RECOMMENDATIONS

With every water well system we recommend Annual Well Service and safety checks. Servicing your water system each year will help extend the lifespan of your well pump equipment.

Alcorn Pump recommends that private well owners test their drinking water each year. Contaminants can change and these contaminants rapidly could affect a person's health. Visit the Department of Health for a list of what you should test for and when. [WWW.AZDHS.GOV](http://WWW.AZDHS.GOV)

### **Other specific recommendations are as followed, and estimates may be available upon request:**

- 1) While the system is operating at this time it is recommended that the well pump, pump control box, pressure tank, pressure switch and pressure gauge be replaced.

This Report is not to be used to determine compliance with any regulations, laws, or rules. Its sole purpose is to attempt to evaluate the operating performance of the well and pump(s) at the time of inspection. Anything can change at a moment's notice.

# PHOTOS



Well head Pressure tank and Control box



Control box



Pressure tank date code sticker



Well head





Running amperage of well pump



Pressure switch



Pump Flow test at yard hydrant