LOG OF REPAIR PROCESS

Wednesday, 07-12-23:
Pump failed, tripping breaker
Replaced Start Capacitor with new from AZCA ($**58**)
Replaced Control Box with new SEI from AZCA ($**510**)
NO FIX — 50 amp breaker breaks immediately upon applying power.

Thursday, 07-13-23:
Sourced company to pull pump and replace with new
Chuck Poorbaugh, Yuma Drilling, referred Precision Electric, Yuma, to remove pump
Precision said they'd be onsite Monday morning, the 17th, but couldn't source a new pump until Wednesday the 19th.
Found Viking Pump Svc in Litchfield Park, AZ for new pump

Friday, 07-14-23:
Drove to Litchfield Park to meet BJ, Viking Pump Svc, purchase new pump/motor ≈ $**3,500**
New Pump: *Goulds 18GS50 with Franklin 5hp motor.*
Upgraded Control Box, adding Contactor

Monday, 07-17-23:
Tony & Axcel of Precision showed up at 0600 hrs to pull the pump. They advised us we needed to replace TWENTY sections of 21ft. 1-1/2" galvanized pipe and 100ft. new #4 cable before installing the new pump.
Provided we could source the required new pipe and cable, they could return next day, Tuesday morning, and continue installing the new pump-motor.
We purchased new pipe, two check valves and 100' cable from AZCA ($**3,000**), who was kind enough to deliver it Monday evening.

Tuesday, 07-18-23:
Stop Boomer going to town for water, work on waterline instead until well is repaired.
Precision Electric returned to complete the install.
Needed another "Splice Kit" for new cable, which Ann drove to and got from AZCA ($**35**)
After install, the problem persisted — tripping the 50-amp breaker.
Using Precision's bigger generator and measuring the AC current, the current draw was 58-amps…clearly bad.
Tested new Control Box on old motor and same result - high current, no spin (indicating bad motor, as diagnosed, OR — the unlikely — the NEW CONTROL BOX is bad.??)

Wednesday, 07-19-23:
Paid Precision Electric for services ($**3,360**)

Break from task for return to San Diego. (Jack & Jodie)

Tuesday, 07-25-23:
Picked up **second**, new Control Box from AZCA @ 1100 hrs. (Flint & Walling Model 025244, 5-hp, 230 volt, SinglePhase)

Prepared the second, new Control Box for installation

Wednesday, 07-26-23:
Installed **second**, new Control Box… and pump works.
Switched the **second**, new Control Box with the first, new Control Box and pump trips 50-amp breaker, as before.
Switched back to the **second**, new Control Box and the pump works. Testing the flow = 18 GPM.

Thursday, 07-27-23:
FINAL TEST: Test the good, **second,** new Control Box on the old motor.
Result: CONFIRMED — The old pump motor was not defective after all.
Conclusive, the first new Control Box (SEI) was not able to run the 5 hp pump motor.

TOTAL COST OF REPAIR SO FAR IS: $10,463.
(Not counting the cost of labor, and travel, and the damage caused by delays in the project.)

NOTEs: When the pump was pulled, Tony said it was placed at 560 ft. Static water level was 495 ft.
315 ft of 1-1/2" galvanized pipe was replaced, and 105 ft. of new, additional pipe was added, so now, pump is set at 665 ft.

JK

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