SARGENT IRRIGATION CO.

Efficiency Test Report

Electric Motor

Name Joe Schram Address Legal NE 27-10-43 Sedgwick Co.

Lattitude: 40 ° 49 ' 09.0 " Longitude: 102 ° 07 ' 00.4 "

Elevation Date 10/26/2022

Well Depth: Casing Dia: Yr.Inst.: Bowls: 8-12RL

Pump Mfg. Verti-Line SN: GR09C084 Col: 340 ft. 8 5/8 x 2 1/2 x 1 1/2

Drive Mfg.: Newman HP: 125 SN: 520256840 Ratio:

Sprinkler: Reinke Type: Nozzled for: GPM@ PSI:

Static Water Level: 227

	Pump RPM		PSI	x	2.31	=	ft.	+	Pumping Level	+	Pump Loss	=	Total Hd. Ft	x	Flow GPM	/	3960	=	Water HP
1	1781		65	x	2.31	=	150.2	+	281	+	10.5	=	441.6	x	813	/	3960	=	90.7
2				x	2.31	=	0	+		+		=		x		/	3960	=	
3				x	2.31	=	0	+		+		=		x		/	3960	=	

Electric 3 Phase: Meter# Meter Multiplier Frame # R405TP/DD3722PB

Full Load Amps 155.0 Volts w/Motor Off 494 Rated RPM: 1770

	KWH/h	/	0.746	=	Hook UP Horse Power
1	0	/	0.746	=	
2	0	/	0.746	=	
3	0	/	0.746	=	

	Volts	x	AMPS	x	1.732	/	1000	x	Power Factor	=	KWH/H	=	1.34	x	Efficiency Factor	-	Thrust Loss	=	Pump HP
1	484	x	151	x	1.732	/	1000	x	82	=	104.3	=	1.34	x	0.91	-		=	127.2
2		x		x	1.732	/	1000	x		=		=	1.34	x		-		=	
3		x		x	1.732	/	1000	x		=		=	1.34	x		-		=	

Pump Efficiency:

	Water HP	/	Pump HP	=	Pump Efficiency
1	90.7	/	127	=	71.3 %
2	0	/	0	=	0 %
3	0	/	0	=	0 %

Bowl Efficiency:

	Pump HP	-	Lineshaft Loss	=	Bowl HP	Water HP	-	Bowl HP	=	Efficiency
1	127.2	-	4	=	123.2	90.7	-	123.2	=	73.6
2		-		=			-		=	
3		-		=			-		=	

Comments:

1 well runs 2 pivots, 1 at a time, ran through east circle

PSI at well

Pump sounds ok/no vibration

Motor sounds ok/no vibration

Approx. 300' of 8" underground

Pivot off/ end gun off

043009