

Method of Determination:

3. _____ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
 _____ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
 _____ Aerial Photo Attached (required for irrigation of 10+ acres).
 _____ Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
Well #1and 2	Franklin Electric	10	2822029310	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements:

E. FLOW CALCULATIONS

Measured Method:

_____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: 1.2 x 49 homes because it includes irrigation.

G. NARRATIVE/REMARKS/COMMENTS

Information from DEQ. 10HP pump for each well and design capacity is 106gpm per well.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.620 CFS	58.80 AF
<u>Totals:</u>		0.620 CFS	58.80 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Keith Wilson Date _____

Reviewer _____ Date _____

Type	WR #	Owner	Source	TRS	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total
Right	25 7089	DON H BINGHAM,	GROUND	103N38E22					2												2
Right	25 12908	TONY L FREEMAN, PENNIE J F	GROUND	103N38E22					X												0
Right	25 12908	TONY L FREEMAN, PENNIE J F	GROUND	103N38E22					X												0
Right	25 12542	KIM B WALKER, LINDA C WALK	GROUND	103N38E22					X												0
Right	25 13605	DORIS RICKS, MICHAEL RICKS	GROUND	103N38E22					X												0
Rec	1 248	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10290	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10201	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10202	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10203	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10503	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Rec	1 10504	FARMERS FRIEND IRRIGATION	SN	03N38E22	X	X	X	X	X	X	X	X	X				X	X	X	X	0
Right	25 7653	DENNIS DAVIS,	GROUND	103N38E22					X	X	X										0
Right	1 61	FARMERS FRIEND CANAL CO	SN	03N38E22																	0
Right	1 241	PROGRESSIVE IRRIGATION DI	SN	03N38E22									X	X	X						0
Right	1 248	FARMERS FRIEND IRRIGATION	SN	03N38E22																	0
Right	1 322	PROGRESSIVE IRRIGATION DI	SN	03N38E22																	0
Right	25 7189	KAREN BROTHERS, BEN BROT	GROUND	103N38E22											1						1
Right	25 7272	HAROLD MUNSON, ROLAND C	GROUND	103N38E22						X											0
Right	25 7379	KENT E EVERETT, NICKOLENA	GROUND	103N38E22						X											0
Right	27 11722	KRIS STREEPER, DUWAYNE S	GROUND	103N38E22					X												0
Right	25 12718	JANIS SHERICK, STEVE SHERI	GROUND	103N38E22					X												0
Right	25 12784	BARRETT BOYERGER, LA RIE	GROUND	103N38E22	X																0
Right	25 12981	BARBARA M ATWOOD, DONAL	GROUND	103N38E22						X											0
Right	25 12981	BARBARA M ATWOOD, DONAL	GROUND	103N38E22						X											0
Right	25 13084	JOLENE WILSON, DOUGLAS S	GROUND	103N38E22										X							0
Right	25 13292	JUDY FOSTER KIMMEL,	GROUND	103N38E22				X													0
Right	25 13292	JUDY FOSTER KIMMEL,	GROUND	103N38E22				X													0
Right	25 13493	PAUL J FAULKNER, SYLVIA L F	GROUND	103N38E22					X												0
Right	25 12915	NANCY L SIMMONS, LARRY W	GROUND	103N38E22									X								0
Right	25 12915	NANCY L SIMMONS, LARRY W	GROUND	103N38E22									X								0
Right	25 10102	DOROTHY L WALKER, CECIL P	GROUND	103N38E22															X		0
Right	25 10102	DOROTHY L WALKER, CECIL P	GROUND	103N38E22															X		0
Right	25 12447	SHARON ROH, LESLIE ROH,	GROUND	103N38E22															X		0
Right	25 12447	SHARON ROH, LESLIE ROH,	GROUND	103N38E22															X		0
Right	25 12782	JOAN M DAFOE, RONALD E DA	GROUND	103N38E22														X			0
Right	25 13145	DARRELL E BYERLY, EVA BYE	GROUND	103N38E22	X																0
Right	25 13145	DARRELL E BYERLY, EVA BYE	GROUND	103N38E22	X																0
Right	25 13264	KIM SUMMERS, REED SUMME	GROUND	103N38E22				X													0
Right	25 13300	M JEAN HURLEY, RICHARD E H	GROUND	103N38E22						X											0
Right	25 13300	M JEAN HURLEY, RICHARD E H	GROUND	103N38E22						X											0
Right	25 12219	LEON SEDIES,	GROUND	103N38E22						X											0
Right	25 12242	DEANNA G KEMPER, CHARLES	GROUND	103N38E22															X		0
Right	25 12242	DEANNA G KEMPER, CHARLES	GROUND	103N38E22															X		0
Right	25 12271	DALE A CLAYTON, BEVERLY C	GROUND	103N38E22															X		0
Right	25 12271	DALE A CLAYTON, BEVERLY C	GROUND	103N38E22															X		0
Right	25 12309	J ASUNCION P PEREZ,	GROUND	103N38E22				X													0
Right	25 12309	J ASUNCION P PEREZ,	GROUND	103N38E22				X													0
Right	25 12315	TIM G SMITH, JERE D SMITH,	GROUND	103N38E22					X												0
Right	25 12652	WILLIAM J LARSON,	GROUND	103N38E22						X											0
Right	25 12652	WILLIAM J LARSON,	GROUND	103N38E22						X											0
Rec	25 7189	EARL J STACEY, CLARA I STA	GROUND	103N38E22											1						1
Rec	25 7189	EARL J STACEY, CLARA I STA	GROUND	103N38E22										X							0
Rec	25 7272	LAVEDA A FANN, MARCENE C	GROUND	103N38E22						X											0
Rec	25 13965	HAROLD DEAN KAUFFMAN, MA	GROUND	103N38E22						X											0
Rec	25 14069	BEN BROTHERS,	GROUND	103N38E22											X						0
Rec	25 13388	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 13389	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 92	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 96	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 110	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 13383	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 223	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 14104	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 13384	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 13390	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	25 13385	PROGRESSIVE IRRIGATION DI	W	03N38E22	X			X		X			X	X	X						0
Rec	1 64	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 65	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 66	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 241	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 322	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 156	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 202	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0
Rec	1 4006	PROGRESSIVE IRRIGATION DI	SN	03N38E22	X			X		X			X	X	X						0

THEORETICAL PUMP FLOW CALCULATIONS

Formula:

$$Q_{cfs} = [(Hp)(8.814)(Eff)] \div [Lift + (psi \times 2.308)]$$

$$Hp = \text{Horsepower} = \underline{10}$$

$$Eff = \text{Efficiency} = \underline{.7} \quad (\text{Usually } 70\%)$$

$$\text{Lift: (Static Level + Assumed Draw down)}$$

$$\text{Static Water Level} = \underline{122} \text{ ft.}$$

$$\text{Assumed Draw down} = + \underline{\quad} \text{ ft.}$$

$$\text{Lift} = \underline{122}$$

OR

$$\text{Measured Dynamic Water Level} = \underline{\quad} \text{ ft.}$$

$$psi = \text{Operating Pressure} = \underline{30} \text{ psi}$$

$$Q_{cfs} = \left[\frac{10}{Hp} \times 8.814 \times \frac{.7}{Eff} \right] \div \left[\frac{122}{Lift} + \left(\frac{30}{psi} \times 2.308 \right) \right]$$

$$Q_{cfs} = \left[\underline{61.7} \right] \div \left[\underline{191.24} \right]$$

$$Q_{cfs} = \underline{.32} \text{ cfs}$$

PERMIT NO. 25-7653







