

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-9222

Exam Date: 6/20/2007

1. Current Owner: BIOPOL LABORATORY INC
327 E PACIFIC AVE
SPOKANE WA 99202
(509)456-7794
2. Accompanied by: Dave Rowles
Phone No: 509-456-7794
Address: Same
Relationship to Permit Holder: employee

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:
2. Other water rights with the same point of diversion:

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

NW1/4NW1/4

Sec. 16, Twp 46N, Rge 04W, B.M.

BENEWAH County

Method of Determination:

2.

PLACE OF USE:

IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
46N 04W 16					6.7	6.4											13.1

Total Acres: 13.1

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>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*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:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 13.1 \text{ ac} \times 3 = 39.3$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.11 \text{ cfs} \times 214 \text{ Days Irr.} \times 1.9835 = 46.69$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 39.3$$

2. Volume Calculations for Other Uses:

ONE 7/16 NOZ AT 130 PSI ^{valve pressure} = 49 gpm

Volume Calculations is based off manufactures rating and PSI of 130 at water Reel w/ 7/16 nozzle.

G. NARRATIVE/REMARKS/COMMENTS

KIFCO WATER-REEL Model T140 -

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>
IRRIGATION	04/01 to 10/31	0.110 CFS	
<u>Totals:</u>		0.110 CFS	39.30 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 Eric J. Davis Date 06-22-2007

Reviewer [Signature] Date 7/23/7



IRRIGATION REEL.jpg



IRRIGATION STAND.jpg



PERFORMANCE
CHART.jpg



PLACE OF USE 1.jpg



PLACE OF USE AND
SYSTEM RUNNING.jpg



PUMP HOUSE.jpg

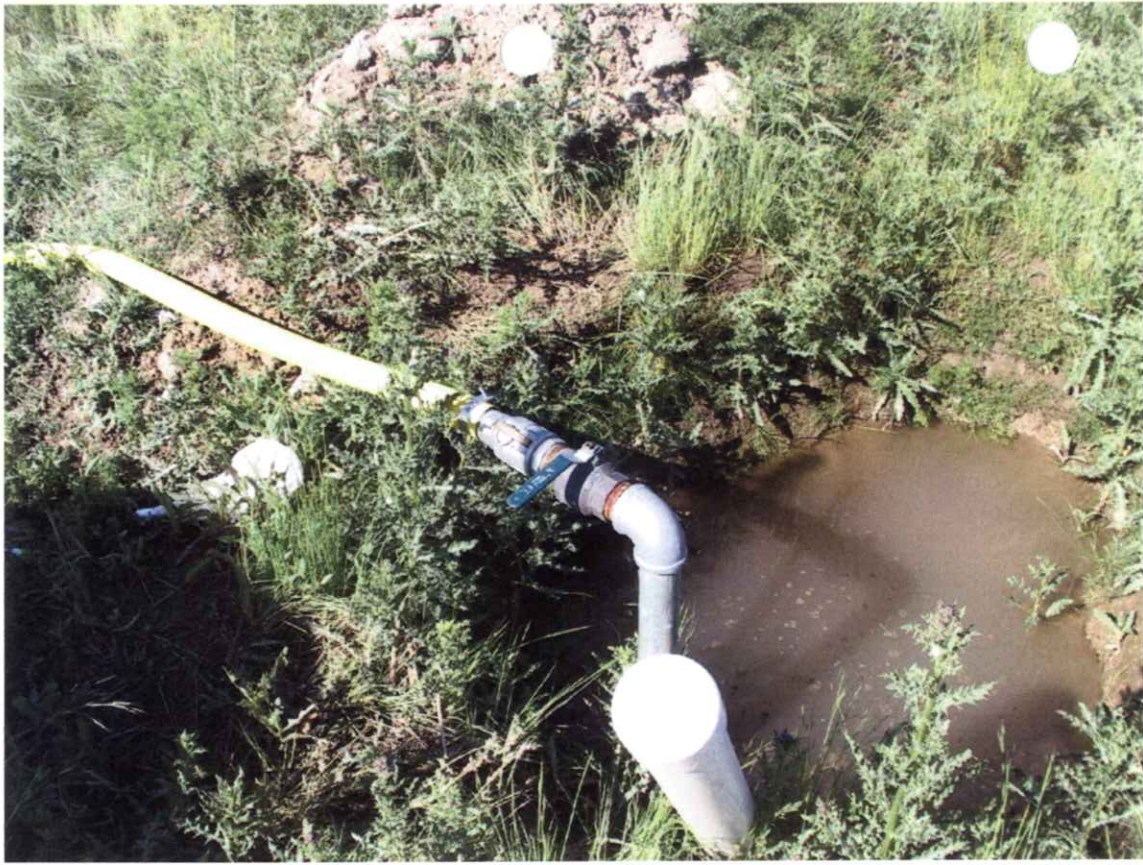


SYSTEM RUNNING.jpg



WELL.jpg





KIPCO
Water-Reel

MODEL T140 X 350 PERFORMANCE

Rain Bird 85 NOZ	SPRINKLER PERFORMANCE			IRRIGATED AREA			SYSTEM INLET PSI	INCHES DEPTH OF APPLICATION					
	PSI	GPM	DIA	WIDTH	X	LENGTH		0.3	0.5	0.75	1	1.25	1.5
3/8"	40	26	142	99	X	400	62	73	44	29	22	-	-
3/8"	50	29	150	105	X	403	75	78	47	31	23	-	-
3/8"	60	32	158	111	X	405	88	81	49	33	24	20	-
3/8"	70	34	166	116	X	408	100	82	49	33	25	20	-
3/8"	80	36	170	119	X	410	113	85	51	34	26	20	-
7/16"	40	34	152	106	X	403	70	90	54	36	27	22	-
7/16"	50	39	162	113	X	407	86	97	58	39	29	23	-
7/16"	60	43	172	120	X	410	101	100	60	40	30	24	20
7/16"	70	46	180	126	X	413	115	-	62	41	31	25	21
7/16"	80	49	186	130	X	415	130	-	63	42	32	25	21
1/2"	40	45	164	115	X	407	84	-	66	44	33	26	22
1/2"	50	50	172	120	X	410	101	-	70	47	35	28	23
1/2"	60	55	180	126	X	413	119	-	74	49	37	29	25
1/2"	70	60	188	132	X	416	138	-	77	51	38	31	26

The irrigated area will vary depending on wind conditions, field dimensions, and use of unspecified sprinklers. The "System Inlet Pressure" is the pressure required at the traveler inlet. It includes allowances for the traveler plumbing and drive, PE tube, and sprinkler pressure. No allowance for field elevation or mainline loss is included.

Retraction Speed of Irrigation Tube (Ft / Hr)												
Feet of	200	150	100	90	80	70	60	50	40	30	20	
PE Tube:	-+-	-+-	-+-	-+-	-+-	-+-	-+-	-+-	-+-	-+-	-+-	-+-
350	1.8	2.3	3.5	3.6	3.8	4.0	4.2	4.5	4.8	5.0	5.2	5.5

ON
unless
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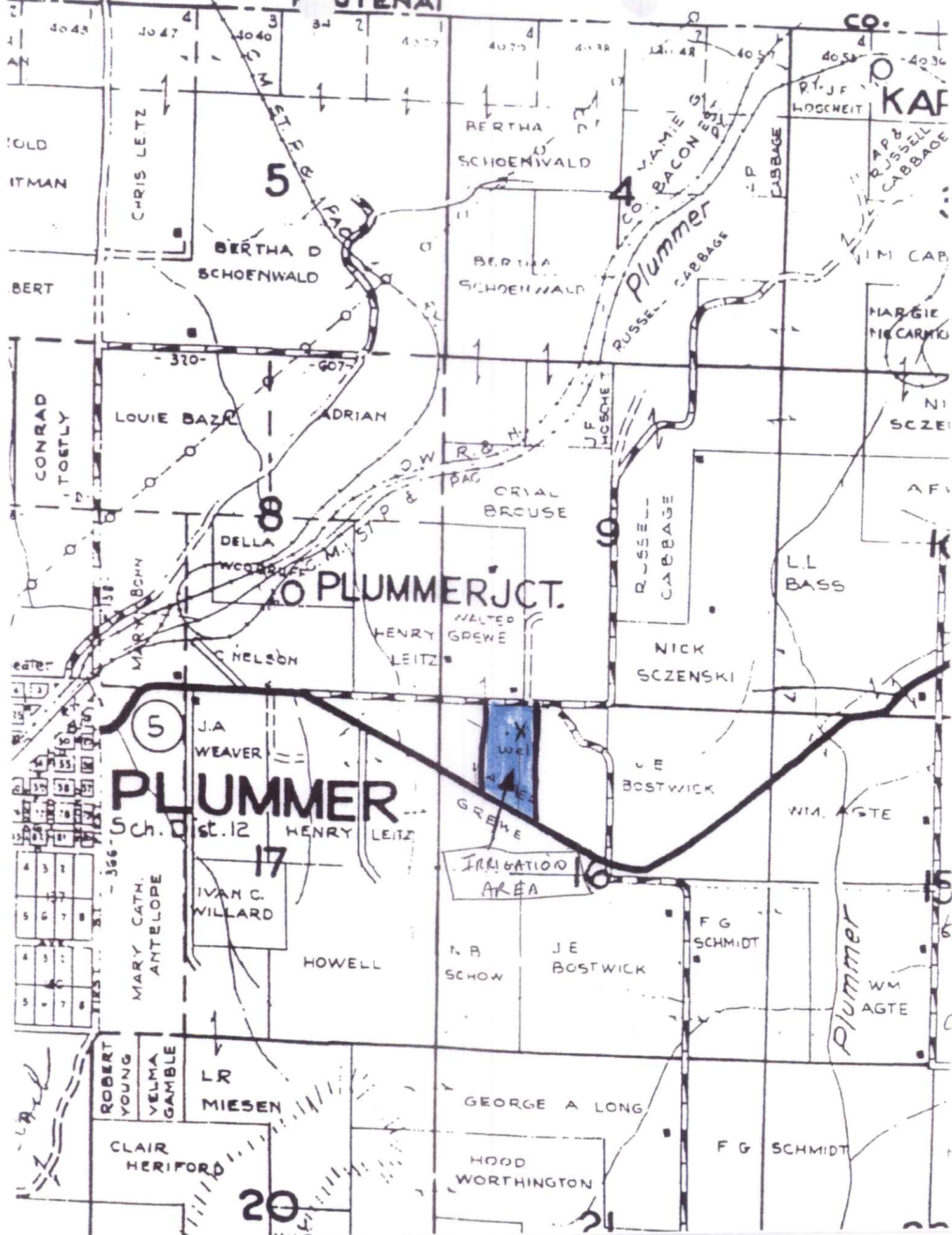


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OTENAI

CO.

KAF



95-9222



0.1 0 0.1 0.2 Miles

-  GCDB46N04W GCDB
-  Application POD
-  Point of diversion.shp
-  Place of use.shp
-  Administrative BasinsAdminbas.shp

