

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 98-7922

Exam Date: 8-03-2012

1. Current Owner: MATT COSSALMAN
1986 HIGHWAY 1
BONNERS FERRY ID 83805
(208)267-1190

2. Accompanied by: MATT COSSALMAN

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCE

MISSION CREEK

TRIBUTARY

KOOTENAI RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

MISSION CREEK SE1/4NW1/4 Sec. 17, Twp 64N, Rge 01E, B.M. BOUNDARY County

Method of Determination: GPS and Map

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
64N	01E	17							X										

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
64N	01E	17							5.0										5.0

Total Acres: 5

PLACE OF USE: FIRE PROTECTION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
64N	01E	17	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
									X										

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.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 5 \times 3 = 15 \text{ AFA}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \times 214 \times 1.9835 = 63.6 \text{ AFA}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 15 \text{ AF}$$

2. Volume Calculations for Other Uses: DOMESTIC = 0.6 AF FIRE PROTECTION = NO VOLUME LIMIT.

G. NARRATIVE/REMARKS/COMMENTS This right was split from 98-7861 because of the power use. The power use will be under right 98-7923. No power rights are to be licensed before the new rules of 7-1-2013. The flow data was from measuring devices on the system (weir) and PSI.

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	0.040 CFS	0.60 AF
IRRIGATION	04/01 to 10/31	0.150 CFS	15.00 AF
FIRE PROTECTION	01/01 to 12/31	0.650 CFS	
<u>Totals:</u>		0.650 CFS	15.60 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 Erik R. [Signature] Date 4-2-2013

Reviewer Kathy C. [Signature] Date 8/2/2013

PSI @ FF	PSI @ #2	Volume (gal)	Time (s)	GPM	GPM ^1.8	Measured v	wier gpm	h^1.5
44.5	51.3	0	1	0	0	0	0	0.00
44.0	50.8	61	58	63	2138	1 3/16	47	1.29
43.5	50.3	61	39	94	4456	1 11/16	80	2.19
41.3	48.0	64	22	175	14045	2 5/8	155	4.25
38.3	45.0	60	14.5	248	26954	3 7/16	233	6.37

Flow gpm	#2 Nozzel Gz	FF fit	flow CFS	Power KW	fit h	expected c	Water Ri	Water Right	Weir h
.0 GPM	51.3	44.5 PSI	0.00	0.00	#NUM!	#NUM!	44.5	48	
10.0 GPM	51.2	44.5 PSI	0.02	0.22	3/16	3			
20.0 GPM	51.2	44.5 PSI	0.04	0.45	1/2	13			
30.0 GPM	51.1	44.4 PSI	0.07	0.67	11/16	21			
40.0 GPM	51.0	44.3 PSI	0.09	0.90	7/8	30			
50.0 GPM	50.9	44.2 PSI	0.11	1.12	1 1/16	40			
60.0 GPM	50.8	44.1 PSI	0.13	1.34	1 1/4	51			
67.3 GPM	50.7	44.0 PSI	0.15	1.50	1 3/8	59	44.0 PSI	1 3/8	
70.0 GPM	50.7	43.9 PSI	0.16	1.56	1 3/8	59			
80.0 GPM	50.5	43.7 PSI	0.18	1.77	1 1/2	67			
90.0 GPM	50.3	43.6 PSI	0.20	1.99	1 11/16	80			
100.0 GPM	50.1	43.3 PSI	0.22	2.20	1 13/16	89			
110.0 GPM	49.9	43.1 PSI	0.25	2.41	1 15/16	98			
120.0 GPM	49.6	42.9 PSI	0.27	2.61	2 1/16	108			
130.0 GPM	49.4	42.6 PSI	0.29	2.82	2 3/16	118			
140.0 GPM	49.1	42.3 PSI	0.31	3.02	2 1/4	123			
150.0 GPM	48.8	42.0 PSI	0.33	3.21	2 3/8	134			
160.0 GPM	48.5	41.7 PSI	0.36	3.41	2 1/2	144			
170.0 GPM	48.2	41.4 PSI	0.38	3.59	2 5/8	155			
180.0 GPM	47.8	41.1 PSI	0.40	3.78	2 11/16	161			
190.0 GPM	47.4	40.7 PSI	0.42	3.96	2 13/16	172			
200.0 GPM	47.1	40.3 PSI	0.45	4.13	2 15/16	184			
210.0 GPM	46.7	39.9 PSI	0.47	4.30	3	190			
219.9 GPM	46.3	39.5 PSI	0.49	4.47	3 1/8	202	39.5 PSI	3 1/8	
220.0 GPM	46.3	39.5 PSI	0.49	4.47	3 1/8	202			
230.0 GPM	45.8	39.1 PSI	0.51	4.63	3 1/4	214			
240.0 GPM	45.4	38.6 PSI	0.54	4.78	3 5/16	220			
250.0 GPM	44.9	38.2 PSI	0.56	4.93	3 7/16	233			
260.0 GPM	44.4	37.7 PSI	0.58	5.07	3 1/2	239			
270.0 GPM	44.0	37.2 PSI	0.60	5.21	3 9/16	245			
280.0 GPM	43.4	36.7 PSI	0.62	5.34	3 11/16	258			
287.2 GPM	43.1	36.3 PSI	0.64	5.43	3 3/4	265	36.3 PSI	3 3/4	
290.0 GPM	42.9	36.2 PSI	0.65	5.46	3 3/4	265			
291.7 GPM	42.8	36.1 PSI	0.65	5.48	3 13/16	272	36.1 PSI	3 13/16	
300.0 GPM	42.4	35.6 PSI	0.67	5.58	3 7/8	278			
310.0 GPM	41.8	35.1 PSI	0.69	5.69	3 15/16	285			
320.0 GPM	41.3	34.5 PSI	0.71	5.80	4 1/16	299			
330.0 GPM	40.7	33.9 PSI	0.74	5.89	4 1/8	306			
340.0 GPM	40.1	33.3 PSI	0.76	5.98	4 3/16	313			
350.0 GPM	39.5	32.7 PSI	0.78	6.06	4 5/16	327			
360.0 GPM	38.8	32.1 PSI	0.80	6.13	4 3/8	334			
370.0 GPM	38.2	31.4 PSI	0.83	6.20	4 7/16	341			
380.0 GPM	37.5	30.8 PSI	0.85	6.26	4 9/16	356			
390.0 GPM	36.8	30.1 PSI	0.87	6.31	4 5/8	363			
400.0 GPM	36.1	29.4 PSI	0.89	6.35	4 11/16	370			
410.0 GPM	35.4	28.7 PSI	0.91	6.38	4 3/4	378			
420.0 GPM	34.7	28.0 PSI	0.94	6.40	4 7/8	393			
430.0 GPM	34.0	27.2 PSI	0.96	6.41	4 15/16	400			
440.0 GPM	33.2	26.5 PSI	0.98	6.42	5	408			
450.0 GPM	32.5	25.7 PSI	1.00	6.41	5 1/16	416			

Irrigation Only:
Creek Sprinklers

Hydro Nozzle
Combination
1/2 + 9/16 + 3/4

Irrigation add
Creek + Volleyball
sprinklers & open
5/8 nozzle 1/2 turn
(weir 3 1/8")

Fire Protection:
Fire hose mostly
open

•	PSI #2	PSI FF	h
Slope:	-0.00023209	-0.00023209	0.0259006
INDEX(LINEST(known_y's,known_x's),1)			
Y-intercept: 51.25923879	44.50923879		-0.1807932
INDEX(LINEST(known_y's,known_x's),2)			

Davis, Eric

From: Davis, Eric
Sent: Friday, March 08, 2013 8:45 AM
To: 'cossalman@frontier.com'
Subject: Water right 98-7861
Attachments: APPLICATION_FOR_AMENDMENT_OF_PERMIT98-7861.pdf; 98-7861.pdf

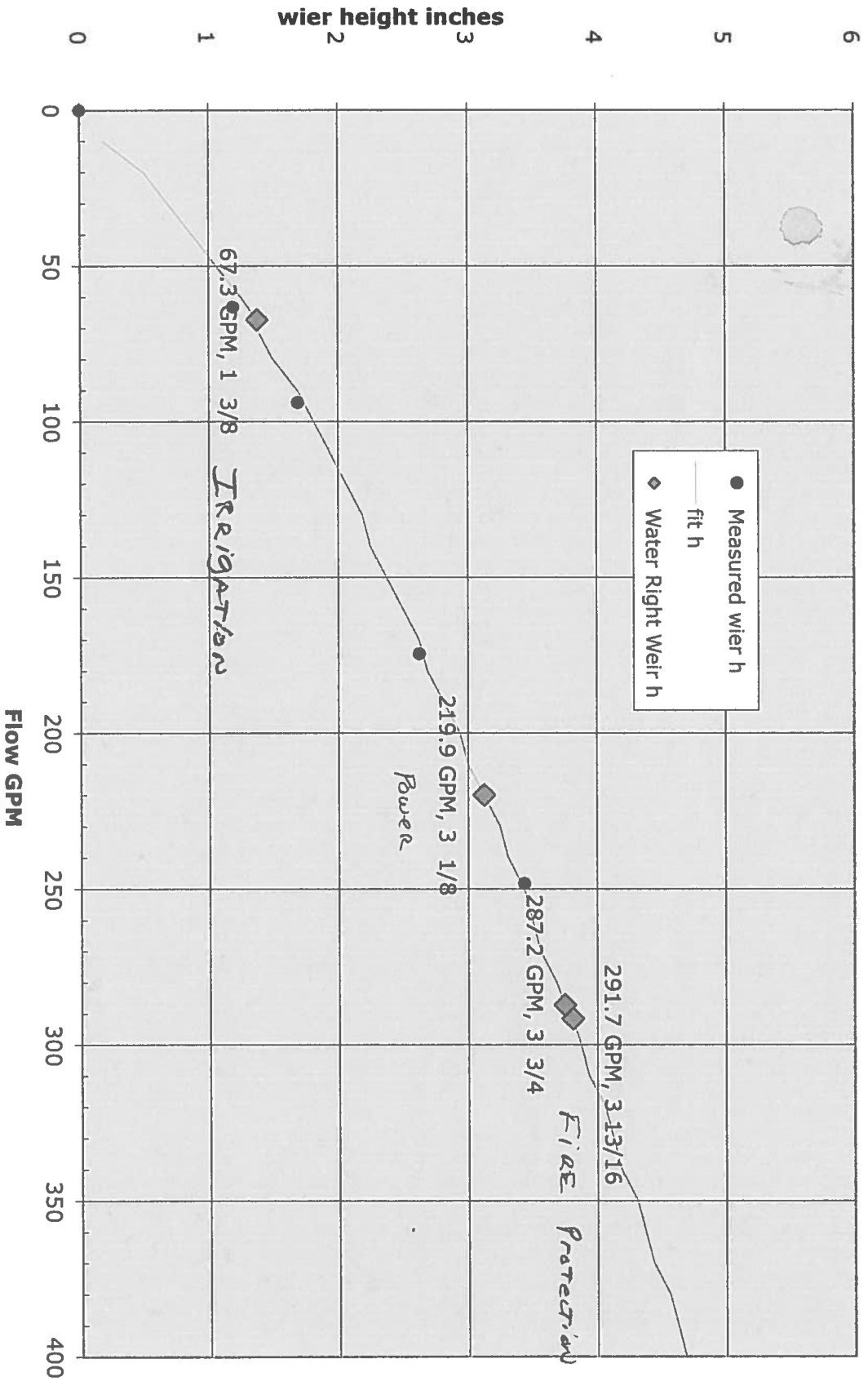
Hi Matt

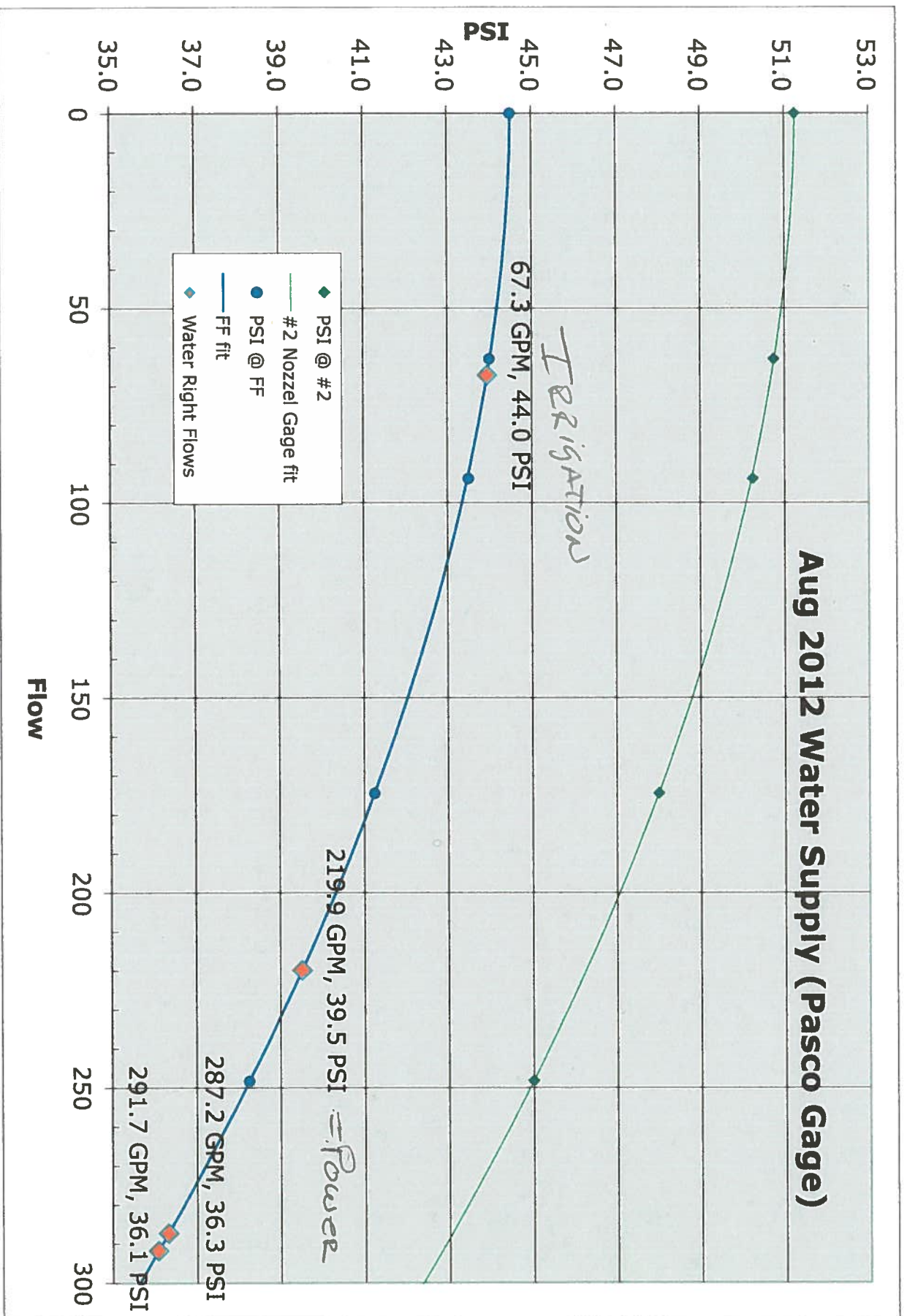
At this time your water right 98-7861 is under review to license. The application and permit has the point of diversion in the location on Mission Creek NW/SW/NW SEC 17, TWP 64N, RGE 01E, B.M. BOUNDARY COUNTY. On August 3rd 2012 you and I (GPS) that location of the diversion in the location on Mission Creek to be SE/NW SEC 17, TWP 64, RGE 01E, B.M. BOUNDARY COUNTY. Pleases review the map that I have attached to this Email for the location of this point of diversion. The department needs this water right Amended be for we can License the water right. Please review the application and map and mail the forms and fee\$100.00 to this office. I please call if you have questions.

Thanks

Eric Davis
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Senior Water Resource Agent
Northern Regional Office
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Coeur d'Alene, ID 83815
PHONE: (208)-762-2800
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July 2012 Flow via Wier Curve fit From Flow Measurements





IRrigation

State of Idaho
Department of Water Resources
Water Right License
98-7922



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.05 0.1 0.2 Miles





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HOME.JPG



IRRIGATION.JPG



PSI.JPG



FIRE LINE.JPG



FLOW.JPG



LAWN .JPG



POD.JPG



POD1.JPG



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IRR-FIRE.JPG



IRR MAN .JPG



GARDEN .JPG

