

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 79-14053

Exam Date: 8/25/2011

1. Current Owner: CITY OF WHITE BIRD
PO BOX 74
WHITE BIRD ID 83554
(208)839-2294

Email: wbcityhall@frontier.com

2. Accompanied by: Jerry Mackie
Phone No: (208) 839-2594
Address: 435 River St., White Bird, ID 83554
Relationship to Permit Holder: certified water/sewer operator for the City of White Bird
Additional Contacts: Terry Eller/clerk for the City of White Bird (208) 839-2294.

3. **SOURCE****TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 79-7208 City of White Bird (for the 3-wells that were abandoned)
2. Other water rights with the same point of diversion: NONE (on the original permit, there were 3-additional wells, but they were abandoned; see Figure 1 Planning and Service Area, for verification from TD&H Engineering.

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

GROUND WATER	SW1/4SE1/4	Sec. 11, Twp 28N, Rge 01E, B.M.
IDAHO County		
GROUND WATER	SW1/4SE1/4	Sec. 11, Twp 28N, Rge 01E, B.M.
IDAHO County		

Method of Determination: Garmin GPS map 76S

2.

PLACE OF USE: MUNICIPAL

Service Area Boundary, as shown on Figure 1 Planning and Service Area, by TD&H Engineering.

Method of Determination: ArcMap 2009

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. (FIG. 1 from TD&H Engineering)
☒ 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 #1, D0029994	Gould	7.5	702-07	submersible	3 inch
Well #2, D0029995	Gould	10.0	702-10	submersible	3 inch

*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>
Sparling flow meter				E-2717	4-inch	2008

2. Measurements:

The pump from well #1 kicked on when I first started conducting the field exam, and at that time I was in the pump House, and obtained the following reading off the **Sparling flow meter**:
 $37312.5 \text{ Total Gallons} \times 100, 88 \text{ gpm} (88 \text{ gpm} \times 0.00223 = 0.196 = 0.20 \text{ cfs})$

NOTE: This measurement could not be confirmed with the polysonic, because when I came back from inspecting the wells, the pump had kicked off. Since the storage tanks are self-leveling and on a demand system, the radio transducer tells the pumps when to kick on and off.

Pump Test on the Well Logs:

Well #1 = $80 \text{ gpm} \times 0.002232 = 0.178 = 0.18 \text{ cfs}$

Well #2 = $80 \text{ gpm} \times 0.002232 = 0.178 = 0.18 \text{ cfs}$

Total Combined Capacity = 0.36 cfs

Pipe Conversion for the capacity for the 4-inch main, and 6-inch main:

4 inch = $Q = 5(3.1416) \times [(4/12)/2]^2 = 0.44 \text{ cfs}$

6 inch = 0.98 cfs

Maximum Instantaneous Water Requirements for Domestic Internal Use Chart (Exh.12). For the City of White Bird being stubbed for 91, but only having 75 active connections within the service area boundary, it would require > 0.25 cfs for internal use only. So, they are not requesting more than would be beneficially used.

Theoretical for Both Wells: The only pressure gauge available on the system in the pump house was 10 psi from the back pressure of the storage tanks (Jerry Mackie said that is the only one they have ever had). After talking to Tim Luke/IDWR Water Management, he stated that since there was no pressure gauge for the system, to run the theoretical for each well from 10 – 60 psi to show possible capacities.

Well #1: $[(8.8) \times (7.5 \text{ Hp}) \times (0.70 \text{ eff})] / [(61 \text{ ft lift}) + (10 \text{ psi} \times 2.31)] = 0.55 \text{ cfs}$

20 psi = 0.43 cfs

30 psi = 0.35 cfs

40 psi = 0.30 cfs

50 psi = 0.26 cfs

60 psi = 0.23 cfs

Well #2: $[(8.8) \times (10 \text{ Hp}) \times (0.70 \text{ eff})] / [(32 \text{ ft lift}) + (10 \text{ psi} \times 2.31)] = 1.12 \text{ cfs}$

20 psi = 0.78 cfs

30 psi = 0.61 cfs

40 psi = 0.50 cfs

50 psi = 0.42 cfs

60 psi = 0.36 cfs

NOTE: The individual wells, and combined theoretical measurements for wells #1 & 2 would have more than enough capacity to produce the 0.20 cfs as permitted. Also the physical measurement from just well #1 produced 0.20 cfs.

RECOMMEND: 0.20 cfs, as permitted.

E. VOLUME CALCULATIONS

Administrator's Memorandum: App. Processing No. 18/Licensing No.1, 10/19/2009. Page 5 Licenses. When licensing a permit for municipal use for an entity serving an incorporated city: The license should not be limited by volume except under circumstances where the permit was limited for reasons described. No volume was listed on the permit, and this is an incorporated city, so for this reason, no volume was listed.

F. NARRATIVE/REMARKS/COMMENTS

The pump house is located on the north end of the main street running through White Bird (N. on River St./Old White Bird Grade) on the east side of the road. There are 2 wells located south/southeast of the pump house. Well #1 is 345 ft deep with an 8 inch casing, 51 ft static, well drillers report tested at 80 gpm (for 52 hours). It has a Gould 7.5 Hp submersible pump serial No 702-07, ID tag # D0029994, with a 3 inch discharge. Well #1 is set up to be the primary well, even though the 2 wells usually work together on demand. Well #2 (is considered the back-up well) is located southeast of the pump house on the other side of the trees. Well #2 is 595 ft deep, has an 8 inch casing, 22 ft static, ID tag # D0029995, Gould 10.0 Hp submersible pump serial No. 702-10, with a 3 inch discharge. Both wells come into the pump house, then discharge through the same flow meter (Sparling E-2717, 4 inch size, calibrated in 2008, with the measurement showing 37,312.5 total gallons X 100, showing 88 gpm---this was showing, and then the pump kicked off). The back-pressure was 10 psi from the storage tanks, and Jerry Mackie/operator said that is the pressure that the system runs at all the time. From the pump house, there is a 4 inch main that runs south on River St., then west on Spring Gulch Rd. to where the 2 storage tanks are located. The 2 storage tanks (one 50,000 gallon, and one 65,000 gallon) water levels are controlled by a radio transducer system that is tied in at the pump house (they are self-leveling). The pumps kick on with demand when the levels in the storage tanks drop to a certain level. For this reason, a physical measurement was not collected at the time of the field exam, but instead the City of White Bird submitted a copy of their 2010 Monthly Water Loss Report. From the storage tanks the line connects back into a 6 inch PVC & Ductile main going south. At the intersection of Main St. and River St. it reduces to a 4 inch PVC main that turns into Cooper St. where it dead ends and has a blow-off valve. On Figure 1 of the Planning and Service Area, submitted by TD&H Engineering, it shows the service area boundary, mains, location for storage tanks, abandoned wells and abandoned well houses. There are only well #1 and #2 on this municipal system, since all other wells have been abandoned. Terry Eller/office clerk (208) 839-2294 confirmed that at the present time they have 91 stubbed, but only 75 active hook-ups within the service area boundary. The distribution is not a looped system, but instead has some dead end lines. There are 10-fire hydrants on the system.

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

G. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
MUNICIPAL	01/01 to 12/31	0.200 CFS
<u>Totals:</u>		0.200 CFS

2. Recommended Amendments

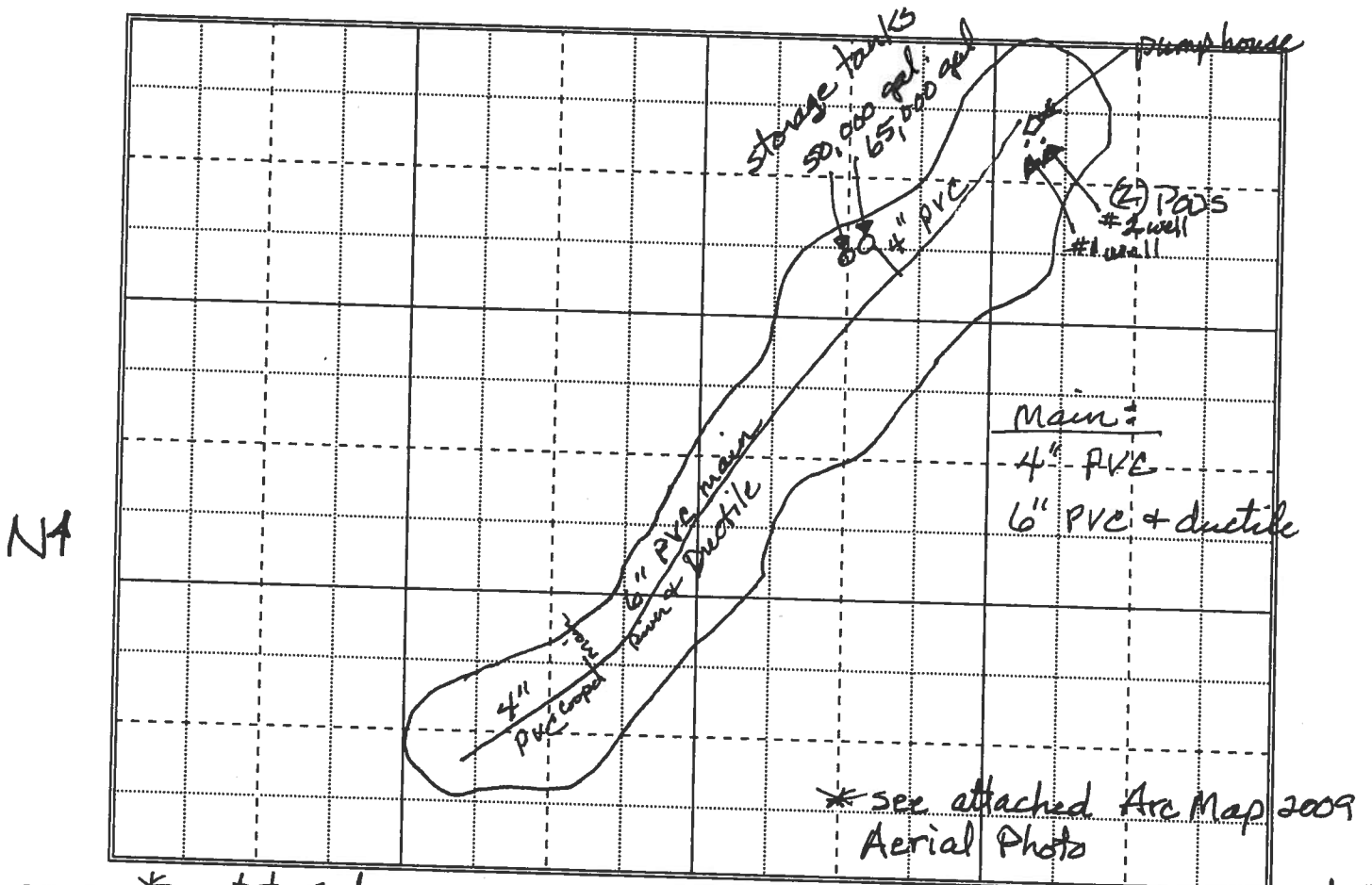
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

HI. AUTHENTICATION

Field Examiner's Name

Janet Hemerway Date *9/22/2011*

Delivery System Diagram: indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



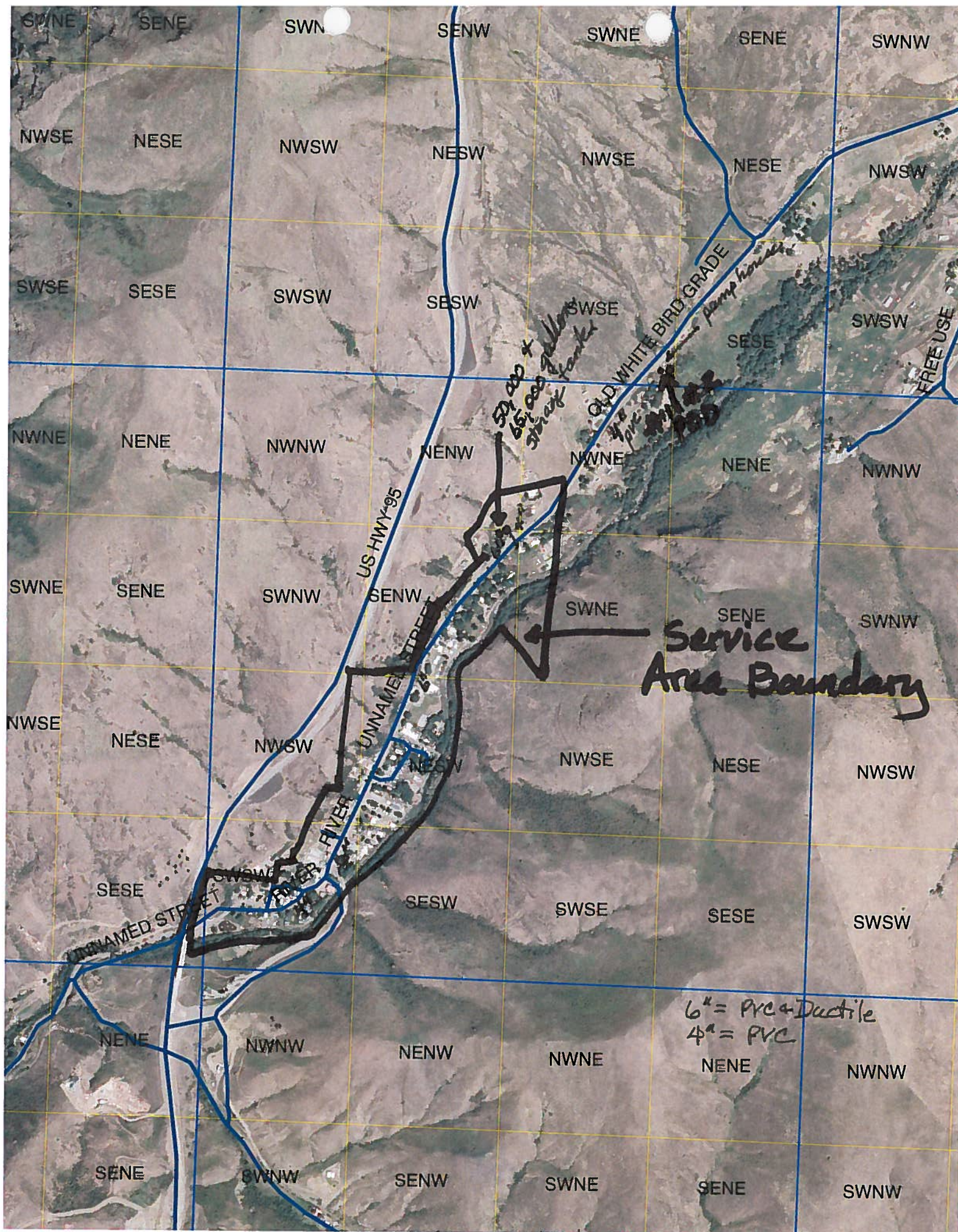
Scale: 1" = * not to scale

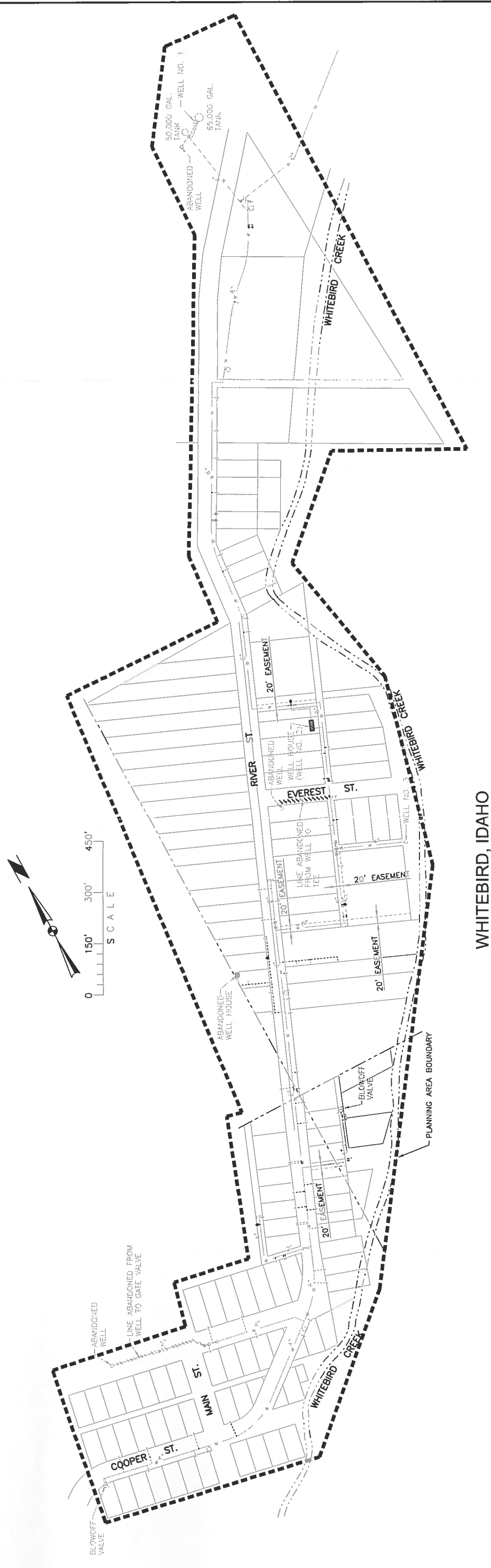
____ Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

X Aerial Photo Attached
(required for irrigation of 10+ acres)

X Photo of Diversion and System Attached

Storage Tank Location:
N. on River St,
W. on
Spring Gulch
Rd.





WHITEBIRD, IDAHO

LEGEND	
SYMBOL	DESCRIPTION
---	PLANNING AREA BOUNDARY

FIGURE 1
PLANNING AND SERVICE AREA



THOMAS, DEAN & HOSKINS, INC.
ENGINEERING CONSULTANTS
GREAT FALLS - BOZEMAN - KALISPELL
SPOKANE
LEWISTON
MONTANA
WASHINGTON
IDAHO

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No. 793220
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat: : : Long: : :

1. WELL TAG NO. D 0029994
DRILLING PERMIT NO. 875669-793220
Water Right or Injection Well No. _____

2. OWNER:
Name City of White Bird
Address P.O. Box 30
City White Bird State Id Zip 83554

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well:

Twp. 28 North ☒ or South ☐
Rge. 1 East ☒ or West ☐
Sec. 11 1/4 SW 1/4 SE 1/4
Gov't Lot _____ County Idaho
Lat: : : Long: : :
Address of Well Site Same as above

(Give at least name of road + Distance to Road or Landmark)
City White Bird
Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Cement</u>	<u>0</u>	<u>60</u>	<u>6000 lb</u>	<u>12" over bore</u>
<u>+ Sand + Bentonite</u>	<u>70</u>	<u>75</u>		

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 280'
Was drive shoe seal tested? ☒ Y ☐ N How? Dry Hole

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8 + 2</u>	<u>280</u>	<u>322</u>		<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

51 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☒ Pump ☐ Baller ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
<u>80</u>	<u>228</u>	<u>280</u>	<u>5.2 Hours</u>

Water Temp. N/A Bottom hole temp. _____
Water Quality test or comments: N/A

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	2	Over Burden		
12	2	20	Gravel + Boulders		
12	20	30	Gravel + Boulders tan clay		
12	30	35	Blue clay + shale		
12	35	45	Blue clay + shale	*	
12	45	65	Blue clay + shale (Blue)		
10	65	70	Blue clay + shale		
10	70	160	Blue clay + shale		
10	160	255	Shale		
10	255	270	Shale		
10	270	280	Shale hard		
10	280	290	Shale hard		
10	290	295	Basalt		
10	295	310	Basalt Fractured	*	
10	310	315	Basalt Green Fractured	x	
10	315	320	Basalt Fractured	x	
10	320	345	Basalt		
Completed Depth <u>345</u>			(Measurable)		
Date: Started <u>8-21-03</u>			Completed <u>11-7-03</u>		

14. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Winie Pump & Drilling Firm No. 417

Principal Driller Mike Peni Date 11-11-03

and Driller or Operator II Ed Holder Date 11-11-03

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No. 793221
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat: : : Long: : :

1. WELL TAG NO. D 0029995
DRILLING PERMIT NO. 875601-793221
Water Right or Injection Well No. _____

2. OWNER:
Name City of Whitebird
Address P.O. Box 36
City Whitebird State Id Zip 83554

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 28 North ☐ or South ☐
Rge. 1 East ☒ or West ☐
Sec. 11 SW 1/4 SE 1/4 1/4
Gov't Lot _____
County IDAHO County _____
Lat: : : Long: : :
Address of Well Site Same as above

(Give at least name of road + Distance to Road or Landmark)
City Whit Bird
Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply

(Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>CEMENT/Sand</u>	<u>0</u>	<u>100</u>	<u>6500 lb.</u>	<u>12" overbase</u>
<u>Bitumite Mix</u>				

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 352

Was drive shoe seal tested? ☒ Y ☐ N How? Dry Hole

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8"</u>	<u>+1</u>	<u>352</u>	<u>32</u>	<u>Steel</u>	☒	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

22 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☒ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>80</u>	<u>225</u>	<u>280</u>	<u>24 hr</u>

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment) Depth first Water Encounter 60'

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water	Y	N
<u>12"</u>	<u>0</u>	<u>3</u>	<u>OVERBUNDEN</u>			
<u>12"</u>	<u>3</u>	<u>17</u>	<u>gravel + Boulders</u>			
<u>12"</u>	<u>17</u>	<u>26</u>	<u>Blue Clay + Shale</u>			
<u>12"</u>	<u>26</u>	<u>60</u>	<u>Shale</u>			
<u>10"</u>	<u>60</u>	<u>100</u>	<u>Shale</u>			
<u>10"</u>	<u>100</u>	<u>150</u>	<u>Shale</u>			
<u>10"</u>	<u>150</u>	<u>160</u>	<u>Shale</u>			
<u>10"</u>	<u>160</u>	<u>180</u>	<u>BROKEN Shale</u>			
<u>8"</u>	<u>180</u>	<u>190</u>	<u>Shale</u>			
<u>8"</u>	<u>190</u>	<u>283</u>	<u>Shale</u>			
<u>8"</u>	<u>283</u>	<u>320</u>	<u>Black Shale</u>			
<u>8"</u>	<u>320</u>	<u>330</u>	<u>Green Shale</u>			
<u>8"</u>	<u>330</u>	<u>346</u>	<u>Shale</u>			
<u>8"</u>	<u>346</u>	<u>565</u>	<u>Basalt</u>			
<u>8"</u>	<u>565</u>	<u>575</u>	<u>Red Fractured Basalt X</u>			
<u>8"</u>	<u>575</u>	<u>595</u>	<u>Basalt</u>			

Completed Depth 595' (Measurable)

Date: Started 9-22-03 Completed 11-07-03

14. DRILLER'S CERTIFICATION

I/we certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Kane Pump & Drilling Firm No. 417

Principal Driller Mike Kane Date 11-11-03

Driller or Operator II Ed Holder Date 11-11-03

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Well # 2

Hemenway, Sandy

From: Justine Aldridge [jaldridge@sparlinginstruments.com]
Sent: Thursday, September 22, 2011 1:03 PM
To: Hemenway, Sandy
Subject: RE: Sparling E2717, 4 inch
Attachments: E02717.pdf

Hello Sandy,

Please find attached the meter record for this meter. If you need additional assistance please let us know.

Thanks,

Justine Aldridge
Sparling Instruments, LLC
4097 N. Temple City Blvd.
El Monte, CA 91731

Tel: (626) 444-0571 Ext. 234

Fax: (888) 439-8438

jaldridge@sparlinginstruments.com

www.sparlinginstruments.com

From: Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]

Sent: Thursday, September 22, 2011 11:45 AM

To: jaldridge@sparlinginstruments.com

Subject: Sparling E2717, 4 inch

Hi,

Do you have any literature, or additional information about the Sparling E-2717, 4-inch flow meter that you could email to me?

Thanks so much,

Sandy Hemenway

Sr. Water Resource Agent
IDWR/State Office
PO Box 83720 or 322 E. Front St.
Boise, ID 83720-0098
OFFICE: (208) 287-4920
CELL: (208) 761-0280
FAX: (208) 287-6700
Email: sandy.hemenway@idwr.idaho.gov



9/22/11 Justine called Sparling does not have anything under the name of White Bird

N. Temple City Blvd., El Monte, CA 91731
Telephone (626) 444-0571 • Fax (626) 444-2314
Website: <http://www.sparlinginstruments.com>

PROPELLER METER RECORD

so they think the installer wrote the wrong name, since that's happened before

Ship to BRANOM INSTRUMENT METER SERIAL NUMBER E-2717
Address HORSESHOE BEND.
Meter Type FM-104 w/ KFS. Meter Size 4"
Meter Spec/Model No. FM-104-041-120-0 Type of Inst. or Control FT-194-1-1 Sales Order No. 73912
Tach Dial/Scale 600 GPM. Inst. or Control Ser. No. E-2717 Size Test Pipe 4.026" I.D.

1 FM-194 ☒ Std. ☒ 4-20mA Outputs ☐ E-M Kit
Test Registration 100 GAL. Cust. Reg. 100 GAL.
Cust. Pipe Size 4.026" I.D. Fig. Tube.
Type of Prop ☒ 3 blade ☒ Cone ☒ Polythene ☐ Durez
3 1/2" ☐ 6 blade ☐ Polythene ☐ Durez
☐ Special
Propeller No. _____

Test Index		Gears			
CALIB. VOL. TANK OR M MTR	METER	TIME SEC.	FLOW GPM	% ACC	CAL. FACT PPG
236.93	521	22.75	124.9	99.8	2.199
329.94	729	166.26	298.8	100.2	2.209
260.08	572	127.39	122.5	99.8	2.199

Slow down meter _____ % Speed up meter _____ %
Calib. Factor/Meter Index 2.204 Reg. Index _____
*Final Meter Index/Cal. Factor _____ Gears _____
Remarks WIR.F.B.
Tested by [Signature] Certified by [Signature]
Date 3-15-04 Date 3-20-04

2 FM-194 ☒ Std. ☒ 4-20mA Outputs ☐ E-M Kit
Test Registration _____ Cust. Reg. 100 GAL.
Cust. Pipe Size 4.026 I.D.
Type of Prop ☐ 3 blade ☐ Cone ☐ Polythene ☐ Durez
3 1/2" ☐ 6 blade ☐ Polythene ☐ Durez
☐ Special
Propeller No. _____

Test Index		Gears			
CALIB. VOL. TANK OR M MTR	METER	TIME SEC.	FLOW GPM	% ACC	CAL. FACT PPG
FT194-1 sent in on 8/7/00					
Returned AS IS 8.2.09					

this was repair to not recalib.

Slow down meter _____ % Speed up meter _____ %
Calibration Factor/Meter Index _____
*Final Meter Index/Cal. Factor _____ Reg. Index _____
Remarks _____
Tested by _____ Certified by _____
Date _____ Date _____

3 FM-194 ☐ Std. ☐ 4-20mA Outputs ☐ E-M Kit
Test Registration _____ Cust. Reg. _____
Cust. Pipe Size _____
Type of Prop ☐ 3 blade ☐ Cone ☐ Polythene ☐ Durez
☐ 6 blade ☐ Polythene ☐ Durez
☐ Special
Propeller No. _____

Test Index		Gears			
CALIB. VOL. TANK OR M MTR	METER	TIME SEC.	FLOW GPM	% ACC	CAL. FACT PPG

Slow down meter _____ % Speed up meter _____ %
Calibration Factor/Meter Index _____
*Final Meter Index/Cal. Factor _____ Reg. Index _____
Remarks _____
Tested by _____ Certified by _____
Date _____ Date _____

*Meter Calibration Conforming to Customers Pipe I D

4 FM-194 ☐ Std. ☐ 4-20mA Outputs ☐ E-M Kit
Test Registration _____ Cust. Reg. _____
Cust. Pipe Size _____
Type of Prop ☐ 3 blade ☐ Cone ☐ Polythene ☐ Durez
☐ 6 blade ☐ Polythene ☐ Durez
☐ Special
Propeller No. _____

Test Index		Gears			
CALIB. VOL. TANK OR M MTR	METER	TIME SEC.	FLOW GPM	% ACC	CAL. FACT PPG

Slow down meter _____ % Speed up meter _____ %
Calibration Factor/Meter Index _____
*Final Meter Index/Cal. Factor _____ Reg. Index _____
Remarks _____
Tested by _____ Certified by _____
Date _____ Date _____

Form 688-3 11/98

Serial No.



E02717

FT194 PROGRAMMING SHEET

3-22-04

MODEL # FT194-1-1

SO# 73912

SERIAL# E-2717

FULL SCALE (Q) 600 GPM

METER K (PPG) 2.204

REGISTRATION 100 GAL

1. CALCULATE FREQ. (PULSES/SEC.) @ FULL SCALE (Q in GPM)

$$F = K * Q / 60$$

$$F = \underline{22.04}$$

1.1 Fcal = LOWEST WHOLE DIGIT CALCULATED IN 1.

$$Fcal = \underline{22}$$

2. CALCULATE TOTALIZER SCALE (Ts)

$$Ts = K * REGISTRATION$$

$$Ts = \underline{220.4}$$

3. CALCULATE RATE SCALE (Rs)

$$Rs = K / 60$$

$$Rs = \underline{.0367}$$

4. VERIFY RATE DISPLAY READING @ Fcal

$$\text{Rate Display @ Fcal.} = \text{FULL SCALE} * Fcal / F$$

$$= \underline{598.9} \quad / 600 \text{ Gpm}$$

5. VERIFY 4-20mA READING ON EXTERNAL DVM @ Fcal

$$Ical = (16 * Fcal / F) + 4$$

$$Ical = \underline{19.971} \text{ mA or } \underline{99.8} \% \text{ on 0-100\% display}$$

6. VERIFY TOTALIZER IS SCALED CORRECTLY @ Fcal

$$\text{Time between the counts @ Fcal} = 60 * F * REGISTRATION / Q / Fcal$$

$$= \underline{10.0} \text{ SECS}$$

OK

APPROVED BY

QA 2
[Signature]

DATE

3/22/04



CITY OF WHITE BIRD
2010 MONTHLY WATER LOSS REPORT

	Main Twin Wells			WATER USED				
	OLD	NEW	GALLON PUMPED THIS MONTH	METERED WATER USED	NON METERED WATER USED	TOTAL GAL. USED	TOTAL GAL. LOST	% OF GAL. LOST
JAN	28,588,000	28,997,100	409,100	259,180	75,000	334,180	74,920	18%
FEB	28,997,100	29,372,120	375,020	208,140	100,000	308,140	66,880	18%
MAR	29,372,120	29,792,210	420,090	202,530	155,000	357,530	62,560	15%
APR	29,792,210	30,030,190	237,980	214,590	3,300	217,890	20,090	8%
MAY	30,030,190	30,484,500	454,310	225,304	211,950	437,254	17,056	4%
JUN	30,484,500	31,019,500	535,000	356,566	173,390	529,956	5,044	1%
JUL	31,019,500	31,357,000	337,500	267,180	39,490	306,670	30,830	9%
AUG	31,357,000	32,087,200	730,200	568,700	106,110	674,810	55,390	8%
SEP	32,087,200	32,639,500	552,300	437,320	106,340	543,660	8,640	2%
OCT	32,639,500	33,002,200	362,700	279,400	44,610	324,010	38,690	11%
NOV	33,002,200	33,330,900	328,700	257,650	43,250	300,900	27,800	8%
DEC	33,330,900	33,655,600	324,700	288,530	7,750	296,280	28,420	9%
Combined Months Totals And Average Percentage			5,067,600	3,565,090	1,066,190	4,631,280	436,320	9%

Non-metered water - cleaning out fire hydrants, water to none City Residence, water bought by construction companies, watering park lawn, washing of City Fire Vehicles, School House (new City Hall)

PUMP INFORMATION

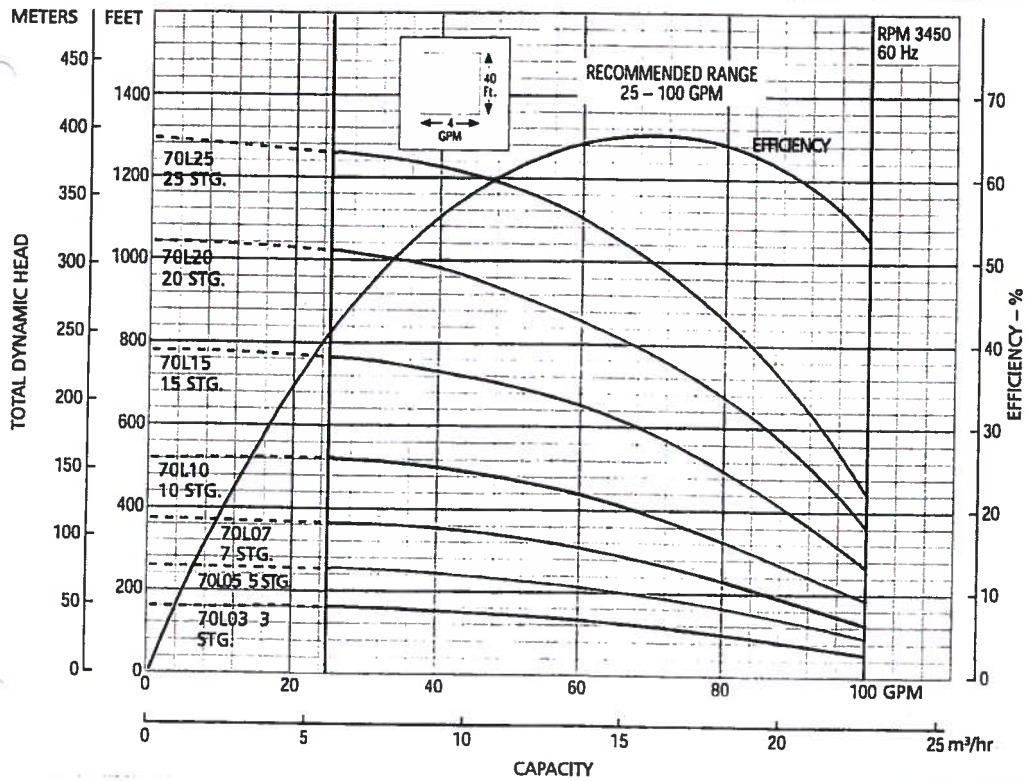
Owner City of White Bud
Pump Purchased from Gould ITT INDUSTRIES
Pump Installed by Challenges Electric
Well Number #2 (new) Date pump Installed 9/25/04
Pump: Make Gould-- type submersible
Model 1P' ser. #
Bowl Dia. capacity
Total head # of bowls
Depth of setting column Dia.
Shaft Dia. length
Length of airline
Motor: make Franklin type Submersible
Model 2366029020 ser #.
Horsepower 10 HP RPM 3450
Voltage phase 3 phase

PUMP INFORMATION

Owner City of White Bird
Pump Purchased from Gould Pumps Inc Industrial
Pump Installed by Challenger Electric
Well Number #1 (new) Date pump Installed 3/24/04
Pump: Make Gould -- type 6" Sub
Model 10107 ser. # _____
Bowl Dia. _____ capacity _____
Total head _____ # of bowls _____
Depth of setting _____ column Dia. _____
Shaft Dia. _____ length _____
Length of airline _____
Motor: make Franklin type Submersible
Model 2310019020 ser #. _____
Horsepower 1.5 HP RPM 3450
Voltage _____ phase 3 phase

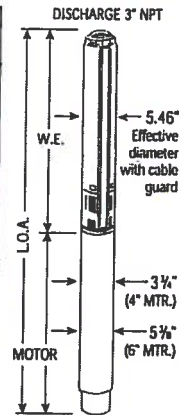
Model 70L

GOULDS PUMPS



DIMENSIONS AND WEIGHTS

HP	Stages	W.E. Order No.	Motor Order No.	PH	Motor Volts	Motor Length	W.E. Length	L.O.A.	Wt. (lbs.)
3	3	70L03	S09940	1	230	19.1	22.6	41.7	65
			S09978	200	230				
			S09970	230	230				
			S09975	3	460	16.1	22.6	38.7	65
			S09979	575					
5	5	70L05	S10940	1	230	28.2	25.8	54.0	81
			S10978	200	230				
			S10970	230	230				
			S10975	3	460	22.2	25.8	48.0	81
			S10979	575					
7.5	7	70L07	S11970	1	230	28.0	29.0	57.0	155
			S11978	200	230				
			S11971	230	230				
			S11972	3	460	24.2	29.0	53.2	130
			S11979	575					
10	10	70L10	S12970	1	230	30.6	33.5	64.1	177
			S12978	200	230				
			S12971	230	230				
			S12972	3	460	25.4	33.5	58.9	147
			S12979	575					
15	15	70L15	S13970	1	230	33.1	41.3	74.4	201
			S13978	200	230				
			S13971	230	230				
			S13972	3	460	28.0	41.3	69.3	175
			S13979	575					
20	20	70L20	S14978	200	230				
			S14971	230	230				
			S14972	3	460	30.6	45.0	75.6	201
			S14979	575					
			S15978	200	230				
25	25	70L25	S15971	230	230				
			S15972	3	460	33.1	56.6	89.7	225
			S15979	575					



All dimensions are in inches and weights in lbs. Do not use for instruction purposes.
 Non-stock motors have a six (6) week lead time.
 Water end and motor must be ordered separately and are packaged separately.

City of White Bird



Franklin Electric

SUBMERSIBLE MOTOR

MODEL 2366029020

3-Phase

60 Hz metric	8.6 kW	230 V	32.2 A	3480 min ⁻¹	cosφ 0.86
	(7.5 kW SF 1.15)	V	A	min ⁻¹	cosφ

60 Hz	10 HP	230 V	28.4 A	3450 RPM	32.2 MAX A
	SF 1.15	V	A	RPM	MAX A

KVA CODE H

Max Ambient Temp 30°C

Thrust Load 15500 N 3500 LB
Min Cooling Flow 16cm/s 0.51l/sec

Ins Class F IP68

Continuous Duty

MADE IN USA

IEC 34-1

799319

156146102



Franklin Electric

SUBMERSIBLE MOTOR

MODEL 2366019020

3-Phase

60 Hz metric	6.4 kW	230 V	24.8 A	3470 min ⁻¹	cosφ 0.83
	(5.5 kW SF 1.15)	V	A	min ⁻¹	cosφ

60 Hz	7.5 HP	230 V	21.8 A	3450 RPM	24.8 MAX A
	SF 1.15	V	A	RPM	MAX A

KVA CODE H

Max Ambient Temp 30°C

Thrust Load 15500 N 3500 LB
Min Cooling Flow 16cm/s 0.51l/sec

Ins Class F IP68

Continuous Duty

MADE IN USA

IEC 34-1

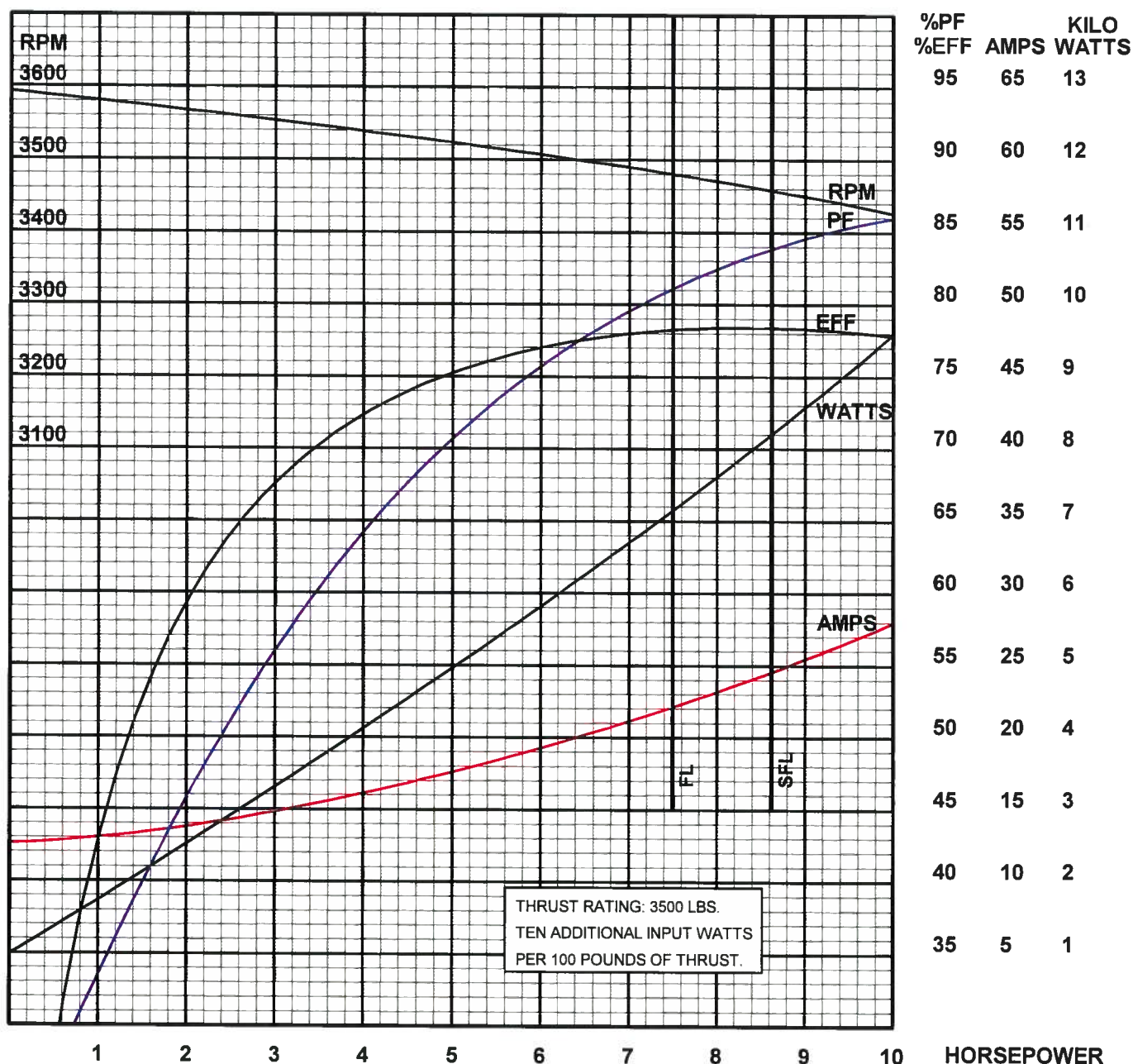
156146102

MOTOR PERFORMANCE CHARACTERISTICS

T E S T	VOLTS	230	HERTZ	60
	ST.MFD		RUN MFD	
	TEST PR	8380	PAGE	6
	APPR BY		DATE	

R A T I N G	FRAME	6 INCH SUB	HP	7.5
	MODEL	236601	VOLTS	230
	RPM	3450	PHASE	3
	S.F.	1.15	HERTZ	60
	TYPE	3 PHASE		

REMARKS: TESTED IN WATER, SHAFT UP, WITH NO APPLIED THRUST.
TYPICAL PERFORMANCE. NOT GUARANTEED AS MINIMUM PERFORMANCE.



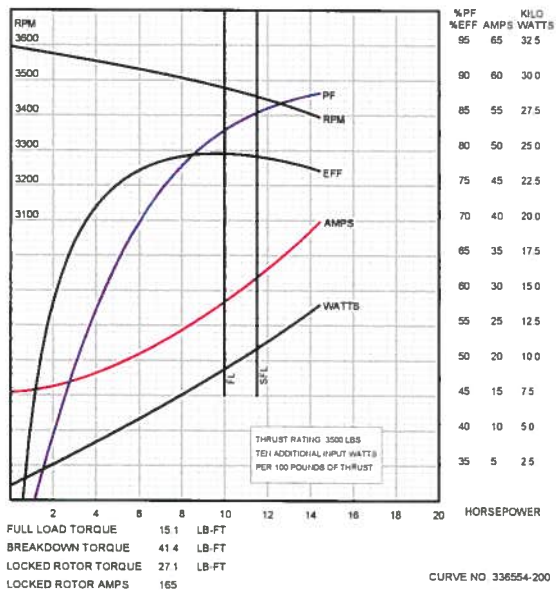
FULL LOAD TORQUE 11.3 LB-FT
BREAKDOWN TORQUE 31.8 LB-FT
LOCKED ROTOR TORQUE 21.1 LB-FT
LOCKED ROTOR AMPS 121



MOTOR PERFORMANCE CHARACTERISTICS

T E S T	VOLTS	230	HERTZ	60	R A T I O N O	FRAME	8 INCH SUB	HP	10
	ST MFD		RUN MFD			MODEL	236602	VOLTS	230
	TEST PR	8324	PAGE	2		RPM	3450	PHASE	3
	APPR BY		DATE			S F	1 15	HERTZ	60
						TYPE	3 PHASE		

REMARKS TESTED IN WATER SHAFT UP WITH NO APPLIED THRUST
TYPICAL PERFORMANCE NOT GUARANTEED AS MINIMUM PERFORMANCE





well
#2
located
on the
other
side of
the tree

Pump
House

08/25/2011



sparline
flow
meter

E-271
4"

Calibrate
on 200

37312.

Total
gallons
X
100

88gph

08/25/2011

79-14053 City of White Bird

S. Hemenway



79-14053 City of White Bird

S. Hemerway



50,000 gallon + 65,000 gallon storage tanks

79-14053 City of White Bird

S. Hemerway



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

August 15, 2011

CITY OF WHITE BIRD
PO BOX 74
WHITE BIRD ID 83554

RE: Beneficial Use Field Examination Required for Licensing 79-14053

Dear Permit Holder:

This is to confirm our appointment to conduct a Beneficial Use Field Examination (exam) for Permit No. 79-14053 on August 25, 2011, at 9:00 am, meeting at the City Hall on River Rd.

Attached is a questionnaire that should be completed prior to the field exam, in reference to the point of diversions, place of use (service area), and the distribution system. This will expedite the licensing process.

If you have any question, please give me a call at (208)287-4920 or (208)761-0280. Thank you in advance for your help.

Sincerely,

A handwritten signature in black ink that reads "Sandy Hemenway". The signature is written in a cursive, flowing style.

Sandy Hemenway

Sr. Water Resource Agent

Enclosure:

CC: Gerald Mackie/City of White Bird

Permit No. 79-14053

Name of Permit Holder: City of White Bird

Mailing Address: PO Box 74, White Bird, ID 83554

Physical Address: _____

Phone: (208) 839-2294 Cell: _____ Email: wbcityhall@frontier.com

Contact Person: _____ Contacts phone number: _____

Information for each Well:

Well #1: common name _____

1. Pump: Motor Make _____ Hp _____ Motor Serial No. _____ Pump Make _____
2. Pump Serial No. or Discharge Size _____ Lift _____ psi _____
3. Measuring Device/Flow Meter (Y/N) _____ Manufacturer _____
4. Measuring Device Serial # _____ model # _____

Well #2: common name _____

1. Pump: Motor Make _____ Hp _____ Motor Serial No. _____ Pump Make _____
2. Pump Serial No. or Discharge Size _____ Lift _____ psi _____
3. Measuring Device/Flow Meter (Y/N) _____ Manufacturer _____
4. Measuring Device Serial # _____ model # _____

Describe the following:

5. Storage (Y/N) _____ Size Tank(s) _____
6. Do the pumps run at the same time, or one at a time according to demand? _____
7. Size and type of pipe (main) _____
8. Is the distribution a looped system, or are there dead-ends _____
9. Is the system treated (Y/N) _____ How? _____
10. Well Driller Reports for each well (Y/N) _____ Have copies available (Y/N) _____
11. Have current map of place of use (service area boundary) Y/N _____ Have copy available (Y/N) _____
12. Current number of households served with the system _____
13. Number of lots stubbed-in (if known) _____
14. Does the City of White Bird use any other water sources, and if so what? _____
15. Are there any "other uses" for the water from the 2 sources listed above? _____
16. Do you have records confirming peak demand, and annual acre-feet (Y/N) _____ Provide copy _____
17. Describe the distribution system
briefly: _____

