

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-8941

Exam Date: 9/5/2007

1. Current Owner: STEPPING STONE HOME OWNERS ASSN
PO BOX 2943
HAYDEN LAKE ID 83835-2943
(208)687-2707

2. Accompanied by: *Michael Dole*

Phone No: *208-762-6073*

Address: *PO Box 2943 Hayden Lake ID 83835*

Relationship to Permit Holder: *Home OWNER ASSN, WATER MANAGEMENT*

3. SOURCE**TRIBUTARY**

GROUND WATER

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 SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW1/4SE1/4 Sec. 34, Twp 52N, Rge 04W, B.M. KOOTENAI County

GROUND WATER NE1/4SE1/4 Sec. 34, Twp 52N, Rge 04W, B.M. KOOTENAI County

Method of Determination: *GPS*

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	
52N 04W 34	2.0		2.0	2.0					2.0	2.0	14.0		7.0	2.0	9.0	2.0	44.0

Total Acres: 44

DOMESTIC same as IRRIGATION

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

☐ Additional Computation Sheets Attached

Measured Method:

The Stepping Stone Home Association is using two wells that have identical pumps. The pumps are Berkeley 40 hp Submersible that produce 350 gpm @ 375 feet of Total Head. Well# 1 has a pump test of 800 + gpm and well #2 has been tested @ 500 + gpm. Please see the attached Pump Performance Curves with this Water Right Field Report. The maximum diversion rate for this license will be 1.17 cfs. The diversion rate for the Domestic Beneficial use of 38 homes is 0.29 cfs. This rate of flow is based on the IDWR Idaho Water Law Handbook Appendix IV. Irrigation of 44 acres multiplied by 0.02 cfs equals 0.88 cfs.

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 44 \times 3 = 132 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = (0.88 \times 246) \times 1.9835 = 429.4$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 132$$

- 2. Volume Calculations for Other Uses:**
- Domestic = 38 homes (38 X 0.6 AF) = 22.8 AF**
- Irrigation + 132 AF**
- Total Volume = 154.8 AF**

G. NARRATIVE/REMARKS/COMMENTS

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	0.320 CFS	22.80 AF
IRRIGATION	03/15 to 11/15	0.880 CFS	132.00 AF
<u>Totals:</u>		1.200 CFS	154.80 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 *Jim Johnson* Date 11-9-2007

Reviewer *Mark Wood* Date 11/21/07

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95-8941

BERKELEY TURBINE MULTISTAGE PERFORMANCE CALCULATION

Date: 25-Mar-96 File: 7T-350T.WQ1
 Series: 7T-350 Version: 6-4-94
 By: AI
 Minimum Casing ID: 8" Pump Serial #:

***** Turbine Design Requirements *****

Model: 7T??-350 Motor HP:?? Max. Pump BHP: 44.208
 Shd Dia: 5.390 Hub Dia: 4.75 Trim Angle: 30 Deg.
 Total No. Of Stages: 6 RMS Dia: 5.080
 No. Trammed Stages: 1 Pump Speed In RPM: 3450

BERKELEY TURBINE MULTISTAGE PERFORMANCE CALCULATION

*** Multistage Pump Performance ***

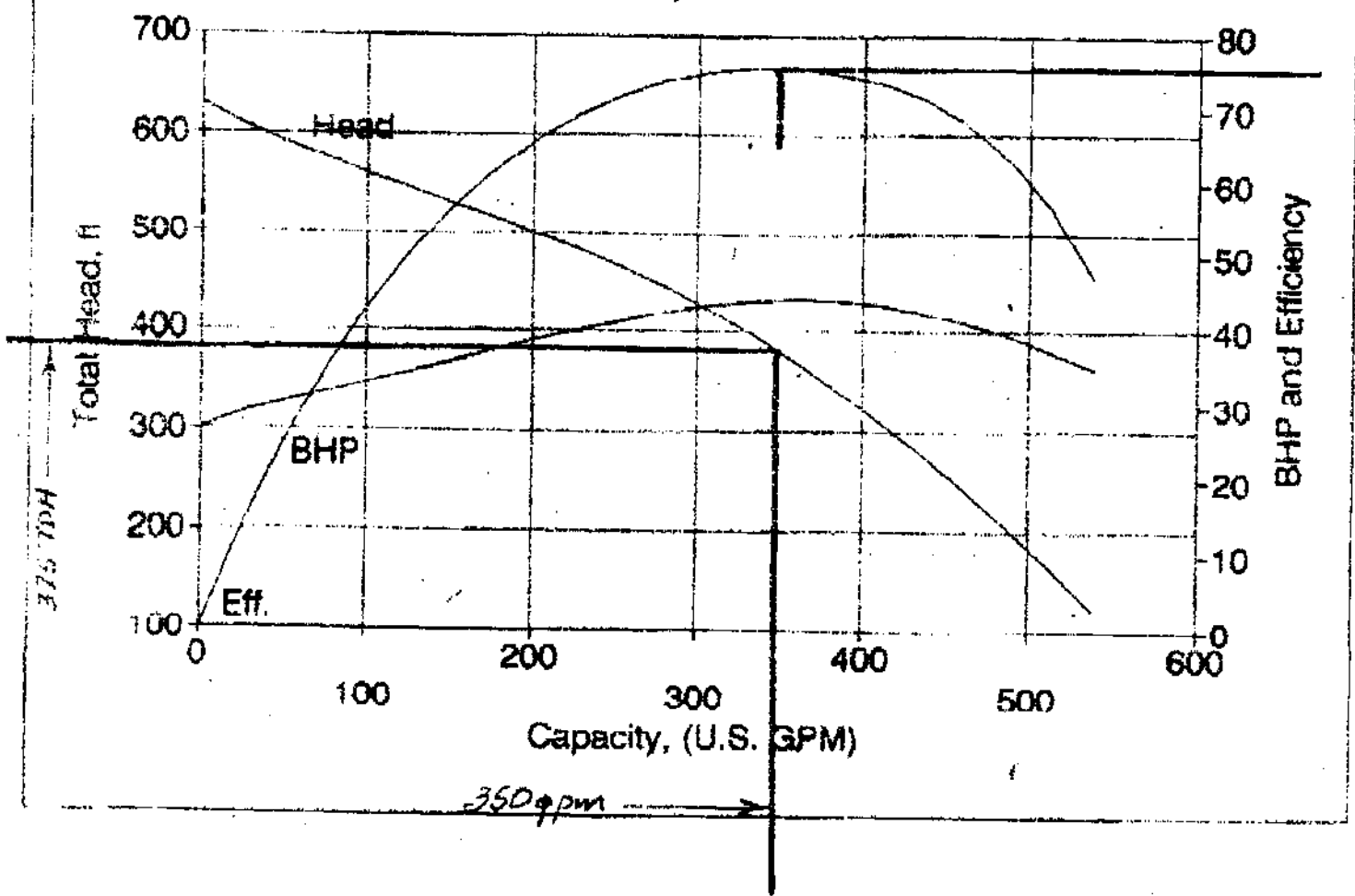
***** Standard Units *****				***** Metric Units *****			
Q	H	BHP	Eff.	Q	Q	H	
(gpm)	(ft)	(hp)	(%)	(L/min)	(m3/hr)	(m)	
0	529.95	26.97	0.00	0.00	0.00	192.01	
26	609.04	28.78	13.68	96.99	5.82	185.64	
51	590.54	30.34	25.16	193.98	11.64	180.00	
77	573.83	31.76	35.03	290.93	17.46	174.91	
102	558.30	33.14	43.56	387.91	23.27	170.17	
128	543.40	34.52	50.88	484.90	29.09	165.63	
154	528.62	35.92	57.07	581.89	34.91	161.13	
179	513.52	37.35	62.21	678.88	40.73	156.52	
205	497.57	38.76	66.39	775.87	46.55	151.69	
231	480.73	40.13	69.68	872.82	52.37	146.53	
256	462.35	41.40	72.18	969.80	58.19	140.93	
282	442.28	42.51	73.98	1066.79	64.01	134.81	
307	420.28	43.38	75.14	1163.78	69.83	128.10	
333	396.19	43.97	75.72	1260.77	75.65	120.76	
359	369.85	44.21	75.71	1357.76	81.47	112.73	
384	341.21	44.06	75.09	1454.70	87.28	104.00	
410	310.19	43.49	73.77	1551.69	93.10	94.55	
436	276.82	42.49	71.59	1648.68	98.92	84.38	
461	241.14	41.07	68.30	1745.67	104.74	73.50	
487	203.24	39.29	63.52	1842.66	110.56	61.95	
512	163.28	37.22	56.71	1939.64	116.38	49.62	
538	121.47	34.99	47.13	2036.63	122.20	37.02	

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a

BERKELEY PUMPS

Model 7T-350 Pump Performance Curve



7T-350, 6 Stage (a-11) 5.390" x 4.75" (30°)
note motor loading.

95-8941



Steppingstones Homeowners Assoc.

SOLD TO: ~~PO Box 2943~~

~~Hayden ID 83835~~

INVOICE DATE
December 4, 2002

ORDER NO.

SHIP TO

Well #1 Repairs

Prices Per Estimate dated 11/21/02

PHONE #

208-687-2814

95-8941

TOTAL DUE THIS INVOICE

\$8,815.23

Well #2

Use Typewriter or Ballpoint Pen

Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4

Lat: : : Long: : :
☒ Air ☐ Flowing Artesian

11. WELL TESTS:

☐ Pump ☐ Bailer

Name STEPPING STONES Roger Lewis, Pres.

Address **P.O. BOX, 889**

City RATHDRUM State ID Zip 83844

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

Twp. 62N North ☒ or South ☐
 Rge. 4W East ☐ or West ☒
 Sec. 34 1/4 NW 1/4 S/E 1/4
 Lot: _____
 County Kootenai
 Lat. : : : Long: : : :

Address of Well Site ¹ 1/4 WEST ON BOEKEL RD.

(Show at least name of road & distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

SEA/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	20	15 sacks	dry - 50 lbs. Ea.

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

Was drive shoe seal tested? ☐ Y ☒ N Low?

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	41	330'	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

☒ *Perforations Method air perforator

☐ Screens Screen Type _____

From	To	Steel Size	Number	Diameter	Material	Casing	Liner
200"	278"	1 1/4"	455	3"	steel	☒	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

300 ft. below ground Artesian pressure b.

Depth flow encountered _____ ft. Describe access port or control devices: ESP

Water Temp. cold Bottom hole temp. cold

Water Quality test or comments: clean & clear

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10"	0	6	Top soil		X
10"	6	12	Cobbles & clay		X
10"	12	20	Pea gravel		X
8"	20	40	Gravel - 3/4 minus - clay mix		X
8"	40	60	1 1/2 with clay		X
8"	60	80	Cemented pea gravel		X
8"	80	150	Cemented sand		X
8"	150	200	3/4 minus gravel		X
8"	200	240	Fine sand-gravel mix		X
8"	240	260	Cobbles		X
8"	260	270	Cobbles - clay & sand mix		X
8"	270	285	Sand & clay mix		X
8"	285	300	Fine sand & clay mix		X
8"	300	325	1/2 minus - clean gravel	X	
8"	325	300	1" minus clean gravel - 1/2" minus mixed in	X	
			15' of 1/4" X 3" perforations in steel casing		
			8-rows 450 PIPS		

Completed Depth 380 (Measurable)

Date: Started 4/15/98 Completed 4/20/96

13. DRILLER'S CERTIFICATION

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

Firm Name United Drilling Inc. Firm No. 414

Firm Official [Signature] Date 4/22/98

and

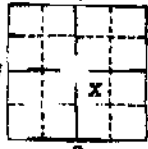
Supervisor or Operator Jason C. Beckham Date 4/22/96

(Plan once if Firm Officials & Operators)

FORWARD WHITE COPY TO WATER RESOURCES

Firm Official & Operator)
95-8941

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PENState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.Well #1
next to
pumphouse

1. WELL OWNER Name <u>Swank and McPoland</u> P.O. Box 1138 Address <u>Hayden Lake, ID 83835</u> Owner's Permit No. <u>95-85-N-23</u>		7. WATER LEVEL Static water level <u>300</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F, Quality _____ Describe artesian or temperature zones below.																																																																																																																	
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)		8. WELL TEST DATA ☐ Pump ☐ Bailor ☒ Air ☐ Other _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td>800+ - ESTIMATED ATN/LMT</td><td></td><td></td></tr></tbody></table>		Discharge G.P.M.	Pumping Level	Hours Pumped	800+ - ESTIMATED ATN/LMT																																																																																																												
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)		9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>12"</td><td>0</td><td>90</td><td>Gravel & cobble</td><td></td><td>X</td></tr><tr><td>12"</td><td>90</td><td>150</td><td>Gravel & boulders</td><td></td><td>X</td></tr><tr><td>12"</td><td>150</td><td>170</td><td>Gravel</td><td></td><td>X</td></tr><tr><td>12"</td><td>170</td><td>190</td><td>Gravel & boulders</td><td></td><td>X</td></tr><tr><td>12"</td><td>190</td><td>205</td><td>Gravel & cobble</td><td></td><td>X</td></tr><tr><td>12"</td><td>205</td><td>210</td><td>Sand & gravel</td><td></td><td>X</td></tr><tr><td>12"</td><td>210</td><td>245</td><td>Gravel & boulders</td><td></td><td>X</td></tr><tr><td>12"</td><td>245</td><td>270</td><td>Gravel</td><td></td><td>X</td></tr><tr><td>12"</td><td>270</td><td>290</td><td>Sand & gravel</td><td></td><td>X</td></tr><tr><td>12"</td><td>290</td><td>300</td><td>Gravel & cobble</td><td></td><td>X</td></tr><tr><td>12"</td><td>300</td><td>340</td><td>Red gravel</td><td></td><td>X</td></tr><tr><td>12"</td><td>340</td><td>350</td><td>Gravel & brown clay</td><td></td><td>X</td></tr><tr><td>12"</td><td>350</td><td>360</td><td>Gravel</td><td></td><td>X</td></tr><tr><td>8"</td><td>360</td><td>382</td><td>Gravel</td><td></td><td>X</td></tr><tr><td colspan="6">No PVC Liner Installed</td></tr><tr><td colspan="6">12" Drive shoe</td></tr><tr><td colspan="6">12" Drive shoe</td></tr></tbody></table>		Bore Diam.	Depth		Material	Water		From	To	Yes	No	12"	0	90	Gravel & cobble		X	12"	90	150	Gravel & boulders		X	12"	150	170	Gravel		X	12"	170	190	Gravel & boulders		X	12"	190	205	Gravel & cobble		X	12"	205	210	Sand & gravel		X	12"	210	245	Gravel & boulders		X	12"	245	270	Gravel		X	12"	270	290	Sand & gravel		X	12"	290	300	Gravel & cobble		X	12"	300	340	Red gravel		X	12"	340	350	Gravel & brown clay		X	12"	350	360	Gravel		X	8"	360	382	Gravel		X	No PVC Liner Installed						12" Drive shoe						12" Drive shoe					
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4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____																																																																																																																			
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>.250 inches</td><td>12 inches +</td><td>1 feet</td><td>79 feet</td></tr><tr><td>.250 inches</td><td>10 inches +</td><td>1 feet</td><td>139 feet</td></tr><tr><td>.264 inches</td><td>8 inches +</td><td>1 feet</td><td>382 feet</td></tr></tbody></table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☐ Factory ☒ Knife ☐ Torch Size of perforation <u>3/8</u> inches by <u>1 1/2</u> inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>425 perforations</td><td>360 feet</td><td>380 feet</td></tr><tr><td>perforations</td><td>feet</td><td>feet</td></tr><tr><td>perforations</td><td>feet</td><td>feet</td></tr></tbody></table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>20</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Pudding clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld _____ ☐ Cemented between struts Describe access port _____		Thickness	Diameter	From	To	.250 inches	12 inches +	1 feet	79 feet	.250 inches	10 inches +	1 feet	139 feet	.264 inches	8 inches +	1 feet	382 feet	Number	From	To	425 perforations	360 feet	380 feet	perforations	feet	feet	perforations	feet	feet																																																																																						
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6. LOCATION OF WELL Sketch map location must agree with written location.  County <u>BOONVILLE</u> NW 1/4 SE 1/4 Sec. 34 T. 52N N/S. R. 4W E/W.		10. Work started <u>4/09/85</u> finished <u>4/26/85</u> 11. DRILLERS CERTIFICATION <u>DR</u> I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>PONDEROSA DRILLING</u> Firm No. <u>228</u> E. 6010 Broadway Address <u>Spokane WA 99212</u> Date <u>4/26/85</u> Signed by (Firm Official) <u>W. Scott Barrett</u> and <u>Thomas R. Richardson</u> (Operator) <u>Thomas R. Richardson</u>																																																																																																																	

USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT