

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-9173

Exam Date: 8/21/2007

1. Current Owner: RON CAVALIN
2888 E MURPHY RD
COEUR D ALENE ID 83815
(208)661-0109
2. Accompanied by: UNACCOMPANIED
Phone No: SAME AS ABOVE
Address: SAME AS ABOVE
Relationship to Permit Holder: N/A

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 SE1/4NE1/4
KOOTENAI County

Sec. 18, Twp 50N, Rge 03W, B.M.

Method of Determination: GPS

2.

PLACE OF USE: DOMESTIC

Twp Rge Sec	NE				NW				SW				SE				Totals
50N 03W 18	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
				X													

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
50N 03W 18	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
				3.0													3.0

Total Acres: 3

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</u> <u>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</u> <u>Size</u>
00022181	Jacuzzi	5		Jacuzzi	45 GPM

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>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: See Attached Pump Curve

5 gal in 8 sec
 37.5 gpm
 .08 cfs

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

PUMP EQUATIONS					
WATER RIGHT No.			95-9173		
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \times 8.8 \times \text{Eff}}{H}$	5	184.7755102	0.75	46	60
Q = 0.179 cfs 80.3 gpm					

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3 \times 3 = 9 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .06 \times 246 \times 1.9835 = 29.3 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 9 \text{ AF}$$

2. Volume Calculations for Other Uses:

$$\begin{array}{r} 9.0 \text{ AF IRR} \\ + 1.8 \text{ AF Domestic} \\ \hline 10.8 \text{ AF total} \end{array}$$

$$.6 \times 3 = 1.8 \text{ AF Domestic}$$

G. NARRATIVE/REMARKS/COMMENTS

THIS SYSTEM USES GROUNDWATER FOR DOMESTIC AND IRRIGATION USE. THE DOMESTIC USE IS FOR 3 HOMES AND THE IRRIGATION USE IS FOR 3 ACRES OF IRRIGATION AROUND THE 3 HOMES. A MEASUREMENT OF 5 GALLONS IN 8 SECONDS WAS TAKEN AT THE TIME OF THE FIELD EXAM.

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	0.080 CFS	1.80 AF
IRRIGATION	03/15 to 11/15	0.060 CFS	9.00 AF
<u>Totals:</u>		0.140 CFS	10.80 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

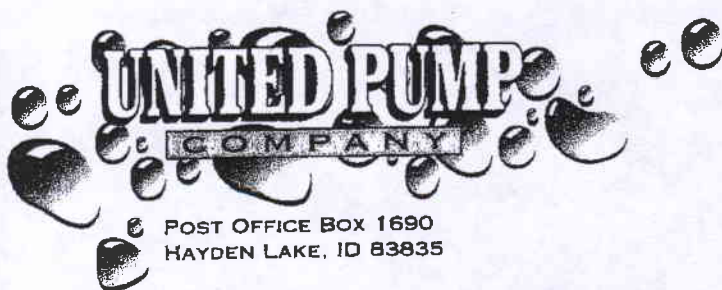
I. AUTHENTICATION

Field Examiner's Name

Date 10-11-07

Reviewer

Date 10/29/07



POST OFFICE BOX 1690
HAYDEN LAKE, ID 83835

Post Office Box 1690, Hayden Lake, ID 83835
(208) 772-7867 • (800) 682-9641 • Fax (208) 772-7229

SOLD TO: Ron Cavalin

4525 Foothills Dr.

Coeur d'Alene, ID 83814

95-9173
INVOICE

11210

INVOICE DATE
March 22, 2002

ORDER NO.

SHIP TO

E. Murphy Road Property

661-0109 cell / 667-4161
PHONE #

INSTALLATION/SERVICE DATE		SHIPPED VIA	F.O.B. POINT	TERMS
March 21, 2002		Install WR	Customer's Well Site	
QTY.	UNIT	DESCRIPTION		
1	ea.	Jacuzzi 5 HP 45 GPM pump/motor/deluxe control		
1	ea.	Jacuzzi 5 Year Extended Warranty on Pump and Motor		
126	lf.	1 1/2" Galvanized Drop Pipe		
2	ea.	1 1/2" Check Valves		
135	lf.	#4/4 TW Submersible Pump Cable		
1	ea.	Motor Splice and Tape		
1	ea.	6" Cast Iron Well Seal		
1	ea.	Electrical Permit		
1	ls.	Labor to Install to Top of Well		
1	ls.	4 Hour Certified Well Test, Water Quality, & Bacteria Testing		

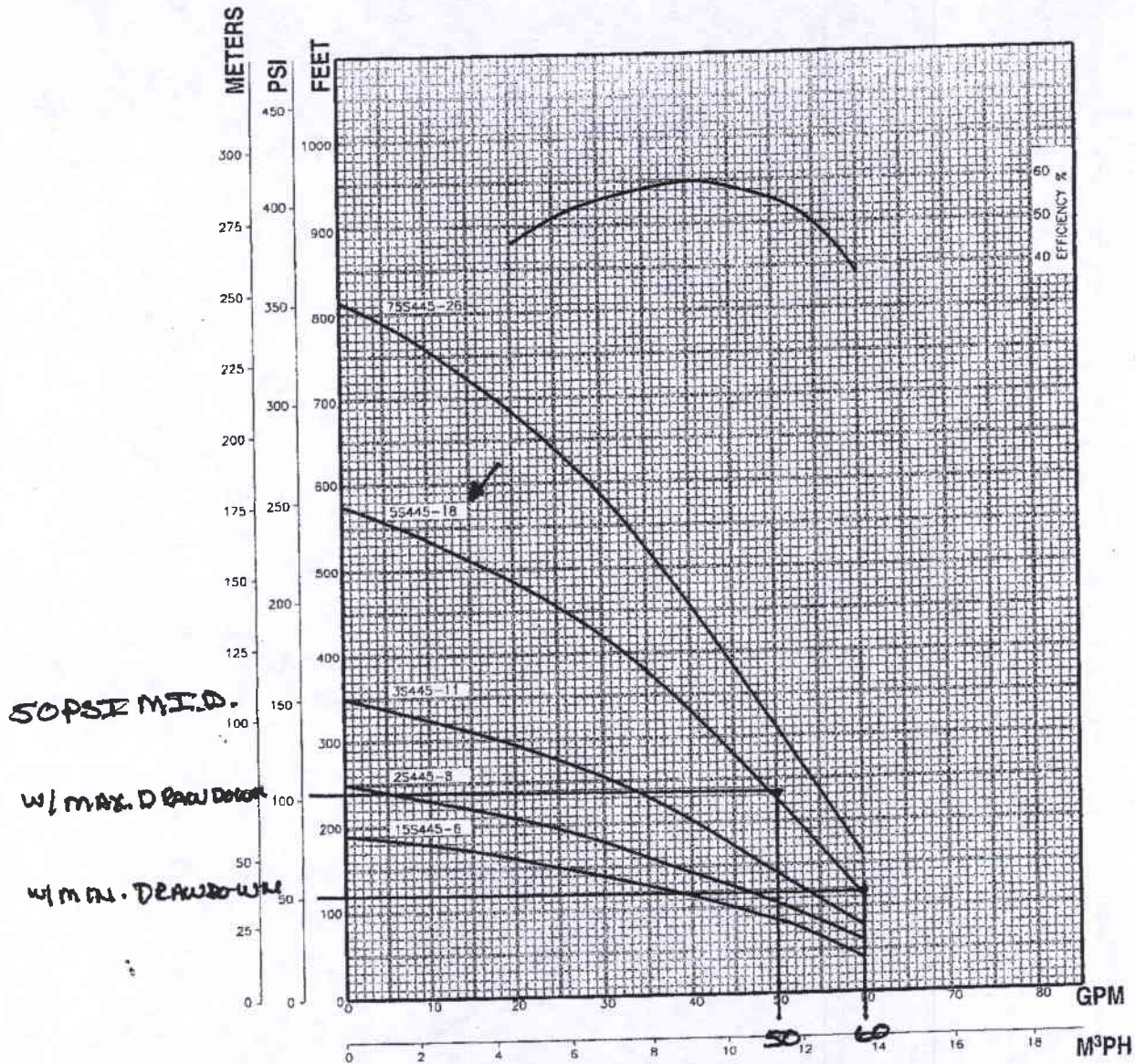
Submersibles



SandHandler™ High Capacity 45 GPM

Performance Curves

95-9173



45 GPM

Pump Ends

Order No.	Model No.	HP	Weight
9252-5856	S445-6XM	1-1/2	15
9252-5872	S445-8XM	2	16
9252-5898	S445-11XM	3	19
9252-5914	S445-18XM	5	25
9252-5922	S445-26XM	7-1/2	33

Notes: 1) Performance shown does not include friction loss in the drop pipe.
2) All performance data is based on rated motor name plate voltage.

SALES • SERVICE • INSTALLATION
FOR SUBMERSIBLE, SEWAGE & IRRIGATION
LICENSED ELECTRICAL CONTRACTOR



UNITED PUMP
COMPANY

WELL TEST

95-9173

Customer: Ron Cavalin **Address:** 4525 Foothills Drive
Coeur d' Alene ID 83814

Job Location: 2860 E. Murphy Road **Phone No:** 208-667-4161
208-661-0109 - Cell

WELL DATA

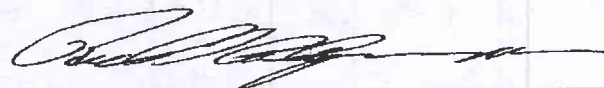
Total Depth: 146' **Test Pump Used:** 5 HP, 45 GPM
Static Water Level: 46' **Pump Setting:** 137' on pitless
Driller Tested: 100+ **Date of Test:** 03/21/02

Time	Flow Rate	Pressure	Water Quality	Static Level
	Gallons Per Minute	Per Square Inch		
2:30 PM	50.00	0.00	Light Color	46'
2:45 PM	50.00	0.00	Light Color	unknown
3:00 PM	50.00	0.00	Very light color	unknown
3:15 PM	50.00	0.00	clear	unknown
3:30 PM	50.00	0.00	clear	unknown
3:45 PM	50.00	0.00	clear	unknown
4:00 PM	50.00	0.00	clear	unknown
4:15 PM	50.00	0.00	clear	unknown
4:30 PM	50.00	0.00	clear	unknown
4:45 PM	50.00	0.00	clear	unknown
5:00 PM	50.00	0.00	clear	unknown
5:15 PM	50.00	0.00	clear	unknown
5:30 PM	50.00	0.00	clear	unknown
5:45 PM	50.00	0.00	clear	unknown
6:00 PM	50.00	0.00	clear	unknown
6:15 PM	50.00	0.00	clear	unknown
6:30 PM	50.00	0.00	clear	unknown

TEST SUMMARY:

50.00 was the average gallons per minute produced by this well over the four-hour test period.

Certified by:



Richard A. Agueros, President
UNITED PUMP COMPANY

RECEIVED

Form 238-7
11/97

APR 22 2002

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

IDWR/North

Office Use Only		
Inspected by _____		
Twp _____	Rge _____	Sec _____
1/4 _____	1/4 _____	1/4 _____
Lat: _____	Long: _____	

1. WELL TAG NO. D0022181

DRILLING PERMIT N

775524

Other IDWR No

2. OWNER:

Name Ron Cavalin

Address 4525 Foothills Drive

City Coeur d'Alene

State ID

Zip 83814

3. LOCATION OF WELL by legal description:

N		Twp	50N	North	☒ or	South
W		Rge	03W	East	☐ or	West ☒
E		Sec	18	1/4 SE	1/4 NE	1/4
S		Gov't Lot _____ County Kootenai				
		Lat _____ Long _____				

Address of Well Site: (see next line)

E. Murphy Road

Lot _____ Blk _____

City _____ Sub. Name (see next line)

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/FILTER PACK			Amount	Method
Material	From	To	Sacks/Lbs	
Bentonite	0	39	14 sacks	Pour in

Drive Shoe Used? ☐ Y ☒ N Shoe Depth(s) _____

Drive Shoe Seal Tested? ☐ Y ☒ N How? _____

8. CASING/LINER

Diam	From	To	Gauge	Material	Casng	Liner	Weld	Thrded
6	2	144	0.250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length Headpipe _____

Length Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations? Method torch

☐ Screens? Screen Type _____

From	To	Slot	Nmbr	Diam	Material	Casng	Liner
130	144	1/4	18		Steel	☒	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL or ARTESIAN PRESSURE

46 ft. below ground.

Artesian pressure _____ lb.

Depth flow encountered

105,125

ft. Describe access port or

control devices: Steel cap welded

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pump Level	Time
100+	100%	143	1 hr.

Water Temp. _____

cold

Bottom hole temp. _____

cold

Water Quality test or comments: (below) Depth first Water Encountered 105

cold, no smell

12. LITHOLOGIC LOG (Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality and Temperature	Water	
				Y	N
10	0	3	Topsoil with some gravel	☐	☒
10	3	15	Sand & gravel - fine	☐	☒
10	15	19	Basalt - black - hard	☐	☒
8	19	105	Basalt - black - hard	☐	☒
8	105	107	Basalt - black - broken 8 gpm @ 105	☒	☐
8	107	120	Basalt - black - soft	☐	☒
8	120	125	Basalt - black - hard	☐	☒
8	125	144	Basalt - black with green clay seams	☒	☐
			very broken 100 + gpm	☐	☐

Completed Depth

144

(Measurable)

Date: Started

3/18/02

Completed

3/19/02

13. DRILLERS 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 and

Jason C. Beckham

Date 3/19/02

Supervisor or Operator Jason C. Beckham

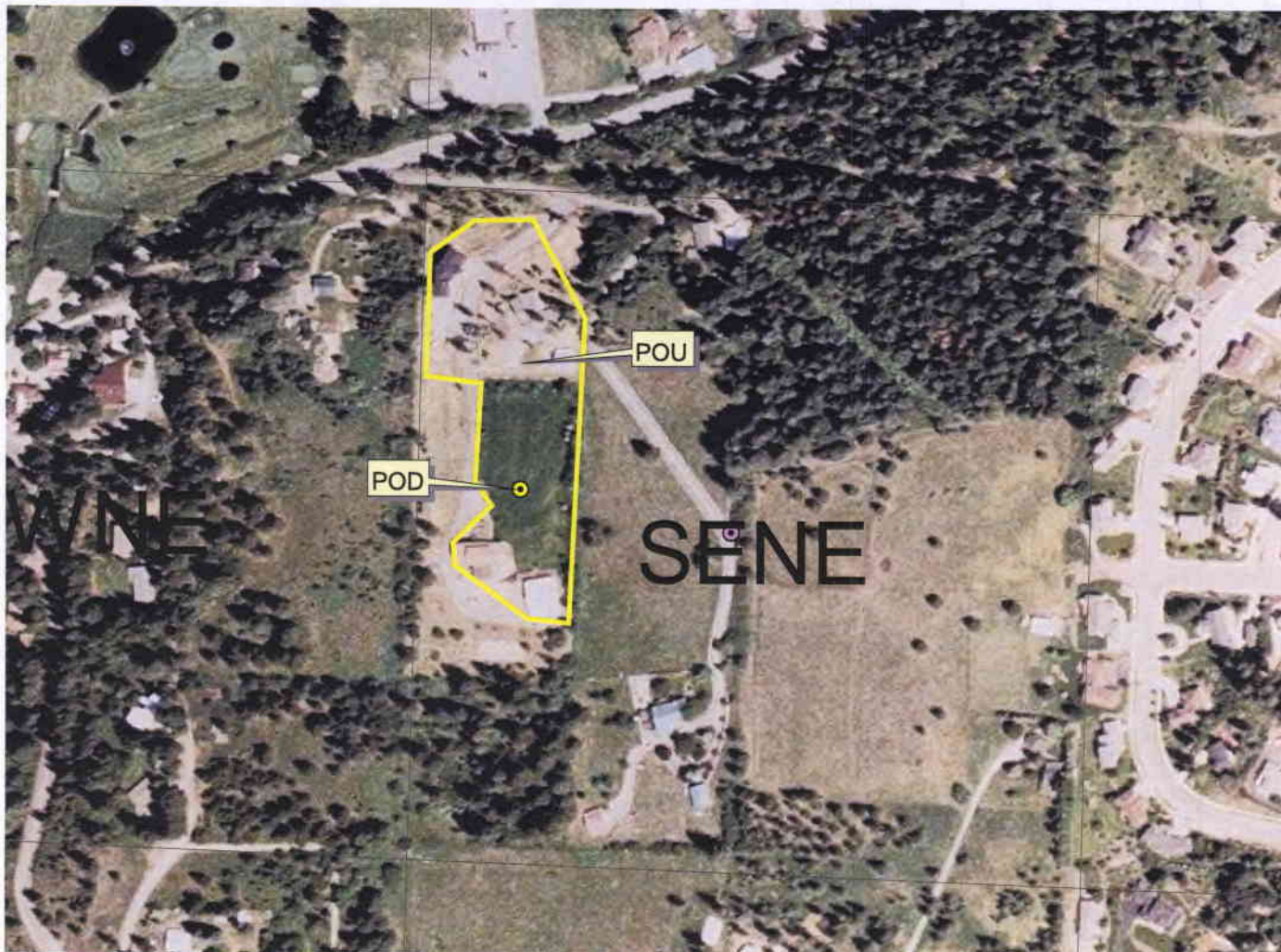
Date 3/19/02

FORWARD WHITE COPY TO WATER RESOURCES

504

95-9173

95-9173



0.1 0 0.1 0.2 Miles

Sec 18 T-56N R3W

- GCDB50N03W GCDB
- Right POD
- Pou.shp
- Pod.shp
- Administrative BasinsAdminbas.shp





MEASUREMENT



PLACE OF USE 1



PLACE OF USE 2



PLACE OF USE 3



PLACE OF USE 4



PLACE OF USE 5



POINT OF DIVERSION

95-9173



95-9173





95-9173





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