

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-7416

Exam Date: 9/5/2008

1. Current Owner: BISSELL FAMILY REVOCABLE LIVING TRUST
5305 E O GARA RD
HARRISON ID 83833
(208)689-3356
2. Accompanied by: Angelo Bissell
Phone No: (208) 689.3356
Address: 5305 E O'Gara RD, Harrison, ID 83833
Relationship to Permit Holder: Owner

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 L4 SE1/4SW1/4 Sec. 17, Twp 47N, Rge 03W, B.M.
KOOTENAI County 47° 25' 06.3 North 116° 44' 47.2 West
Method of Determination: Garmin GPS Receiver, USGS 7.5' Quadrangle
'Black Lake'

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	
47N	03W	17												1.7			1.3		3.0
													1.4				1.4		

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

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4.

Well or DiversionID No.*Motor MakeHpMotor Serial No.Pump MakePump Serial No. or DischargeSize

726012

Franklin 3

NA

Unknown

NA

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

DRILLING PERMIT 94-89-N-5

D. FLOW MEASUREMENTS

1.

MeasurementEquipmentTypeMakeModel No.Serial No.SizeCalib. Date

Bucket

NA

Lowes

NA

NA

5 Gallon

NA

Watch

Wrist

Remington

NA

NA

NA

NA

2. Measurements: (See narrative)

Fruit Trees① Garden Hose measured
(used on Fruit trees)

$$\frac{2.75 \text{ Gallons}}{30 \text{ seconds}} \times \frac{2}{2} = \frac{1 \text{ Min}}{5.5 \text{ Gallons}} = \boxed{5.5 \text{ GPM}}$$

② From hose connecting to
1 1/2" handline

$$\frac{5.5 \text{ Gallons}}{30 \text{ seconds}} \times \frac{2}{2} = \frac{1 \text{ Min}}{11 \text{ Gallons}} = \boxed{11 \text{ GPM}}$$

③ At last sprinkler on
hand line

$$\frac{1.75 \text{ Gallons}}{30 \text{ seconds}} \times \frac{2}{2} = \frac{1 \text{ Min}}{3.5 \text{ Gallons}} = \boxed{3.5 \text{ GPM}}$$

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

PUMP	EQUATIONS	WATER RIGHT No.	94-7416			
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI	
Q =	HP*8.8*Eff/H	3	205.9524	0.7	125	35
Q =	0.090 cfs	= 40,39 GPM				

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (3.0) \times (3.0) = 9.0 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = (.09) \times (246) \times (1.9835) = 43.91 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 9.0 \text{ AF}$$

2. Volume Calculations for Other Uses

NONE

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G. NARRATIVE/REMARKS/COMMENTS

Point of Diversion (POD) for this water right is a well drilled in 1989 on a moderately sloping hillside above Lake Coeur d Alene. A replacement three horsepower submersible pump (same as original) was installed in the well in 2006. Theoretical calculations based on well log depth, etc. indicate that the well is capable of producing .09 Cubic feet per Second (CFS). This is consistent with Gallons Per Minute noted on the well using well driller equipment. This water right is for irrigation only. The applicant is aware that domestic use is not covered under the water right.

Water lines from the well go in three directions. A line leads northward and uphill past a spigot to the applicant residence. A 1 1/4 inch underground water line leads slightly upslope to the east approximately 80 feet from the well to a trailer home. A third 1 1/4 inch underground line leads down slope westward approximately 80 feet to a box containing a valve that can be closed to prevent water from reaching pipes that supply the irrigation system.

The third 1 1/4 inch irrigation water line turns south and crosses beneath the driveway leading to the trailer home and owners residence. The irrigation line, after crossing the driveway, divides into three distribution lines. The first distribution line runs eastward near the driveway and has three hose connections points that are used to attach garden hoses for irrigating fruit trees. A second distribution line runs west and down slope to a large garden that has seven faucets. A third distribution line runs south to a valve and that can be used to control water for 1 1/2 inch aluminum hand lines with sprinklers. Flow was measured at 5.5 GPM on a garden hoses supplying the fruit trees, 11 GPM from a flexible hose before the start of the hand line, and at 3.5 GPM at the last sprinkler on the hand line. Water flowed from faucets in the garden when tested.

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	03/15 to 10/31	0.090 CFS	9.00 AF
<u>Totals:</u>		0.090 CFS	9.00 AF

2. Recommended Amendments

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

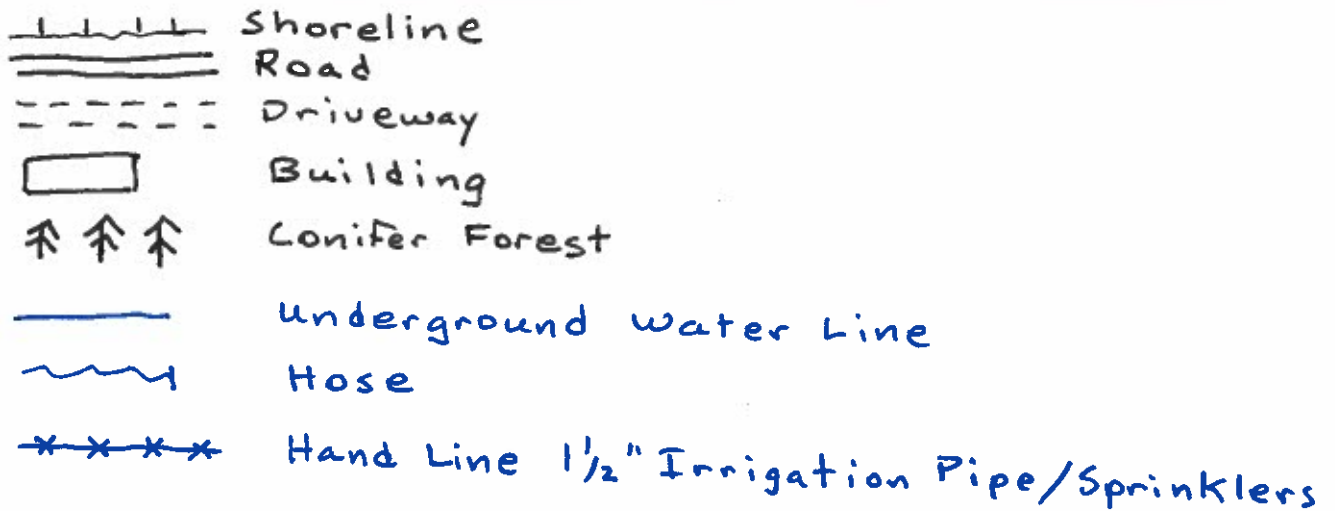
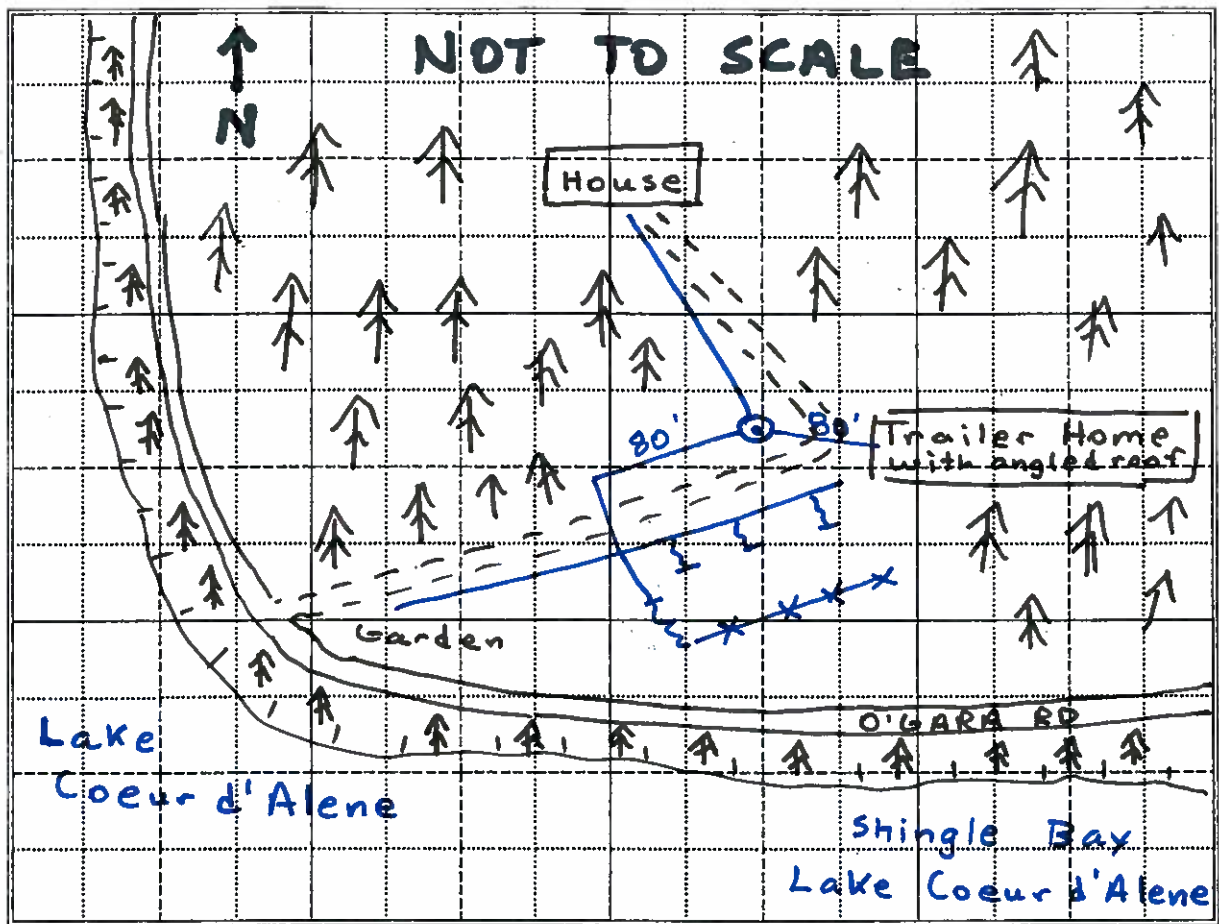
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

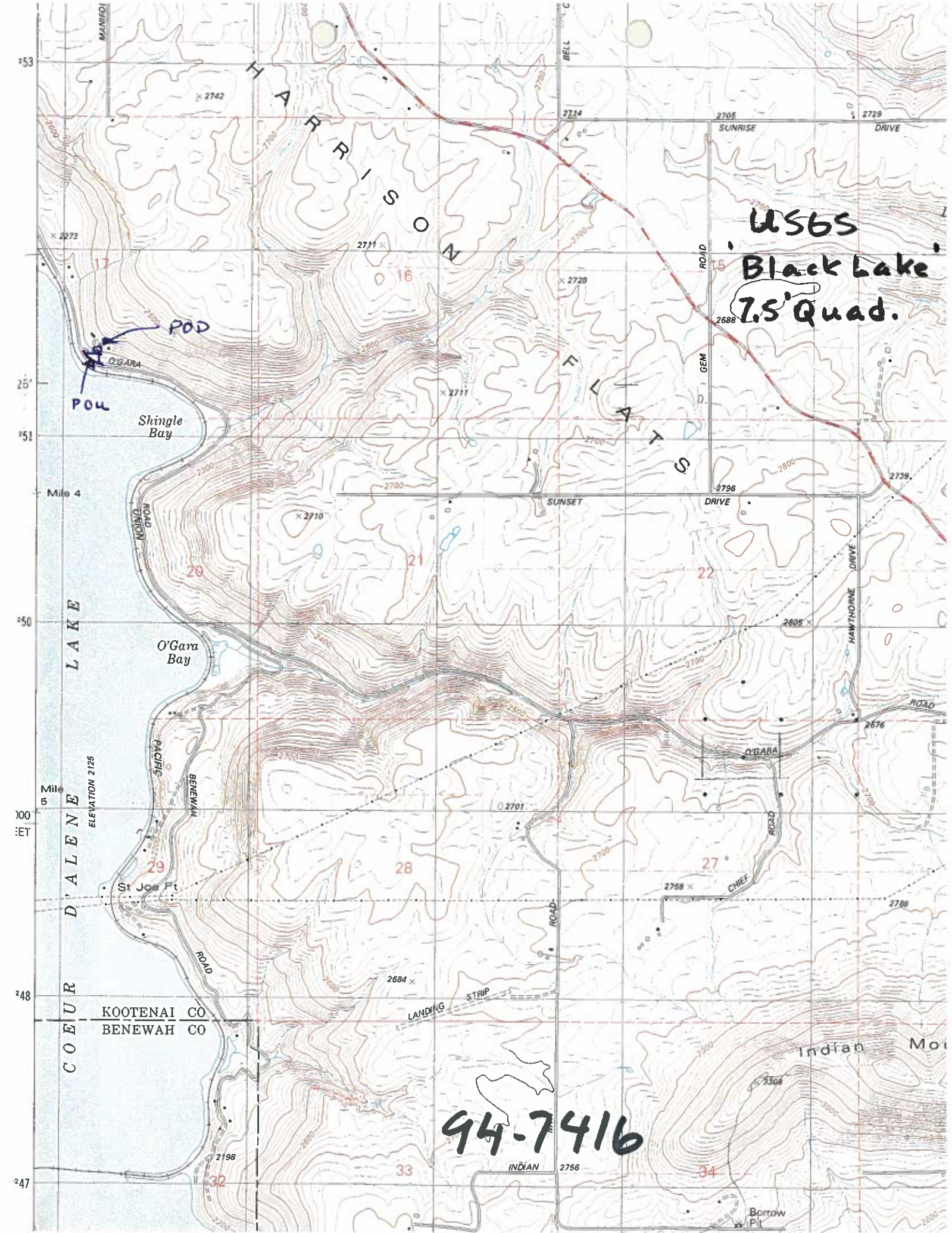
Field Examiner's Name William M. Mafey Date 9/19/08
 Reviewer [Signature] Date 9/29/08

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3. Delivery System Diagram:



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USGS
Black Lake
7.5' Quad.

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KOOTENAI CO
BENEWAH CO

LAKE

COEUR D'ALENE

HARRISON

BLACK LAKE

Shingle Bay

O'Gara Bay

St Joe Ft

Indian Mo

Borrow Pit

LANDING STRIP

INDIAN

CHIEF

O'GARA

SUNSET

SUNRISE

DRIVE

ROAD

HAWTHORNE DRIVE

ROAD

ROAD

ROAD

ROAD

ROAD

ROAD

ELEVATION 2125

Mile 4

Mile 5

253

251

251

250

250

250

248

247

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94-7416 Well Cover.JPG



94-7416 Irrigated Fruit Trees.JPG



94-7416. 1.5 Inch Hand Line Sprinklers.JPG



94-7416 Valve & Hose For Hand Line.JPG



94-7416 Hose To Fruit Trees.JPG



94-7416 Bucket filling From Sprinkler.JPG



94-7416 Garden Lower.JPG



94-7416 Garden Upeer.JPG



94-7416 Hand Line Diameter.JPG



94-7416 House Not On LISC.JPG



94-7416 Spigot Near house.JPG



94-7416 Trailer Home Not On LISC.bmp

94-7416



94-7416 Well Cover



94-7416 Spigot Near House

94-7416



94-7416 House not on LISC



94-7416 Trailer Home Not on LISC

94-7416



94-7416 Hose to Fruit Tees



94-7416 Irrigated Fruit Trees

94-7416



94-7416 Valve & Hose for Hand Line



94-7416 Hand Line Diameter

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94-7416 1.5 Inch Hand Line Sprinklers



94-7416 Bucket Filling From Sprinkler

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94-7416 Garden Lower



94-7416 Garden Upper

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INVOICE

RECEIVED

KT0332

BISSEL, ANGELO
RT. 1 BOX 44
HARRISON, ID
83833

H2O WELL SERVICE

100 W. Hayden Ave.
Hayden, Idaho 83835
(208) 772-4004

MAR 02 2007

Invoice Date: 07/13/89

Page: 1

IDWR/North

Invoice No.: 279

PUMP & PRESSURE TANK

Qty	Item #	Description	Price	Dis	Ext	T
1.00	BT220	PRES TANK 120 GAL	454.00	59.2511	185.00	Y
1.00	22MG15-30	BERKELEY SUB 3 HP	1265.00	42.4664	727.80	Y

Replaced motor. (Franklin 3 HP.) SAME AS ORIGINAL
26 MAR 06. PUMP PART GOOD

H2O WELL SERVICE, INC.
582 WEST HAYDEN AVE.
HAYDEN LAKE, ID. 83835

(208) 772-4004

Sub Total	:	1719.00
Discount	:	806.20
Net Total	:	912.80
Sales Tax	:	45.64
Invoice Total:		958.44
Received	:	
Balance	:	958.44
Your Change	:	

Paid 7/11/89

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