



SPF WATER
ENGINEERING

RECEIVED

AUG 26 2011

DEPT. OF WATER RESOURCES
SOUTHERN REGION

August 25, 2011

Allen Merritt
Idaho Department of Water Resources
Southern Region Office
1341 Fillmore St., Suite 200
Twin Falls, ID 83301-3380

Re: Water Right Permit Application No. 72-16873

Dear Allen,

We recently spoke on the telephone concerning the above-captioned applications. At that time, I indicated that SPF had prepared a short report at the request of the State of Idaho, Department of Fish & Game concerning a possible hydraulic connection between the Salmon River and a new well to be drilled under Permit No. 72-16873.

We are happy to supply the enclosed report for your records.

Best Regards,

Roxanne Brown
Sr. Water Rights Specialist

CC: Gary Petersen
Larry Weeks, IDFG – cover letter via email

Enclosures

SPF Job No. 921.0010



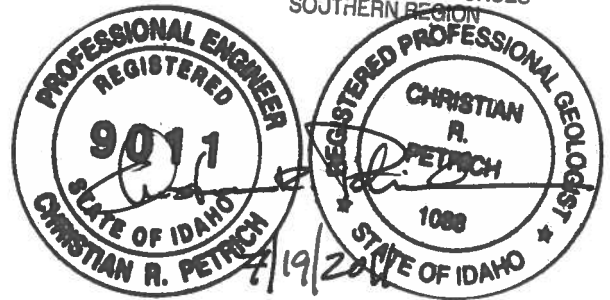
RECEIVED

AUG 26 2011

DEPT. OF WATER RESOURCES
SOUTHERN REGION

MEMORANDUM

DATE: July 19, 2011
TO: Lynn Stratton
Idaho Dept. of Fish and Game
P.O. Box 1336, Salmon, ID 83467
FROM: Christian R. Petrich, Ph.D., P.E., P.G.
CC: Larry Weeks
Idaho Dept. of Fish and Game
RE: Bayhorse Creek Conservation Project



The Peterson Ranch Trust irrigates land approximately 8.5 miles south of Challis, Idaho near the mouth of Bayhorse Creek (Figure 1). Water for irrigation is currently diverted from Bayhorse Creek under water right 72-4077. The Peterson Ranch Trust seeks to move an existing point of diversion (BH-2) under water right 72-4077 from Bayhorse Creek to a well near the Salmon River just downstream of the mouth of Bayhorse Creek (Figure 2). The well will be used to irrigate an approximate 20-acre portion of the Peterson Ranch Trust land. Moving the point of diversion from Bayhorse Creek to a well near the Salmon River will enhance irrigation-season flows in lower Bayhorse Creek.

Flow from Bayhorse Creek is directly tributary to the Salmon River, and thus the current point of diversion in Bayhorse Creek draws water that is directly tributary to the Salmon River. At question is whether or not the replacement point of diversion (i.e., the proposed Peterson well) would draw groundwater that is in hydraulic connection with the Salmon River.

I have reviewed hydrogeologic information from this project area and have concluded that the proposed well would draw water from aquifers in hydraulic connection with the Salmon River. Drawing water from the proposed well will have a similar effect on Salmon River flows as diverting water from Bayhorse Creek. This memorandum provides supporting information for this conclusion.

Hydrogeology

Regional geology in the Bayhorse Creek project area (Figure 3) is dominated by Ordovician¹- and Cambrian²-age metamorphic rocks (dolomite/siltstone/quartzite) and Eocene³-age volcanic (silicic and basaltic) rocks (Bond and Wood, 1978; Maley, 1987; Rember and Bennett, 1979). Valley sediments along lower Bayhorse Creek and the Salmon River are comprised of Quaternary⁴ alluvium and colluvium.

Driller's reports from wells in the vicinity of Bayhorse Creek penetrate these shallow valley sediments; some wells extend into underlying bedrock. The Idaho Department of Water Resources (IDWR) online well construction database contains drillers' reports from 5 wells (Table 1 and Attachment B) near the mouth of Bayhorse Creek:

1. The Hansen well, for which the exact location is unknown (it is listed simply as being in Township 12N, Range 19E, Section 7), was drilled to a depth of 84 feet through clay and gravel sediments. It is listed as producing 20 gallons per minute (gpm) by bailing⁵.
2. The Peterson exploration well, drilled in March 2011, encountered gravel and sand sediments to a depth of 47 feet, and then shale/clay to a depth of 100 feet. The static water level was listed as being 12 feet below ground surface. The driller estimated potential production rates of 250 gpm from a depth of 18 to 47 feet below ground surface and 15 gpm from a depth of 64 to 100 feet. The basis for these estimates was not described in the driller's report.
3. The Anderson domestic well, located "along the Bayhorse Loop Road by river," was drilled to a depth of 65 feet through sand and gravel sediments. The well casing was perforated between 51 and 61 feet below ground surface in a sand and gravel zone. The well was described as yielding 60 gpm over a 2-hour period (based on air-lifting).
4. The Peterson domestic well, reported as being located at the "first place across Bayhorse Bridge," was drilled to a depth of 63 feet through boulders, gravel, and silt. It was reported as producing 60 gpm over a 1-hour period from a depth between 51 and 61 feet below ground surface (based on air-lifting).
5. A Bureau of Land Management (BLM) well, reported as being located 6 miles south of Challis on Highway 95 at the Bayhorse Campground, was

¹ The Ordovician Period occurred from approximately 500 to 430 million years ago.

² The Cambrian Period occurred from approximately 570 to 500 million years ago.

³ The Eocene Epoch occurred from approximately 54 to 38 million years ago.

⁴ The Quaternary Period has been in place for approximately the last 2 million years.

⁵ Production rates for this and other wells reflect testing method, well construction, and well use. Alternate construction could enable higher pumping rates.

constructed to a depth of 205 feet below ground surface. The well penetrates gravel and sand to a depth of 28 feet, shale to a depth of 160 feet, and layers of rhyolite and/or quartzite to a depth of 205 feet. The well is screened from 35 to 45 feet, 95 to 105 feet, and 195 to 205 feet. The well is reported to have a 7 gpm capacity based on a 2-hour test by air-lifting.

Saturated shallow alluvial sand and gravel sediments represent the greatest water-producing zones for wells in this area. By comparison, wells drawing water from shale, rhyolite, and/or quartzite materials are less productive than in shallow alluvial sediments. This is illustrated in the Peterson exploration well, in which alluvial sediments were estimated to have substantially greater productivity (250 gpm) than underlying shale (15 gpm), and in the BLM well (rated at 7 gpm), which draws water primarily from shale, rhyolite, and/or quartzite.

There is no evidence of areally-extensive confining layers (e.g., clay) separating the Salmon River from alluvial sediments. Furthermore, shallow groundwater levels (based on the static water level observed in the Peterson exploration well) appear to be similar to Salmon River water levels. Local alluvial-sediment aquifers in the vicinity of the mouth of Bayhorse Creek are therefore in direct hydraulic connection with surface water. Recharge to these shallow aquifers occurs as surface-channel seepage, infiltration from precipitation, and tributary underflow. Seepage from the river occurs when water levels in the river are higher than in the aquifer; discharge occurs where groundwater levels are lower than those in the river.

The Salmon River canyon becomes narrower approximately 0.7 miles north (downstream) of the proposed Peterson well site (Figure 1). As a result of this constriction, groundwater flowing parallel to the Salmon River discharges to the river in this general location.

The proposed Peterson well(s) will have the greatest production rates if completed in shallow alluvial sediments near the river. Pumping water from a production well (or wells) in this area will create a hydraulic cone of depression (i.e., pumping will create an area of lower water levels surrounding the well). The cone of depression will (1) induce seepage from the Salmon River and/or (2) reduce the amount of groundwater discharge to the Salmon River.

In conclusion, the Peterson Ranch Trust currently draws water from Bayhorse Creek, which is directly tributary to the Salmon River. The proposed alternative point of diversion – a well located near the Salmon River approximately 1 mile downstream of the mouth of Bayhorse Creek – will draw groundwater that is in close hydraulic connection with the Salmon River. In either case, the consumptive use resulting from irrigation of approximately 22 acres – whether by diversion from Bayhorse Creek or by withdrawal of the shallow groundwater near the Salmon River – will have the same effect of depleting flow in the Salmon River.

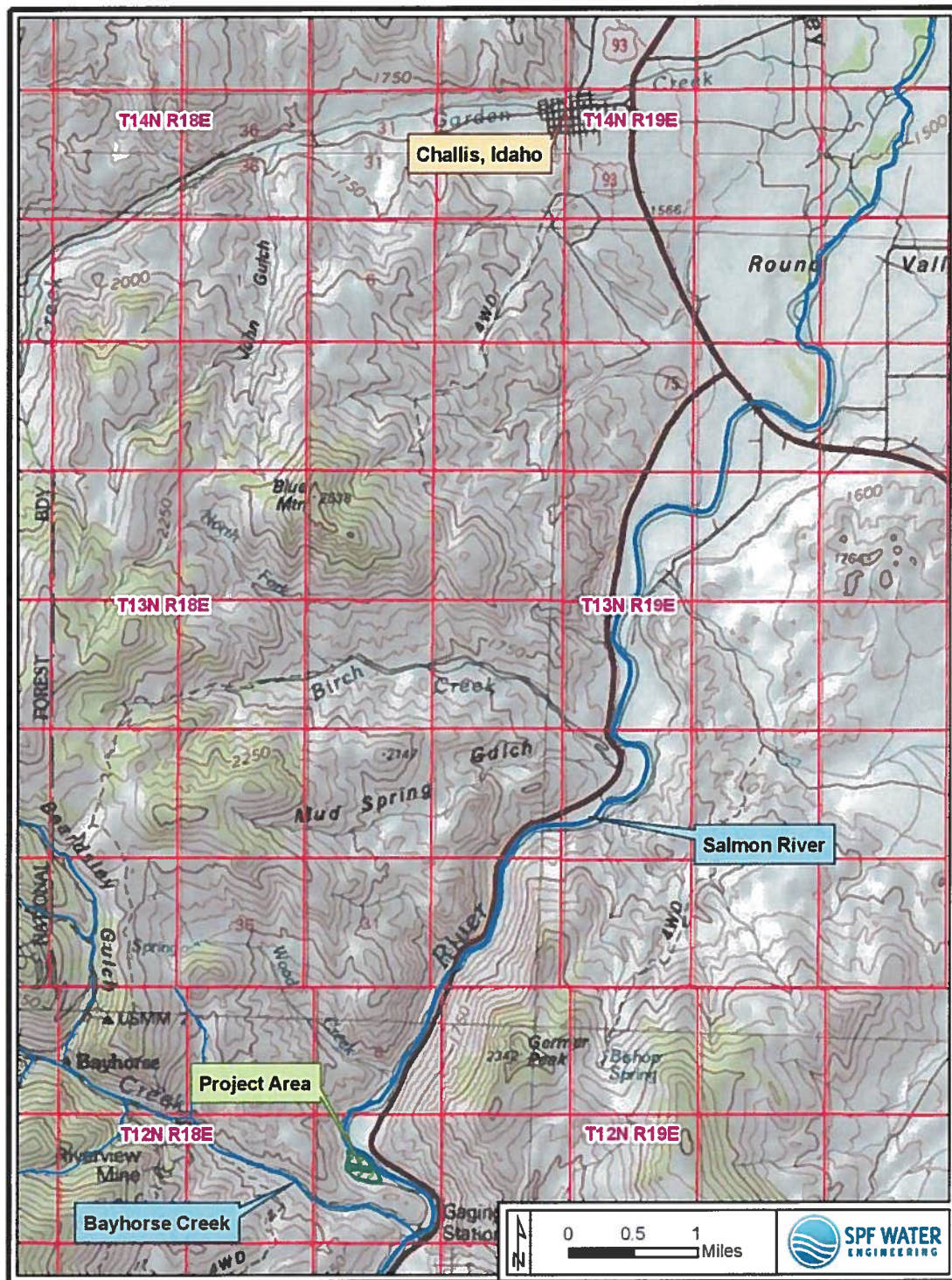


Figure 1. Bayhorse Creek and Salmon River area.

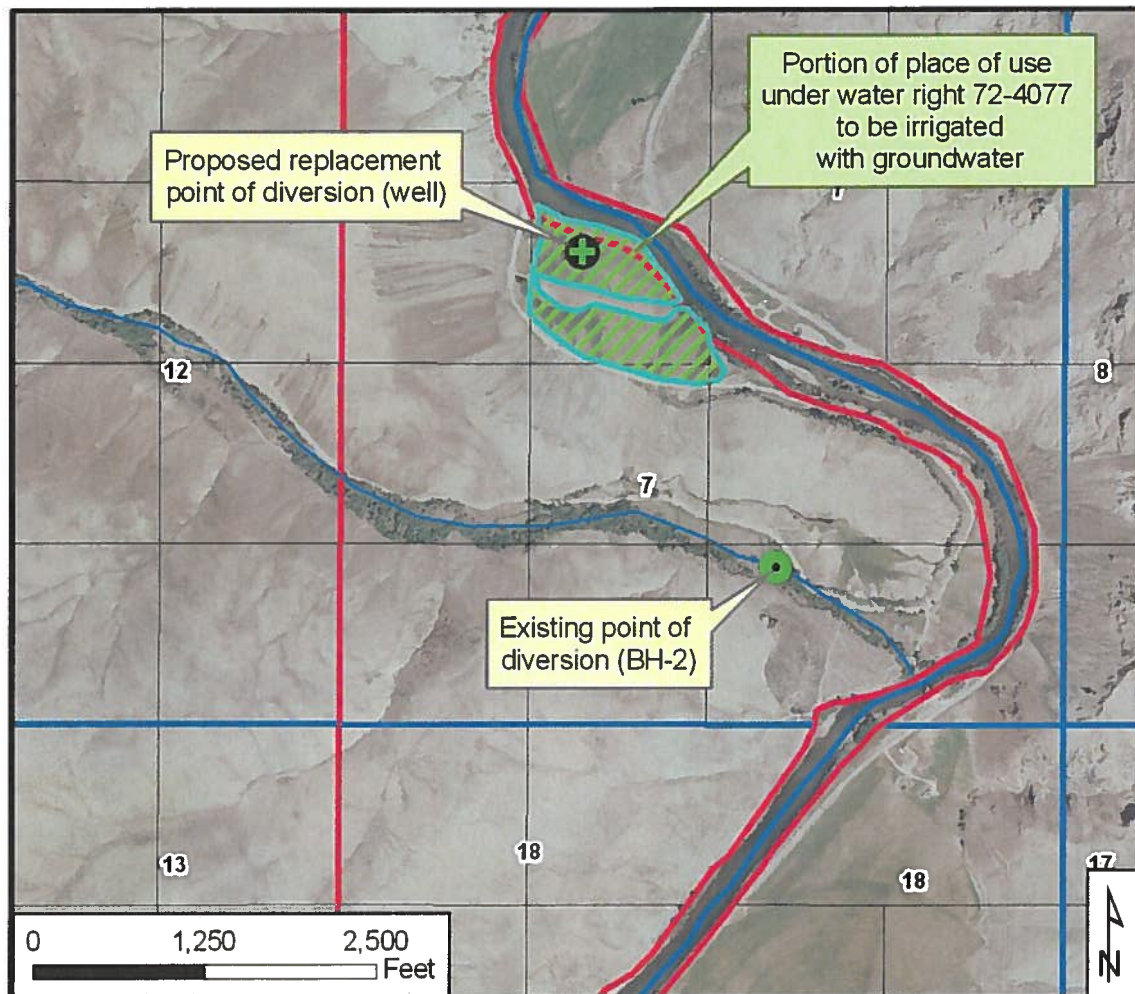


Figure 2. Bayhorse Creek project area.

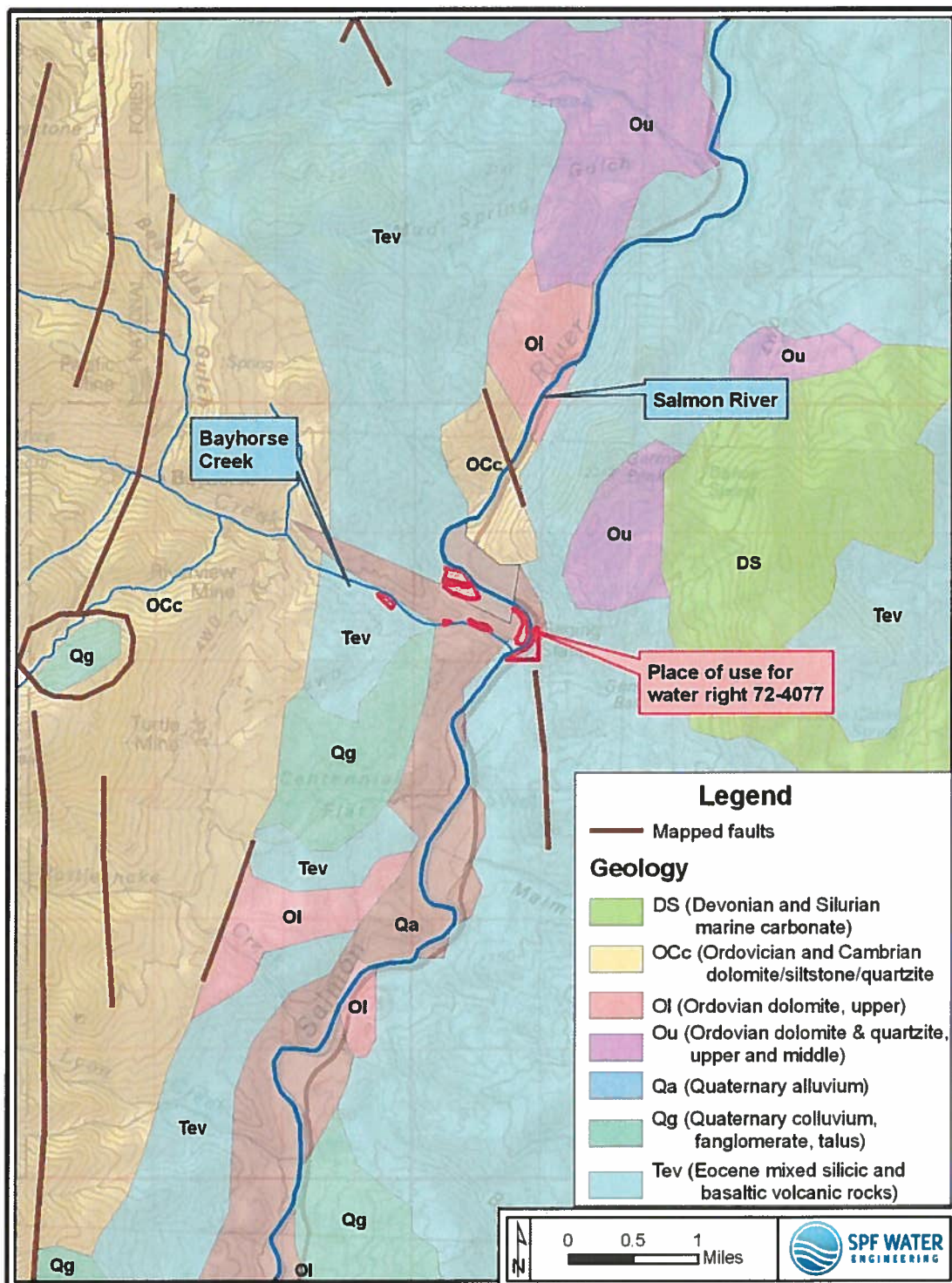


Figure 3. Project area surficial geology.

Drillers' Report Summary														
Ref. No.	Name	Use	TWP	RNG	SEC	Tract	Gov. Lot	Location	Rate (gpm)	Static Water Level (ft)	Total Depth (ft)	Casing Depth (ft)	Csg. Dia. (in)	Constr. Year
1	Hansen, L.S.	Domestic	12N	19E	7	?			20	66	84			1959
2	Peterson, Gary	Exploration	12N	19E	7	SESW		Bayhorse		12	100	55	6	2011
3	Anderson, Doug	Domestic-Single Residence	12N	19E	7	NESW		Bayhorse Loop Road by river	60	4	63	63	6	1999
4	Peterson, Gary	Domestic-Single Residence	12N	19E	7	SESW	10	Frist place across Bayhorse Bridge	60	12	63	63	6	1999
5	US Department of Interior	Domestic-Public Water Supply, Domestic-Public Water Supply	12N	19E	7	SWSE		6 miles south of Challis highway 75	7	10	205	-30	12	2001

Table 1. Drillers' report summary.

References

- Bond, J.G. and Wood, C.H., 1978. Geologic map of Idaho. Idaho Department of Lands, Bureau of Mines and Geology, 1:500,000 scale.
- Maley, T., 1987. Exploring Idaho Geology. Mineral Land Publications, Boise, Idaho.
- Rember, W.C. and Bennett, E.H., 1979. Geologic Map of the Challis Quadrangle, Idaho, Geologic Map Series Challis 2° Quadrangle (1:250,000 scale). Idaho Bureau of Mines and Geology.

Attachments

- Attachment A: Partial decree, Water Right 72-4077
- Attachment B: Drillers' reports from wells near the mouth of Bayhorse Creek

SRBA - PARTIAL DECREE

http://164.165.134.61/F7204077XX.HTM

SRBA PARTIAL DECREE 72-04077

Issued on 03-19-2001.

This is not an official copy.

Contact IDWR or the Court for a Certified Copy.

Choose Landscape Orientation when printing.

NAME AND ADDRESS: PETERSEN RANCH TRUST
C/O CLARENCE E PETERSEN
545 RIO VIRGIN DRIVE
SAINT GEORGE, UT 84790-7834

SOURCE: BAYHORSE CREEK TRIBUTARY: SALMON RIVER

QUANTITY: 4.50 CFS

THE QUANTITY OF WATER UNDER THIS RIGHT FOR DOMESTIC USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

PRIORITY DATE: 06/01/1922

POINT OF DIVERSION: T12N R18E S12

SESWNE Within Custer County

SENESE

SWNESE

R19E S07

LOT 8 (SENWSW)

LOT 10 (NESWSE)

LOT 10 (NWSWSE)

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
Irrigation	04-01 TO 10-31	4.50 CFS
Domestic 1 HOME	01-01 TO 12-31	0.04 CFS

PLACE OF USE: Irrigation

Within Custer County

T12N R10E S12	SWNE	0.1	NESE	3.3
R19E S07 LOT 4	(SWNE)	0.1	LOT 4	(SENW) 20.0
	NESW	3.3	LOT 7	(NESE) 3.7
	(NWSE)	2.0	LOT 10	(SWSE) 1.5
	LOT 10	(SESE)	6.5	
40.5 Acres Total				

Domestic

Within Custer County

T12N R19E S07 LOT 10 (SESE)

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR DOMESTIC USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. I.C. SECTION 42-1412(6).

**Attachment B: Drillers' Reports for Wells in
Vicinity of Bayhorse Creek**

025606

Department of Reclamation

Log No. _____
 Rec. _____, 19____
 Well No. _____
 Permit No. _____

(DO NOT FILL IN)

CASING RECORD

DIAM. CASING	FROM FEET	TO FEET	LENGTH	"REMARKS" -- SEALING, GROUTING, ETC.
6	4	84	80	

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

S. 7 12 N 19 E

025607

WELL LOG

[illegible]

WELL DRILLERS STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed Cole Drilling Co

By Robert L. Gale

Dated Jan 12, 1960.

License No. 153

Describe access port _____

Water quality test or comments: _____

* Signature of Principal Driller and rig operator are required

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

054067

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

1. WELL TAG NO. D 0006882
DRILLING PERMIT NO. 72-99-S-0009-000
Other IDWR No. _____

2. OWNER:
Name DOUG ANDERSON
Address 449 NATOMA ST
City SAN FRANCISCO State CA Zip 94107

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N
W E S
Twp. 12 North ☒ or South ☐
Rge. 19 East ☒ or West ☐
Sec. 4 1/4 NE 1/4 SW 1/4
Gov'l Lot _____ County CLATSOP
Lat: _____ Long: _____
Address of Well Site BAV HORSE
LOOP ROAD BY RIVER City CHALLIS
(Give at least name of road - Distance to Road or Landmark)

LI. _____ Bk. _____ 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/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	20	300	Over Bore

Was drive shoe used? ☒ N Shoe Depth(s) 63
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	11	63	250	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Method torch
Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
57	61		1P	1/4" x 3/8"	Steel	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

7 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: TOP OF WELL SEAL

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
60		50	2 hrs.

Water Temp. 52 Bottom hole temp. 52

Water Quality test or comments: _____

Depth first Water Encounter 12

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	0	12	TOP SOIL - SAND		X
	12	36	SAND GRAVEL	X	
	36	48	SAND	X	
	48	63	SAND GRAVEL	X	

RECEIVED
JUL 14 1999
Department of Water Resources

RECEIVED
JUL 28 1999
MICROFILMED
Department of Water Resources

OCT 13 1999

Completed Depth 63' (Measurable)
Date: Started 5-24-99 Completed 5-25-99

13. DRILLER'S CERTIFICATION

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

Company Name GUTHRIE DRILLING Firm No. 226

Firm Official H. T. Guthrie Date 7-12-99

and
Driller or Operator _____ Date _____
(Sign once if Firm Official & Operator)

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 000 6886
 DRILLING PERMIT NO. 72-99-S-0011-000
 Other IDWR No. _____

2. OWNER:
Name GARY PETERSON
Address 6588 W. - 2100 S
City SALT LAKE CITY State UT Zip 84128

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

SESW - by Gov lot - Chen

Twp. 12 North ☒ or South ☐
Rge. 19 East ☒ or West ☐
Sec. 7

Gov't Lot 10 10 acres County CUSTER 40 acres 160 acres

Lat: : : Long: : :

Address of Well Site FIRST PACE
ARROW ACROSS BAYBROOK City CHALLIS
(Give at least name of road • (distance to flood or landmark) BRIDGE

LI. _____ 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/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	20	250	over bore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 6-3
Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Linear	Welded	Threaded
66	41	63	250	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations Method torch
Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Linear
57	61		18	1/4"	Steel	☒	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

12 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or
control devices: TOP OF WELL SEAL

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
60		50	1 hr.

Water Temp. 49 Bottom hole temp. 49

Water Quality lost or comments: Good - cold

Depth first Water Encounter 15

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	0 17		Boulder & Grey Silt		X
	17 68		Large Gravel & Sand		X
RECEIVED JUL 14 1999 Department of Water Resources					
RECEIVED JUL 28 1999 Department of Water Resources					
MICROFILMED OCT 13 1999 Department of Water Resources					
Completed _____ Depth <u>63'</u> _____ (Measurable) Date: Started <u>6-8-99</u> Completed <u>6-9-99</u>					

13. DRILLER'S CERTIFICATION

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

Company Name GUTHRIE DRILLING Firm No. 226

Firm Official M. J. Huth Date 7-12-99

and
Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Basin 72
APP 867160
Per 769904

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

_____ 1/4 _____ 1/4 _____ 1/4

Lat: : : Long: : :

1. WELL TAG NO. D 0000895
 DRILLING PERMIT NO. _____
 Other IDWR No. _____

2. OWNER:

Name USDT - ALM
Address Rt 2 Box 610
City SALMON State Id Zip 83467

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
 Twp. 12 North ☒ or South ☐
 Rge. 19 East ☒ or West ☐
 Sec. 7 1/4
 Gov'l Lot _____
 County CLUSTER
 Lat. : : Long. : :
 W E
 X
 10 acres 1/4 1/4 SE 1/4
 40 acres 100 acres

Address of Well Site 6 mi S. Challis
City Challis
(Give at least name of road & distance to road or landmark)

LI. 1 Bk. 1 Sub. Name Bay horse
Campgrounds

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 or Pounds	
Bentonite Grout	20	10	97 GAL	Pumped
Bentonite Gravel	10	0	250 #	Poured

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 30 Ft
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8"	+18"	30	.322	STEEL	☒	☐	☒	☐
6"	13	35	.316	PVC	☐	☒	☐	☒
6"	45	95	.316	PVC	☐	☒	☐	☒

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens ☒ Screen Type FACILITY

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
35	45	20	Factory	6"	PVC	☐	☒
95	105	20	" "	6"	PVC	☐	☒
195	205	20	" "	6"	PVC	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

Depth ft. below ground 10 Artesian pressure - lb.
Describe access port or control devices: Removable Well Cap

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
7 GPM	N/A	110 FT	2 HRS

Water Temp. 52° Bottom Hole Temp. 52°
Water Quality test or comments: NOT AVAILABLE AT
TIME WELL WAS COMPLETED Depth first Water Encounter 10 Ft

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12 5/8"	0	5	Soil		
	5	20	LARGE GRAVEL some SAND MIX		
8"	20	26	LARGE GRAVEL, some SAND MIX		
	26	28	Shale		
	28	45	Solid shale		
	45	100	Solid Shale		
	100	120	Green Shale.		
	120	160	GREEN, BDN MX Rhyolite		
	160	205	LAYERS Rhyolite, Quartzite		

RECEIVED

AUG 21 2003

Department of Water Resources
Southern Region

Completed Depth 205 Ft. (Measurable)
Date: Started 7/11/01 Completed 7/30/01

13. DRILLER'S CERTIFICATION

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

Company Name JAFCO Firm No. 504

Firm Official Long John Date 8-8-01

and _____
Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0000895
 DRILLING PERMIT NO. _____
 Other IDWR No. _____

2. OWNER:

Name USDI - ALM
Address Rt 2 - Box 610
City SALMON State Id Zip 83467

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

		Twp. _____ North ☐ or South ☐		
		Rge. _____ East ☐ or West ☐		
Sec. _____		1/4	1/4	1/4
Gov't Lot _____		10 acres	40 acres	160 acres
Lat. _____		Long. _____		
Address of Well Site _____				
City _____				

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/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Lines	Welded	Threaded
6"	105	195	316	PVC	☐	☒	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe_____ Length of Tailpipe_____

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens _____ Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. Bottom hole temp.

Water Quality test or comments:

Depth first Water Encounter

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

[illegible]

RECEIVED

AUG 21 2001

Department of Water Resource
Southern Region

Completed Depth _____ (Measurable)

Date: Started _____ Completed _____

13. DRILLER'S CERTIFICATION

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

Company Name _____ Firm No. _____

Firm Official _____ Date _____
and _____

Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)