

Permit No: 63-11776

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DEPARTMENT OF
WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11776

Exam Date: 9/23/04

1. Current Owner: AL BIRT
4609 SOUTHSIDE BLVD
NAMPA ID 83686
(208)466-1820
2. Accompanied by: Permit holder and Erin Retelle (IDWR)
Phone No: 880-0086-cell
Address:
Relationship to Permit Holder:

3. SOURCE

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-11881, Nampa Meridian Irrigation District Water
2. Other water rights with the same point of diversion: 63-11881

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

NW1/4SE1/4

Sec. 11, Twp 02N, Rge 02W, B.M.

CANYON County

Method of Determination: Exam, Maps

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	
02N	02W	11									18.0			2.5	0.7		27.8		49.0

Total Acres: 49

Method of Determination: Tax info, ArcView Photos, Exam

3. ☐ Y ☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
☐ Y ☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
☐ Y ☐ Aerial Photo Attached (required for irrigation of 10+ acres).
☐ Y ☐ 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>
		10		Dempster	8BCAM submersible (per Davis Well & Pump)

*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>
Theoretical						

2. Measurements:

Theoretical: Corky, with Davis Well & Pump, stated that he set the pump @ 80'. Based on this info, dynamic lift was estimated @ 70'. Because the system open discharges, 4.33 psi (10') was included for friction loss. This pump is no longer available. A pump curve could not be located.

E. FLOW CALCULATIONS

☐Y ☐Additional Computation Sheets Attached

Measured Method: See attached theoretical pumping rate flow analysis

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 49 \times 4.5 = 220.5$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .84 \times 246 \times 1.9835 = 409.9$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 220.5$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

A 10 inch well equipped with a 10 hp submersible pump provides ground water to 49 acres via open discharge, mainline and gated pipe. Note that acreage in the NESE was not originally listed on the permit, however ground water could be used to irrigate a .7 acre pasture owned by the applicant. A small rock pile in the NESW and another rocky area in the SENWSE were included because these areas were irrigated for pasture purposes rather than crops. Shares from Nampa Meridian Irrigation District are the primary source of water used for irrigation and enter the farm in the corner of the SENWSE quarter. Please refer to the attached system diagram for further detail. Davis Well & Pump drilled the well and installed the pump. The pump is no longer available and a pump curve could not be located. 1994 and 2000 arc view photos were used to determine acreage. A measuring device was not found. This irrigation well and a domestic well also serve as diversion points for stockwater use under license 63-11881. No other rights are used.

Have conditions of permit approval been met? ☐Yes ☒No (The license will need condition 01M. Mr. Birt stated that he would install a measuring device when necessary. Currently measurement and reporting are not required by IDWR for basin 63 irrigation wells.)

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	3/15 to 11/15	.84 CFS	220.5
<u>Totals:</u>		.84 CFS	220.5

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

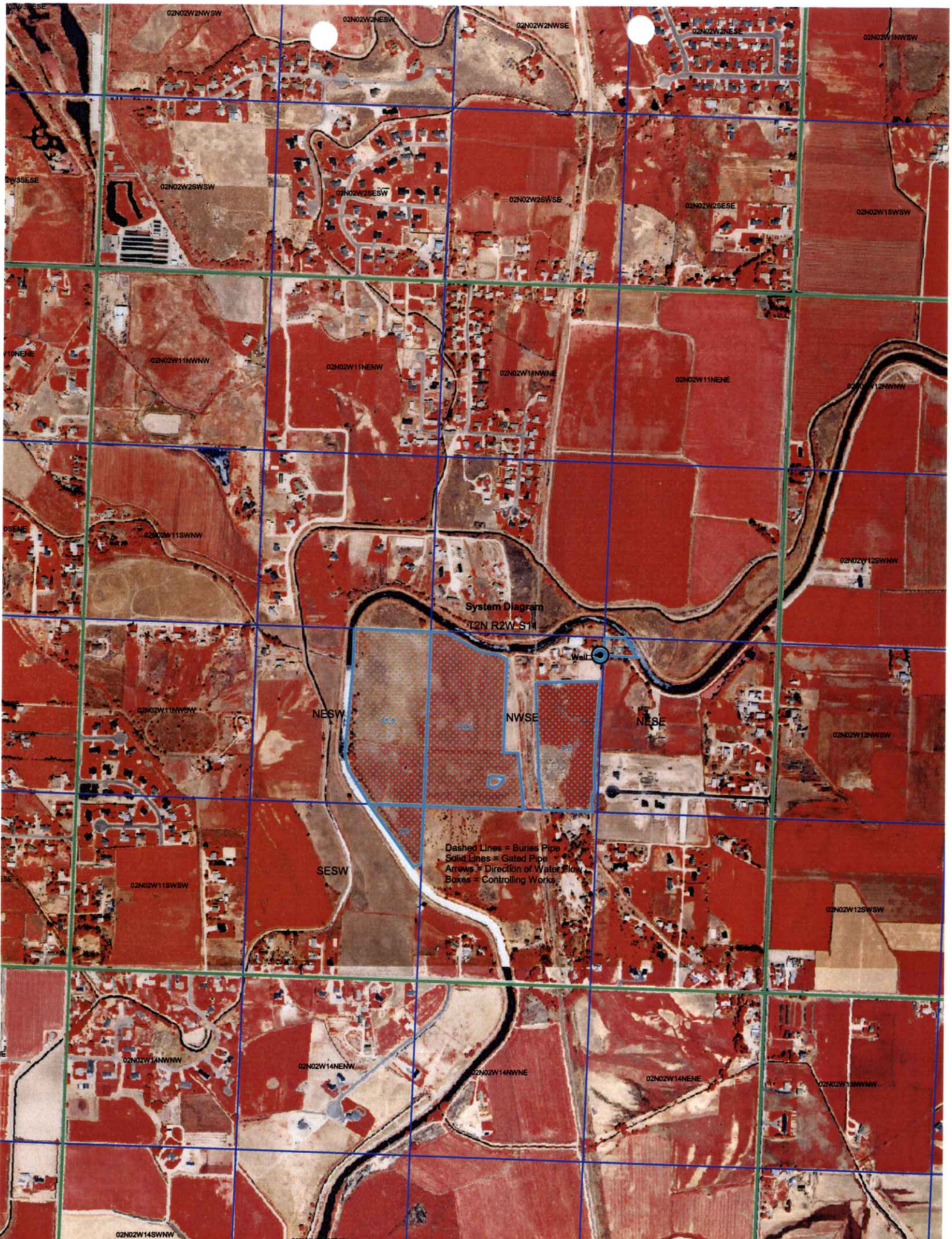
I. AUTHENTICATION

Field Examiner's Name Lori Guzman Date 10/13/04

Reviewer _____ Date _____

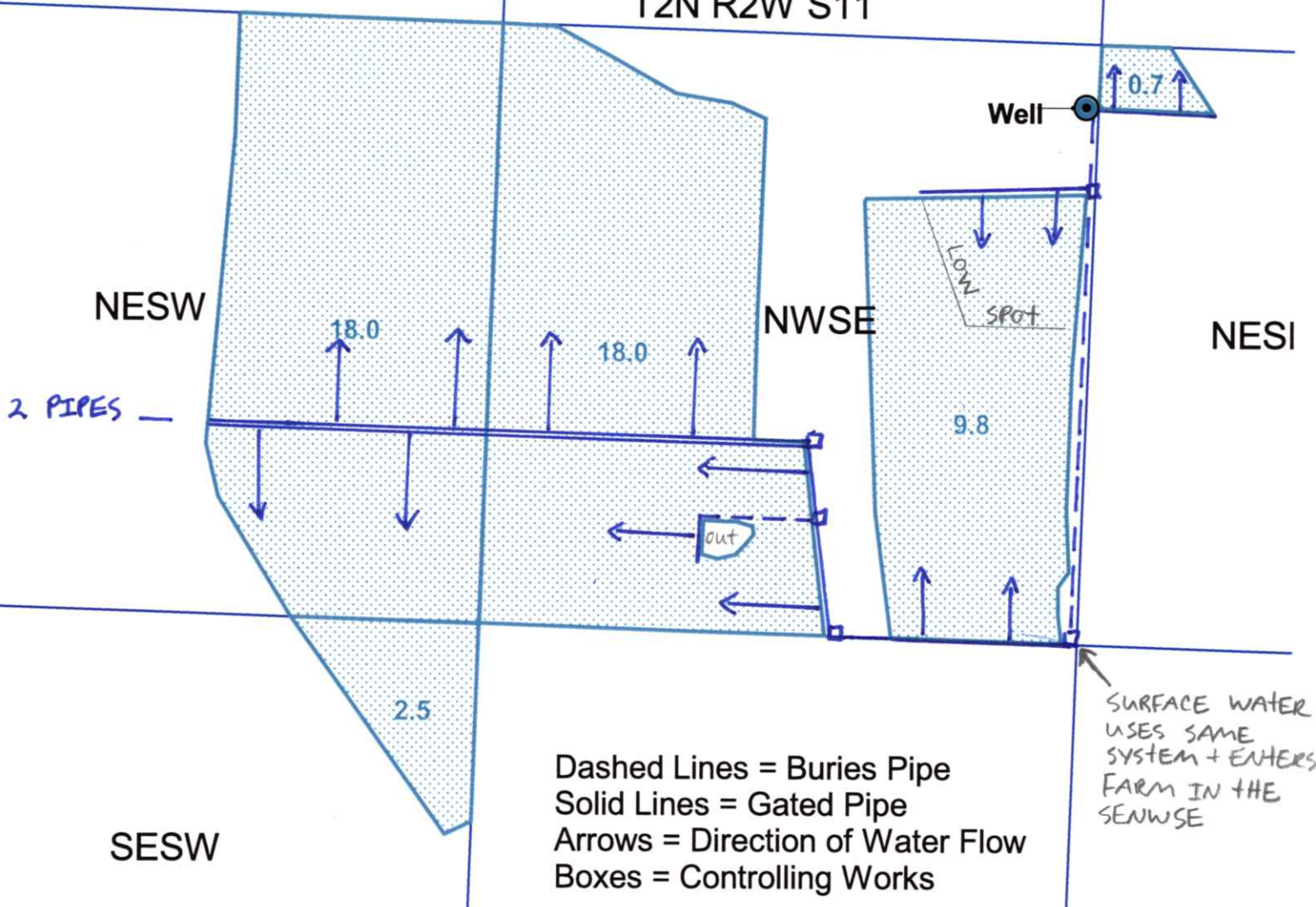
Record ID		Measured Flow:	
Water Right No. 63-11776		Designed Flow:	
Name Al Birt		HP/Eff Flow:	0.84 cfs <<--Max
pod		Sprinkler Flow:	
year:		Pivot/System Flow:	
Flow Measurement: gpm =			
Curve/Pump Design: gpm =			
Horsepower / Efficiency Method			
Horsepower	10 hp		
PWL	70 ft		
Disch Psi	4.33 psi		
PUMP Eff Estimate	0.76 %		
TDH	80 ft		
OHP	7.6 hp		
Flow	376 gpm	=	0.84 cfs
System Method:			
No Lines		Nozzle Equation: $Q=C*A*\sqrt{2*g*h} / \sqrt{1-r^4}$	
Birds per line		C=	1.00 Nozzle coefficient; typical 0.97 to 1.00
Ttl no nozzles	0	r=	0.0000 ft Nozzle radius
Nozzle size		A=	0.00000 ft^2 Nozzle area
Nozzle pressure		h=	0 ft Head
Flow per nozzle	0.00 gpm	g=	32.2 ft/sec^2 Gravitational constant
Sprinkler Flow	0 gpm	Q=	0.000 cfs Flow per nozzle
Percent Leaks	%	=	0.000 gpm Flow per nozzle
Total Flow	0 gpm		
Pivot / System rating gpm =			

Comments / Data Supplied:



System Diagram

T2N R2W S11



Dashed Lines = Buried Pipe
Solid Lines = Gated Pipe
Arrows = Direction of Water Flow
Boxes = Controlling Works

SURFACE WATER
USES SAME
SYSTEM + ENTERS
FARM IN THE
SENWSE

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

10" Irrig
well
(back-up stockwaters)

Moratorium
Irrig Permit
63-11776

1. DRILLING PERMIT NO: 63-92-C-0180-000 OTHER APPLICABLE NO: 63-11881-stock
perm

2. OWNER: al Birt Phone: 466-1820
Address: 4609 Southside Blvd Nampa 83686

3. WELL LOCATION: Twp 2N, Rge. 2W, Sec. 11, NW 1/4 SE 1/4
County Canyon (Provide sketch map and photo on reverse.)

4. DRILLER: Davis Lic. No. 101
When Drilled? 8/11/92

5. WELL CONSTRUCTION:

Casing Diameter 10 inches Water tight cap? ☒ Yes ☐ No Access Port: ☒ Yes ☐ No

Casing $\geq$ 12 inches above ground? ☒ Yes ☐ No - Describe _____

Depth of Casing 18 ft. Method Drilled Rotary & air

Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____

Control Valve? ☒ Yes ☐ No Pressure Gauge: ☐ Yes ☒ No

Condition of Piping and Valving _____

Auger to a depth of _____ ft. Evidence of Annular Seal ☐ Yes ☐ No

Are there obvious construction problems that may be a source for contamination or waste of water?
☐ Yes ☒ No (Describe in Remarks and Attach Photo - On Reverse)

3. HYDROLOGIC INFORMATION:

Depth to Static Water 50 ft. Water Temperature _____ °F

Flowing Artesian ☐ Yes ☒ No Pressure: 55 (psi)

Water Sample Taken? ☐ Yes ☒ No If yes, describe purpose _____

Water Quality Measurements/Observations (Describe) _____

7. WELL USE:

☐ Domestic	☒ Irrigation	☒ Stock
☐ Test	☐ Municipal	☐ Industrial
☐ Abandoned	☐ Waste Disposal/Injection	☐ Not Used
☐ Other: _____		



10" well, 10 HP submersible pump
located in NENWSE



surface water
controlling
works in
NWSE



looking West from
W $\frac{1}{2}$ NWSE



controlling
works in
NWSE