

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11651

Exam Date: 5/31/2012

1. Current Owner: STEVE KNOWLTON
11927 CHURCHILL CT
HOUSTON TX 77024
(713)750-4719
- DOUGLAS J THURGOOD
17187 CAN-ADA RD
NAMPA ID 83687
(208)466-6521
2. Accompanied by: Scott Hayes
Phone No: (208) 863-5983
Address:
Relationship to Permit Holder: current owner

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Nampa Meridian Irrigation District canal water
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 SW1/4SE1/4 Sec. 5, Twp 03N, Rge 01W, B.M.
CANYON County

Method of Determination: field exam GPS and arc map

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			
03N	01W	5																	36.0	34.0	70.0

Total Acres: 70

Method of Determination: Field examination and Arc Map

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. Well or Diversion

ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Tractor	unk	unk	Wel Line	Amarillo 20 hp right angle drive

D. FLOW MEASUREMENTS

1. Measurement
Equipment Type Make Model No. Serial No. Size Calib. Date
 Theoretical measurement only

2. Measurements:

EXPECTED FLOWS FOR PIPE DIAMETER

For 8 inch diameter pipe = 1.74 cfs

$$\frac{(\underline{20})\text{Hp} * 8.8 * 0.7}{(\underline{10})\text{PSI} * 2.31 + 50} \text{ ft} = \underline{1.68} \text{ cfs}$$

E. FLOW CALCULATIONS

Measured Method: N/A

Permit Rate (irr) = 1.60 cfs
 Proof Pd (\$125.00) (max cfs) = 2.00 cfs
 Found POU acres 70 * 0.02 cfs/ac = 1.40 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$\begin{aligned} V_{\text{I.R.}} &= (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{70} \text{ ac} * 4.5 \text{ af} = \underline{315} \text{ afa Recommendation} \\ V_{\text{D.R.}} &= [\text{Div Rate (cfs)}] \times (\text{Days in Irr season}) \times 1.9835 = \underline{1.40} \text{ cfs} * 260 \text{ days} * 1.98 = \underline{720.7} \text{ afa} \end{aligned}$$

2. Volume Calculations for Other Uses

G. NARRATIVE/REMARKS/COMMENTS

The system is a 16 inch well driven by a diesel motor with open discharge through an eight inch pipe into the farm ditch normally used for canal water. Inventory of Drought wells inspection by Cindy Hodges in 1992 identified the power as a tractor with PTO driving the 20 hp gear drive tied into the well. All but the tractor was at the POD for the exam. The current owner took possession of the property after the harvest of the 2011 crop season and has not replaced the tractor maintained by the original owner. The system analysis is based upon the system that existed when proof was submitted and identified in the Drought Well Inventory. The well water enters the ditch system below any canal water measuring device. The discharge pipe is approximately 15 ft long. Utilizing dams in the ditch system the water can be diverted either west along the northern border of the POU or south along the eastern border to ultimately be flumed across Ten Mile Creek in a 12 inch pipe. The flume discharges into a ditch running west and paralleling Ten Mile Creek on the south that runs the length of the field. The water can also be applied to the ground around the farmstead from that same ditch. There was a considerable amount of Hemlock growing around Ten Mile Creek and the farmstead at this location. All of the POU is flood irrigated from the ditches.

The permit listed the season of use as 3-15 thru 11-15. The current standard for this area is 3-1 thru 11-15 which I am recommending and the season of use utilized in volume calculations.

I am recommending that the measurement and reporting conditions be replaced with O1M based upon supervisor approval.

Have conditions of permit approval been met? X 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	03/01 to 11/15	1.400 CFS	315.00 AF
<u>Totals:</u>		1.400 CFS	315.00 AF

2. Recommended Amendments

 Change P.D. as reflected above Add P.D. as reflected above X None

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

I. AUTHENTICATION

Field Examiner's Name Kelly K. Christensen Date 6-5-2012

Reviewer _____ Date _____

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Agent KKC

FIELD EXAM MAP

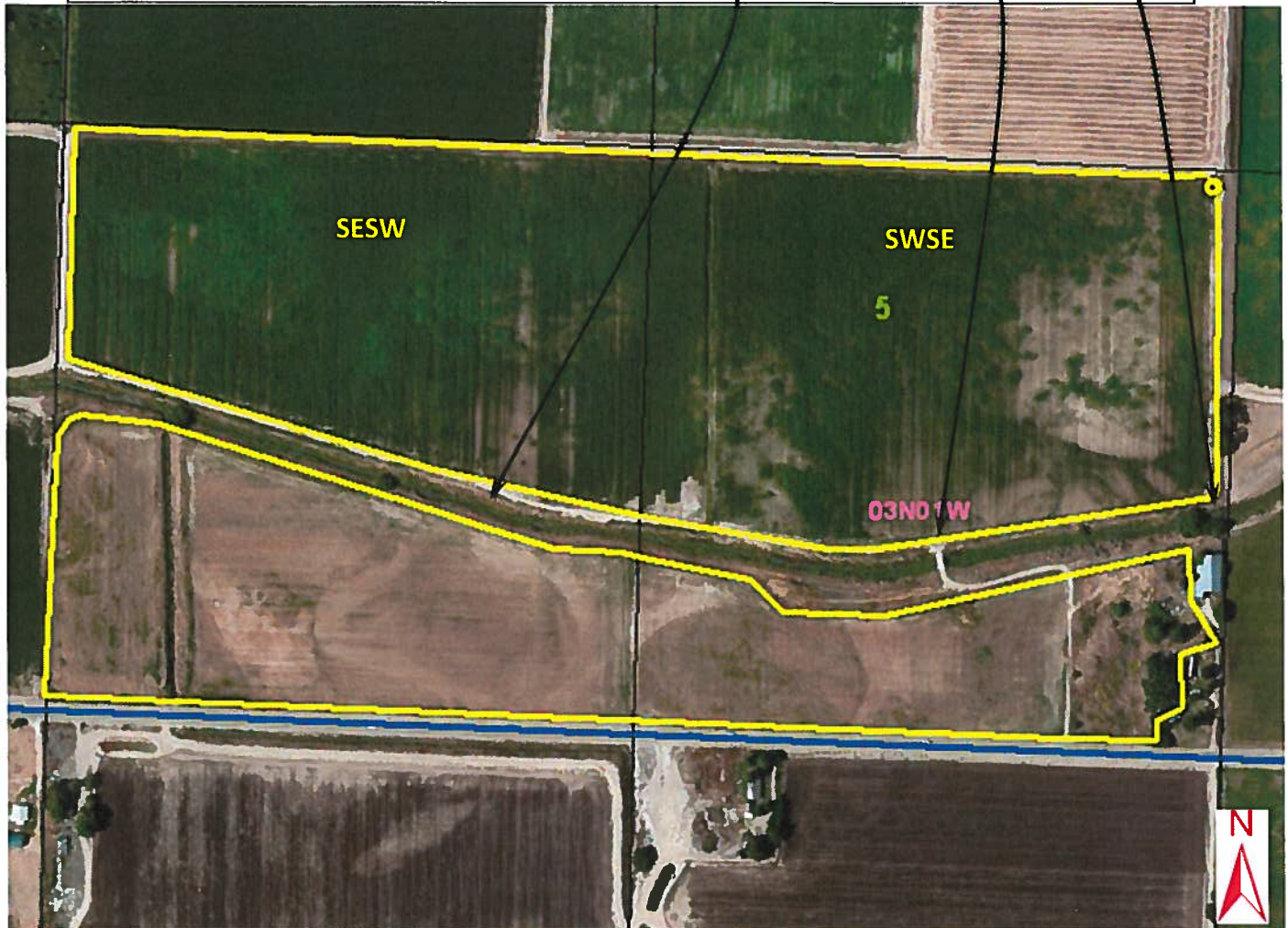
Aerial photo date 2011

Twp Rng Sec QQ

3N 01W 05

Bridge Flume

Ten Mile Creek



-  Recommended POD
-  Recommended POU
-  Section line
-  Quarter/quarter line
-  Township line

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Exam date 5-31-12

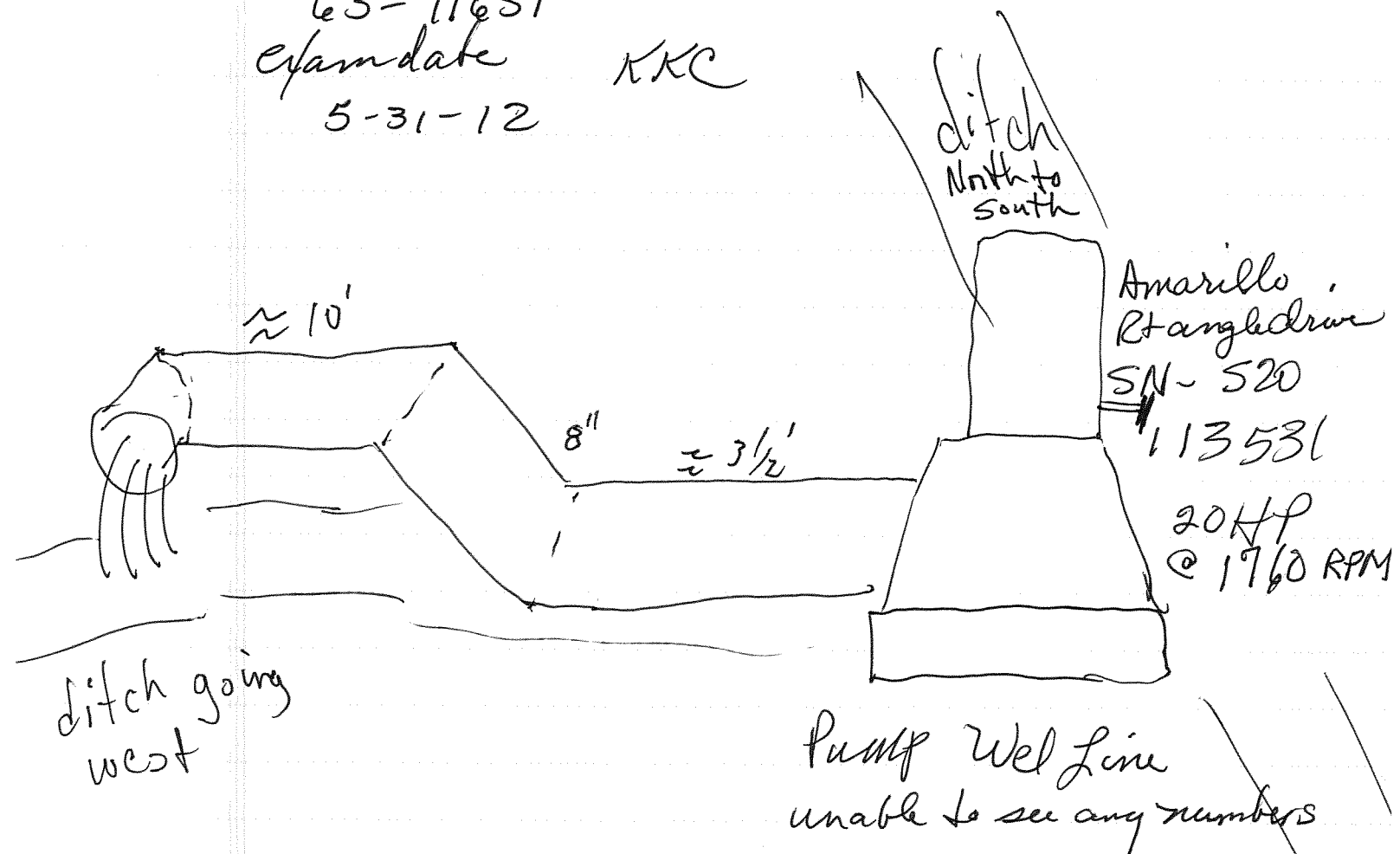
Agent RKC

2011 aerial photo

3N, 1W, Sec 5 SESW & SWSE



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exam date KKC
5-31-12



no motor @ exam date
4 picstaker @ P/O looking W on right to South of
1 pic looking South showing 12" frame carrying
water to So Side of 10 mile Cr. (along E side of P/O)
1 pic looking west @ P/O So of 10 mile Cr ~~west~~ south of
Bridge Crossing Cr.
1 pic looking east @ same location.