

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 73-7124

Exam Date: 9/10/2012

Measurement date: 6/24/2013

1. Current Owner: BIG CREEK RANCH LLC
PO BOX 5987
KETCHUM ID 83340-5987
(208) 788-1771
2. Accompanied by: Doug Parkinson
Phone No: (208)833-4450
Address: Box 65 Ellis Idaho; 83235
Relationship to Permit Holder: leases the land

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:

Several water rights share the same place of use. 73-9, 73-10, 73-11 and 73-2056 were not claimed in the Snake River Basin Adjudication. 73-10046 and 73-10052 are stock water and domestic rights. 73-7124 from Big Creek does not reach the place of use. The Big Creek water right has not been available since the late 1960's. See memo that discusses phone conversation with the water district 73 water master. Also see documentation provided by Roxanne Brown dated July 12, 2013.

73-2141 for irrigation overlaps this water right.

2. Other water rights with the same point of diversion: 73-2142

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NW1/4SE1/4 Sec. 18, Twp 14N, Rge 22E, B.M. CUSTER County

Method of Determination: GPS and visual inspection

2.

<u>PLACE OF USE:</u>			IRRIGATION																Totals
Twp	Rge	Sec	NE				NW				SW				SE				
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
14N	21E	13				16.0									40.0	7.8	1.5	28.0	93.3
14N	22E	18						14.0		5.2	38.0	24.0	.5						81.7
Total Acres:			175																

Method of Determination: GPS and visual inspection

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

X Aerial Photo Attached (required for irrigation of 10+ acres).

X Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Site Tag # A0018792	GE Triclad	100	5K6276X C638	Triclad	Induction Motor

D. FLOW MEASUREMENTS

1.
1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Thyme Flyte	Polysonic					3/26/2013

2. Measurements:

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method: Thyme Flyte – see attached printout sheet

Measured amount = 2.38 cfs
 Theoretical amount = 3.12 cfs (see attachment)
 The permit allows 3.50 cfs
 175 acres X .02 = 3.5 cfs

Total recommended rate of diversion: 2.38

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 175 \times 3.5 = 612.5$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 2.38 \times 214 \times 1.9835 = 1,010.2$$

Permit: 4/15 – 10/15 – 184 days for 868.6 AF
 Basin season of Use 4/1 – 10/31 – 214 days for 1,010.2 AF

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 602.35 \text{ AF}$$

2. Volume Calculations for Other Uses: None

Total recommended volume: 612.5 AF

G. NARRATIVE/REMARKS/COMMENTS

A pump in T14N R22E Section 18 NWSE provides water to 175 acres. Water flows through a buried pipe approximately 0.7

miles to a central pivot.

Rights 73-2141 and 73-7124 when combined shall not exceed a total diversion rate of 3.98 cfs, a total annual maximum diversion volume of 696.5 af at the field headgate, and the irrigation of 199 acres.

The season of use for the permit was 4/15 to 10/15. This was changed to match Basin 75's season of use, 4/1 to 10/31.

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	04/1 to 10/31	2.38 CFS	
	<u>Totals:</u>	2.380 CFS	602.35 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

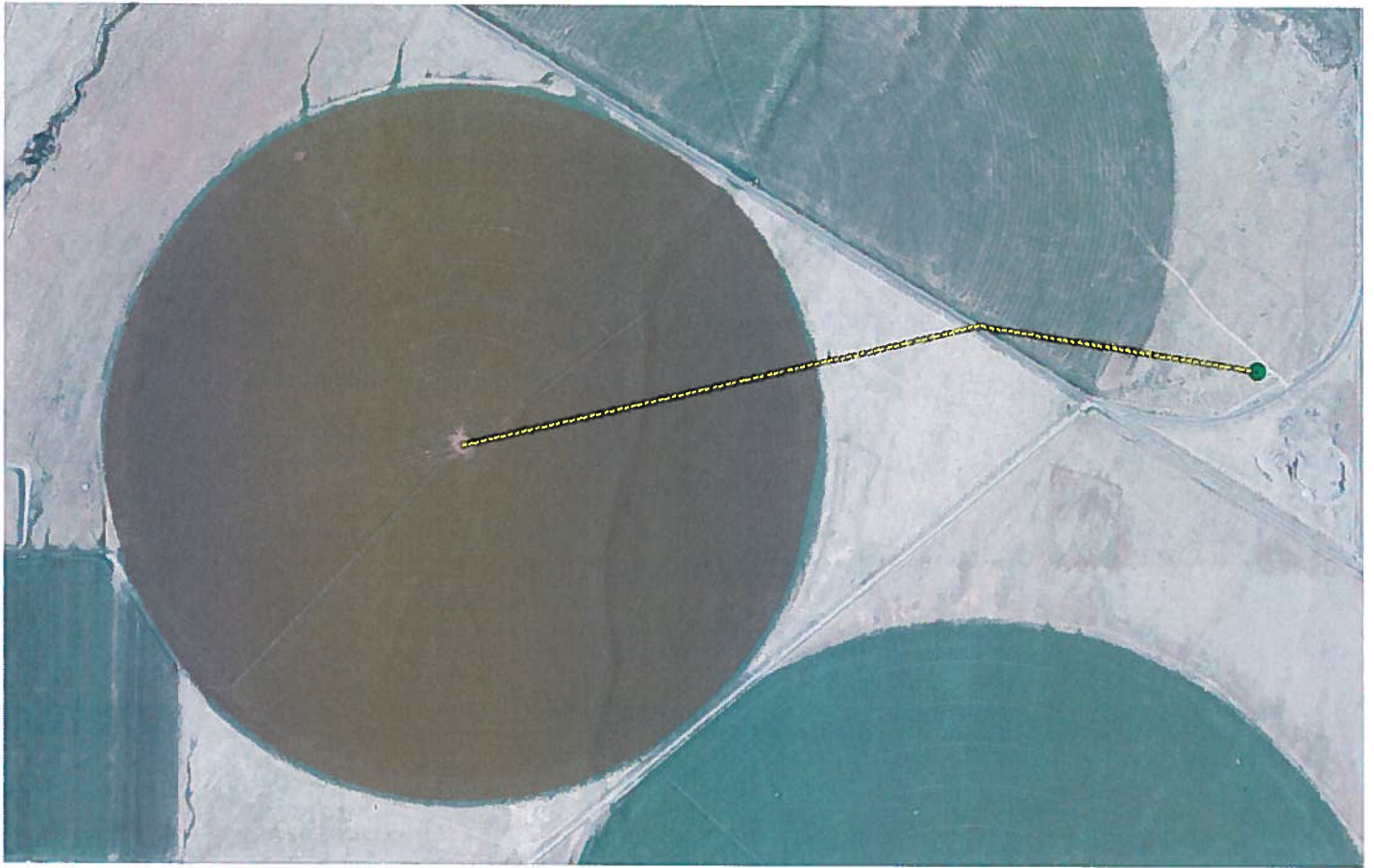
The place of use amendment includes portions of Section 13 SWSE and SWNE, and Section 18 SESW to complete the central pivot.

I. AUTHENTICATION

Field Examiner's Name John Lee Date 7/17/2013

Reviewer _____ Date _____

Water Distribution System Water Right 73-7124



A pump in T14N R22E Section 18 NWSE, shown above as a green dot supplies water to 175 acres. Water flows through a buried pipe (dashed black and yellow line) approximately 0.67 miles to a central pivot located in T14N R22E Section 18 SWNW Lot 2. The pivot supplies water to the 175 acre circle (area shaded in dark red).

0376.3 MMSEC
102.67 % T0

0376.3 MMSEC
102.67 % T0

0376.3 MMSEC
102.67 % T0

17:34+ 1.082E 3GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R

17:35+ 1.078E 3GPM 00R
+00100 *10 G 00R
-00000 *10 G 00R

17:36+ 1.037E 3GPM 00R
+00216 *10 G 00R
-00000 *10 G 00R

17:37+ 1.105E 3GPM 00R
+00324 *10 G 00R
-00000 *10 G 00R

17:38+ 1.085E 3GPM 00R
+00432 *10 G 00R
-00000 *10 G 00R

17:39+ 1.080E 3GPM 00R
+00541 *10 G 00R
-00000 *10 G 00R

17:40+ 1.093E 3GPM 00R
+00649 *10 G 00R
-00000 *10 G 00R

17:41+ 1.033E 3GPM 00R
+00757 *10 G 00R
-00000 *10 G 00R

17:42+ 1.050E 3GPM 00R
+00866 *10 G 00R
-00000 *10 G 00R

17:43+ 1.058E 3GPM 00R
+00973 *10 G 00R
-00000 *10 G 00R

17:44+ 1.054E 3GPM 00R
+01081 *10 G 00R
-00000 *10 G 00R

17:45+ 1.074E 3GPM 00R
+01189 *10 G 00R
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11755

1068.6

2.38 cts

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 73-7124
 Examiner: Sandra Thiel
 Date of Field Exam: 6/24/2013

P/D No.:	Option 1	OPTION 2	OPTION 3	
PUMP HORSEPOWER	100	100	100	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	59	59	59	
DISCHARGE PRESSURE	40	50	60	
FRICITION	0			
RATE OF FLOW (cfs)	4.07	3.53	3.12	AVE
(gpm)	1826.2	1584.4	1399.2	3.57

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

MEMORANDUM

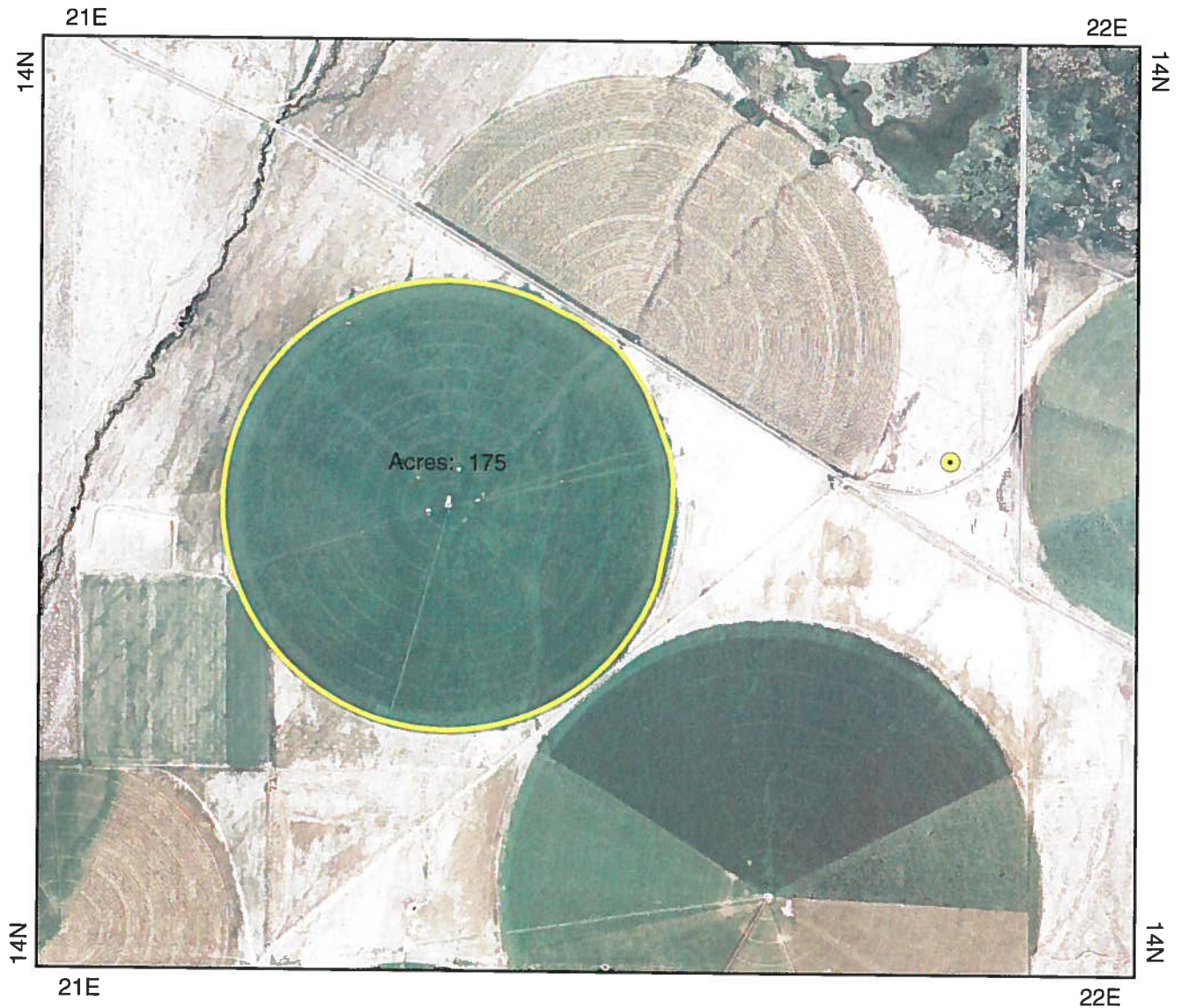
TO: Water Rights File 73-7124
FROM: Sandra Thiel
DATE: July 8, 2013
SUBJECT: Big Creek water delivery for water right 73-2153

Notes from July 8, 2013 phone conversation with Ted O'Neal, water master for water district 73.

I called Ted O'Neal to ask about Big Creek water delivery to Big Creek Ranch. According to Mr. O'Neal Big Creek water hasn't been delivered to the Ranch since the late 1960's. He referred to the water as a high water right and said it was delivered by ditch to the ranch. However, the ditch traveled across the valley and would frequently fill in with gravel. In order for the water to be delivered someone would have to plough the channel every few days. If they were unable to excavate, water would flow outside of the channel.

State of Idaho
Department of Water Resources
Water Right License
73-7124

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

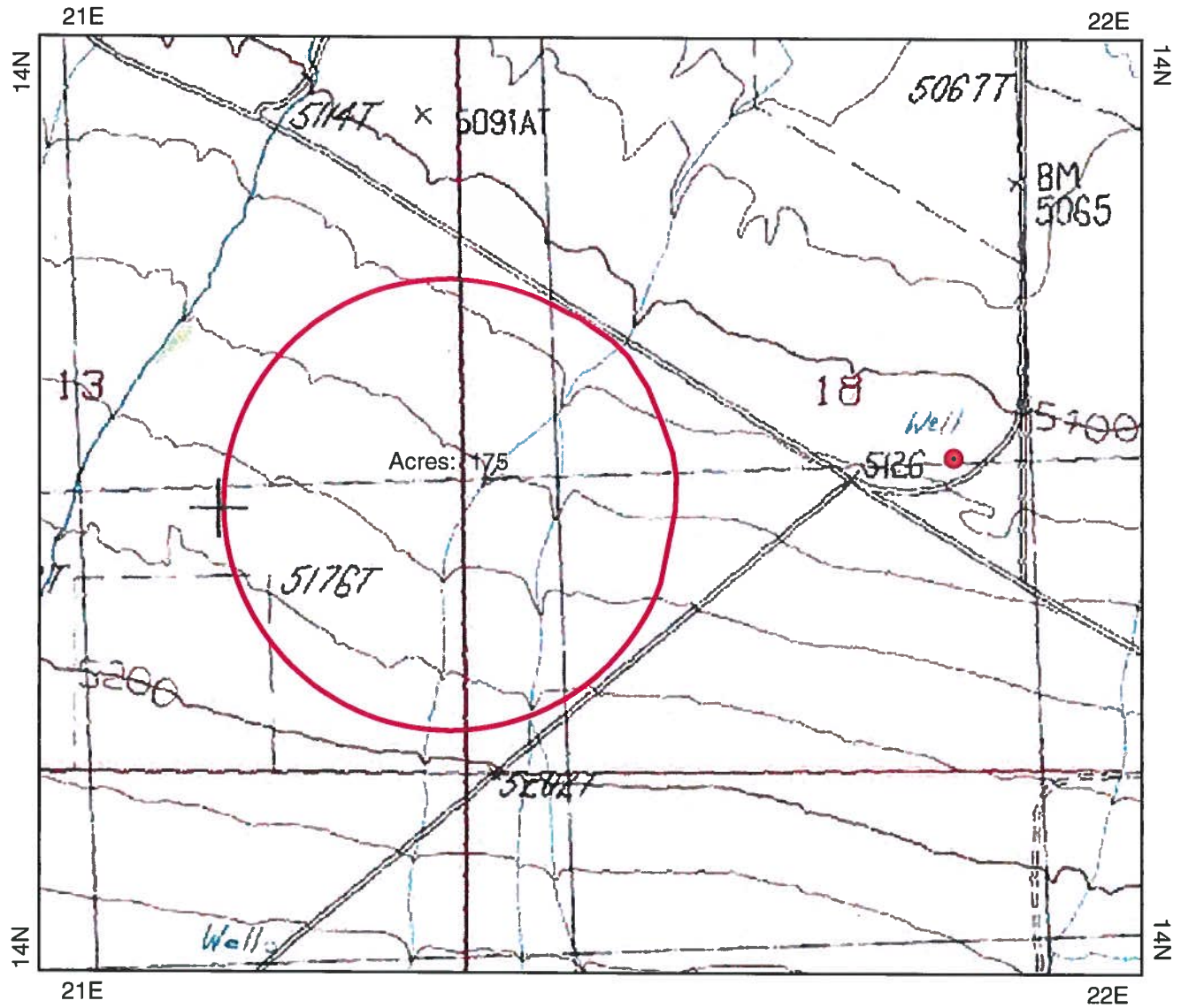


- Point of Diversion
- Place Of Use Boundary

0 0.25 0.5 Miles

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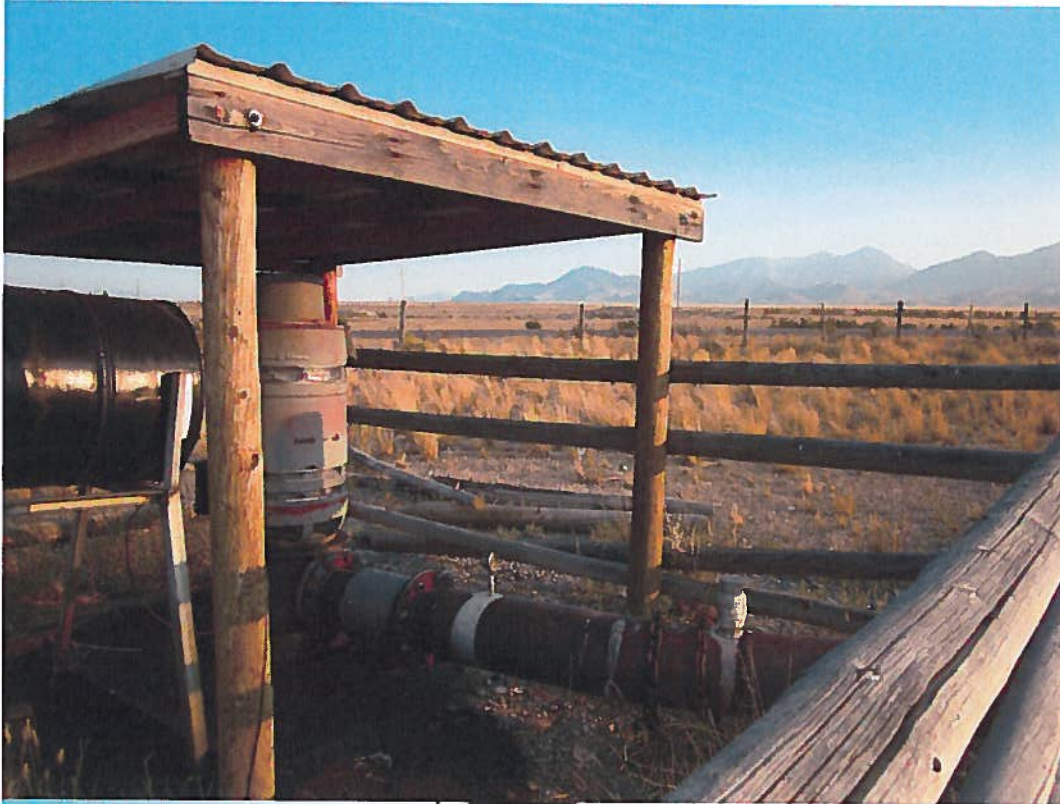


- Point of Diversion
- Place Of Use Boundary

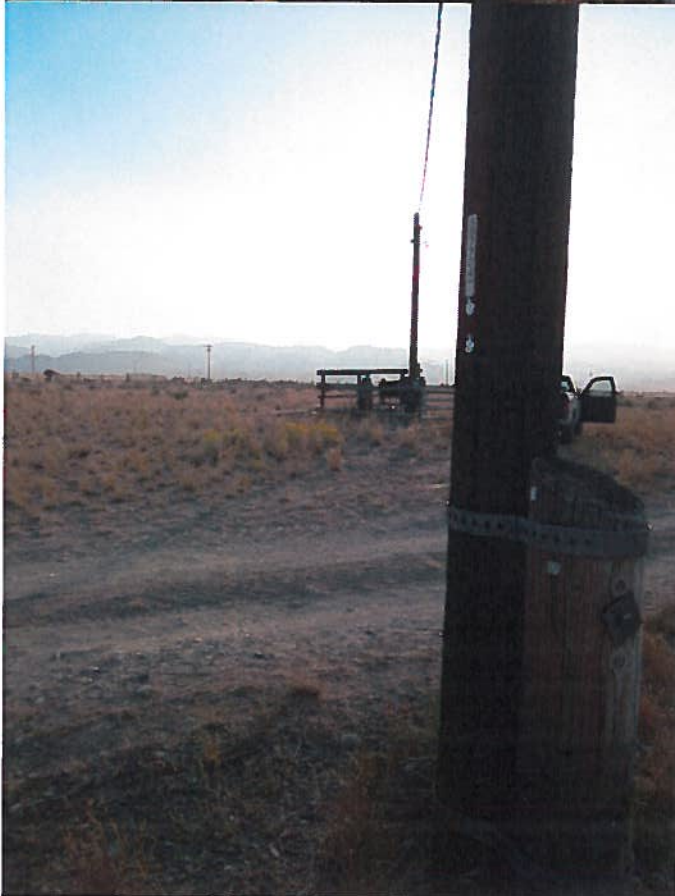


0 0.25 0.5 Miles

PHOTOGRAPHER AND DATE OF PHOTOS: Sandy Thiel, June 24, 2013
FILE NUMBER 73-7124

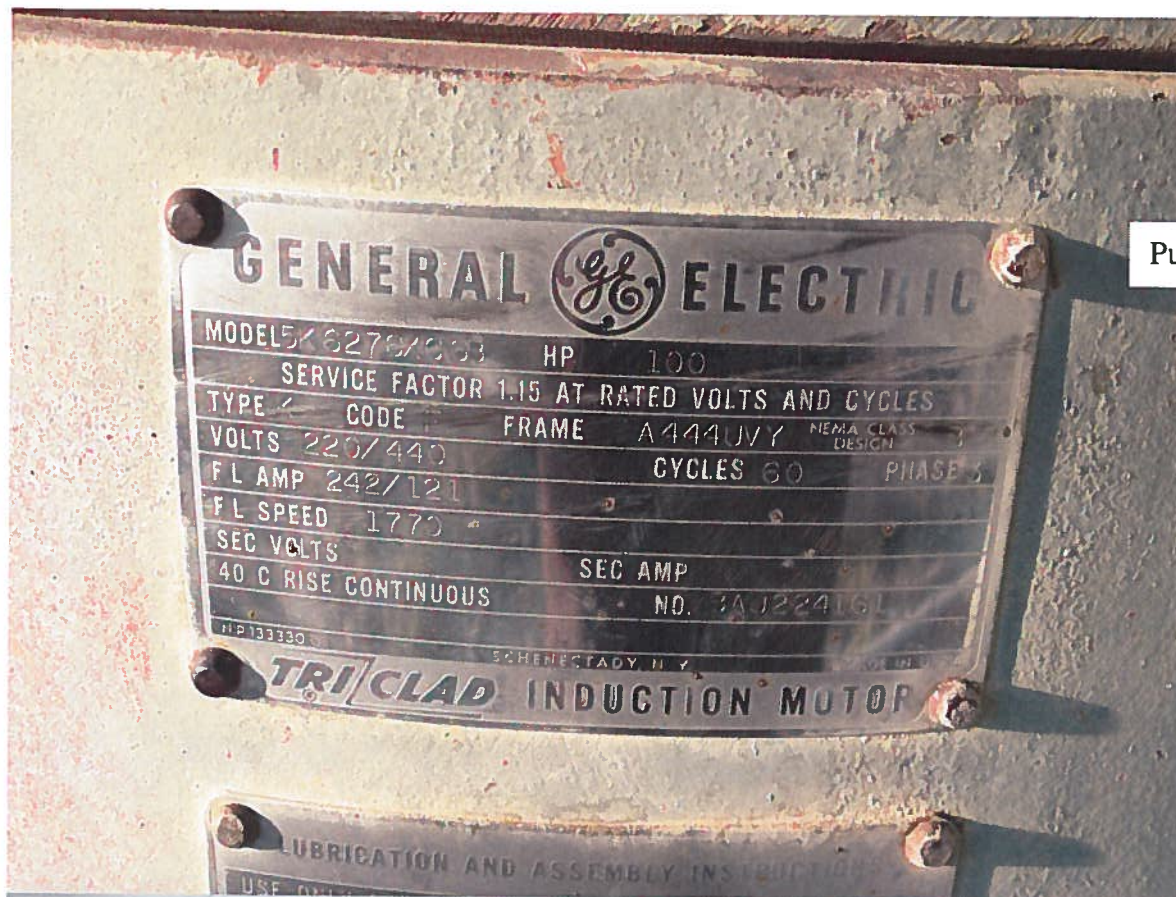


This photo shows
the pump



The tag is on the
other side of power
pole:

A0018792



Pump information



Field looking north, northeast from the center of the pivot



This photo shows the field looking east, southeast,

- Township
- Section
- Farm 80
- Booster
- Domestic
- Irrigation
- Pipes
- Aluminum
- PVC
- Portable

