STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-7744
Exam Date: 4/3/2006

1. Current Owner: DARREL LOOS
   1355 E 4415 N
   BUHL ID 83316
   (208) 543-5710

2. Accompanied by: Darrel Loos
   Phone No: (208) 543-5710
   Address: 1355 E 4415 N BUHL ID 83316
   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:**

IRRIGATION/STOCKWATER WELL
GROUND WATER — NW1/4SW1/4SE1/4 — Sec. 14, Twp 09S, Rge 18E, B.M.
TWIN FALLS County

DOMESTIC WELL
GROUND WATER — NW1/4SW1/4SE1/4 — Sec. 14, Twp 09S, Rge 18E, B.M.
TWIN FALLS County

Method of Determination:
GPS Irrigation/Stockwater Well – 2435888 E / 1271340 N

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09S	14E	14															X		

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		
09S	14E	14															3.8		3.8	3.8

Total Acres: 3.8

DOMESTIC same as IRRIGATION

Method of Determination:

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 Discharg ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Size
Irrigation/Stockwater Well	STARITE	7.5	K80N		

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.Size	Calib. Date

2. Measurements:

Flow measurement recorded by Terry Blau in August 1987 apparently used a bucket and a stopwatch to measure the irrigation/stockwater pump capacity. The size of the bucket was 1.011 gallons; the time that it took to fill the bucket was recorded at 10 sections of the irrigation system. Below is the calculated flow rate at each of the ten sections.

E. FLOW CALCULATIONS

Attached _____Additional Computation Sheets

Measured Method:

Bucket and stopwatch

Bucket size 1.011 gallons = .1352 ft3

Sec.	4.5	6.5	3	4	4	3	14	10	9	9	Total
cfs	0.030	0.021	0.045	0.034	0.034	0.045	0.010	0.014	0.015	0.015	0.26

Total calculated flow for the irrigation/stockwater well was 0.26 cfs.
Recommend diversion rate at 0.03 cfs/acre x 3.8 acres = **0.114 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 3.8 acres x 4.0 afa/year = **15.2 AF/year**

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 =

0.114 cfs x 264 days x 1.9835 = **59.7 AF/year**

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = $V_{I.R.}$ = **15.2 AF/year**

2. Volume Calculations for Other Uses:

Stockwater = 25 cattle x 12 gallons/day/head = 300 gallons/day = **.34 AF/year**

Domestic (in-house use) = **0.6 AF/year**

G. NARRATIVE/REMARKS/COMMENTS

Terry Blau started the proof of beneficial use field exam in 1987; the irrigation/stockwater wells capacity was measured to be 0.26 cfs. In April 2006 I met with Mr. Loos, he showed me his irrigated pasture and lawn (3.8 acres) and I took a GPS location of the irrigation/stockwater well. The pasture is irrigated with 6 inch gated pipe from the irrigation/stockwater well. The domestic well is used to water the lawn surrounding the house with a sprinkler system; the garden and trees are watered with a hose. The domestic well is also used for in-house use. The domestic well was originally drilled under water right 47-7421, however that water right has lapsed.

Mr. Loos has 3.8 acres that are irrigated, irrigated area includes pasture, trees, lawn, and garden; it is recommended that he receive 15.2 AF/year for irrigation. He also has had up to 25 head of cattle, which would receive a stockwater use of 0.34 AF/year, along with the domestic in-house use of 0.6 AF/year. The total annual volume recommended for Mr. Loos is 16.14 AF.

Have conditions of permit approval been met? __x__Yes _____No

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
DOMESTIC	1/01 to 12/31	0.040 CFS	0.6 AF
STOCKWATER	1/01 to 12/31	0.020 CFS	0.34 AF
IRRIGATION	3/15 to 11/15	0.114 CFS	15.2 AF
	Totals:	0.174 CFS	16.14 AF

2. Recommended Amendments

___Change P.D. as reflected above _X_Add P.D. as reflected above ___None

_x_Change P.U. as reflected above ___Add P.U. as reflected above ___Other

I. AUTHENTICATION

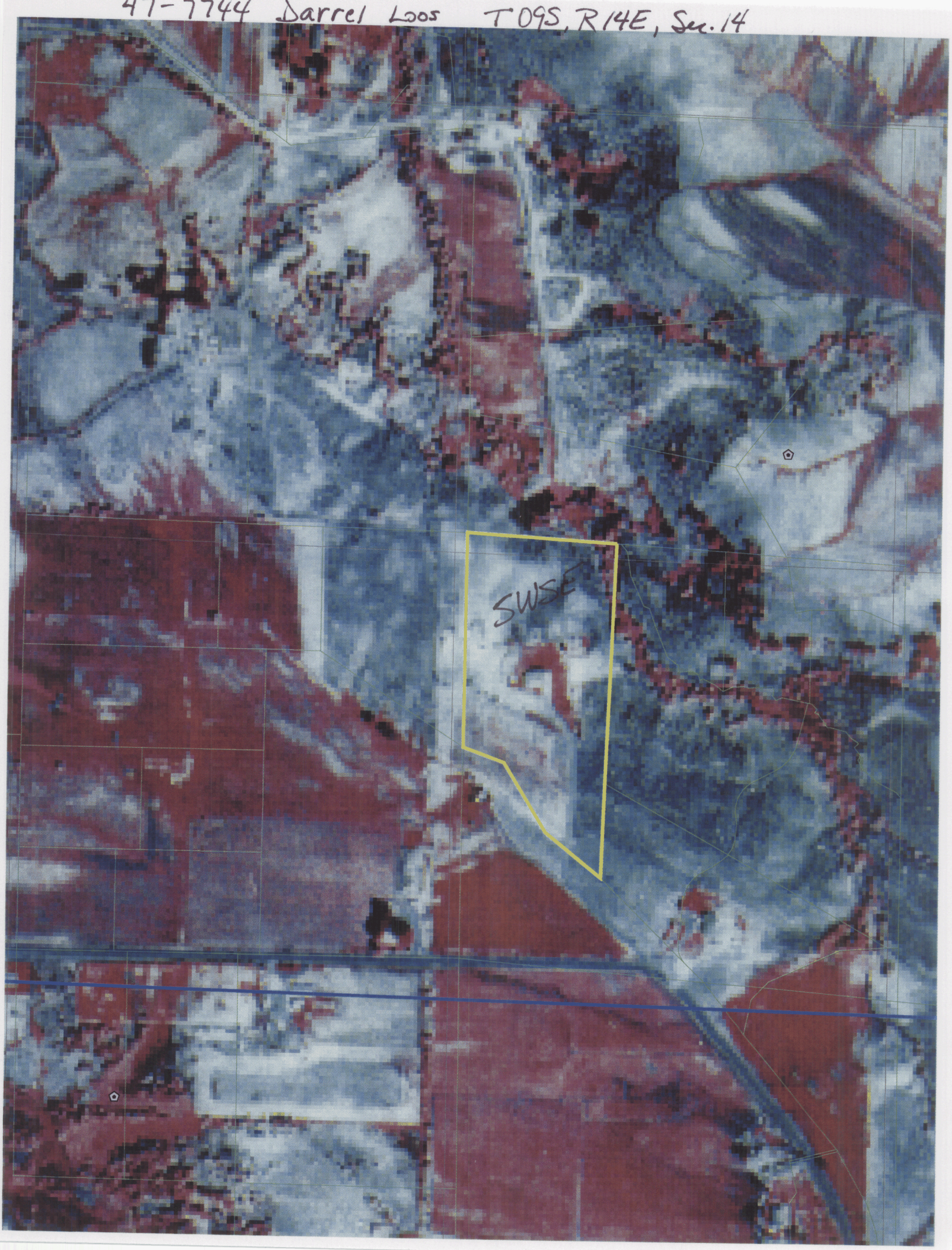
Field Examiner's Name Nathan Erickson

Date 4/21/06

Reviewer

Date 4/21/06

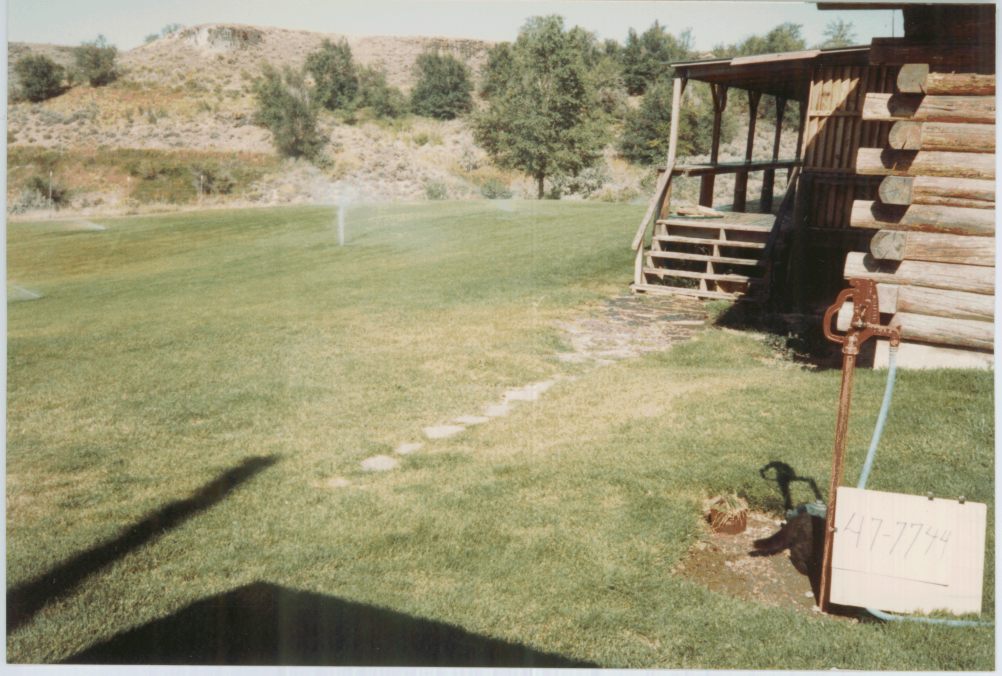
41-7744 Darrel Loos T09S, R14E, Sec. 14




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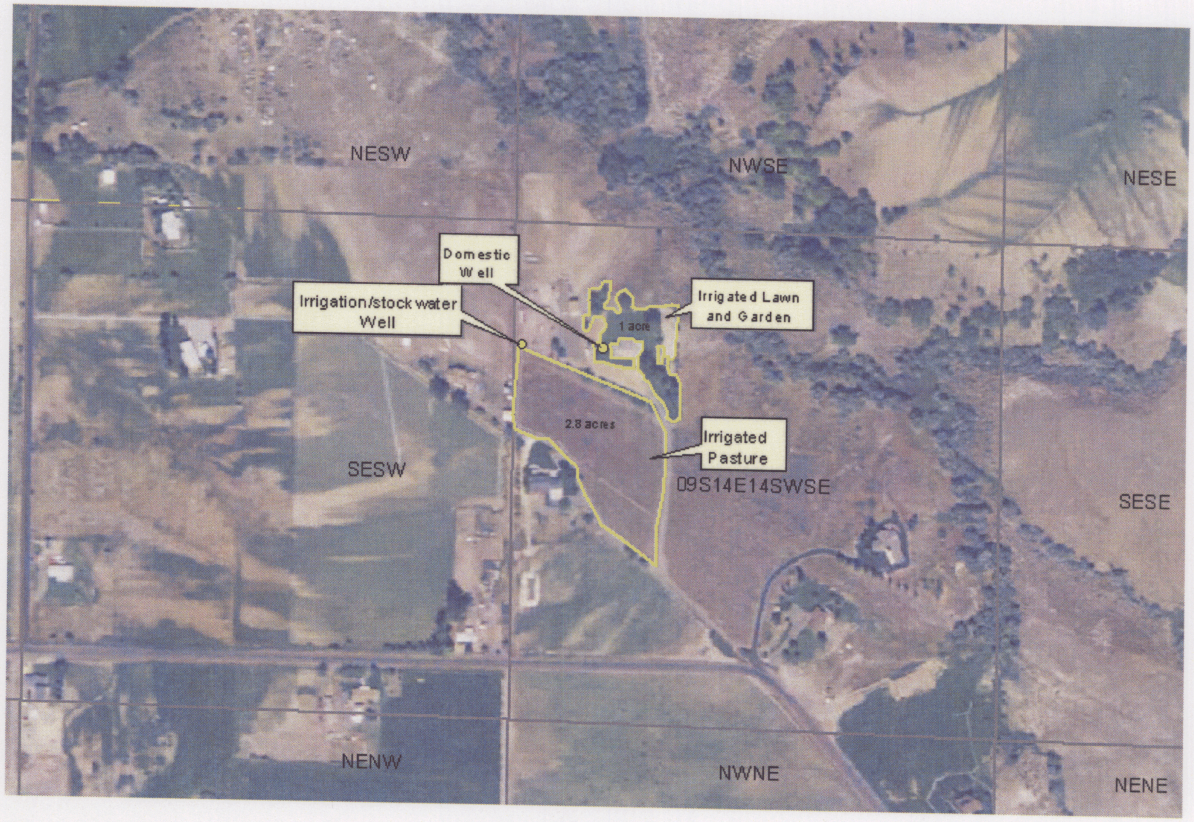

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Darrel Loos – Irrigated area, irrigation/stockwater well, and domestic well.





Domestic well



Irrigation/Stockwater well

Darrel Loos – Irrigation delivery system, 6 inch gated pipe.





Gated irrigation pipe and the location where the flow measurement was taken.