

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A36-07056
Date Received: 3/03/1989
Receipt No: 5006452
Received By: TD

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: PAUL ROBERTSON 208-532-4172
Address: RT. 2 BOX 2572
PAUL, ID 83347

2. Date of Priority: MAY 07, 1969

3. Source: GROUNDWATER Trib. to:

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4 of	Lot	County
06S	21E	29	SW	SW	NW		LINCOLN
			SE	SE	SW		LINCOLN
		30	SE	SW	SW	11	LINCOLN

5. Description of diverting works:
THREE WELLS & PUMPS DELIVERING TO COMMON MAINLINE SYSTEM

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or)	A.F.A.
IRRIGATION	03/15	11/15	6.400		

7. Total Quantity Appropriated is:
6.400 C.F.S. (and/or) A.F.A.

8. Total consumptive use is 1320.0 Acre Feet Per Annum.

9. Non-irrigation uses:
NONE

10. Place of Use:

Township	Range	Section	1/4 of	1/4 of	Lot	Use	Acres
06S	21E	19	SW	SE		IRR	40.0

A36-07056

Page 1

Date: 03/03/89

MICROFILMED
FEB 03 1993

10. Place of Use: Continued

Township	Range	Section	1/4 of	1/4	Lot	Use	Acres
06S	21E	19	SE	SE		IRR	40.0
						Section Acres	80.0
		29	NW	NW		IRR	40.0
			SW	NW		IRR	40.0
						Section Acres	80.0
		30	NE	NE		IRR	40.0
			NW	NE		IRR	40.0
			SW	NE		IRR	40.0
			SE	NE		IRR	40.0
			NE	NW		IRR	40.0
			SW	NW		IRR	40.0
			SE	NW		IRR	40.0
						Section Acres	280.0
						Total Acres	440.0

11. Place of use in counties: LINCOLN

12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:
NONE

14. Remarks:

15. Basis of Claim: LICENSE

16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not X wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: (See Maps A36-02407)

For Individuals:

I/We do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant(s): Paul Robertson Date: 3-3-89

Date: _____

State of Idaho)
County of Twin Falls) SS.

Subscribed and sworn (or affirmed) before me this 3rd day
of March 19 89
Lee D. Martin
Notary Public

Seal

Residing at Kimberly Idz
My Commission Expires 6/30/94

Ady

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

TRANSFER OF WATER RIGHT

TRANSFER NO. 4312
WATER RIGHT NO(S). 36-04058A/36-07690A/36-07056
36-11124/36-15363

This is to certify that: PAUL ROBERTSON
RT 1 BOX 1589
PAUL ID 83347

has requested a change to the above captioned water right(s). This change in water right(s) is authorized pursuant to the provisions of Section 42-222, Idaho Code, provided the conditions listed below are met.

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Right No. 36-07056 :			
IRRIGATION	04/01 to 10/31	6.40 CFS	1740.0 AF
Priority: 05/07/1969			
Right No. 36-11124 :			
IRRIGATION	04/01 to 10/31	0.52 CFS	219.7 AF
Priority: 05/01/1972			
Right No. 36-15363 :			
IRRIGATION	04/01 to 10/31	10.17 CFS	2072.0 AF
Priority: 04/17/1960			
	SUBTOTAL:	* 16.57 CFS	* 3916.0 AF
Right No. 36-04058A :			
IRRIGATION	04/01 to 10/31	0.70 CFS	248.0 AF
Priority: 06/01/1962			
Right No. 36-07690A :			
IRRIGATION	04/01 to 10/31	** 1.83 CFS	448.0 AF
Priority: 04/06/1978			
	TOTAL:	*** 19.10 CFS	*** 4560.0 AF

SOURCE
GROUNDWATER

LOCATION OF POINT(S) OF DIVERSION:

SWNW , Sec. 29, Township 06S, Range 21E
SESW , Sec. 29, Township 06S, Range 21E
Lot 11(SWSW), Sec. 30, Township 06S, Range 21E
LINCOLN County

TRANSFER NO. 4312
WATER RIGHT NO(S). 36-04058A/36-07690A/36-07056
36-11124/36-15363

PLACE OF USE: IRRIGATION

<u>TWN</u>	<u>RGE</u>	<u>SEC</u>	<u>ACRES</u>	<u>ACRES</u>	<u>ACRES</u>	<u>TOTAL</u>
06S	21E	19	SWSE 40	SESE 40		80
		29	NWNW 40	SWNW 40	NWSW 40	
			SWSW 40	SESW 40		200
		30	NENE 40	NWNE 40	SWNE 40	
			SENE 40	Lot 1(NENW) 40	Lot 5(SWNW) 35	
			Lot 6(SENW) 40	Lot 7(NESW) 40	Lot 8(NWSW) 40	
			Lot 9(NWSW) 12	Lot 10(SWSW) 16	Lot 11(SWSW) 34	
			Lot 12(SESW) 40	NWSE 40	SWSE 40	
			SESE 40			577
		31	NENE 40	NWNE 40	Lot 1(NENW) 40	
			Lot 2(NWNW) 40	Lot 3(NWNW) 16	Lot 4(SWNW) 16	
			Lot 5(SWNW) 40	Lot 6(SENW) 11		243
		32	NWNW 40			40

Total number of acres irrigated: **** 1140

CONDITIONS OF APPROVAL AND REMARKS

1. The right holder shall measure and annually report diversions of water and/or other pertinent hydrologic and system information as required by Section 42-701, Idaho Code.
2. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.0 afa per acre at the field headgate for irrigation of the lands above.
3. The right holder shall accomplish the change authorized by this transfer within one (1) year of the date of this approval.
4. Failure of the right holder to comply with the conditions of this transfer is cause for the Director to rescind approval of the transfer.
5. Approval of this transfer does not preclude the opportunity for review of the validity of the water right(s) in the ongoing Snake River Basin Adjudication.
6. Prior to diversion of water under this approval, the right holder shall provide a means of measurement acceptable to the Department from all authorized points of diversion which will allow determination of the total rate of diversion.
7. The total instantaneous diversion of water from all points of diversion under Transfer 4312 shall not exceed 19.10 cfs, nor a total combined annual volume of 4560.0 af.
- **** 8. Right 36-04058A is limited to the irrigation of 62.0 acres in the place of use described above in a single irrigation season.
- **** 9. Right 36-07690A is limited to the irrigation of 112.0 acres in the place of use described above in a single irrigation season.
- **** 10. Right 36-07056 is limited to the irrigation of 435.0 acres in the place of use described above in a single irrigation season.

TRANSFER NO. 4312
WATER RIGHT NO(S). 36-04058A/36-07690A/36-07056
36-11124/36-15363

CONDITIONS OF APPROVAL AND REMARKS

- **** 11. Right 36-11124 is limited to the irrigation of 979.0 acres in the place of use described above in a single irrigation season.
- **** 12. Right 36-15363 is limited to the irrigation of 518.0 acres in the place of use described above in a single irrigation season.
- * 13. Rights 36-07056, 36-11124 and 36-15363 when combined shall not exceed a total diversion rate of 16.57 cfs, a total annual diversion volume of 3916.0 af at the field headgate and the irrigation of 979.0 acres.
- ****
- *** 14. Rights 36-04058A, 36-07056, 36-07690A, 36-11124 and 36-15363 when combined shall not exceed a total diversion rate of 19.10 cfs, a total annual diversion volume of 4560.0 af at the field headgate and the irrigation of 1140.0 acres.
- ****
- **** 15. The right holder shall cease irrigation of 13.0 acres previously authorized under these rights, and consolidate use of water on the remaining 1140.0 acres.
- ** 16. The portion of Right 36-07690A in the amount of 0.41 cfs shall be considered abandoned through approval of Transfer 4312.
17. Right 36-11124 is subordinate to all water rights with a priority date earlier than April 12, 1994, that are not decreed as enlargements pursuant to Section 42-1426, Idaho Code. As between water rights decreed as enlargements pursuant to Section 42-1426, Idaho Code, the earlier priority right is the superior right.
18. Right 36-11124 is based upon an enlargement of Rights 36-07056 and 36-15363 pursuant to Section 42-1426, Idaho Code.

Dated this 13th day of

November, 1998


Chief, Water Allocation Bureau

MEMORANDUM

TO: FILES 36-04058A, 36-07056, 36-07690A, 36-11124 &
36-15363 (Combined Rts.36-02406/2407 & Part 2423)

FROM: PAM SKAGGS/STATE OFFICE

SUBJECT: TRANSFER 4312

DATE: January 29, 1998

Transfer 4312 adds points of diversion and combines/changes the place of use under Rights 36-04058A, 36-07056, 36-07690A, 36-11124 & 36-15363 (Combined Rts.36-02406/2407 & Part 2423). The applicant is combining these rights into a single permissible place of use system using three existing points of diversion.

The transfer approval was processed on the rights as currently recommended by SRBA reformatted records, while the application identified the original water rights records and numbers, resulting in different right numbers appearing on the transfer approval.

These five (5) rights include an unencumbered water right (36-04058A), three (3) combined rights (36-07056/11124/15363), and a right (36-07690A) with a point of diversion overlap with rights under a separate owner and system. In order to separate Right 36-7690A from the p/d overlap rights, a reduction of 0.41 cfs was made. The effect on the entire system is negligible with the rate per acre remaining at 0.016 cfs per acre within a piped sprinkler system.

36-07690A	Combined Rights	Percent	Capacity Limit	Transfer Portion
2.24 cfs	/ 11.99 cfs	= 0.18682	x 9.82 cfs	= 1.83 cfs

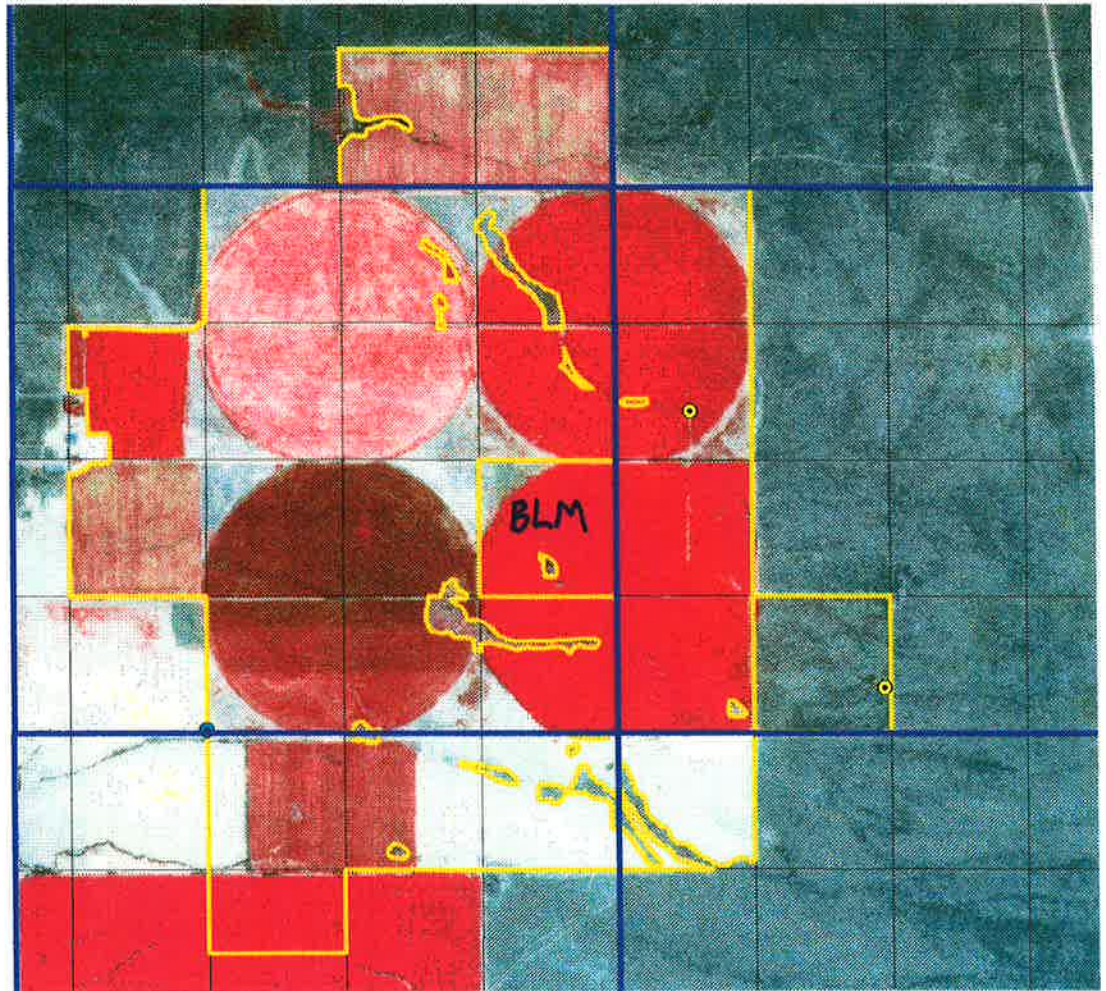
2.24 cfs - 1.83 cfs = 0.41 cfs abandoned thru transfer.

The p/d overlap condition on the non-transferred rights (36-07446/7690B/15379) should be modified to reflect the transfer, reducing the combined total to 7.99 cfs. (9.82 cfs - 1.83 cfs = 7.99 cfs)

Recommended conditions include measuring & annual reporting, irrigation overlap, multiple points of diversion/measuring devices, permissible place of use, combined limits, consolidate use on reduced acres, abandoned portion, expansion right conditions and standard transfer conditions.

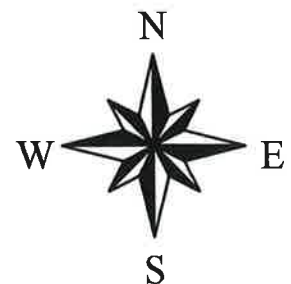
IDAHO DEPARTMENT OF WATER RESOURCES

36-007056, 36-11124, &
36-15363



660 0 660 Feet

TNS 6S, RNG 21E
SEC 19, 29, 30, 31, & 32



⊙ Recommended Point of Diversion

Recommended Place of use

Section lines

Quarter/Quarter Lines

GIS PLACE OF USE PRESENTATION
1987 and/or 1988 NAPP PHOTOGRAPHY
DATA ENTRY NOVEMBER 4, 1997
BY STEVE CLELLAND

CLAIM NUMBERS 36-07056
36-11124
36-15363

DATE 11/4/97
 AGENT sa

TRANSFER NUMBER _____
 OBJECTION FILED _____
 TOTAL ACRES FROM RECOMMENDATION 979
 GEOGRAPHIC INFO SYSTEM 910

RIGHT NO				NE				NW				SW				SE				w/o BLM
	TNS	RNG	SEC	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
RECOM	65	21E	19															40	40	80
GIS			19															37	40	77
RECOM			29						40	40			40	40	40					200
GIS			29						40	40			40	40	Ø					160
RECOM			30	40	40	40	40	40		35	40	40	40		40	Ø	40	40	40	515
GIS			30	36	39	40	39	40		39	40	40	39		40	39	39	36	38	539*
RECOM			31	40	40			40			24									144
GIS			31	36	39			40			24									139
RECOM			32						40											40
GIS			32						34											34

B36-DBPOU.DBF 3/13/98 su
 B36-DBPOD.DBF _____

POLYGON CREATED ON 604 () _____
 ATTRIBUTES OF B36-POU.SHP (→ See Below ←)
 2 ATTRIBUTES OF B36-POD.SHP 657 (SWNW S.29)
658 (SESESW S.29)
[#659 (SWSESW) S.30] +

* Section total 539 includes 39 Acres in BLM tract
 979 - 5% = 930 Acre > 5% difference, GIS acres are less.

Pou Shapes: #722 MAIN POU IRRIGATED
 #712 ~~#723~~ BLM (NESE S.30)
 #713 ~~#724~~ Ø IRRIG. (SESW S.29) (40ac)

POD #659
 + AS Review states well in S.30 SWSESW
 is part of this system but was added in in 1988
 and Requires a transfer to be effective.

P/U CONFLICT yes (X) no ()
 P/D CONFLICT yes (X) no ()
 READY FOR DECREE yes () no ()
 SENT FOR DECREE yes () no ()

RECEIVED

FEB 24 1995

Department of Water Resources
Southern Region

RECEIVED

FEB 15 1995

OFFICE OF THE
ATTORNEY GENERAL

RECEIVED

FEB 16 1995

Department of Water Resources
Adjudication Bureau

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re the General Adjudication of Rights
to the Use of Water From the Snake River
Basin Water System.

The State of Idaho, ex rel. R. Keith
Higginson in his official capacity as
Director of the Idaho Department
of Water Resources,

Petitioner,

vs.

The United States; the State of Idaho; and
all Claimants to the Use of Water From
the Snake River Basin Water System,

Respondents.

Case No. 39576

STANDARD FORM 3

STANDARD FORM FOR NOTICE
OF CHANGE IN ADDRESS

OR

CONSENT TO SUBSTITUTION OF
PARTY

*all records modified
2-22-95. -ss*

INSTRUCTIONS FOR USE

This form must be used to provide notice of change in address or to substitute a party whose water right recommendation is in a director's report which has been filed with the court. The filing of Standard Form 3 cannot result in a contested matter. A hearing will not be scheduled.

This form has been adopted by the court in *SRBA Administrative Order 1* (amended June 21, 1993), Section 4A, which may be consulted for further information.

Standard Form 3 shall not operate to excuse compliance with the statutory requirements of I.C. § 42-1409(7) where a water right recommendation is not before the court.

As used in this form, the term "prior claimant/seller" means any person who, pursuant to I.C. § 42-1409(2), (3) and (6), filed a notice of claim asserting the right to the use of water or on whose behalf the right to the use of water was asserted. "New claimant/purchaser" means any successor in interest of a "prior claimant/seller," whether the interest is acquired by purchase, gift, inheritance or other means.

A *Consent to Substitution of Party (Substitution)* must be signed by the prior claimant/seller and the new claimant/purchaser. The *Substitution* shall be filed by the new claimant/purchaser.

Check either the *Change in Address* or *Consent to Substitution of Party* box and fill in the requested information. A party may copy or reproduce the standard form. The text of the form must be on the front and back of each page, exactly as it appears here.

Follow the instructions on the form or the court will not accept it for filing. The Verification and the Certificate of Mailing must be completed.

The standard form may be obtained from the Idaho Department of Water Resources and the court. You must provide a copy of this form to each party, or to their legal counsel, in any subcase in which you are a party.

☐ CHANGE IN ADDRESS

My name is Paul Robertson

I am the claimant of 36-07690A 36-04058A 36-07056
(Insert each water right number) 36-11124 36-15363

I have filed an objection/response to the following water right(s) _____

(Insert each water right number)

My new mailing address is Rt. 1 Box 1589
Paul Ed 83347

My phone number is: Work 678-0248-1344 Home 438-5959

RECEIVED

☐ **CONSENT TO SUBSTITUTION OF PARTY**

My name is _____

My address is _____

My phone number is: Work _____ Home _____

The name and address of the party who I wish to be substituted for are:

I am the new claimant/purchaser of _____ and
(Insert each water right number)

I am submitting proof of acquisition of the interest of the prior claimant/seller, *which is required by the court* to support my *Substitution*. Proof must contain a legal description of the property, including the water right numbers conveyed. You must describe the documents you are submitting.

X _____
(Signature of prior claimant/seller)

(Signature of new claimant/purchaser)

☐ **ATTORNEY OF RECORD COMPLETING FORM**

My name is _____

I am the attorney of record for _____
(Identify party/claimant)

My address and phone number are _____

VERIFICATION

(Must be completed for either a *Notice of Change in Address* or for *Consent for Substitution of Party*)

State of Idaho

County of Twin Falls

Paul Robertson, being first duly sworn, upon oath, deposes and says:
(Insert name of party/claimant filing form)

That I am the person or entity filing this form, that I am a water right claimant or party or their successor in interest, defined by I.C. §§ 42-1401A(1), (7) or (10); and that I have read this form, know its contents and that the statements are true to the best of my knowledge and belief.

Paul Robertson
Signature of person filing form

By: _____
Attorney signing in representative capacity

Subscribed and sworn to before me on Feb 13, 1995
(Insert Date)

[Signature]
Notary Public for Idaho
Residing at: Twin Falls
My Commission expires: 6/24/98

INSTRUCTIONS FOR MAILING

You must mail the form, including all attachments, to the Clerk of the SRBA Court and to the parties identified in the Certificate of Mailing. FAX filings will not be accepted by the SRBA Clerk of the Court.

You must sign the Certificate of Mailing to show that you followed these steps.

CERTIFICATE OF MAILING

I certify that on 2/13, 1995, I mailed the original and copies of this form, including all attachments, to the following persons by mailing the original and/or copies, postage prepaid and addressed as follows:

1. Original to:

Clerk of the District Court
Snake River Basin Adjudication
253 Third Avenue North
P. O. Box 2707
Twin Falls, Idaho 83303-2707

2. A *Change of Address* must be served on each party, or their attorney, in each subcase in which you are a party at the following address(es):

3. A *Consent to Substitution of Party* must be served on the prior claimant/seller or their attorney at the following address:

4. A *Consent to Substitution of Party* must be served on each party, or their attorney, to each subcase in which the prior claimant/seller is a party at the following address(es):

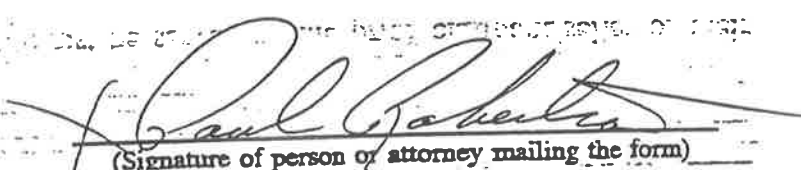
USDI - BLM

4. One copy to:

Chief, Natural Resources Division
Office of the Attorney General
State of Idaho
P. O. Box 44449
Boise, Idaho 83711-4449

5. One copy to:

United States Department of Justice
Environment and Natural Resource Division
550 West Fort Street, Box 33
Boise, Idaho 83734


(Signature of person or attorney mailing the form)



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

February 22, 1995

R. KEITH HIGGINSON
DIRECTOR

PAUL ROBERTSON
RT 1 BOX 1589
PAUL ID 83347

RE: Snake River Basin Adjudication (SRBA)
Notices of Claim No. 36-07690A, 36-04058A, 36-07056,
36-11124 & 36-15363
Change of Address Notification

Dear Claimant:

IDWR has received your notice of the change of address of the water rights claims referenced above. Our records have been changed accordingly.

Sincerely,

Idaho Department of Water Resources
Adjudication Bureau

SO:ss:region

MICROFILMED

DEC 04 1996

AJ0749NP
No. A36-07056

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 02/22/95
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	PAUL ROBERTSON RT 1 BOX 1589 PAUL ID 83347 (208) 438-5959	05/07/1969	IRRIGATION	03-15 11-15	6.40 CFS	
TOTAL DIVERSION:					6.40 CFS	
CONSUMPTIVE USE:						1320.00 AFA

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion: T06S R21E S29 SWSWNW SESESW
S30 Lot11(SESWSW)

LINCOLN County
LINCOLN County

Place of use Legal Description for: IRRIGATION

NE												NW				SW				SE																			
T	R	S	NENE		NWNE		SWNE		SENE		:	NENW		NWNW		SWNW		SENW		:	NESW		NWSW		SWSW		SESW		:	NESE		NWSE		SWSE		SESE		:	SUM
			Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	Lt	Ac	:			
06S	21E	19	:								:									:									:								:	80.0	
06S	21E	29	:								:			40		40				:									:								:	80.0	
06S	21E	30	:	40		40		40		40	:	40				40		40		:									:								:	280.0	
			TOTAL ACRES																												440.0								

POU County: LINCOLN

Other Rights: NONE

Conditions of Approval:

Remarks: SF3 ADDRESS CHANGE 2/22/95.

Dates: Exam Made Date:

Verified Date:

Misc: Water District Number:

Field Inspection Flag:
Presumption Flag: C

MICROFILMED
DEC 04 1996

AJ0749NP
No. 36-07056

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 02/22/95
PAGE: 1

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	PAUL ROBERTSON RT 1 BOX 1589 PAUL ID 83347 (208) 438-5959	05/07/1969	IRRIGATION	04-01 10-31	6.40 CFS	
TOTAL DIVERSION:					6.40 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion: T06S R21E S29 SWNW SESESW LINCOLN County

Place of use Legal Description for: IRRIGATION

NE																NW				SW				SE							
NENE NWNE SWNE SENE																NENW NWNW SWNW SENW				NESW NWSW SWSW SESW				NESE NWSE SWSE SESE				SUM			
T	R	S	Lt		Ac		Lt		Ac		Lt		Ac		Lt		Ac		Lt		Ac		Lt		Ac		Lt		Ac		
06S	21E	19																													80.0
06S	21E	29									40		40				40		40		40										200.0
06S	21E	30	40		40		40		40		01-40		05-35		06-40		07-40		08-40		12-40				40		40		40		515.0
06S	21E	31	40		40						01-40				06-24																144.0
06S	21E	32									40																				40.0
																												TOTAL ACRES	979.0		

POU County: LINCOLN

Other Rights: NONE

Conditions of Approval:

- C03 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN POINT OF DIVERSION
- PURSUANT TO IDAHO CODE 42-1416A.
- C05 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PLACE OF USE PURSUANT TO
- IDAHO CODE 42-1416A.
- M01 - A MEASURING DEVICE OF A TYPE APPROVED BY IDWR SHALL BE
- MAINTAINED AS A PART OF THE DIVERTING WORKS.

Remarks:

ONE OF THE TWO POINTS OF DIVERSION IS ON THE LINE DIVIDING THE SESWNW AND THE SWSWNW, S29, T6S, R21E.
RIGHT NOS. 36-15363 AND 36-11124 ARE ALSO DIVERTED THROUGH THE POINTS OF DIVERSION DESCRIBED ABOVE.
THIS RIGHT IS LIMITED TO THE IRRIGATION OF 435 ACRES WITHIN THE PLACE OF USE DESCRIBED ABOVE IN A SINGLE IRRIGATION SEASON.
USE OF THIS RIGHT WITH RIGHTS LISTED ABOVE IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 16.57 CFS, A TOTAL COMBINED ANNUAL DIVERSION VOLUME OF 3916 AF, A TOTAL COMBINED ANNUAL CONSUMPTIVE USE VOLUME OF 2937 AF, AND TO THE IRRIGATION OF A TOTAL OF 979 ACRES IN A SINGLE IRRIGATION SEASON.
RIGHT NO. 36-11124 IS AN EXPANSION OF THIS RIGHT PURSUANT TO IDAHO CODE 42-1416(2).

DEC 04 1996
MICROFILMED

AJ0749NP
No. 36-07056

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 02/22/95
PAGE: 2

=====

Dates: Exam Made Date: 04/21/1992 Verified Date:

Misc: Water District Number: Field Inspection Flag:
Presumption Flag: C

Comments: Date: 04/21/1992 User-ID: KEEN Subject: CLAIM REVIEW
DESKTOP INVESTIGATION, RECOMMENDATIONS, AND DATA ENTRY BY
S.W. KEEN. IRRIGATION AUDIT REPORTS PREPARED IN 1990 BY IDAHO
POWER COMPANY FOR THE THREE WELLS CLAIMED IN A36-07056 WERE
HELPFUL.

Date: 07/30/1992 User-ID: WHITE Subject: DATA ENTRY
CHANGES MADE FOR DATA ENTRY STANDARDS.

Date: 09/14/1992 User-ID: SCHULTZ Subject: NOTICE OF ERROR (NOE)
RECEIVED NOE 9/14/92. CHANGED NOE FLAG FROM BLANK TO A.

Date: 10/19/1992 User-ID: SOUTH3 Subject: NO CHANGE TO RECOMMENDATION
MR. ROBERTSON INDICATED A DESIRE TO MEET WITH KKC BUT DID NOT
FOLLOW THROUGH. RMC

Date: 02/22/1995 User-ID: SSHERMAN Subject: SF3 ADDRESS CHANGE
SF3 ADDRESS CHANGE.

Audit: 02/22/95 SSHERMAN

MICROFILMED
DEC 04 1996

NOTICE OF ERROR

RESPONSE

CORRECTED R PROOF

MICROFILMED

FEB 03 1993

NOTICE OF ERROR FORM

AUG-24-1992

Please type or print clearly, fill out completely, and return to:

Idaho Department of Water Resources

Statehouse Mail

Boise, Idaho 83720-9000

RECEIVED

SEP 14 1992

Department of Water Resources

The notice of error must be received at IDWR by the **deadline date** printed below with your proposed recommendation.

YOUR DEADLINE FOR FILING A NOTICE OF ERROR IS: SEP-24-1992

1. Water right number: 36-07056

2. Name: Paul Robertson

Address: RT. 1 Box 1589

Paul Id 83347
Weekday Telephone Number: 438-5959

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FEB 03 1993

TEAR AT PERFORATIONS AND COMPLETE FORM ON OTHER SIDE

(Instead of filling in items 3 and 4 below you may include a copy of your proposed recommendation with the changes marked on the copy.)

3. Describe the portion of proposed recommendation with which you disagree:

All of it

4. Describe the changes you wish to have made in the proposed recommendation:

5. Describe why you disagree with the proposed recommendation:

6. Date: *Sept 10 - 92*

SIGNATURE

Paul Robertson



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 736-3033

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

October 19, 1992

PAUL ROBERTSON
RT 1 BOX 1589
PAUL ID 83347

Re: Snake River Basin Adjudication (SRBA)
Notice of Error Response
Recommended Right Nos. 36-07690A, 36-07056, 36-15363,
36-11124 and 36-04058A

Dear Mr. Robertson,

You recently filed a Notice of Error with IDWR concerning the water rights referenced above. No change to our recommendation has been made at this time.

During the Notice of Error procedure, we hope to find and correct errors in our recommendations of your rights. Although you had indicated a desire to meet with our personnel, no appointment was made. We are now at the end of the Notice of Error procedure and without specific information about your concerns we can not make any changes.

Please contact this office if you have other questions or concerns.

Sincerely,

Roxanne McCarthy
Sr. Water Resource Agent
Adjudication Bureau

RM:rm

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FEB 03 1993

R PROOF



CVR



MAPS



PHOTOS



MISC



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FEB 03 1993

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	PAUL ROBERTSON RT 2 BOX 2572 PAUL ID 83347 (208) 532-4172	05/07/1969	IRRIGATION	04-01 10-31	6.40 CFS	
TOTAL DIVERSION:					6.40 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: LICENSE

Point(s) of Diversion:

T06S R21E S29

SWNW

SESESW

LINCOLN County

Place of use Legal Description for: IRRIGATION

				NE				NW				SW				SE								
T	R	S	:	NENE	NWNE	SWNE	SENE	:	NENW	NWNW	SWNW	SENW	:	NESW	NWSW	SWSW	SESW	:	NESE	NWSE	SWSE	SESE	:	SUM
			:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:	Lt	Ac	Lt	Ac	:	
06S	21E	19	:					:					:					:					:	80.0
06S	21E	29	:					:		40	40		:		40	40	40	:					:	200.0
06S	21E	30	:	40	40	40	40	:	01-40		05-35	06-40	:	07-40	08-40		12-40	:	40	40	40		:	515.0
06S	21E	31	:	40	40			:	01-40			06-24	:					:					:	144.0
06S	21E	32	:					:		40			:					:					:	40.0
TOTAL ACRES																							979.0	

POU County: LINCOLN

Other Rights: NONE

Other Water Rights with Same Point(s) of Diversion and Source:

A36-02407 A36-04058A A36-07056 A36-07690A A36-11124 R36-11124 R36-15363

Other Water Rights Listing Overlapping Place(s) of use:

A36-02407 A36-02423 A36-07056 A36-11124 R36-11124 R36-15363

Conditions of Approval:

- C03 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN POINT OF DIVERSION PURSUANT TO IDAHO CODE 42-1416A.
- C05 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PLACE OF USE PURSUANT TO IDAHO CODE 42-1416A.
- M01 - A MEASURING DEVICE OF A TYPE APPROVED BY IDWR SHALL BE MAINTAINED - AS A PART OF THE DIVERTING WORKS.

Remarks:

ONE OF THE TWO POINTS OF DIVERSION IS ON THE LINE DIVIDING THE SESWNW AND THE SWSWNW, S29, T6S, R21E. RIGHT NOS. 36-15363 AND 36-11124 ARE ALSO DIVERTED THROUGH THE POINTS OF DIVERSION DESCRIBED ABOVE. THIS RIGHT IS LIMITED TO THE IRRIGATION OF 435 ACRES WITHIN THE PLACE OF USE DESCRIBED ABOVE IN A SINGLE IRRIGATION SEASON. USE OF THIS RIGHT WITH RIGHTS LISTED ABOVE IS LIMITED TO A TOTAL COMBINED DIVERSION RATE OF 16.57 CFS, A TOTAL COMBINED ANNUAL DIVERSION VOLUME OF 3916 AF, A TOTAL COMBINED ANNUAL CONSUMPTIVE USE VOLUME OF 2937 AF, AND TO THE IRRIGATION OF A

Verified by S.W. Kean
on 4-22-92

MICROFILMED

FEB 03 1993

AJ0749NP
No. R36-07056

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT
(REGIONAL)

DATE: 04/22/92
PAGE: 2

Remarks: TOTAL OF 979 ACRES IN A SINGLE IRRIGATION SEASON.

Dates: Exam Made Date: 04/21/1992 Verified Date: 04/22/1992

Misc: Water District Number: Field Inspection Flag:
Presumption Flag: C

Comments: Date: 04/21/1992 User-ID: KEEN Subject: CLAIM REVIEW
DESKTOP INVESTIGATION, RECOMMENDATIONS, AND DATA ENTRY BY
S.W. KEEN. IRRIGATION AUDIT REPORTS PREPARED IN 1990 BY IDAHO
POWER COMPANY FOR THE THREE WELLS CLAIMED IN A36-07056 WERE
HELPFUL.

Audit: 04/22/92 KEEN

MICROFILMED

FEB 03 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

09:02:55
02/27/92

PAGE: 12
QUICKLOOK INFORMATION

CLAIM NUMBER: A36-07056

WR ELEMENT	FIELD EXAM Y/N	CORRESPONDENCE SENT/RECEIVED BY WHOM/DATE	FIELD EXAM BY WHOM/DATE	CHANGE CLAIM Y/N	VERIFIED BY CODE	COMPLETED REVIEW WHOM/DATE	COMPLETED DATA ENTRY WHOM/DATE	VERIFIED DATE WHOM/DATE
PRIORITY DATE			S.W. Keen 2-27-92	No	6	S.W. Keen 4-21-92	S.W. Keen 4-21-92	S.W. Keen 4-22-92
POINT OF DIV	Y		S.W. Keen 4-20-92	Yes	6,1			
SOURCE			S.W. Keen 2-27-92	No	6			
PLACE OF USE	Y		S.W. Keen 2-27-92	Yes	4,2			
DIV. AMOUNT CFS/VOLUME			S.W. Keen 2-27-92	No	6			
CONSUMPTIVE USE	-		S.W. Keen 2-27-92	Yes	6			
PURPOSES			S.W. Keen 2-27-92	No	4,2			
PERIOD OF USE	Y		S.W. Keen 2-27-92	Yes	6			
BASIS OF CLAIM			S.W. Keen 2-27-92	No	6			
REMARKS			S.W. Keen 4-21-92	Yes	6			

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FEB 03 1993

"VERIFIED BY" CODES

TOPO MAP/ORTHO-PQ = 1
ASCS MAP = 2
WATERMASTER RECORDS = 3
NAPP PHOTOS = 4
FIELD EXAM = 5
OTHER (SEE REMARKS) = 6

THESE CODES ARE USED TO INDICATE HOW THE FIELD EXAMINER VERIFIED THE INFORMATION
USED FOR THIS FIELD EXAMINATION. INDICATED ARE ALL CODES WHICH APPLY.

Flag = C

Cond. Code = C03, C05, M01

Remarks = E03 - 16.57 cfs; 3916 AF; 2937 AF; 979 AF
F04 - SESWNW and SWSWNW, S29, 6S, 21E
F05 - 36-15363 and 36-11124
K06 - 435 acres

~~Special Remark - This Right is used on the NESE, SSE, F05, F06 through
a land exchange agreement with the United States of
America~~

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

09:02:55
02/27/92

PAGE: 1
GENERAL INFORMATION

CLAIM NUMBER: A36-07056

LAST: ROBERTSON
ADDRESS: RT. 2 BOX 2572
CITY: PAUL
PHONE NUMBER: 208-532-4172

FIRST: PAUL
STATE: ID ZIP: 83347

OWNER CODE: C

FIELD EXAM REQUIRED?

DATABASE
N

FIELD
EXAMINER

VERIFICATION REQUIRED DUE TO REMARKS?

NO REMARKS IN CLAIM

FIELD EXAMINATION INFORMATION

CONTACT PERSON: _____

PHONE NUMBER: (____) ____-____

DATE OF FIELD EXAM: ____/____/____

APPOINTMENT MADE: Y(____) N(____)

TIME: ____:____ A(____) P(____)

ACCOMPANIED BY: _____

PHONE NUMBER: (____) ____-____

RELATIONSHIP TO CLAIMANT: _____

DIRECTIONS TO PROPERTY / REMARKS:

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FEB 03 1993

A. AJ CLAIM: # A36-07056 PRIORITY DATE: 05-07-1969 STAGE: L

B. WR RECORD: # 36-07056 PRIORITY DATE: 05-07-1969 STAGE: L

C. FIELD EXAM REQUIRED?

DUE TO PRIORITY DATE DISCREPANCY? (Y/N)

DATABASE
N

FIELD
EXAMINER
SW Keen

ARE THERE OBVIOUS REASONS TO QUESTION THE PRIORITY DATE CLAIMED? Y() N(☒)
IF YES EXPLAIN.

REMARKS:

claimed priority date matches licensed priority date.

=====

RECOMMENDED PRIORITY DATE:
05-07-1969

REVIEWED BY

SW Keen

DATE

2-27-92

=====

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FEB 03 1993

A. AJ CLAIM POINT OF DIVERSION AND SOURCE:

RIGHT	TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT
A36-07056	06S	21E	29	SW	SW	NW	
A36-07056	06S	21E	29	SE	SE	SW	
A36-07056	06S	21E	30	SE	SW	SW	11

CNTY

LINCOLN

LINCOLN

LINCOLN

This License
Licenses 36-02406 + 36-02407
Stat. Claim 36-04058

OTHER AJ CLAIMS WITH SAME AJ POD
A PREFIX R PREFIX
A36-02407 NONE
A36-04058A
A36-07690A
A36-11124

WR RECORDS IN SAME 40 ACRE TRACT

36-02406
36-02407
36-04058

SOURCE: GROUNDWATER

TRIB:

B. WR POINT OF DIVERSION AND SOURCE:

RIGHT	TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT
36-07056	06S	21E	29		SW	NW	

CNTY

LINCOLN

OTHER WR RECORDS WITH SAME WR POD

AJ CLAIMS IN SAME 40 ACRE TRACT
A PREFIX R PREFIX

NONE

A36-02407 NONE
A36-04058A
A36-07690A
A36-11124

SOURCE: GROUNDWATER

TRIB:

C. FIELD EXAM REQUIRED?

DUE TO POD DISCREPANCY? (Y/N)
DUE TO SOURCE DISCREPANCY? (Y/N)

DATABASE
Y
N

FIELD
EXAMINER
SW Kean
SW Kean

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FEB 03 1993

REMARKS:

Currently the three wells claimed are tied into one network. (See Diversion Audit Report by Idaho Power Co dated 10-8-90.) According to the claimant, the two wells in section 29 were irrigated in 1980, but the third well was not added until 1988. Cannot recommend the third well because the transfer occurred after commencement.

RECOMMENDED POINT(S) OF DIVERSION AND SOURCE:

TWP.	RGE.	SEC.	1/4	1/4	1/4	LOT	COUNTY
6S	21E	29		SW	NW		Lincoln
6S	21E	29	SE	SE	SW		Lincoln

← This well is on line between SWSWNW + SESWNW
← shows in this location on U.S.G.S. OQ

SOURCE: GROUNDWATER

TRIB:

REVIEWED BY: Shelley Waller Keen

DATE: 4-20-92

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FEB 03 1993

A. ROOT WATER RIGHT NUMBERS: A36-07056

B. POU LISTING

TWP	RNG	SEC	1/4	1/4	LOT	NAME	AJ #/ACRES	WR #/ACRES	LANDSAT DATA	FIELD EXAM.	RECOMM. ACRES	
06S	21E	19	SW	SE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	39.0	39 Gully	40	
06S	21E	19	SE	SE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	41.0	40	40	
06S	21E	29	NW	NW		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	39.0	40	40	
06S	21E	29	SW	NW		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	40.0	40	40.0	
06S	21E	30	NE	NE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	37.0	38 Gully	40	
06S	21E	30	NW	NE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	39.0	40	40	
06S	21E	30	SW	NE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	42.0	40	40	
06S	21E	30	SE	NE		ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	38.0	40	40	
06S	21E	30	NE	NW	①	ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0		40	40	
06S	21E	30	SW	NW	⑤	ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0	Farmland location	~~40~~ 35	35	
06S	21E	30	SE	NW	⑥	ROBERTSON , PAUL	A36-07056 /40.0	36-07056 /40.0		~~40~~	40	
TOTAL ACRES							A36-07056	440.00	440.00	315.00	432	435

ARE IRRIGATED ACRES FOUND IN TRACTS OTHER THAN INDICATED ABOVE, Y() N(☒)
IF YES SEE ATTACHED SHEET:

ASCS total = 426.6 Acres

C. FIELD EXAM REQUIRED?

DUE TO POU DISCREPANCY? (Y/N) ☒ N

DATABASE

Y No

FIELD
EXAMINER

SW Kam

POU COUNTY: LINCOLN

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FEB 03 1993

PRESUMPTION FLAG: C

REMARKS:

- Benefit of the doubt gives claimant full 40s in S19, SWSE and S30, NENE.
 - According to the claimant the wells were connected in 1980.
- Claimant indicated permissible place of use is okay. Combine place of use with R36-15363 and R36-11121, which are served by the same two wells in a single system.

RECOMMENDATIONS:

TOTAL ACRES: 435 of ⁹⁷⁹~~957~~

REVIEWED BY: S.W. Keen

DATE: 2-27-92

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FEB 03 1993

A. AJ CLAIMED USES:

PURPOSES	MONTH/DAY	DIVERSION QUANTITY
A36-07056 IRRIGATION	FROM 03-15 TO 11-15	6.400 CFS
TOTAL DIVERSION RATE/VOLUME CLAIMED		6.400 CFS

B. WR RECORDED USES:

PURPOSES	MONTH/DAY	DIVERSION QUANTITY
36-07056 IRRIGATION	FROM 03-01 TO 10-31	6.400 CFS 1760.00 AF/A
TOTAL DIVERSION RATE/VOLUME CLAIMED		6.400 CFS 1760.00 AF/A

PRESUMPTION FLAG: C

C. FIELD EXAM REQUIRED?

	DATABASE	FIELD EXAMINER
DUE TO WATER-USE DISCREPANCY? (Y/N)	N	SW Keen
DUE TO DIVERSION RATE DISCREPANCY? (Y/N)	N	SW Keen
DUE TO PERIOD FROM/TO DISCREPANCY? (Y/N)	Y	SW Keen

D. PERIOD OF USE:

RECOMMEND AS CLAIMED?

Y() N(☒)

RECOMMEND TO WR STANDARDS OR OTHER?

Y(☒) N() Explain in remarks, below.

REMARKS:

New standard season is 4/1 to 10/31.

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FEB 03 1993

A. DOES DIVERSION RATE CLAIMED AGREE WITH EXISTING RECORDS?

Y(☒) N(☐)

AJ TOTAL CLAIMED DIVERSION RATE: 6.400 CFS
WR ROOT RIGHT TOTAL DIVERSION RATE: 6.400 CFS

*** IF NO or IF STATUTORY CLAIM or BENEFICIAL USE then flow measurement required. ***
** If an amount smaller than the original diversion rate is **
** claimed and an exam is NOT required, explain in remarks. **

FLOW MEASUREMENT REQUIRED?

FIELD
DATABASE EXAMINER

DUE TO STAGE OR DIVERSION RATE DISCREPANCY? (Y/N)

Y

B.

FLOW MEASUREMENT

MEASUREMENT METHOD _____, SEE ATTACHED CALCULATIONS.

C. ARE OTHER WATER RIGHTS USED? Y(☐) N(☒) IF YES COMPLETE OVERLAP REVIEW.

OTHER RIGHTS LISTED IN CLAIM: NONE

NO CLAIMS FOUND WITH SAME POU AND IRRIGATION USAGE

NO RIGHTS WITH SAME POU BUT NOT USED FOR IRRIGATION

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FEB 03 1993

D. RATE/VOLUME CALCULATIONS: (IRRIGATION)

1a. IRRIGATION RATE
ACRES 435 x 0.02 CFS/ACRE = 8.70 CFS
(Taken from p/u review)

DOES AMOUNT CLAIMED EXCEED 0.02 CFS/ACRE? Y() N(☒)

*** IF YES ADDITIONAL WATER USE FORM FILED AND ATTACHED? Y() N() ***

2. IRRIGATION CONSUMPTIVE USE

CLAIMED CONSUMPTIVE USE = 1320.0 AF/A

ACRES 435 x CONSUMPTIVE VOL. AF/A FOR AREA 43.0 =

TOTAL CONSUMPTIVE USE 1305 AF/A

3. IRRIGATION DIVERSION VOLUME

CLAIMED DIVERSION VOLUME = AF/A

ACRES 435 x DIVERSION VOL. AF/A FOR AREA 4 =

TOTAL DIVERSION VOLUME 1740 AF/A

4. CALCULATIONS FOR USES OTHER THAN IRRIGATION:

SEE ATTACHED SHEET? Y() N()

REMARKS: (Include limitations on CONSUMPTIVE USE for combined rights.)

6.4 cfs x 214 days x 1.98 = 2711.8 AFY

Note: See enclosed Idaho Power Co. Irrigation Audit Reports

Audit # IP46-90 ⇒ The well originally with 36-07056 was measured at 2270 gpm
The well originally with 36-02406 + 36-02407 " " " 2205 gpm

4475 gpm = 9.97 cfs combined

9.97 cfs
979 acres = 0.01 cfs/acre

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FEB 03 1993

RECOMMENDATIONS:

REC. PURPOSES	REC. PERIOD		REC. DIV		REC. DIV		REC. CONS.	
	FROM	TO	RATE CFS	EXAMINER	VOL. AF/A	EXAMINER	USE	EXAMINER
IRRIGATION	<u>4-1</u> ~~03-15~~	<u>10-31</u> ~~11-15~~	DATABASE 6.400	EXAMINER _____	DATABASE 6.400	<u>1740</u> ~~1740~~	DATABASE 1320.0	<u>1305</u> ~~1305~~
TOTAL FOR THIS RIGHT			6.400				1320.0	

REVIEWED BY: S.W. Keen

DATE: 4-21-92

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FEB 03 1992

- Combined Use - Permissible POU same as R36-11124 and R36-15363 - totals ⁹⁷⁹~~1536~~ acres
- Combined diversion rate $(6.4 \text{ cfs} + 10.17 \text{ cfs}) = 16.57 \text{ cfs}$ (0.017 cfs/acre)
Recorded capacities are $(8.47 \text{ cfs} + 10.70 \text{ cfs}) = 19.17 \text{ cfs}$
 - Combined diversion volume = $\frac{979}{979} \times 4.0 = \frac{3916}{2937} \text{ AF}$
 - Combined consumptive use volume = $\frac{979}{979} \text{ acres} \times 3.0 \text{ AF/acre} = \frac{2937}{2937} \text{ AF}$

A. CHECK ONLY THE FOLLOWING THAT APPLY:

OWNERSHIP _____
FORFEIT/ABANDON _____
ADDITIONAL DIV. AMOUNT _____

ACCEPTED
AS CLAIMED

()
()
()

NEEDS
REVIEW

()
()
()

B. SPLIT WATER RIGHT REVIEW

ROOT WATER RIGHT NUMBER: 36-07056

TOTAL DIVERSION RATE OF WR SPLITS

DATABASE
6.400

EXAMINER

CFS

SPLITS:

OLD RIGHT
NUMBERS

CURRENT
CLAIM NUMBERS

DIVERSION
RATE

CURRENT "R"
CLAIM NUM.

"R" DIV.
RATE

WR RIGHT
NUMBERS

DIVERSION
RATE

-

A36-07056

6.400

-

36-07056

6.400

TOTAL CFS

6.400

6.400

DIVERSION RATE REVIEW

DO THE SUM CFS RATE OF THE SPLITS EQUAL THE ROOT RIGHT CFS RATE? (Y/N)
IF NO, is the written review sheet attached? (Y/N)

DATABASE
Y

FIELD
EXAMINER

REMARKS:

No Splits

AUTHENTICATION:

SIGNATURE:

Shelley Walter Keen

DATE:

4-21-92

NAME OF FIELD EXAMINER:

Shelley Walter Keen

TITLE:

Sr. W.R. Agent

MICROFILMED

FEB 03 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM VERIFICATION REPORT

09:14:46
02/27/92

PAGE: 13
PROFILE REPORT

CLAIM NUMBER: A36-07056

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	PAUL ROBERTSON RT. 2 BOX 2572 PAUL ID 83347 (208) 532-4172	05/07/1969	IRRIGATION	03-15 11-15	6.40 CFS	
					TOTAL DIVERSION:	6.40 CFS
					CONSUMPTIVE USE:	1320.0 AFA
Water Source: GROUNDWATER			Tributary to:		Stage: LICENSE	
Point(s) of Diversion:		T06S R21E S29	SWSWNW	SESESW	LINCOLN County	
		S30 Lot11(SESWSW)			LINCOLN County	

Place of use Legal Description for: IRRIGATION

T	R	S	NE				NW				SW				SE				SUM		
			NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE			
			Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	
06S	21E	19	:																		80.0
06S	21E	29	:							40		40									80.0
06S	21E	30	:	40		40		40		40		40		40							280.0
																			TOTAL ACRES	440.0	

POU County: LINCOLN

Other Rights: NONE

Conditions of Approval:

Dates: Exam Made Date:

Verified Date:

Misc: Water District Number:

Field Inspection Flag:
Presumption Flag: C

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FEB 03 1993

R36-07056

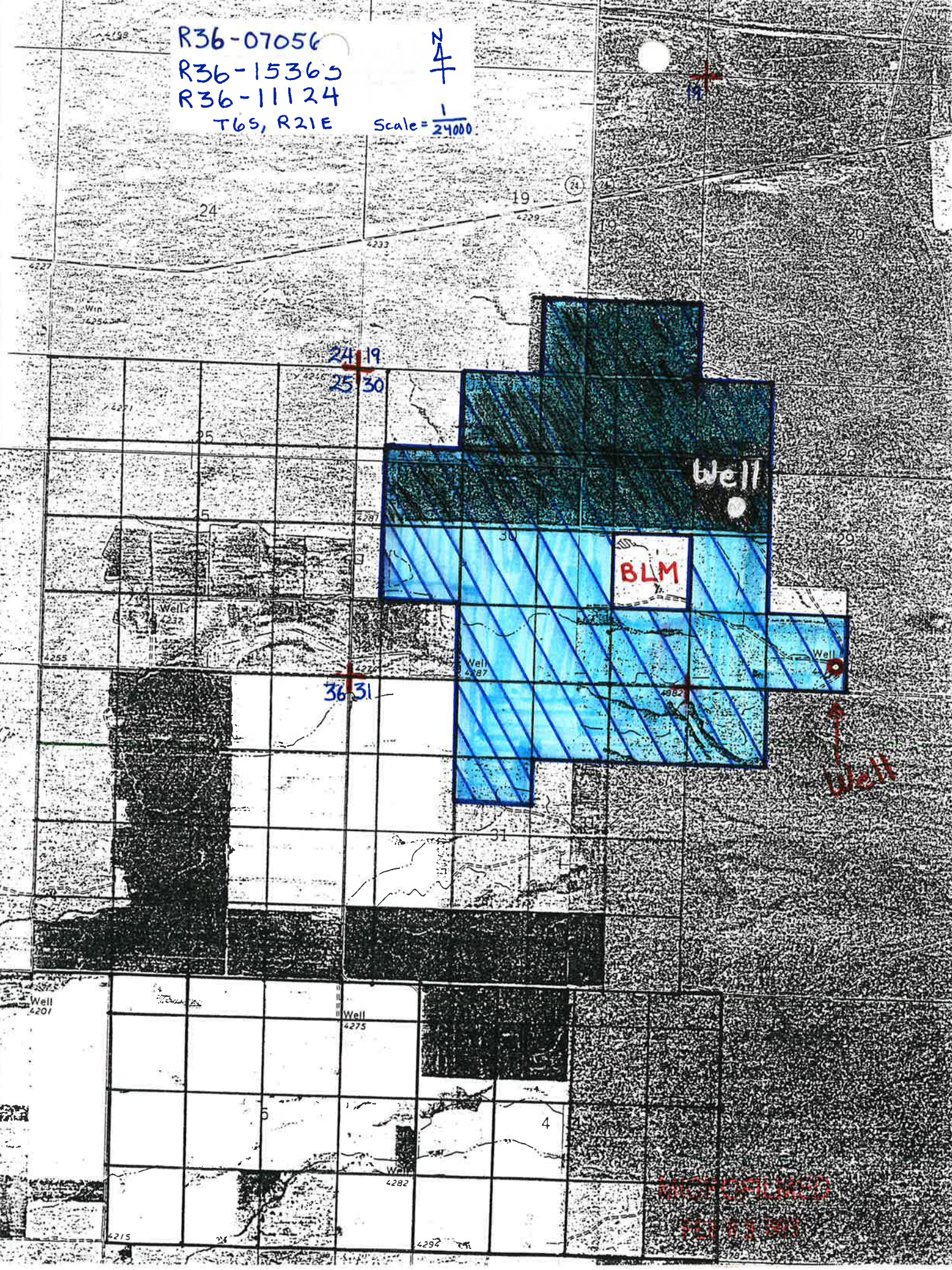
R36-15365

R36-11124

T6S, R21E

Scale = $\frac{1}{24000}$

N
4
+



MICROFILMED

SEP 13 1983

06S21E

[illegible]

MICROFILMED

FEB 03 1993

CLAIMANT'S NAME: Paul RobertsonDATE: 4-14-92COUNTY: LincolnEMPLOYEE: S.W. Keen532-4172 = Home678-6248-1344 = mobile

I called Paul Robertson to discuss an opportunity to measure his well in SWSW Sec.30, T6S, R21E. He told me that a couple of years ago Rex Winn of Idaho Power measured all of his wells and did a system analysis. Mr. Robertson agreed to send me that information this week.

Mr. Robertson also indicated that he would call me back to discuss a permissible place of use recommendation.

4-20-92 I called Paul Robertson to thank him for sending the Idaho Power documents and to ask him about the interconnection of his three wells. Mr. Robertson informed me that the two in section 29 have been connected for 12 years (1980) and the third well was hooked ~~up~~ up in 1988 when the land was purchased from Mr. Blincoe. The third well purchased from Mr. Blincoe corresponds to 36-04058.

Mr. Robertson also indicated that permissible place of use recommendations are acceptable to him.

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IRRIGATION AUDIT REPORT

IDAHO POWER COMPANY

PREPARED BY:

FRED ZIARI



IRZ CONSULTING

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FEB 03 1993

IRRIGATION SYSTEM ANALYSIS OBJECTIVES

THE OBJECTIVE OF THIS IRRIGATION SYSTEM ANALYSIS WAS TO DETERMINE AND EVALUATE THE POTENTIAL ENERGY SAVINGS OF THE EXISTING IRRIGATION SYSTEM AS WAS GUIDELINED BY THE IDAHO POWER STATEMENT OF WORK.

IRRIGATION SYSTEM COMPONENTS THAT WERE EVALUATED ARE AS FOLLOW:

- ⊙ MAINLINE SIZES AND FRICTION.
- ⊙ VALVE AND FITTING'S SIZES AND FRICTION.
- ⊙ SPRINKLER OPERATING PRESSURE.
- ⊙ PUMP AND MOTOR EFFICIENCIES.
- ⊙ PUMP FLOW RATE.

ONE OR ALL OF THE ABOVE MEASURES CAN BE CHANGED TO REDUCE THE TOTAL HORSEPOWER OF THE PUMP AND THUS THE ENERGY REQUIREMENT OF THE IRRIGATION SYSTEM.

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IRZ CONSULTING

*115 W. Hermiston, Ave. Suite 210
Hermiston, Oregon 97838
(503)567-0252*

IRRIGATION AUDIT REPORT

Paul Robertson
Rt. 2 Box 2572
Paul, ID 83347

DATE :October 08, 1990
AUDIT# :IP47-90

Dear Mr. Robertson:

Enclosed please find the results of the Irrigation System Analysis which was conducted during the summer of 1990. The purpose of this audit is to determine the Potential energy savings of your irrigation system, as guidelined by the Idaho Power Company. I hope you will take the time to review this report, and that it will be helpful in reducing your irrigation costs.

RESULTS OF ENERGY SAVINGS

From our detail analysis of the 500 horsepower pump it was determined that due to the existing proper sprinkler pressure, the right size mainlines and high pump and motor efficiency no further energy could economically be saved at this time.

The sprinkler pressure were measured at different locations in the fields, and are generally over 40 psi. This is an acceptable sprinkler pressure, and are doing a fairly good job of irrigating.

We have also checked all the mainlines and the fittings around the pump and found them to be properly designed. Since this system is tied to other irrigation systems, there are not much can be done to improve it any further.

PUMP EFFICIENCY TEST

The pump test was conducted using an accurate ultrasonic flow meter to measure the flow rate of the pump. Electrical readings consisting of voltage, amperage, power factor, and kilowatt (electrical horsepower) on all three legs were made using electrical measurement instrumentation.

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During our test the pump was discharging 2205 gallons per minute from a depth of 485 feet, with 52 psi of pressure and it was drawing 515.8 horsepower. It achieved an overall efficiency (combined efficiency of pump and motor) of 66.4%, which is rated as "GOOD" efficiency. All electrical readings were found to be very balanced. We believe that this pump will achieve an even better efficiency, when more is pumping a little more gallonage.

For more detailed information, please refer to the enclosed pump efficiency field sheet. For protection and prolonging the life of the motor, we recommend that you provide a simple shade. The shade should not be elaborate, and as a matter of fact, the simpler it is the more effective it will be. Also please make sure to cover all the holes in the electric panel.

COST SHARING PROGRAM

This Irrigation System Analysis, is sponsored by Idaho Power Company, and will normally pay up to 50% of the cost of the irrigation energy conservation program (i.e. pump efficiency, etc). Since this report indicates that no cost effective energy savings could be achieved for this irrigation system, no cost sharing program will be available at this time.

If you have further questions concerning this report please feel free to contact Mr. Rex Winn of Idaho Power, or myself.

Sincerely,



Fred Ziari
IRZ CONSULTING

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PUMPING PLANT EFFICIENCY

THE OVERALL PUMPING PLANT EFFICIENCY IS THE RATIO OF WATER HORSE-POWER (output) TO THE ELECTRICAL HORSEPOWER (input). IT IS THE COMBINED EFFICIENCY OF PUMP AND MOTOR.

EXAMPLE: A 100 HORSEPOWER MOTOR IS RATED AS 90% EFFICIENT AND THE PUMP IS RATED AS 80% EFFICIENT, SO THE OVERALL EFFICIENCY IS $90\% \times 80\% = 72\%$.

OVERALL EFFICIENCY RATING TABLE

MOTOR SIZE (HP)	LOW	FAIR	GOOD	EXCELLENT
7.5-10	44.9% OR LESS	45-52%	53-57.9%	58% OR ABOVE
15-30	47.9% OR LESS	48-55.9%	56-60.9%	61% OR ABOVE
40-60	52.9% OR LESS	53-59.9%	60-64.9%	65% OR ABOVE
75 TO 500	55.9% OR LESS	56-62.9%	63-68.9%	69% OR ABOVE

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PUMP EFFICIENCY TEST

=====

TEST NO. :IP47-90
DATE :7/11/90

UTILITY : IDAHO POWER
METER NO. : 40091254G
PUMP NUMBER : 1

MOTOR DESCRIPTION

1. Make :U.S.
2. Rated HP : 500
3. Rated Volt: 440
4. Rated Amp : 574
5. RPM : 1800

PUMP DESCRIPTION

1. MAKE : LAYNE&BOWLER
2. MODEL NO. : NA
3. SERIAL NO.: 44296

FIELD TEST FINDINGS

=====

Flow Rate (gpm)	Pressure (psi)	Pumping Level (feet)	Total Head (feet)
2205.0	52.0	485.0	615.1

<----- Voltage -----			<----- Current----->		<-----Power Factor-->		Kilowatt
(volt)			(amps)		(%)		(kw)
475.0	474.0	474.0	522.0	529.0	519.0	89.5	384.8

Electrical Horsepower	Water Horsepower	Overall Efficiency	Rated Efficiency
515.8	342.5	66.4%	G O O D

*** INSTALL SHADES ON THE MOTORS

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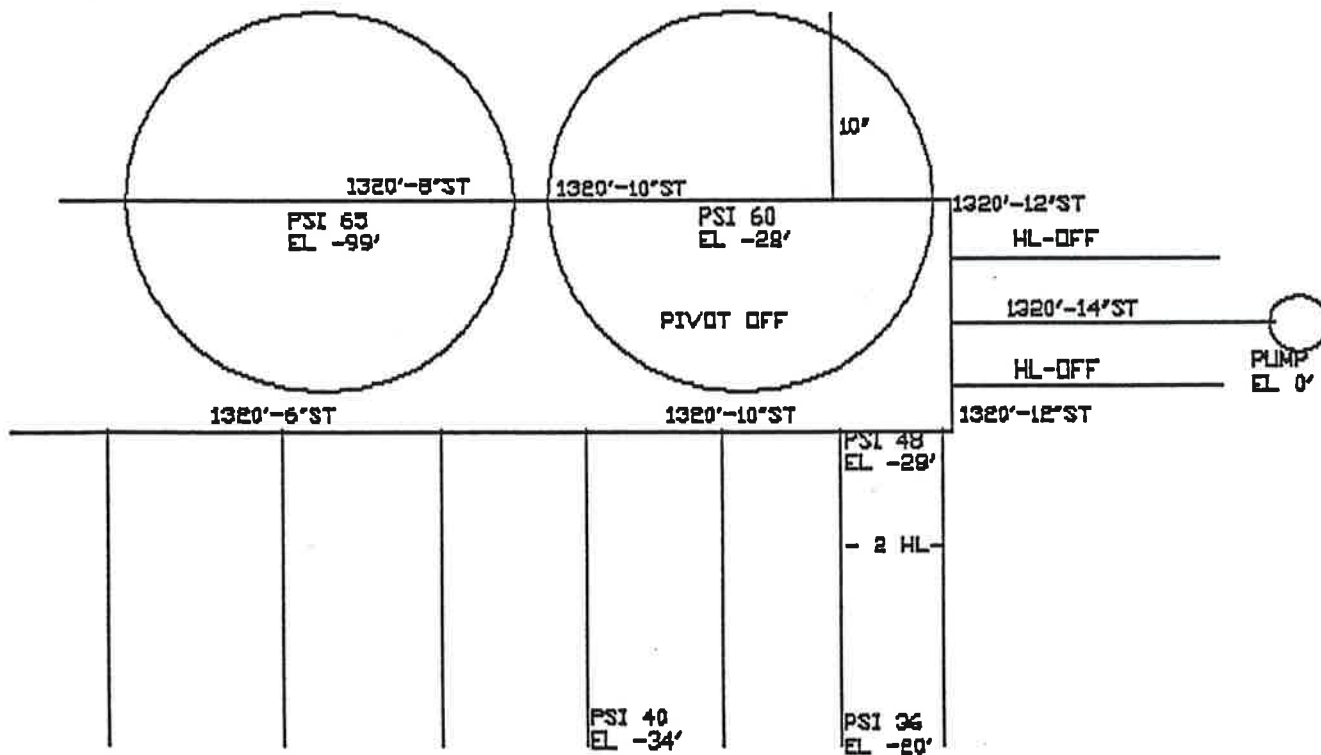
FEB 03 1993

Name.....:PAUL ROBERTSON
Address.....:RT 2 BOX 2572
City,State,ZIP.:PAUL, ID 83347
Irrig Acres...: 405
Major Crops.....:POTATO/BEET/WHEAT

Test Number ...:IP47-90
Test Date:7/11/90
Meter #.....:40091254G
Inspector(s)....:FRED ZIARI

IRRIGATION LAYOUT:

500 HP PUMP



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A. Number of Pump(s) : 1

Pump Setup : Main Pump
Pump Number: 1

B. MOTOR INFORMATION

1. Make.....: U.S.
3. Rated HP....: 500
4. Rated Volts: 440
5. Rated Amps.: 574
6. RPM.....: 1800
7. HP/Meter....: 500

D. ELECTRICAL INPUT

1. Disc Revolutions....
2. Meter Constant Kh...
3. CTR.....
4. PTR/Multiplier.....
5. Time..... sec
kW Metered= 0.0 kWe

	1-2	1-3	3-2	Average
6. Voltage.....	475.0	474.0	474.0	474.3
7. Amperage.....	522.0	529.0	519.0	523.3
8. Power Factor..(%)..	89.5	89.5	89.5	89.5

kW Measured= 384.8 kWe

C. PUMP INFORMATION

1. Manufacture: LAYNE & BOWLER
a Centrifugal:
b Turbine/Sub: X
2. Model #....: NA
3. Serial #....: 44296
4. Rated Head.: NA ft.
5. Rated Flow.: NA gpm
6. Implr Dia...: in.
7. Intake Dia.: in.
8. Intake Len.: ft.
9. # of Stages: NA

E. FLOW AND PRESSURE INFORMATION

1. Measurement Device.: ULTRASONIC
2. Pipe ID.....: 12.000 in.
3. Pipe Material.....: STEEL
4. Flow Reading.....: 2205 gpm
5. Discharge Pressure.: 52.0 psi

F. PUMPING WATER LEVEL

1. Pumping Lift.....: 485.0 ft.
2. Suction Head.....: 0.0 ft.
3. Gauge in feet.....: 0.0 ft.
4. Water Level Fluct...: 0.0 ft.
5. Misc Frict Losses...: 10.0 ft.

G. CALCULATED OVERALL EFFICIENCY

1. Total Dynamic Head.: 615 ft.
2. Flow.....: 2205 gpm
3. Water Horsepower...: 342.5 WHP
4. Input Horsepower...: 515.8 EHP
5. Estimated Break HP.: 464.2 BHP
6. Pumping Plant Eff...: 66.4 %

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WHEEL/HAND LINE:X
CENTER PIVOT :X

H. FIELD ELEVATIONS

1. Highest Irrigated Field Elevation...: 0.0 ft.
2. Lowest Irrigated Field Elevation...: -99.0 ft.
3. Is Flow or Pressure Control Recommended? YES
4. Elevation of critical sprinkler as tested.....: 0.0 ft.
5. Potential critical sprinkler elevation.....: 0.0 ft.

I. REQUIRED PRESSURE AT CRITICAL POINT

1. Low Pressure Sprinkler Recommendation.....: 35.0 psi
2. Flow or Pressure control loss (5psi).....: 5.0 psi
3. REQUIRED OPERATING PRESSURE.....: 40.0 psi 92.4 ft.

J. LATERAL DATA --If Applicable

	N / A			
	# 1	# 2	# 3	# 4
1. Nozzle Diameter(s)...(in)...				
2. Average Pressure....(psi)...	46.0			
3. Flow per Sprinkler..(gpm)...	0.00	0.00	0.00	0.00
4. # of Sprinklers.....				
5. Lateral Flow.....(gpm)...	0	0	0	0
		Total Flow =		0

K. CRITICAL SPRINKLER PRESSURES

1. First Sprinkler Pressure.....: 48.0 psi
2. Last Sprinkler Pressure.....: 40.0 psi
3. LOWEST PRESSURE.....: 40.0 psi
4. Mainline Pressure Adjustment.....: 0.0 psi
5. Elevation Adjustment.....: 0.0 psi
6. ADJUSTED CRITICAL PRESSURE.....: 40.0 psi 92.4 ft.

L. POTENTIAL TOTAL HEAD SAVINGS

	PSI	FEET
1. ADJUSTED CRITICAL PRESSURE.....:	40.0	92.4
2. REQUIRED OPERATING PRESSURE.....:	40.0	92.4
3. POTENTIAL TOTAL HEAD SAVINGS.....:	0.0	0.0

NOTES:

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*: Mainlines in a network will not be considered here.

M. MAINLINE FRICTION LOSS CALCULATION:

1. Calculate velocity and friction at critical mainlines.
2. Resize or use parallel pipeline on all mainline with velocity greater than 6.5 fps (or C-factor < 100) to around 5 fps.
3. Use the proposed flow when resizing the mainline.

Mainline Number	Pipe Length (ft)	Inside Dia (in)	C* Value	Flow (gpm)	Velocity (fps)	Hf/100 (ft)	Total Frictn (ft)	Head Saved (ft)
1. Existing Proposed	1320	14.00	100	2205	4.60	0.86	11.35	0.0
2. Existing Proposed	1320	12.00	100	1800	5.11	1.25	16.50	0.0
3. Existing Proposed	1320	10.00	100	900	3.68	0.84	11.10	0.0
4. Existing Proposed	1320	8.00	100	900	5.74	2.49	32.86	0.0
5. Existing Proposed	1320	12.00	100	826	2.34	0.30	3.90	0.0
6. Existing Proposed	1320	10.00	100	826	3.37	0.72	9.46	0.0
7. Existing Proposed	1320	6.00	100	275	3.12	1.12	14.84	0.0
8. Existing Proposed								0.0
9. Existing Proposed								0.0
10. Existing Proposed								0.0
POTENTIAL TOTAL HEAD SAVINGS (Add 1 thru 10)								0.0

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N. SAVINGS PER MEASURE:		HEAD SAVINGS
1. Install low pressure sprinklers or nozzles	=	0.0 ft.
2. Mainline/Valve/Fitting Savings :		
a. Mainline Friction Loss Savings	=	0.0 ft.
b. Fittings Loss Saving (if applicable)	=	0.0 ft.
c. Partially Closed Valve Savings	=	0.0 ft.
3. SYSTEM TOTAL HEAD SAVINGS	=	0.0 ft.

O. PUMPING PLANTS INFORMATION

1. Existing Condition:

Pump #	TDH	GPM	WHP	EHP	BHP	EFF
1	615.1	2205.0	342.5	515.8	464.2	66.4
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0

TOTAL	615.1	2205.0	342.5	515.8	464.2	
-------	-------	--------	-------	-------	-------	--

2. Proposed Condition:

Pump #	TDH	GPM	WHP	EHP	BHP	EFF
1	615.1	2205.0	342.5	515.8	464.2	66.4 *
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0

TOTAL	615.1	2205.0	342.5	515.8	464.2	
-------	-------	--------	-------	-------	-------	--

475.7 428.1 7.2%

P. SYSTEM INFORMATION

1. Total Plant Efficiency (existing)	=	66.4 %
2. Total Plant Efficiency (proposed)	=	66.4 %
3. Estimated Operating Hours per Year	=	1836 Hrs/Yr
4. Estimated Water application- Acre Inch per Year	=	22.09 Acre inch

* NOTE : NOT AT NORMALL RUNING CONDITION, MORE EFFICIENT WITH 2 PIVOTS

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Q. HISTORICAL KWH INFORMATION

NA =	N	Year	kWh
a.		1989	709680
b.		1988	625320
c.		1987	784560
d.	N	1986	
e.	N	1985	
f.		Average	706520 kWh/Yr

R. PUMPING PLANT INFORMATION:	EXISTING =====	PROPOSED =====
1. Total Head-TDH	615 FT	615 FT
2. Flow Rate	2205 GPM	2205 GPM
3. Pumping Plant Efficiency	66.4 %	66.4 %
4. Input Kilowatts	384.8 kW	384.8 kW
5. Input Horsepower	515.8 HP	515.8 HP
6. ESTIMATED BRAKE HORSEPOWER	464.2 BHP	464.2 BHP

7270
355.0
475.7

S. ENERGY SAVINGS AND COST SHARING

1. Estimated annual kwh saving and estimated cost sharing:

	ESTIMATED Kwh Savings per measure	Eligibility	MAXIMUM COST SHARE
a. Low Pressure Savings	0		\$0
b. Mainline Savings	0		\$0
c. Fittings Savings	0		\$0
d. Flow Savings	0		\$0
e. Efficiency Savings	54,715 kWh		\$0
f. TOTAL POTENTIAL KWH SAVED AND MAX COST SHARING	0		\$0

\$1,860⁰⁰ Per year

Flow Control Savings : 0

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IRRIGATION AUDIT REPORT

IDAHO POWER COMPANY

PREPARED BY:

FRED ZIARI



IRZ CONSULTING

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FEB 03 1993

IRRIGATION SYSTEM ANALYSIS OBJECTIVES

THE OBJECTIVE OF THIS IRRIGATION SYSTEM ANALYSIS WAS TO DETERMINE AND EVALUATE THE POTENTIAL ENERGY SAVINGS OF THE EXISTING IRRIGATION SYSTEM AS WAS GUIDELINED BY THE IDAHO POWER STATEMENT OF WORK.

IRRIGATION SYSTEM COMPONENTS THAT WERE EVALUATED ARE AS FOLLOW:

- ⊙ MAINLINE SIZES AND FRICTION.
- ⊙ VALVE AND FITTING'S SIZES AND FRICTION.
- ⊙ SPRINKLER OPERATING PRESSURE.
- ⊙ PUMP AND MOTOR EFFICIENCIES.
- ⊙ PUMP FLOW RATE.

ONE OR ALL OF THE ABOVE MEASURES CAN BE CHANGED TO REDUCE THE TOTAL HORSEPOWER OF THE PUMP AND THUS THE ENERGY REQUIREMENT OF THE IRRIGATION SYSTEM.

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FEB 03 1993

IRZ CONSULTING

*115 W. Hermiston Ave. Suite 210
Hermiston Oregon, 97838
(503)567-0252*

IRRIGATION AUDIT REPORT

Paul Robertson
Rt 2, Box 2272
Paul, ID 83347

DATE :October 08, 1990
AUDIT# :IP46-90

Dear Mr. Robertson:

Enclosed please find the results of the Irrigation System Analysis which was conducted during the summer of 1990. The purpose of this audit is to determine the Potential energy savings of your irrigation system, as guidelined by the Idaho Power Company. I hope you will take the time to review this report, and that it will be helpful in reducing your irrigation costs.

RESULTS OF ENERGY SAVINGS

From our analysis of the 400 horsepower pump it was determined that 37,181 and 27,959 kilowatt-hours per year of energy could respectively be saved by converting your pivot to the low pressure nozzles operating at 20 psi, and by replacing the existing 1100 feet of 12 inch old steel pipe (starts from pump) with 14 inch PVC pipe. This savings represents a reduction of 8.0% of your present energy usage or a total annual savings of approximately \$2250.00, based on the past few years of electrical usage.

If these savings seem cost effective for your operation, you may then take the following actions, and need to consult your dealer.

PUMP EFFICIENCY TEST

The pump test was conducted using an accurate ultrasonic flow meter to measure the flow rate. Electrical readings consisting of voltage, amperage, power factor, and kilowatt (electrical horsepower) on all three legs were taken using an electrical measurement instrumentation.

During our test the pump was discharging 2270 gallons per minute, lifting from a depth of 397

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feet, with 70 psi of discharge pressure and it was drawing 422.5 horsepower. It achieved an overall efficiency (combined efficiency of pump and motor) of 76.5%, which is rated as "EXCELLENT" efficiency. There was a very slight sign of current imbalance. Please make sure all the connections are tightened.

For more detailed information, please refer to the enclosed pump efficiency field sheet. We have noticed evidences of mice in the panel, which might damage the motor insulation. Please make sure to cover all the holes in the electric panel.

PUMP MODIFICATION

Installation of a low pressure system or a mainline by itself will not result in any energy savings, unless pumps are modified to use less horsepower and therefore less energy. Normally pumps are modified to output less pressure at the discharge.

The method of pump modification is fairly simple and can be done by an experienced pump shop. After you have install the low pressure nozzles, and replaced the mainlines, we estimate you will have 42 feet of extra pressure available. I recommend that you pull the pump and have them by either trimming the impellers or by dropping bowls, reduce the total dynamic head-TDH, by about 42 feet. If everything stay the same, your pump should then draw approximately 30 less horsepower.

If for the past 5 years you have not done so, you should first megger the motor and if found to be low, you may then have the motor dipped and baked to restore it to the original efficiency.

I suggest that you consult your pump dealer on the details of the modification, before taking any action.

LOW PRESSURE NOZZLES

We recommend that you install low pressure nozzles on the drop tubes. There are two types of low pressure nozzles available in the market today. The first type, which is the most popular, is the "Spray Head", and is recommended for an operating pressure ranging from 10 to 20 psi. The spray heads can be installed either on the top of the pivot or preferably on a drop tube closer to the crop, so to minimize the effect of wind drift and evaporation losses. Also in the heavier soils, new spray nozzles such as Rotator or Wobbler can be used to reduce the runoff problem.

The second type is the "Diffuser" nozzle, which replaces the existing round nozzles on the impact sprinklers. It has an operating pressure ranging from 30 to 35 psi. Since the diameter of throw is wider than the spray head it is mainly recommended for use on heavier soils. Since only the nozzles need to be replaced this method might be less expensive, but you can not use the drop tubes to minimize evaporation losses.

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NOTE. The calculated savings in this report is based on the spray nozzles on drop tubes, operating at 20 psi.

PRESSURE REGULATORS

We strongly recommend the installation of the pressure regulators on all pivots with large field elevation differences or with multiple pivots operating with the same pump(s). Pressure variation causes poor water application uniformity and results in under or over irrigation of portions of your fields. The pressure regulators which are normally installed at the base of each spray head, will maintain a constant pressure throughout the length of the pivot, regardless of field slope or pump operating pressure.

END GUN

In most cases, when the pumps are modified to operate at a low pressure system, the end pressure will be too low for the end gun to operate properly. There are several solution to this problem:

- completely remove the end gun
- install a small booster pump (1 to 2 hp) at the end tower to boost the pressure for the end gun. This might be more expensive especially on the smaller pivots.
- install the new Diffuser type end gun, which will operate properly at much lower pressure.

I recommend that you consult your irrigation dealer for selection of a proper end gun. (see Appendix A)

COST SHARING PROGRAM

To receive financial incentives, you need to notify Idaho Power Company for approval, before proceeding with the recommendations in this report (i.e. low pressure nozzles ,pump efficiency improvement, etc.).

After all measures have been installed you should contact and bring all receipts to Mr. Rex Winn at Idaho Power. Idaho Power will pay up to 50% of the actual cost of modifications recommended in this report, not to exceed \$10,000 per system (see page 6 of the report). To establish the actual energy saving, we need to retest the pump after all the measures have been installed.

We encourage you to take advantage of this opportunity, and if you have further questions

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concerning this report please feel free to contact me or Rex.

Sincerely,

Fred Ziari

Fred Ziari
IRZ CONSULTING

Note: This is not a complete redesign of your systems.

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PUMPING PLANT EFFICIENCY

THE OVERALL PUMPING PLANT EFFICIENCY IS THE RATIO OF WATER HORSE-POWER (output) TO THE ELECTRICAL HORSEPOWER (input). IT IS THE COMBINED EFFICIENCY OF PUMP AND MOTOR.

EXAMPLE: A 100 HORSEPOWER MOTOR IS RATED AS 90% EFFICIENT AND THE PUMP IS RATED AS 80% EFFICIENT, SO THE OVERALL EFFICIENCY IS $90\% \times 80\% = 72\%$.

OVERALL EFFICIENCY RATING TABLE

MOTOR SIZE (HP)	LOW	FAIR	GOOD	EXCELLENT
7.5-10	44.9% OR LESS	45-52%	53-57.9%	58% OR ABOVE
15-30	47.9% OR LESS	48-55.9%	56-60.9%	61% OR ABOVE
40-60	52.9% OR LESS	53-59.9%	60-64.9%	65% OR ABOVE
75 TO 500	55.9% OR LESS	56-62.9%	63-68.9%	69% OR ABOVE

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PUMP EFFICIENCY TEST

=====

TEST NO. : IP46-90
DATE : 7/11/90

UTILITY : IDAHO POWER
METER NO. : 54384496W
PUMP NUMBER : 1

MOTOR DESCRIPTION

1. Make : G.E.
2. Rated HP : 400
3. Rated Volt: 460
4. Rated Amp : 462
5. RPM : 1775

PUMP DESCRIPTION

1. MAKE : PEERLESS
2. MODEL NO. : NA
3. SERIAL NO.: 19990

FIELD TEST FINDINGS

=====

Flow Rate (gpm)	Pressure (psi)	Pumping Level (feet)	Total Head (feet)
2270.0	70.0	397.0	563.7

<----- Voltage -----			<----- Current----->		<-Power Factor->		Kilowatt
(volt)			(amps)		(%)		(kw)
460.0	462.0	462.0	446.0	460.0	470.0	86.0	315.2

Electrical Horsepower	Water Horsepower	Overall Efficiency	Rated Efficiency
422.5	323.1	76.5%	EXCELLENT

*** COVER HOLES IN THE PANEL.

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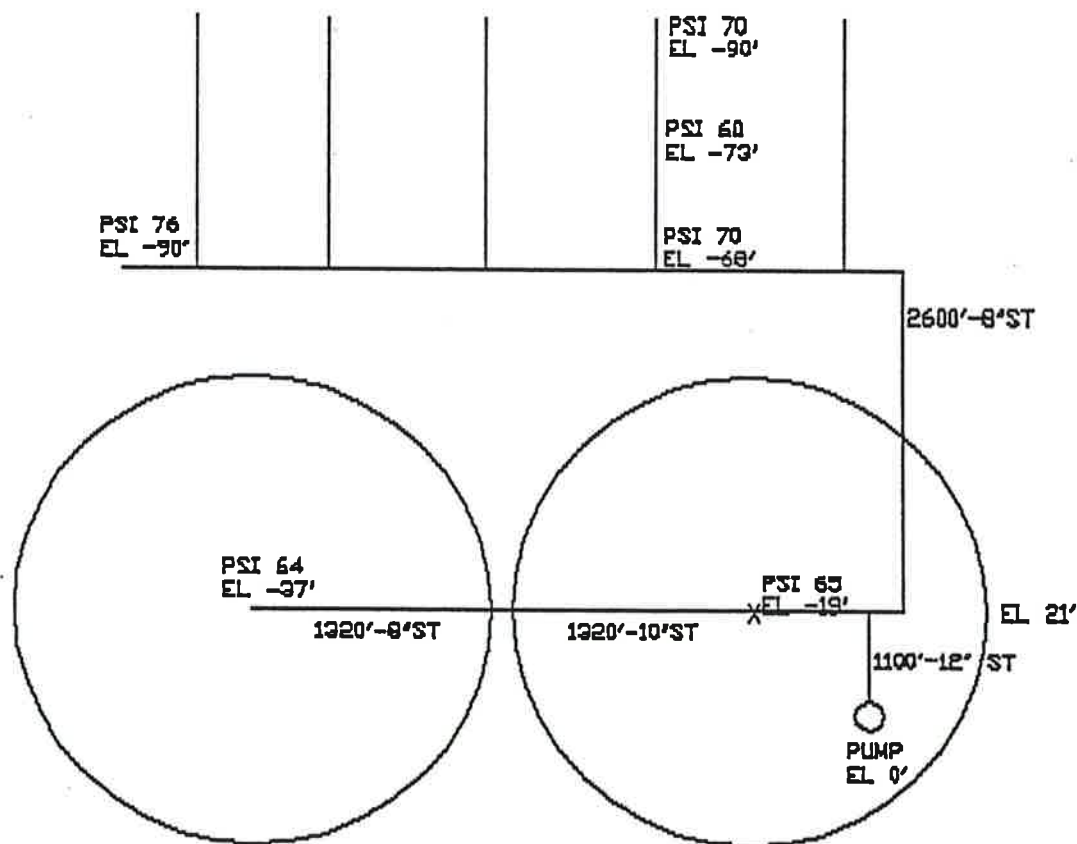
FEB 03 1993

Name.....:PAUL ROBERTSON
Address.....:RT 2 BOX 2572
City,State,ZIP.:PAUL, ID 83347
Irrig Acres...: 380
Major Crops.....:BEETS/POTATOES

Test Number ...:IP46-90
Test Date:7/11/90
Meter #.....:54384496W
Inspector(s)....:FRED ZIARI

IRRIGATION LAYOUT:

400 HP PUMP



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IDAHO WATER IRRIGATION SYSTEM ANALYSIS
EXISTING PUMP TEST INFORMATION

Page 2
Test #: IP46-90

A. Number of Pump(s) : 1

Pump Setup : Main Pump
Pump Number: 1

B. MOTOR INFORMATION

1. Make.....: G.E.
3. Rated HP...: 400
4. Rated Volts: 460
5. Rated Amps.: 462
6. RPM.....: 1775
7. HP/Meter...: 400

C. PUMP INFORMATION

1. Manufacture: PEERLESS
a Centrifugal:
b Turbine/Sub: X
2. Model #....: NA
3. Serial #....: 19990
4. Rated Head.: ft.
5. Rated Flow.: gpm
6. Implr Dia.: in.
7. Intake Dia.: in.
8. Intake Len.: ft.
9. # of Stages: NA

D. ELECTRICAL INPUT

1. Disc Revolutions...:
2. Meter Constant Kh...:
3. CTR.....:
4. PTR/Multiplier.....:
5. Time.....: sec
kW Metered= 0.0 kW

	1-2	1-3	3-2	Average
6. Voltage.....:	460.0	462.0	462.0	461.3
7. Amperage.....:	446.0	460.0	470.0	458.7
8. Power Factor..(%):	86.0	86.0	86.0	86.0

kW Measured= 315.2 kW

E. FLOW AND PRESSURE INFORMATION

1. Measurement Device.: ULTRASONIC
2. Pipe ID.....: 10.000 in.
3. Pipe Material.....: STEEL
4. Flow Reading.....: 2270 gpm
5. Discharge Pressure.: 70.0 psi

F. PUMPING WATER LEVEL

1. Pumping Lift.....: 397.0 ft.
2. Suction Head.....: 0.0 ft.
3. Gauge in feet.....: 0.0 ft.
4. Water Level Fluct...: 0.0 ft.
5. Misc Frict Losses...: 5.0 ft.

G. CALCULATED OVERALL EFFICIENCY

1. Total Dynamic Head.: 564 ft.
2. Flow.....: 2270 gpm
3. Water Horsepower...: 323.1 WHP
4. Input Horsepower...: 422.5 EHP
5. Estimated Break HP.: 380.2 BHP
6. Pumping Plant Eff...: 76.5 %

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WHEEL/HAND LINE:X
CENTER PIVOT :X

H. FIELD ELEVATIONS

1. Highest Irrigated Field Elevation...: 21.0 ft.
2. Lowest Irrigated Field Elevation...: -90.0 ft.
3. Is Flow or Pressure Control Recommended? YES
4. Elevation of critical sprinkler as tested.....: -37.0 ft.
5. Potential critical sprinkler elevation.....: 21.0 ft.

I. REQUIRED PRESSURE AT CRITICAL POINT

1. Low Pressure Sprinkler Recommendation.....: 20.0 psi
2. Flow or Pressure control loss (5psi).....: 5.0 psi
3. REQUIRED OPERATING PRESSURE.....: 25.0 psi 57.8 ft.

J. LATERAL DATA --If Applicable

	N / A			
	# 1	# 2	# 3	# 4
1. Nozzle Diameter(s)...(in)...				
2. Average Pressure....(psi)...	59.4			
3. Flow per Sprinkler..(gpm)...	0.00	0.00	0.00	0.00
4. # of Sprinklers.....				
5. Lateral Flow.....(gpm)...	0	0	0	0
		Total Flow =		0

K. CRITICAL SPRINKLER PRESSURES

1. First Sprinkler Pressure.....: 59.0 psi
2. Last Sprinkler Pressure.....: 60.6 psi
3. LOWEST PRESSURE.....: 60.6 psi
4. Mainline Pressure Adjustment.....: 0.0 psi
5. Elevation Adjustment.....: -25.1 psi
6. ADJUSTED CRITICAL PRESSURE.....: 35.5 psi 82.1 ft.

L. POTENTIAL TOTAL HEAD SAVINGS

	PSI	FEET
1. ADJUSTED CRITICAL PRESSURE.....	35.5	82.1
2. REQUIRED OPERATING PRESSURE.....	25.0	57.8
3. POTENTIAL TOTAL HEAD SAVINGS.....	10.5	24.3

NOTES:

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*: Mainlines in a network will not be considered here.

M. MAINLINE FRICTION LOSS CALCULATION:

1. Calculate velocity and friction at critical mainlines.
2. Resize or use parallel pipeline on all mainline with velocity greater than 6.5 fps (or C-factor < 100) to around 5 fps.
3. Use the proposed flow when resizing the mainline.

Mainline Number	Pipe Length (ft)	Inside Dia (in)	C* Value	Flow (gpm)	Velocity (fps)	Hf/100 (ft)	Total Frictn (ft)	Head Saved (ft)
1. Existing	1100	11.79	100	2270	6.67	2.09	23.01	
Proposed	1100	14.00	150	2270	4.73	0.43	4.71	18.3
2. Existing	1320	9.79	100	800	3.41	0.75	9.89	
Proposed								0.0
3. Existing	1320	7.79	100	800	5.38	2.28	30.05	
Proposed								0.0
4. Existing	2600	7.79	100	640	4.31	1.51	39.16	
Proposed								0.0
5. Existing								0.0
Proposed								
6. Existing								0.0
Proposed								
7. Existing								0.0
Proposed								
8. Existing								0.0
Proposed								
9. Existing								0.0
Proposed								
10. Existing								0.0
Proposed								
POTENTIAL TOTAL HEAD SAVINGS (Add 1 thru 10)								18.3

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N. SAVINGS PER MEASURE:	HEAD SAVINGS
1. Install low pressure sprinklers or nozzles	= 24.3 ft.
2. Mainline/Valve/Fitting Savings :	
a. Mainline Friction Loss Savings	= 18.3 ft.
b. Fittings Loss Saving (if applicable)	= 0.0 ft.
c. Partially Closed Valve Savings	= 0.0 ft.
3. SYSTEM TOTAL HEAD SAVINGS	= 42.6 ft.

O. PUMPING PLANTS INFORMATION

1. Existing Condition:

Pump #	TDH	GPM	WHP	EHP	BHP	EFF
1	563.7	2270.0	323.1	422.5	380.2	76.5
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0

TOTAL	563.7	2270.0	323.1	422.5	380.2
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2. Proposed Condition:

Pump #	TDH	GPM	WHP	EHP	BHP	EFF
1	521.1	2270.0	298.7	390.5	351.5	76.5
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0

TOTAL	521.1	2270.0	298.7	390.5	351.5
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P. SYSTEM INFORMATION

1. Total Plant Efficiency (existing)	= 76.5 %
2. Total Plant Efficiency (proposed)	= 76.5 %
3. Estimated Operating Hours per Year	= 2732 Hrs/Yr
4. Estimated Water application- Acre Inch per Year	= 36.06 Acre inch

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Q. HISTORICAL KWH INFORMATION

NA =	N	Year	kWh
a.		1989	697560
b.		1988	964440
c.		1987	921240
d.	N	1986	
e.	N	1985	
f.		Average	861080 kWh/Yr

R. PUMPING PLANT INFORMATION:	EXISTING =====	PROPOSED =====
1. Total Head-TDH	564 FT	521 FT
2. Flow Rate	2270 GPM	2270 GPM
3. Pumping Plant Efficiency	76.5 %	76.5 %
4. Input Kilowatts	315.2 kW	291.3 kW
5. Input Horsepower	422.5 HP	390.5 HP
6. ESTIMATED BRAKE HORSEPOWER	380.2 BHP	351.5 BHP

S. ENERGY SAVINGS AND COST SHARING

1. Estimated annual kwh saving and estimated cost sharing:

	ESTIMATED Kwh Savings per measure	Eligibility	MAXIMUM COST SHARE
	-----	-----	-----
a. Low Pressure Savings	37181	X	\$7,436
b. Mainline Savings	27959	X	\$5,592
c. Fittings Savings	0		\$0
d. Flow Savings	0		\$0
e. Efficiency Savings	0		\$0
f. TOTAL POTENTIAL KWH SAVED AND MAX COST SHARING	65139		\$10,000

Flow Control Savings : 0

THIS SYSTEM IS ELIGIBLE FOR ONLY THE MEASURES MARKED ABOVE WITH AN 'X'.

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