

Permit No: 2-7157C

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
OCT 20 2005
DEPARTMENT OF WATER RESOURCES
Page

A. GENERAL INFORMATION

Permit No: 2-7157C

Exam Date: 10/3/2005

1. Current Owner: MUD FLAT CANAL CO
C/O JOHN TERRY FIELD
38167 STATE HWY 78
GRAND VIEW ID 83624-5039

2. Accompanied by: Terry Field

Phone No: (208) 834-2263

Address: SAME AS ABOVE

Relationship to Permit Holder: PRESENT OWNER OF LAND AND RIGHT

3. SOURCE

SNAKE RIVER

TRIBUTARY

COLUMBIA RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE

2. Other water rights with the same point of diversion: SEE ATTACHED LIST

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

SNAKE RIVER L9 SE1/4SW1/4 Sec. 34, Twp 05S, Rge 04E, B.M.
OWYHEE County

Method of Determination: VISUAL INSPECTION AND AERIAL PHOTOGRAPHY.

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	
06S	03E	16	40.0	23.0	38.0	32.0	2.6			29.0	38.0			37.0	22.0	38.0	40.0	29.0	368.6

Total Acres: 368.6

Method of Determination: VISUAL INSPECTION AND AERIAL PHOTOGRAPHY.

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

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

YES 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
SNAKE RIVER (CJ STRIKE RESERVOIR) PUMP # 1	GENERAL ELECTRIC	250 Hp	KNJ1012016	VERTILINE	
SNAKE RIVER (CJ STRIKE RESERVOIR) PUMP # 2	GENERAL ELECTRIC	250 Hp	KNJ102015	VERTILINE	
RE-LIFT PUMP FROM BYBEE CANAL PUMP #1	GENERAL ELECTRIC	200 Hp	JMJ922109	VERTILINE	
RE-LIFT PUMP FROM BYBEE CANAL PUMP #2	GENERAL ELECTRIC	200 Hp	FMJ622101	VERTILINE	
RE-LIFT PUMP FROM BYBEE CANAL PUMP #3	GENERAL ELECTRIC	600 HP	SN# 5K623X03349A MDL # KNJ101202	VERTILINE	
RE-LIFT PUMP FOR MUD FLAT CANAL TO FIELD PUMP #1	GENERAL ELECTRIC	50 Hp	78165	UNKNOWN	
RE-LIFT PUMP FOR MUD FLAT CANAL TO FIELD PUMP #2	GENERAL ELECTRIC	50 Hp	78166	UNKNOWN	
RE-LIFT PUMP FOR MUD FLAT CANAL TO FIELD PUMP #3	GENERAL ELECTRIC	75 Hp	78167	UNKNOWN	
RE-LIFT PUMP FOR MUD FLAT CANAL TO FIELD PUMP #4	GENERAL ELECTRIC	100 Hp	78169	UNKNOWN	
RE-LIFT PUMP FOR MUD FLAT CANAL TO FIELD PUMP #5	GENERAL ELECTRIC	100 Hp	78170	UNKNOWN	

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

PLEASE NOTE: All of the pump information for Snake River Pumps and the pumps from the Bybee canal were attained from former field exams on Mud Flat Canal. The pump information of the owner's pumps from the Mud Flat canal were attained from the owners records. These pumps are no longer on site.

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
MANOMETER – 48 INCH	CONSTRUCTED	IDWR				
ANNUBAR	75	DIETRICH STO		091459	41.05 "	
EAGLE EYE METER	PROTABLE	DIETRICH STO	670	65806 S. ID 091469	0-13 "	4/27/83

2. Measurements: The Mud Flat Canal has not been in use since 1986 or 1987. All of the pumps for the owner and the canal company have been sold and removed. A measurement at the time of this exam was not possible. It is very unlikely that the canal will ever be put back into full operation. Therefore, I needed to use a measurement done by John Noyes on 4/24/1985. This measurement has been used for the licensing of all of the other permits on this canal. All of the lands associated with this canal were put into the CRP program within that next two years. The owner of this permit put his land into CRP the year after this measurement was made. Therefore, it safe to assume that the measurement made by Mr. Noyes was the maximum capacity ever diverted into the canal. With the system no longer in place, this was the last measurement of the system, and it should be suitable for licensing this permit.

E. FLOW CALCULATIONSYES Additional Computation Sheets Attached

Measured Method:

CANAL CAPACITY → 48.44 CFS

PERMIT LIMITATION → 12.80 CFS

PROOF OF BENEFICIAL USE FILING FEE LIMITATION → 7.40 CFS

FIELD PUMP CAPACITY → 9.87 CFS

INCH PER ACRE LIMITATION → 7.37 CFS (0.02 CFS x 368.6 ac)

PLEASE NOTE: This permit is limited by the by the inch (0.02 cfs) per acre limitation. Therefore, this permit should be licensed for 7.37. cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 368.6 \times 4.5 = 1658.7 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 7.37 \text{ cfs} \times 260 \times 1.9835 = 3800.8 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1658.7 \text{ afa}$$

2. Volume Calculations for Other Uses: **NONE**

G. NARRATIVE/REMARKS/COMMENTS

This permit was diverted through the Mud Flat Canal. The Mud Flat Canal ceased operation in 1986, and all of the pumps and power lines have been removed from the system. The owner's pumps and power lines have also been removed. Therefore, in order to perform the field exam on this permit, some assumptions were made. I also had to attain the pump information for the point of diversion and point of re-diversion from the Bybee canal from previous exams, since these pumps are no longer on site.

The water from this permit was diverted from C J Strike Reservoir on the Snake River in Lot 9, SESW S34 T5S R4E. The water from the river was diverted into the Bybee Canal by two 250 Hp pumps owned by the Mud Flat Canal Company. The water in the Bybee Canal flowed in a westerly direction for approximately 3 miles where the Mud Flat Canal water was diverted from the Bybee Canal by two 200 Hp pumps and one 600 Hp pump. The Mud Flat Canal flowed in a southern direction for approximately 3 miles and then turned west and flowed another 4 ½ miles to the owner's property.

The owner supplied an equipment bid from Layne of Idaho in Nampa, which he claims were the 5 pumps used on the permitted acres. The pump stations and diversion structures from the canal for these pumps are still in place, so I assume this information is correct. The owner stated that the water diverted by the pumps flowed through a mainline that bisected the property and went along the western edge of the property. While on site, I did see the location of one of the main lines that had recently been removed. This was the mainline that dissected the property on the north side of the canal.

There were several water rights that used the Mud Flat canal system. These rights are either no longer being used or are now being diverted directly from the Bybee Canal. John Noyes measured the Mud Flat Canal in 1985 with a diversion rate of 48.44 cfs. Whereas the owner placed his land into CRP in 1986, I am confident that the system had not been enhanced after Mr. Noyes measurement. According to the owner, the use of the canal ceased in 1986 or 1987.

When all of the Mud Flat canal water rights are combined, the total diversion rate from all rights is 73.98 cfs. Therefore, this permit should have a condition that limits the amount of water allowed to 48.44 cfs when all of these rights are combined. The priority date for this right is sufficient to allow to them to irrigate as they wished, when the regulation of the canal required all junior users above the 48.44 cfs to cease use of the canal water.

This right and several of the other rights from the Mud Flat Canal are currently enrolled in the water bank. These rights are being used for fish flushing and mitigation purposes. The combined conditions should be placed on all of the rights that were diverted from the Mud Flat canal to avoid enlargement issues when rented from the water bank. Hopefully, this will be done during the Snake River Basin Adjudication (SRBA) recommendations for these rights.

I cannot confirm or deny that this permit was ever fully developed. However, the CRP records do show that 368.6 irrigated acres were entered into the program in 1986. The owner does have records that show that pumps could have been purchased for this property. The 1987 aerial photography does show the outline of 368.6 acres. Even though the cost of putting this ground back into production would be cost prohibitive and is very unlikely, it does appear that the water right was put to beneficial use at one time. Therefore, I would recommend this permit for licensing for the amounts shown in this report with a condition that shows the combined limitations of the canal. I would recommend that the following conditions be incorporated into the license:

This right when combined with water rights 02-7059, 02-7060A, 02-7060B, 02-7061 02-7062, 02-10180, 02-10181, 02-7064, 02-7168A, 02-7168B, 02-7168C, 02-7237A, 02-7275, 02-7279A, 02-7279B, and 02-10012 is limited to 48.44 cfs.

Prior to this right back into use, the owner must design the new system to allow for proper measurement of the water being diverted.

This right must comply with the limits or restriction of the Swan Falls agreement that may apply to this water use.

Have conditions of permit approval been met? ☒ Yes ☐ No

PLEASE NOTE: The system was no longer operational, and the pumps and mainlines were no longer in place. Therefore it is impossible to determine if a suitable measurement port or suitable measurement point was available. However, I am assuming that the measurement port was available, since Mr. Noyes did attain a measurement for the canal in 1985.

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	7.370 CFS	1,658.70 AF
<u>Totals:</u>		7.370 CFS	1,658.70 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

I. AUTHENTICATION

DANIEL A. NELSON -- SENIOR AGENT

Field Examiner's Name

Daniel A. Nelson

Date

10-17-05

Reviewer

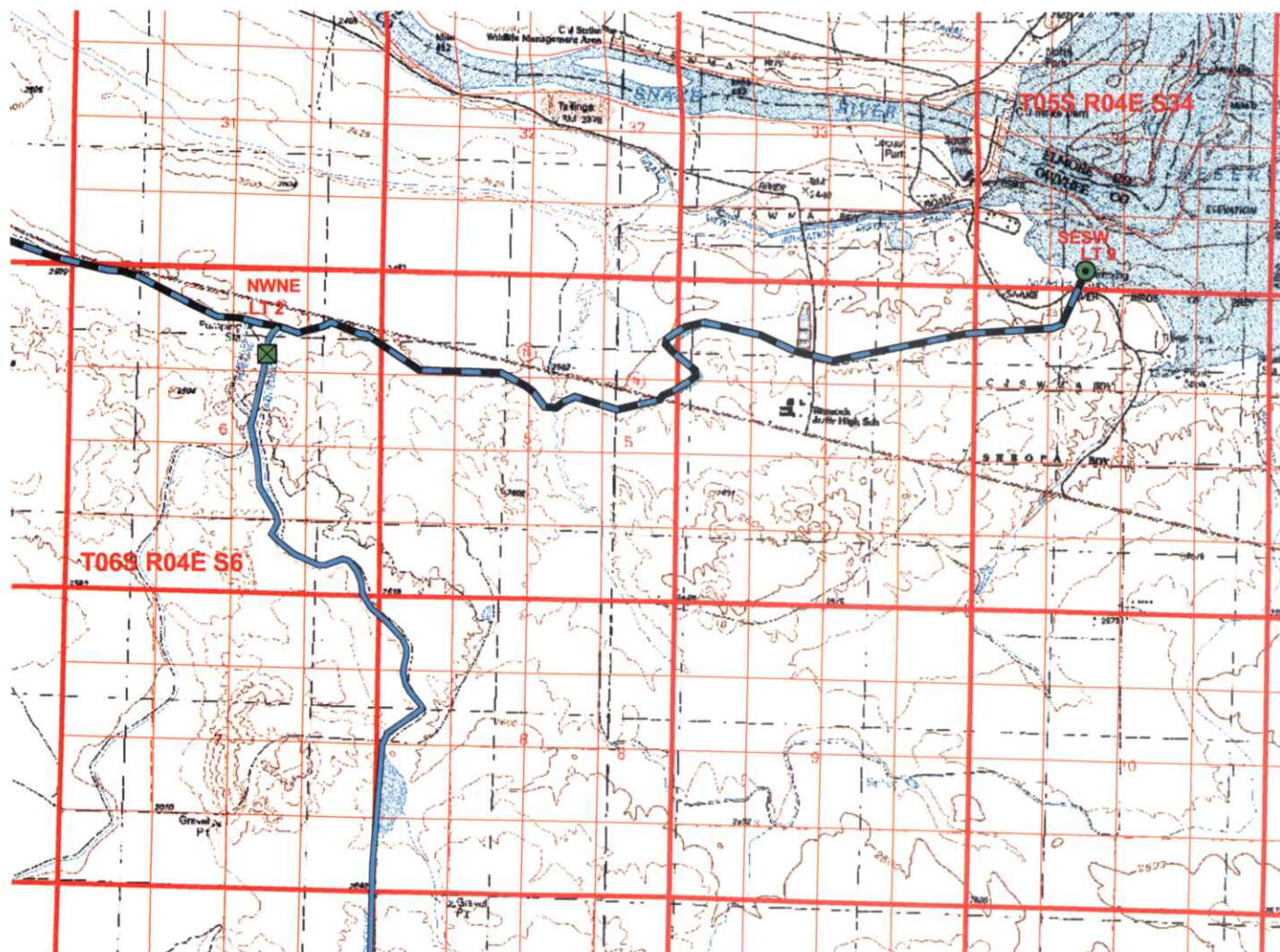
Date

SEAL

FIELD EXAM 02-7157C

POINT OF DIVERSION QUADRANGLE MAP

BY DAN NELSON



1 0 1 2 Miles

● POINT OF DIVERSION

□ PLACE OF USE

⊠ RE-LIFT STATION FROM BYBEE CANAL TO THE MUD FLAT CANAL

— MUD FLAT CANAL

— BYBEE CANAL

□ SECTION LINES

□ 1/4 1/4 LINES



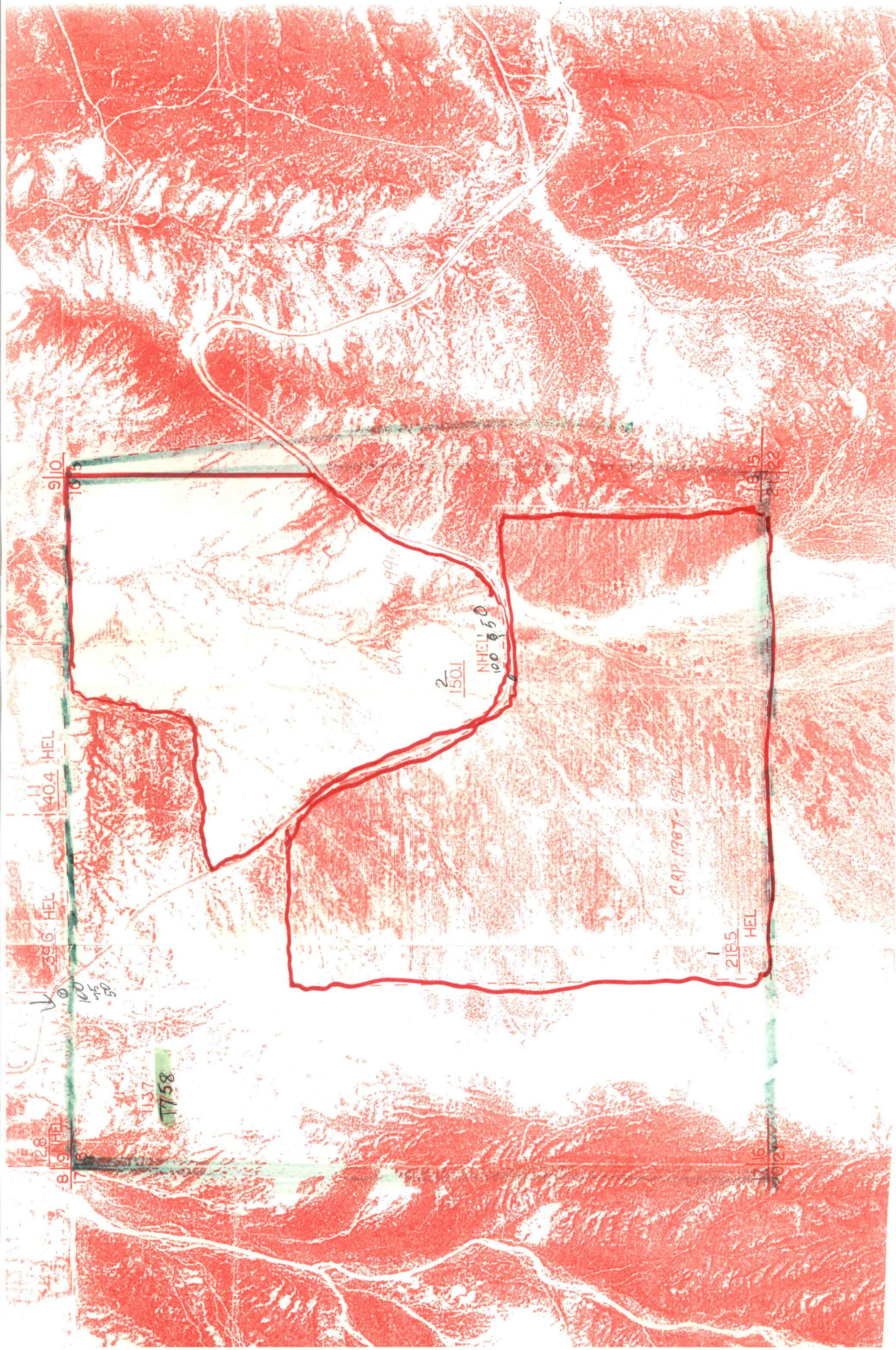
This is a quadrangle map of the point of diversion. The water was diverted from CJ Strike Reservoir on the Snake River into the Bybee Canal. The point of diversion was located in Lot 9, SESW S34 R4E. The water was then re-lifted out of the Bybee Canal into the Mudflat Canal in Lot 2, NWNE S6 T6S R4E. The Mud Flat Canal then delivered the water to the property.

[illegible]

-  PLACE OF USE
-  MUD FLAT CANAL
-  SECTION LINES
-  1/4 1/4 LINES



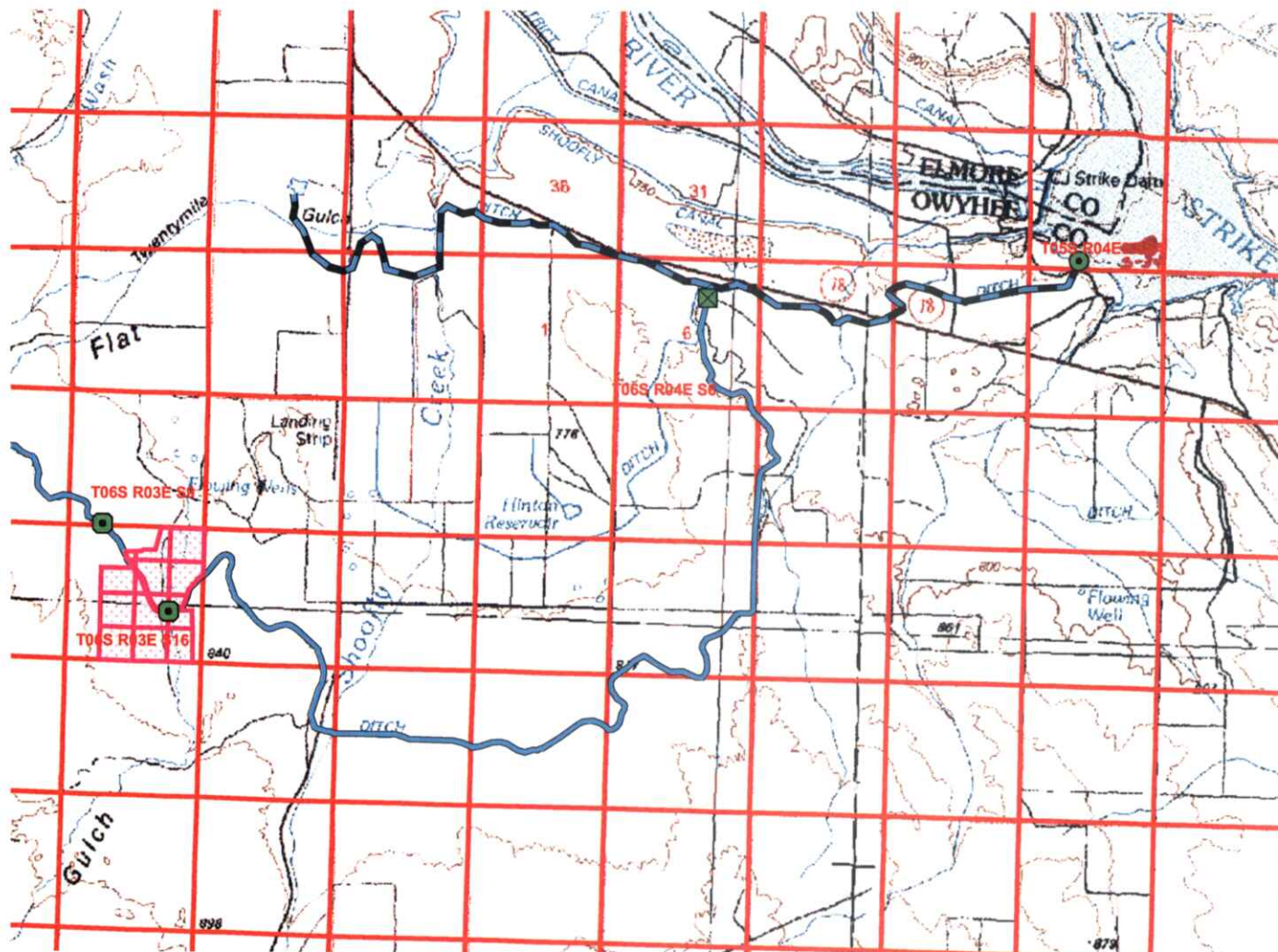
This is the quadrangle map of the place of use for this permit. The point of diversion quadrangle map is on a separate map due to the distance between the two.



FIELD EXAM 02-7157C

100 K QUADRANGLE MAP

BY DAN NELSON



2 0 2 4 Miles

POINT OF DIVERSION

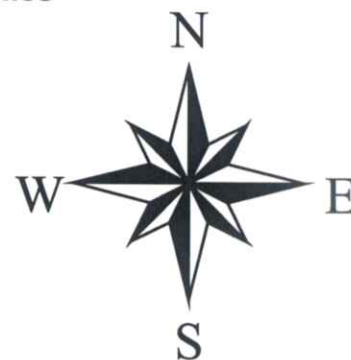
RE-LIFT PUMPS FROM MUD FLAT CANAL

RE-LIFT STATION FROM BYBEE CANAL INTO MUD FLAT CANAL

MUD FLAT CANAL

BYBEE CANAL

SECTION LINES

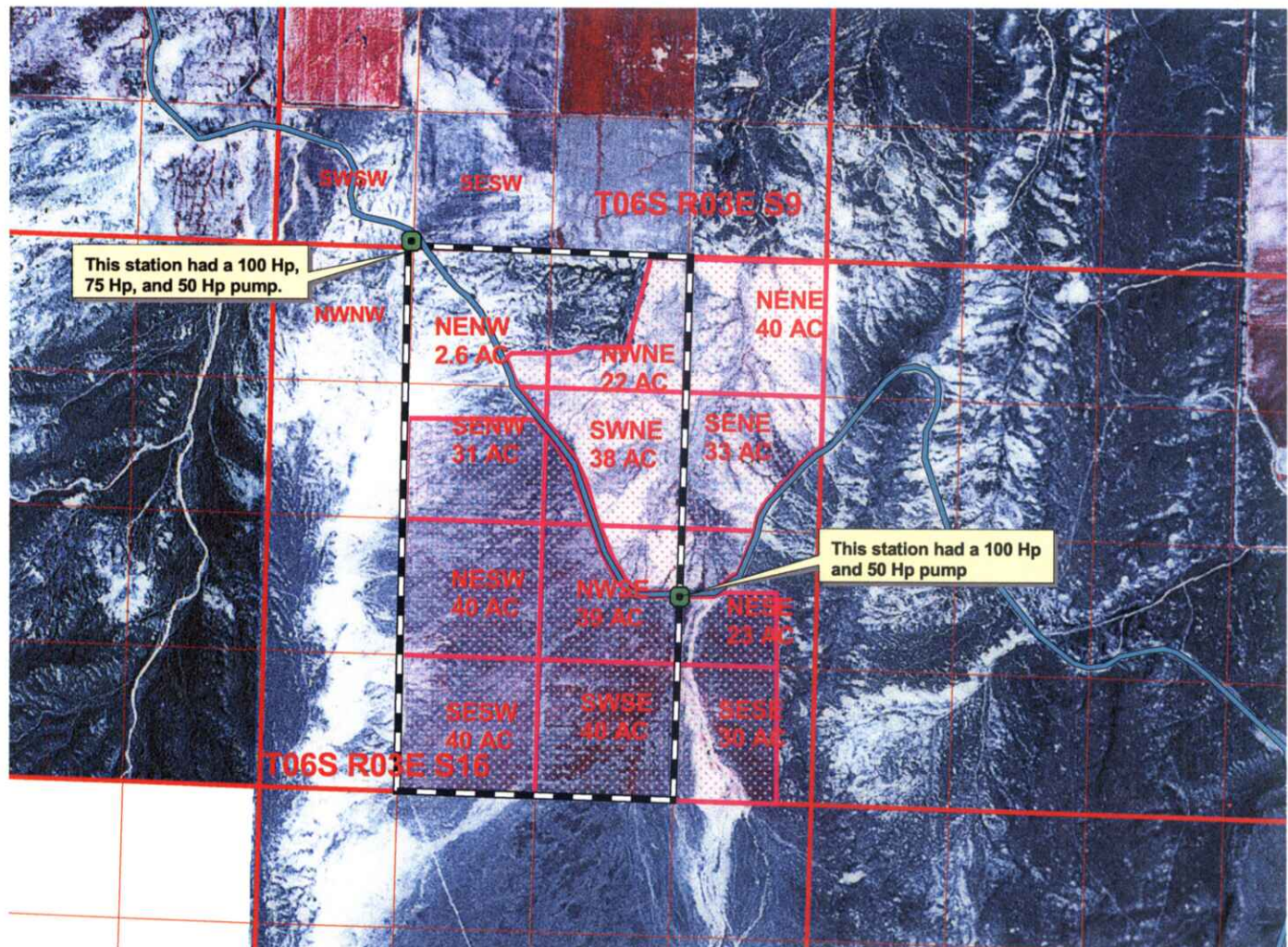


This map is a 100 K quadrangle map. It allows me to show the entire delivery system from C J Strike Reservoir on the Snake River. The water is diverted from the reservoir into the Bybee Canal, and then re-lifted into the Mud Flat Canal. The Mud Flat Canal delivers the water to the property where two re-lift stations delivers the water to the fields.

FIELD EXAM 02-7157C

FIELD SYSTEM DIAGRAM

BY DAN NELSON



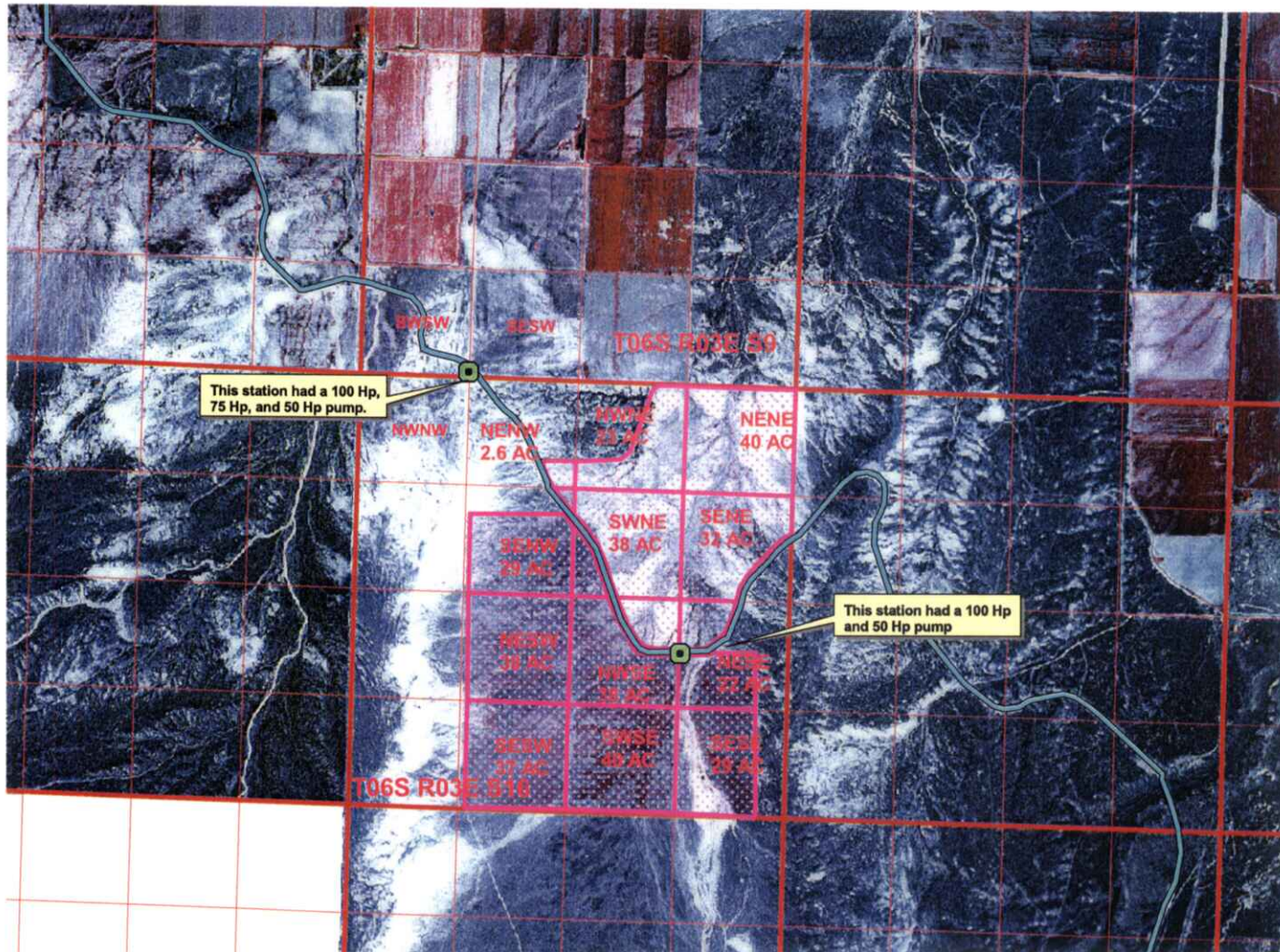
0.6 0 0.6 1.2 Miles

- Re-lift from mud flat canal.shp
- Mud flat relift station from bybee canal.shp
- Mud flat canal.shp
- Mainlines.shp
- Place of use.shp
- PLSS Section Lines
- T06s03e.shp



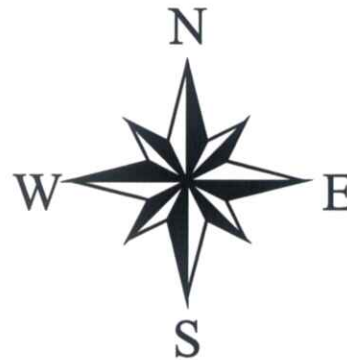
The water for this permit was delivered to the property through the Mud Flat Canal. The water was diverted from the canal into two faults or re-lift stations. The first re-lift station (east station) had a 100 Hp and 50 Hp pump. The second re-lift station (west station) had a 100 Hp, 75 Hp, and 50 Hp pump. These pumps were used to deliver the water to a common mainline, that fed several wheel lines. Most of the system has been removed, so this diagram is only an estimate of what was originally on the property.

FIELD EXAM 02-7157
PLACE OF USE
BY DAN NELSON

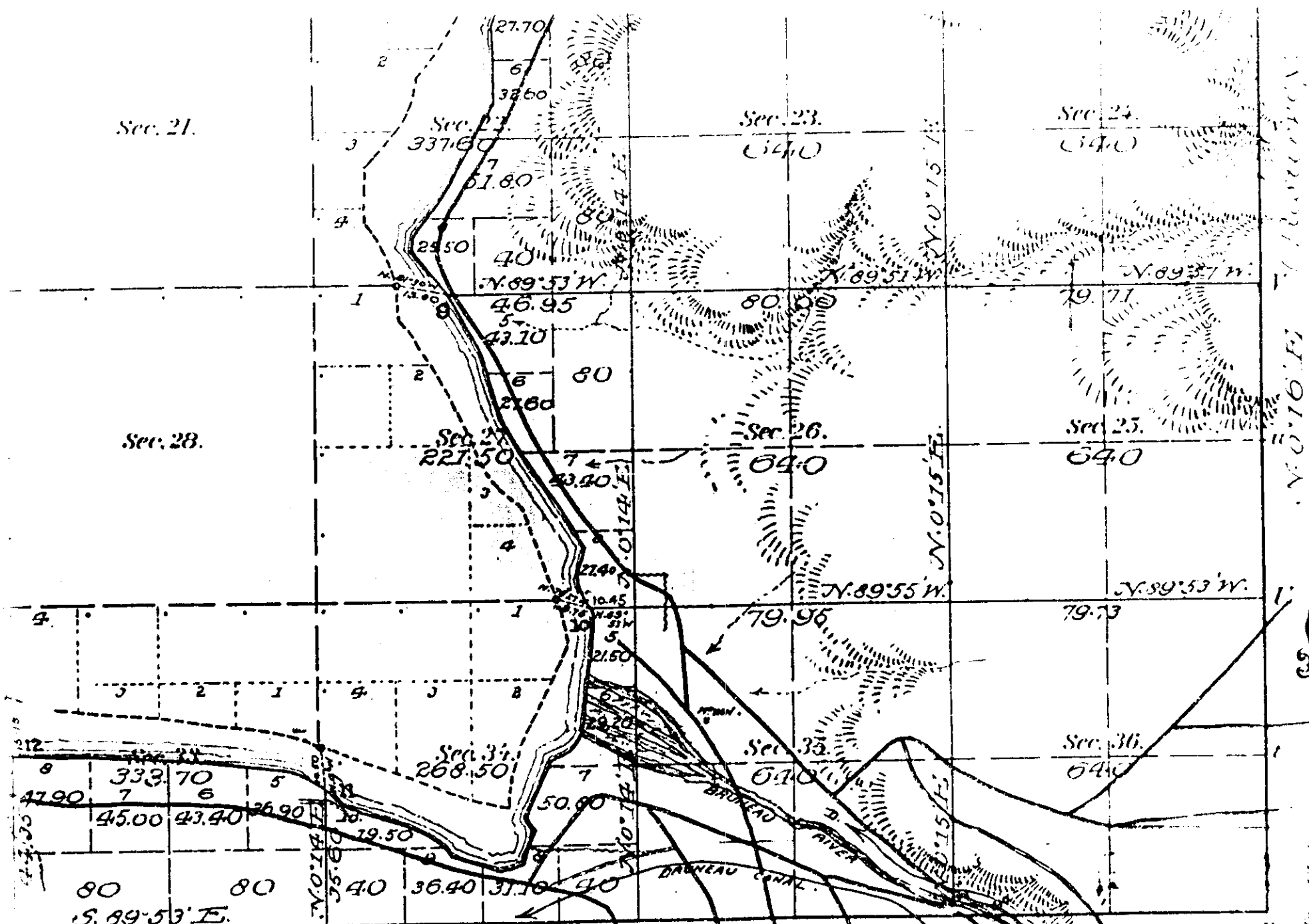


0.6 0 0.6 1.2 Miles

-  RELIFT PUMPS FROM MUD FLAT CANAL
-  PLACE OF USE
-  MUD FLAT CANAL
-  SECTION LINES
-  1/4 1/4 LINES



The total acres being irrigated are 368.6 acres.



Total number of Acres 7537.55 (additional)
 p q r

T 55 R 4 E
 S 34

Scale 40 Chains to an inch.

Survey	When Surveyed	Mean Declination
Lk		

The above Map of Township 15 South of Range 4 East

ASCS-578
(02-02-84)

USDA-ASCS

796 REPORT OF ACREAGE

NOTE: Section 374 of the Agricultural Adjustment Act of 1938, as amended, authorizes collection of the following data. The data will be used to determine eligibility for assistance. Furnishing this data is voluntary; however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the Act.

PAGE

OF

FARM NO.	NAME AND ADDRESS	FARM LAND	CROP LAND	OPERATOR	KEY	OTHER INTERESTED PRODUCERS		ASSIGNMENT	
						NAME AND ADDRESS	OTHER FARMS	CROP	JOB
C-388	J Terry Field Box 332 Grandview ID 83624	2350	1366.9		3				
				OWNER	4				
					5				
				PROGRAM YEAR	6				
				1986					
				OTHER	7				

SECTION I - FARM FIELD REPORT (Note: Grey Shaded Area For County Office Use Only) (Section I Continued on Reverse)

TRACT NO.	FIELD NO.	CROP OR LAND USE	CROP OR LAND USE SUMMARY					KEY	SH. ARE	DISPOSITION	GROSS ACRES	DEDUCTIONS		NET ACRES	INIT. & DATE
			OFFERED ACRES	ELIGIBLE ACRES	EXCESSIVE HERBICIDE	1985	1984	1983	1982	1981		IDENT./MEAS.	ACRES		
798	1	Open Field 3.16 T Question CLASS 4e CP-4	218.5	218.5	NONE	IRR	IRR	IRR	IRR	IRR					
						CONV	CONV	CONV	CONV	CONV					
						ACR	ACR	ACR	Wheat	Wheat					
									6	6					
798	2	Open Field 3.1 T Quest. CLASS 4e CP-4	150.1	150.1	NONE	IRR	IRR	IRR	IRR	IRR					
						CONV	CONV	CONV	CONV	CONV					
						Wheat	ACR	Barl.	Wheat	Port					
								6							
760	1	Open Field 3.3 T Quest. CLASS 4e CP-4	7.7	7.7	NONE	IRR	IRR	IRR	IRR	IRR					
						CONV	CONV	CONV	CONV	CONV					
						ACR	ACR	Oats	Wheat	Wheat					
									6	6					

13. TOTAL OPERATOR REPORT

14. TOTAL DETERMINED ACREAGE

A. OPERATOR'S SIGNATURE <i>J Terry Field</i>	DATE Mar. 13, 1986	B. OPERATOR'S SIGNATURE	DATE	C. OPERATOR'S SIGNATURE	DATE
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SECTION II - OPERATOR'S CERTIFICATION

I certify to the best of my knowledge and belief that the acreages of crops and land uses listed herein are true and correct. I understand that an inaccurate acreage report could result in a payment reduction or loss of program benefits and/or reduction in future allotments and quotas when applicable.

REPORT OF ACREAGE

NOTE: Section 374 of the Agricultural Adjustment Act of 1938, as amended, authorizes collection of the following data. The data will be used to determine eligibility for assistance. Furnishing this data is voluntary; however, without it assistance cannot be provided. The data may be furnished to any agency responsible for enforcing the Act.

PAGE

OF

FARM NO.	NAME AND ADDRESS	FARM LAND	CROP LAND	OTHER FARMS	OPERATOR	KEY	OTHER INTERESTED PRODUCERS		ASSIGNMENT	
							NAME AND ADDRESS A	OTHER FARMS B	CROP C	JOB D
					OWNER	3				
						4				
						5				
					PROGRAM YEAR 1986	6				
					OTHER	7				

SECTION I - FARM FIELD REPORT (Note: Grey Shaded Area For County Office Use Only) (Section I Continued on Reverse)

TRACT NO.	FIELD NO.	CROP OR LAND USE	CROP OR LAND USE SUMMARY										KEY	SH-ARE	DISPOSITION	GROSS ACRES	DEDUCTIONS		NET ACRES	INIT.
			OFFERED ACRES	ELIGIBLE ACRES	EXCESSIVE HERBICIDE	1985	1984	1983	1982	1981	IDENT./MEAS.	ACRES								
7760	2	open field 3.6 T Eligible CLASS 4E CP-4	111.2	111.2	NONE	Beet	wheat	Pot	wheat	wheat										
						Irr	Irr	Irr	Irr	Irr										
						Conv	Conv	Conv	Conv	Conv										
							G		G	G										
7760	3	open field 3.8 T Eligible CLASS 4E CP-4	122.2	122.2	NONE	Beet	wheat	Pot	wheat	Beet										
						Irr	Irr	Irr	Irr	Irr										
						Conv	Conv	Conv	Conv	Conv										
							G		G											
7760	4	open field 3.1 T Question CLASS 4E CP-4	65.2	65.2	NONE	Irr	Irr	Irr	Irr	Irr										
						Conv	Conv	Conv	Conv	Conv										
						Pot	wheat	Pot	wheat	Beet										
							G		G											
13. TOTAL OPERATOR REPORT																				
14. TOTAL DETERMINED ACREAGE																				
A. OPERATOR'S SIGNATURE			DATE		B. OPERATOR'S SIGNATURE		DATE		SECTION II - OPERATOR'S CERTIFICATION											
									I certify to the best of my knowledge and belief that the acreages of crops and land uses listed herein are true and correct. I understand that an inaccurate acreage report could result in a payment reduction or loss of program benefits and/or reduction in future allotments and quotas when applicable.											
									C. OPERATOR'S SIGNATURE											
									DATE											

State of Idaho
DEPARTMENT OF WATER RESOURCES
SUPPLEMENTAL FIELD REPORT FOR MANOMETER MEASUREMENT

Measured by: JOHN K. NOYES Date 4/24/1985
Owner: MUD FLAT CANAL CO Permit No. ADJ CLM. 02-7059

Description of well &/or measuring site
- Include any clarifications of the sketch
- Include legal description if more than one p.d. is described in the Field Report

PUMPS #1 & 2 FROM SNAKE R. AT LT 9, SE SW, SEC. 34, T85S, R84E. 42" STEEL PEN-
STOCK HAVING APPROXIMATELY 60' LIFT INTO BYGEE CANAL. RE-MEASUREMENT OF MAIN
PUMPS. RE-LIFT PUMPS FROM BYGEE CANAL
NOT IN OPERATION AT TIME OF EXAM.

Measured inside diameter of pipe in inches 41.50"
MEASURED 42" PIPE. I.D. TAKEN FROM TABLE COMPILED FROM MANUFACTURERS' LITERATURE FOR WESTERN U.S. USED .250" WALL THICKNESS FOR 42" PIPE GIVEN OF 41.50" (A) 41.50"

Size of Annubar used in test 41.25" State ID No. 091459

Model No. of Annubar ~~Model~~ Used 75
(Model No. = 75 for 6" and larger)
(Model No. = 73 for 4")

Size ~~Annubar~~ MANOMETER Used 48" State ID No. ---

Date of Last Calibration of Meter N/A

Observed inches of H₂O read on ~~MANOMETER~~ MANOMETER

(B) Max. 23.3" - 12.7" = 10.6" Min. 23.6" - 12.9" = 10.7"
Ave. = 10.75"
(K) N/A

Flow Correction Factor (From Calibration Graph)
(Use 1 if Error is $\pm 2\%$ at observed pressure)

Select C based on Annubar Model No.

If Model No. = 75, then C = 3.85

If Model No. = 73, then C = 4.14

(C) 3.85
= 48.44 cfs measured

CALCULATION: $\frac{A^2}{448.8} (\sqrt{B}) C =$

$A^2 = (41.50)^2 = 1722.25, \sqrt{B} = \sqrt{10.75} = 3.279$ cfs = $\frac{(1722.25)(3.279)(3.85)}{448.8} = 48.44$ cfs OK

SKETCH (If not shown on Field Report):

MICROFILMED

GROUNDWATER THEORETICAL ANNALYSIS

FILE: 02-7157C

DATE: 10/3/2005

BY: Daniel A. Nelson

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times (HP) \times (EFF.))}{TDH}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

TDH CALCULATIONS:

The Mud Flat Canal system has not been used since 1986. Therefore, all of the pumps and power lines have been removed. Therefore, it was difficult to ascertain the TDH. I estimated that the owner would need at 65 psi to ensure pressure for his sprinklers. The owner told me he used several wheel lines on the system, so 65 psi sounds reasonable to ensure and maintain a solid pressure on the entire system. This ground is comprised of rolling hills, and there is an 80 ft elevation difference between the pump and the end of the mainline. Therefore, I determined that 100 psi would be needed to maintain pressure across the system [(80 ft / 2.31) + 65 = 100 total psi needed to run sprinklers]. The pumps would need to lift the water approximately 3 feet from the pumping faults to the mainline. The total dynamic head was calculated as follows :

$$\underline{TDH = 3 \text{ ft lift} + (100 \text{ psi} \times 2.31) = 234 \text{ ft total dynamic lift.}}$$

The TDH would be the same for each pump, since they were all pumping into a common mainline.

THERE ARE 5 PUMPS ON THIS SYSTEM WITH THE SAME TDH. THE FOLLOWING ARE THE THEORETICAL CALCULATIONS FOR EACH PUMP:

PUMP #1 → 50 Hp pump (serial number 78165)

$$Q = \frac{(8.8) \times (50 \text{ Hp}) \times (0.70)}{234 \text{ TDH}} = \underline{1.32 \text{ cfs (593 gpm)}}$$

234 TDH

Theoretical analysis 02-2137C

PUMP #2 → 50 Hp pump (serial number 78166)

$$Q = \frac{(8.8) \times (50 \text{ Hp}) \times (0.70)}{234 \text{ TDH}} = \underline{1.32 \text{ cfs (593 gpm)}}$$

PUMP #3 → 75 Hp pump (serial number 78167)

$$Q = \frac{(8.8) \times (75 \text{ Hp}) \times (0.70)}{234 \text{ TDH}} = \underline{1.97 \text{ cfs (884 gpm)}}$$

PUMP #4 → 100 Hp pump (serial number 78169)

$$Q = \frac{(8.8) \times (100 \text{ Hp}) \times (0.70)}{234 \text{ TDH}} = \underline{2.63 \text{ cfs (1180 gpm)}}$$

PUMP #5 → 100 Hp pump (serial number 78170)

$$Q = \frac{(8.8) \times (100 \text{ Hp}) \times (0.70)}{234 \text{ TDH}} = \underline{2.63 \text{ cfs (1180 gpm)}}$$

TOTAL COMBINED DIVERSION:

1.32 + 1.32 + 1.97 + 2.63 + 2.63 = 9.87 CFS TOTAL CAPACITY OF THE SYSTEM

REMARKS: This system has not been use since 1986, when the ground was put into the CRP program. All of the pumps and power lines have been removed from the site and it doesn't appear as though this system will ever be brought back on line. New pumps and power lines will need to be purchased and installed for this ground. This calculation is the best that can be calculated at this time. I have no idea if these were the actual pumps or if the pumps were all operated at the same time. All of this information came from owner's records.



P.O. Box 1005

Nampa, Idaho 83651

208-466-7376

EQUIPMENT BID

RE: Terry Fields
Mud Flats Project
FHA Pumps

2	50 HP	GE Motors	
2	Pumps	ser. #'s 78165 & 78166	
2	Ampco	440 Volt Panels	\$1660.00
1	75 HP	GE Motor	
1	Pump	ser. # 78167	
1	Ampco	440 Volt Panel	1280.00
2	100 HP	GE Motors	
2	Pumps	ser. #'s 78169 & 78170	
2	Ampco	440 Volt Panels	<u>2640.00</u>
Total			\$5580.00

This bid includes all valves and flanges. This offer is for equipment as is and were it is.


Norman D. Webb
Manager

Irving Field Section 14

SEE ATTACHED LIST

- 1 100 HP GE Motor #LNJ1109358 with WES Line Pump
- 1 75 HP GE Motor #RNJ803379 with WES Line Pump
- 1 50 HP GE Motor #LN51109315 with WES Line Pump
- 1 100 HP GE Motor #JNJ928389 with WES Pump
- 1 50 HP GE Motor #KNJ100533 with WES Line Pump

40 - 3" Hand Lines - 1320' feet long with pressure regulations and center risers

AC Panels, Fittings, End Plugs, Thrust Blocks Etc.

- 2060 Feet - 6" x 125 PSI PVC Main line (Buried)
- 3160 Feet 8" x 125 PSI PVC Main Line (Buried)
- 3060 Feet 10" x 125 PSI PVC Main Line " "
- 1260 feet 12" x 125 PSI PVC Main Line " "
- 1320 feet 16" x 125 PSI PVC Main Line " "

including risers and couplers

POINT OF DIVERSION OVERLAP FOR T5S R4E S34

Basin	Sequence	Suffix	Basis	Canal	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table
2	71		Beneficial Use	Bybee	7/1/1964	0.5		SNAKE RIVER	IRRIGATION	MEAKER, HOLLY (Current); MEAKER, REG (Current)
2	2152		License	Private Diversion	10/26/1959	0.96	240.5	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	2153		License	Private Diversion	10/26/1959	1.55	347.9	SNAKE RIVER		TATE, WILLIAM D (Current)
2	2154		License	Private Diversion	10/26/1959	2.76	691	SNAKE RIVER	IRRIGATION	TATE, BARBARA (Current)
2	2209	D	License	Private Diversion	2/25/1963	12.16	2035.2	SNAKE RIVER	IRRIGATION	J R SIMPLOT SELF DECLARATION REVOCABLE TRUST (Current)
2	2242		License	Bybee	11/18/1963	6.38	1595	SNAKE RIVER	IRRIGATION	GINGRICH, CLINTON W (Current)
2	2243		License	Bybee	11/18/1963	5.84	1460	SNAKE RIVER	IRRIGATION	GINGRICH, LEON W (Current)
2	2275		License	Bybee	2/12/1964	4.38	1095	SNAKE RIVER	IRRIGATION	LAYTON, PATRICIA G (Current); LAYTON, SAMUEL A (Current)
2	2279		License	Bybee	2/28/1964	6.18	1050	SNAKE RIVER	IRRIGATION	JOHNSON, KEITH A (Current)
2	2288		License	Bybee	5/4/1964	5.8	1450	SNAKE RIVER	IRRIGATION	POST, LESLIE J (Current)
2	2308		License	Private Diversion	5/20/1964	23	6760	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	2380		License	Bybee	11/9/1965	0.1	25	SNAKE RIVER	IRRIGATION	CHURCH OF JESUS CHRIST OF THE LATTER DAY SAINTS (Current)
2	2418		License	Bybee	2/8/1964	5.78	1770	SNAKE RIVER	IRRIGATION	JOHNSON, LEONA K (Current)
2	2423		License	Private Diversion	2/24/1964	1.86	465	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	2424		License	Private Diversion	6/28/1960	4.16	1040	SNAKE RIVER	IRRIGATION	TATE, WILLIAM D (Current)
2	4014		Statutory Claim	Bybee	6/1/1964	1.5		SNAKE RIVER	IRRIGATION	NANNEY, HELEN M (Current)
2	4026		Statutory Claim	Bybee	6/1/1967	0.8		SNAKE RIVER	IRRIGATION	LEMON, WILLIAM H (Current)
2	7012		License	Bybee	3/4/1968	1	250	SNAKE RIVER	IRRIGATION	LEMON, MILDRED (Current); LEMON, WILLIAM H (Current)

Basin	Sequence	Suffix	Basis	Canal	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table
2	7059		License	Mud Flat	4/9/1970	6.4	1600	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7060	A	License	Mud Flat	4/9/1970	5.6	1120	SNAKE RIVER	IRRIGATION	DIRKS, ROBERT G (Current)
2	7060	B	License	Mud Flat	4/9/1970	0.8	160	SNAKE RIVER	IRRIGATION	J R SIMPLOT SELF DECLARATION REVOCABLE TRUST (Current)
2	7061		License	Mud Flat	4/9/1970	6.32	1580	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7062		License	Mud Flat	4/9/1970	4.1	1025	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7064		License	Mud Flat	4/23/1970	6.36	1590	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7103		License	Private Diversion	10/24/1972	6.2	1550	SNAKE RIVER	IRRIGATION	CONNECTICUT GENERAL LIFE INSURANCE CO (Current)
2	7104		License	Private Diversion	10/24/1972	5.92	1480	SNAKE RIVER	IRRIGATION	CONNECTICUT GENERAL LIFE INSURANCE CO (Current)
2	7126		License	Bybee	8/15/1973	3.68	920	SNAKE RIVER	IRRIGATION	NANNEY, HELEN M (Current)
2	7154		License	Private Diversion	7/23/1974	9.6	2187	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	7157	C		Mud Flat	5/24/1974	12.8		SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7168	A	License	Mud Flat	8/30/1974	3.08	770	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7168	C	License	Mud Flat	8/30/1974	2.7	675	SNAKE RIVER	IRRIGATION	GRANDVIEW FAMILY LIMITED PARTNERSHIP (Current)
2	7168	B	License	Mud Flat	8/30/1974	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7206		License	Private Diversion	10/30/1975	0.76	190	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	7237	A	License	Mud Flat	12/23/1976	5.9	1475	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7242	C	License	Bybee	2/10/1977	3.35		SNAKE RIVER	IRRIGATION	LEE, MAURICE D (Current); LEE, SONYA E (Current)
2	7242	B	License	Bybee	2/10/1977	0.32	80	SNAKE RIVER	IRRIGATION	ASLETT, GARTH (Current)
2	7242	D	License	Bybee	2/10/1977	2.42	605	SNAKE RIVER	IRRIGATION	LEE, MAURICE D (Current); LEE, SONYA E (Current)

Basin	Sequence	Suffix	Basis	Canal	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table
2	7275		License	Mud Flat	12/13/1978	2.26	565	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7279	A	License	Mud Flat	2/8/1979	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7279	B	License	Mud Flat	2/8/1979	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7344		License	Bybee	5/6/1981	2.86		SNAKE RIVER	IRRIGATION	MEAKER, HOLLY (Current); MEAKER, REG (Current)
2	7389		License	Bybee	1/25/1972	1.6	400	SNAKE RIVER	IRRIGATION	SILVER SAGE RANCH INC (Current)
2	10012		Beneficial Use	Mud Flat	5/1/1979	0.6		SNAKE RIVER	IRRIGATION	GOOD, JEFF (Current); GOOD, NATE (Current)
2	10180		License	Mud Flat	4/9/1970	2.4	480	SNAKE RIVER	IRRIGATION	DIRKS, MECHELLE (Current); DIRKS, ROBERT G (Current)
2	10181		License	Mud Flat	4/9/1970	3.2	640	SNAKE RIVER	IRRIGATION	SMITH, CONNIE (Current); SMITH, ROBERT (Current)
2	10187		License	Private Diversion	2/25/1963	12.16	2035.2	SNAKE RIVER	IRRIGATION	J R SIMPLOT SELF DECLARATION REVOCABLE TRUST (Current)
2	10198		License	Private Diversion	7/23/1974	7.59	1726	SNAKE RIVER	IRRIGATION	UNRUH, CATHERINE W (Current); UNRUH, DAVID C (Current)
2	10201		License	Private Diversion	7/23/1974	0.83	189	SNAKE RIVER	IRRIGATION	TRIANGLE DAIRY INC (Current)
2	10202		License	Private Diversion	7/23/1974	1.18	270	SNAKE RIVER	IRRIGATION	J R SIMPLOT SELF DECLARATION REVOCABLE TRUST (Current)

MUD FLAT CANAL WATER RIGHTS

Basin	Sequence	Suffix	Basis	Canal	Priority Date	Rate(cfs)	Volume(af)	Source	Water Use(s)	Source Table
2	7059		License	Mud Flat	4/9/1970	6.4	1600	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7060	A	License	Mud Flat	4/9/1970	5.6	1120	SNAKE RIVER	IRRIGATION	DIRKS, ROBERT G (Current)
2	7060	B	License	Mud Flat	4/9/1970	0.8	160	SNAKE RIVER	IRRIGATION	J R SIMPLOT SELF DECLARATION REVOCABLE TRUST (Current)
2	7061		License	Mud Flat	4/9/1970	6.32	1580	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7062		License	Mud Flat	4/9/1970	4.1	1025	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	10180		License	Mud Flat	4/9/1970	2.4	480	SNAKE RIVER	IRRIGATION	DIRKS, MECHELLE (Current); DIRKS, ROBERT G (Current)
2	10181		License	Mud Flat	4/9/1970	3.2	640	SNAKE RIVER	IRRIGATION	SMITH, CONNIE (Current); SMITH, ROBERT (Current)
2	7064		License	Mud Flat	4/23/1970	6.36	1590	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7157	C		Mud Flat	5/24/1974	12.8		SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7168	A	License	Mud Flat	8/30/1974	3.08	770	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7168	C	License	Mud Flat	8/30/1974	2.7	675	SNAKE RIVER	IRRIGATION	GRANDVIEW FAMILY LIMITED PARTNERSHIP (Current)
2	7168	B	License	Mud Flat	8/30/1974	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7237	A	License	Mud Flat	12/23/1976	5.9	1475	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7275		License	Mud Flat	12/13/1978	2.26	565	SNAKE RIVER	IRRIGATION	MUD FLAT CANAL CO (Current)
2	7279	A	License	Mud Flat	2/8/1979	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	7279	B	License	Mud Flat	2/8/1979	3.82	859.5	SNAKE RIVER	IRRIGATION	AGENBROAD, DARREL L (Current)
2	10012		Beneficial Use	Mud Flat	5/1/1979	0.6		SNAKE RIVER	IRRIGATION	GOOD, JEFF (Current); GOOD, NATE (Current)

TOTAL DIVERSION RATE ==> 73.98

**TOTAL DIVERSION RATE WITH
A PRIORITY EARLIER THAN
PERMIT 02-7157C ==>** 35.18

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C

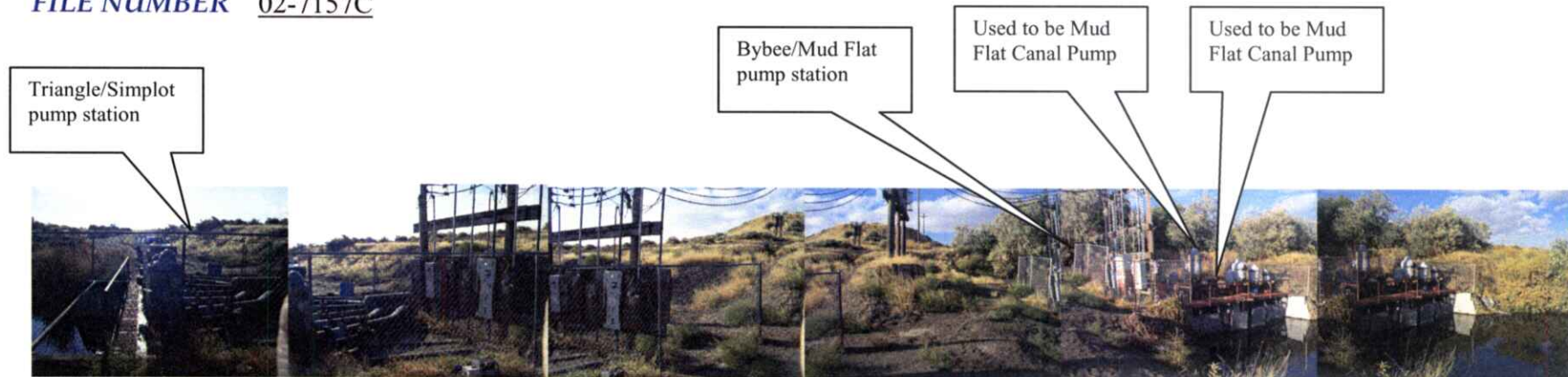
The third and fourth pump station were used by Mud Flat Canal company.



The above picture is a close up of the Bybee Pumping Station from CJ Strike Reservoir on the Snake River. The 3rd and 4th pumps from the left were the pumps used for Mud Flat Canal Company. Other individuals are now using these stations. The pump on the 4th station has been pulled to be worked on, but you can still see the pump base for this station.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C



The pictures above show the pump stations for the Bybee and the Triangle (Simplot) pump stations looking up from the reservoirs. The Mud Flat Canal pumps were the 3rd and 4th pumps from the left (the fourth pump has been removed for repairs). The pictures below are of the same pump stations looking down from the road. The body of water leading from the diversion channel is CJ Strike Reservoir on the Snake River.



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C



This hole is where the mainline went up to the mudflat canal

Water from the Bybee canal was diverted through this channel

These photos are of the re-lift station where water from the Bybee Canal is re-lifted into the Mud Flat Canal. As you can see from the photos, this system has not been used for many years. The last known year it was used was 1985.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C

THESE ARE PHOTOS OF THE NORTH WEST POINT WHERE WATER IS TAKEN FROM THE MUD FLAT CANAL, AND DELIVERED TO THE OWNER'S PROPERTY. AS YOU CAN TELL FROM THE PHOTOS, THIS SYSTEM HAS ALSO NOT BEEN USED IN A VERY LONG TIME.



This is photo of the re-division vault where water was pumped out to the mainlines.



This is a photo of the actual diversion from Mud Flat Canal



This is a photo of the mainlines that pumps in the vault used to deliver the water to the fields.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C

THESE ARE PHOTOS OF THE SOUTH EAST POINT WHERE WATER IS TAKEN FROM THE MUD FLAT CANAL, AND DELIVERED TO THE OWNER'S PROPERTY. AS YOU CAN TELL FROM THE PHOTOS, THIS SYSTEM HAS ALSO NOT BEEN USED IN A VERY LONG TIME.



This is photo was taken looking south across Mud Flat Canal. The mainline running north across the canal is shown in the picture. The mainline is sitting on the headgate from Mud Flat Canal to the pumping vault.



This is a photo of the of pumping vault for this diversion



This is a photo of the remnants of the mainline that travel south through the fields.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/3/2005

FILE NUMBER 02-7157C



These are pictures of the place of use. The three pictures above show the south fields and the pictures below show the north fields. You can see the lines where these fields were broken out of sagebrush at one time, but they haven't been worked or irrigated in a very long time

FIELD NOTES

PERMIT NUMBER 02-7157C

PLEASE NOTE: These documents are for backup purposes only and are not apart of actual Beneficial Use Field Report.

