

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORTRECEIVED
FEB 06 2004
DEPARTMENT OF WATER RESOURCES**A. GENERAL INFORMATION**22-07143
Permit No. ~~22-7144~~/71431. Owner: ^{MRS.} Betty LindermanPhone No. 1-800-594-9797Current Address: 1366 N 1350W Newdale Id 834362. Accompanied by: Kirk SargentEXAM DATE: 12 July, 2000
17 July 95Address: 1364N 1350W Newdale Id 83436Phone No. 456 2313Relationship to Permit Holder: operator3. Source: GROUNDWATER tributary to _____**B. OVERLAP REVIEW**1. Other water rights with the same place of use: 22-60251/602522. Other water rights with the same point of diversion: 22-07145/22-07146**C. DIVERSION AND DELIVERY SYSTEM**

1. Point(s) of Diversion:

Ident No.	Gov't Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
	2	NE	SW	NW	19	6N	4SE	TETON	On site / USGS Quad

2. Place(s) of Use:

Indicate Method of Determination On site FSA Aerial

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
6N	4SE	18									40	40	L-3 39.2	L-4 39.2	38.5	40	40	38.5	315.4
		19	38.5	40	40	37.5	40	L-1 39.2	L-2 37.7	38.2									311.1
																			626.5
RECOMMEND																			
6N	4SE	18									40	40	L-3 39.2	L-4 39.2					158.4
		19						L-1 1.6											1.6
																			16.0

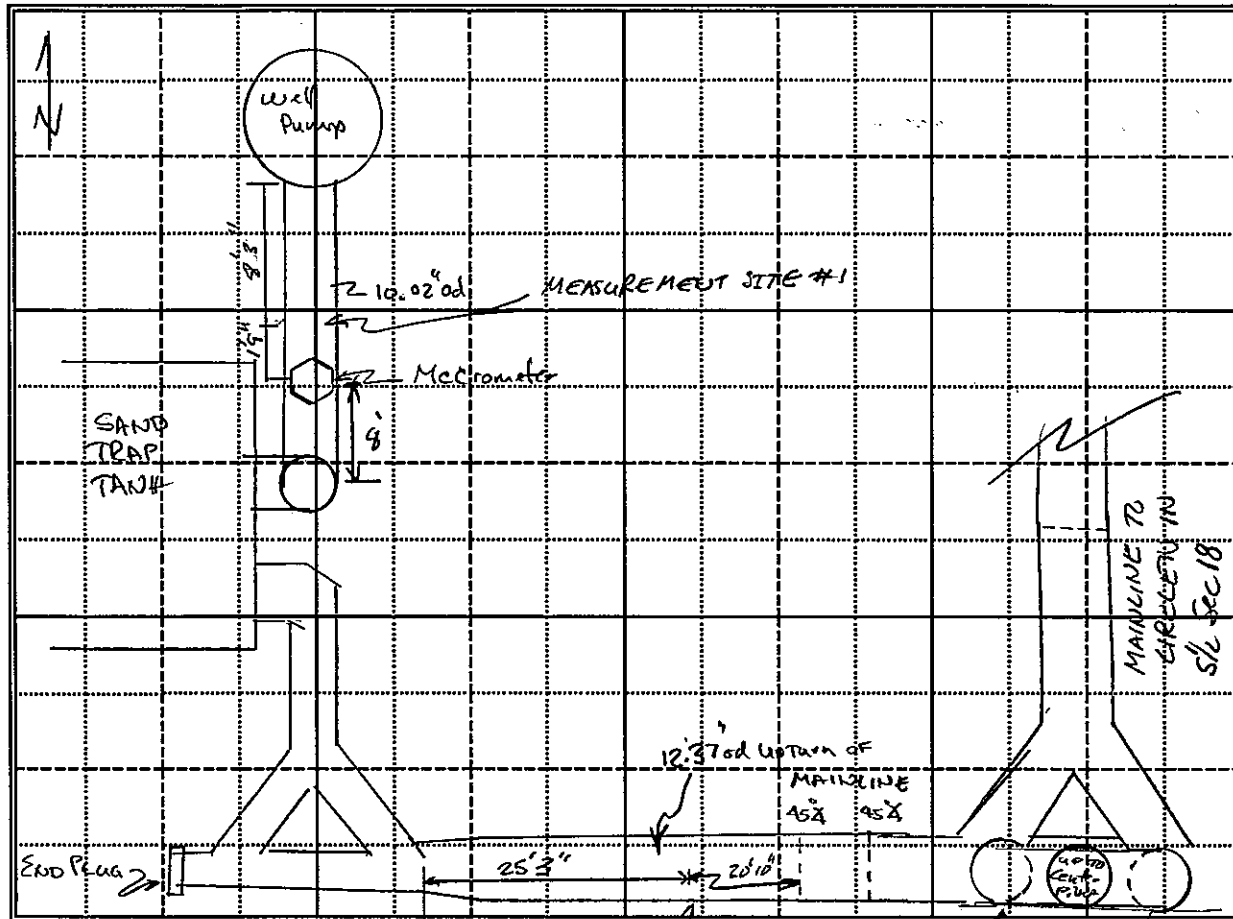
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3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = _____

____ Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

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

____ 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
	U.S. Motor	250	NRR C2930-01-17383-01649	Peerless	F 22771

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Motor	Totalizer	McCrrometer	—	—	10"	—
Sonic Meter		Polysonic	TF-P	149743/26863	—	—

2. Measurements: 71.985" od 0.102" thick

[McCrrometer 7-17-1995 Q = 0.01 cfs / 65 sec = 6.70 cfs (3007.6 gpm)]
Pressure @ Pump = 20 PSI

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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 22-7143

Exam Date: 7/17/1995

7/12/2000

1. Current Owner: SHAYNE T LINDERMAN
1366 N 1350 W
NEWDALE ID 83436
(208)456-2345

2. Accompanied by: *Kirk Sargent*
Phone No: *208 456-2313*

Address: *1364N 1350W NEWDALE ID 83436*

Relationship to Permit Holder: *operator*

3. SOURCE**TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

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

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER

Lot 2

NE1/4SW1/4NW1/4

Sec. 19, Twp 06N, Rge 45E, B.M.

TETON County

Method of Determination:

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	
06N 45E 18									40.0	40.0	39.2	39.2					158.4
											L 3	L 4					
06N 45E 19						1.6											1.6
						L 1											

Total Acres: 160

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SETUP NO. *#2 Better Measurement Location*

PIPE O.D. 12.374 IN
PIPE WALL THICKNESS 0.102 IN 22-7143
22-7144

PIPE I.D. 12.170 IN

PIPE MATERIAL
CARBON STEEL

PIPE SOUND VELOCITY
10597.129 F/S

LINER MATERIAL
NONE

LINER SOUND VELOCITY
0.000 F/S

LINER THICKNESS
0.000 IN

INSIDE ABS ROUGHNESS
0.00015000

FLUID MATERIAL
WATER

FLUID SOUND VELOCITY
4863.330 F/S

FLUID VISCOSITY
1.132 cSt

TRANSDUCER TYPE
STANDARD

TRANSDUCER MOUNTING

TRANSDUCER SPACING
9.849 IN

FLOW 1965.275 GPM
5.420 F/S

14:53:40 07-17-95

SCALE FACTOR = 0.990
OFFSET (GPM) = -28.668
INSEC OFFSET = 7.97
USEC OFFSET = -0.75
XMT DET DLY = 16.66
OPERATION FAC. = 1.00
TRANSDUCER: STANDARD/U

WIN DLY = 449.16 UP 449.16
SETR = 1.61 1.35
BIAS = 0.55 0.57
AGC = 0.75 0.73
SIG STG = 8.51 8.59
MISSED = 0 0
TIME(us) = 462.6 462.2
DEL TIME(ns) = 432.5 965
DIFF COUNT = 46
P2X = 23.12
SPS = 0.000
OPERATION

FLUID (F/S) = 4863.33
REYNOLDS NO. = 450249
PROFILE FACTOR = 0.9470

FLOW = 1963.850 GPM
5.416 F/S

*1965.275 gpm = 4.378 cfs
= 4.38 cfs*

*Flow Measurement
taken 7-17-1995*

*USING PEEK
POLYSONICS 1ST-P
FLOW METER*

*RECOMMEND USING McCROMETER
FLOW Rate = 6.70 cfs*

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SPACING
8.911 IN U

07-13 15:5000 *R
+ 1.946E 3GPM

0450.3 MMSEC
100.83 % T0

07-13 15:5200 *H
+002.70 % AI2

07-13 15:5700 *R
+ 2.048E 3GPM

07-13 15:5700 *R
+ 2.055E 3GPM

0454.5 MMSEC
100.37 % T0

07-13 15:5800 *R
+ 2.056E 3GPM

MODE SELECT
INPUT

OUTER DIAMETER
11.9850 IN

PIPE MATERIAL
? CS,SS

WALL THICKNESS
0.1020 IN

INNER LINING
? NO LING.

KIND OF FLUID
? ANOTHER

SOUND VELOCITY
1430 M/S-

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

DATA CHANGE
? NO

SPACING
8.816 IN U

07-13 15:5900 *R
+ 2.035E 3GPM

0454.4 MMSEC
100.35 % T0

07-13 15:5900 *R
+002.70 % AI2

07-13 15:5700 *R
+ 2.048E 3GPM

07-13 15:5700 *R
+ 2.055E 3GPM

0454.5 MMSEC
100.37 % T0

07-13 15:5800 *R
+ 2.056E 3GPM

MODE SELECT
INPUT

OUTER DIAMETER
11.9850 IN

PIPE MATERIAL
? CS,SS

WALL THICKNESS
0.1020 IN

INNER LINING
? NO LING.

KIND OF FLUID
? ANOTHER

SOUND VELOCITY
1430 M/S-

SENSOR MOUNTING
? U

TYPE OF SENSOR
? SMALL

DATA CHANGE
? NO

SPACING
8.816 IN U

07-13 15:5900 *R
+ 2.035E 3GPM

0454.4 MMSEC
100.35 % T0

07-13 15:5900 *R
+002.70 % AI2

07-13 16:0800 *R
+ 2.120E 3GPM

07-13 16:0800 *R
+ 2.120E 3GPM

RECOMMEND USING McCrometer
FLOW RATE = 6.70 cfs

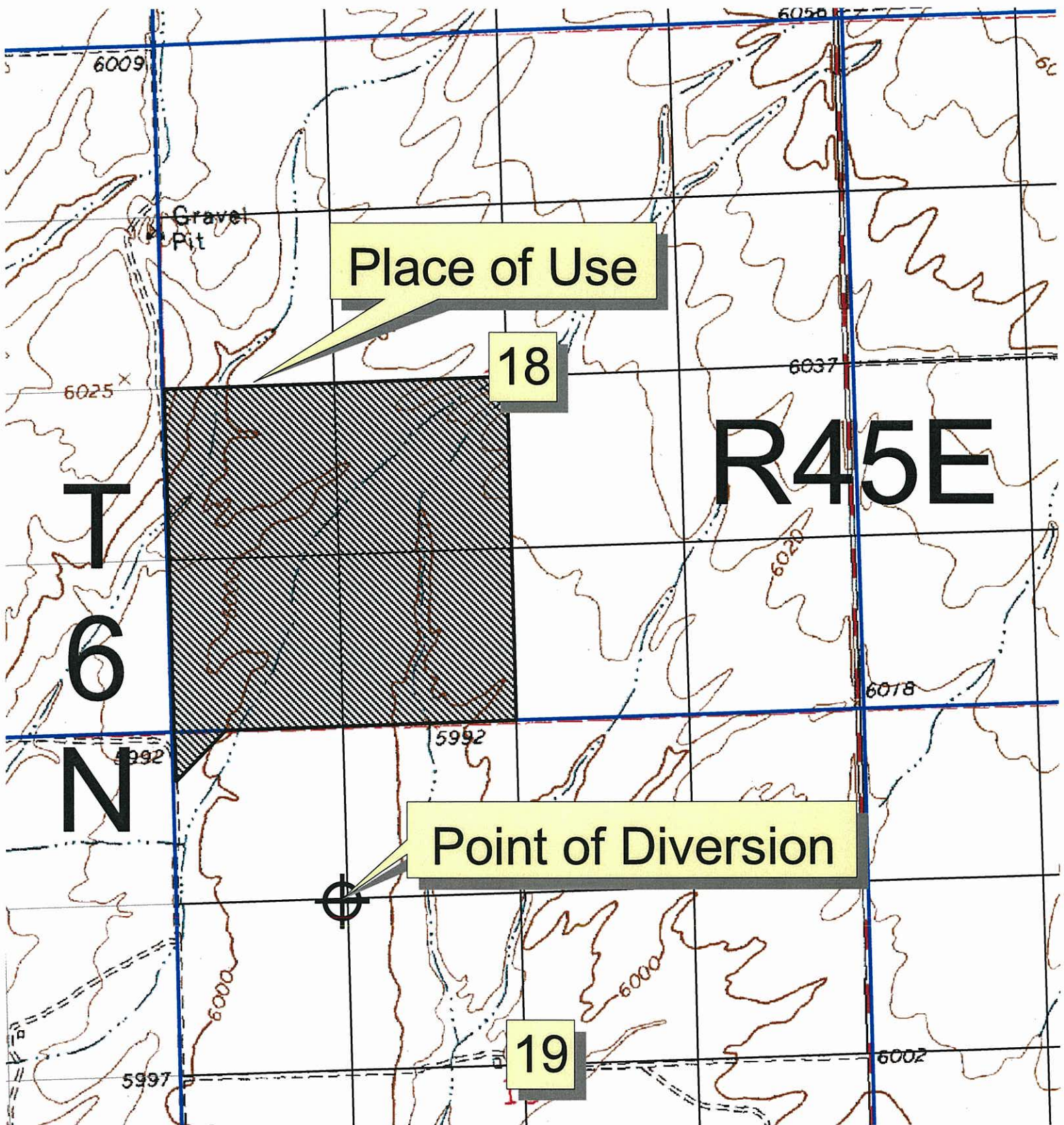
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Flow MEASUREMENT
TAKEN 7-12-2000
using
Polycor TF-P



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Lot 2

18

70.1 8

HEL

HEL

HEL

HEL

59

Lot 3

39.2

40

7.7

6.7

6

7

38.5

Lot 4

39.2

40

40

38.5

HEL

HEL

HEL

HEL

3 18 10 6.7

5 124.1

11 6.1

12 5.5

8 135.2

13 4.6 18

4 19

HEL

PLACE OF USE

6.0

6.9

16

17

HEL

8.0

19

Lot 1

39.2

40

40

38.5

POINT OF
DIVERSION

R45E

T
6
N

EL

HEL

SYSTEM PLACE OF USE

Lot 2

37.1

38.2

40

37.5

22-7143

HEL

HEL

HEL

HEL

20 3.5

15 135.0

24

22 6.7

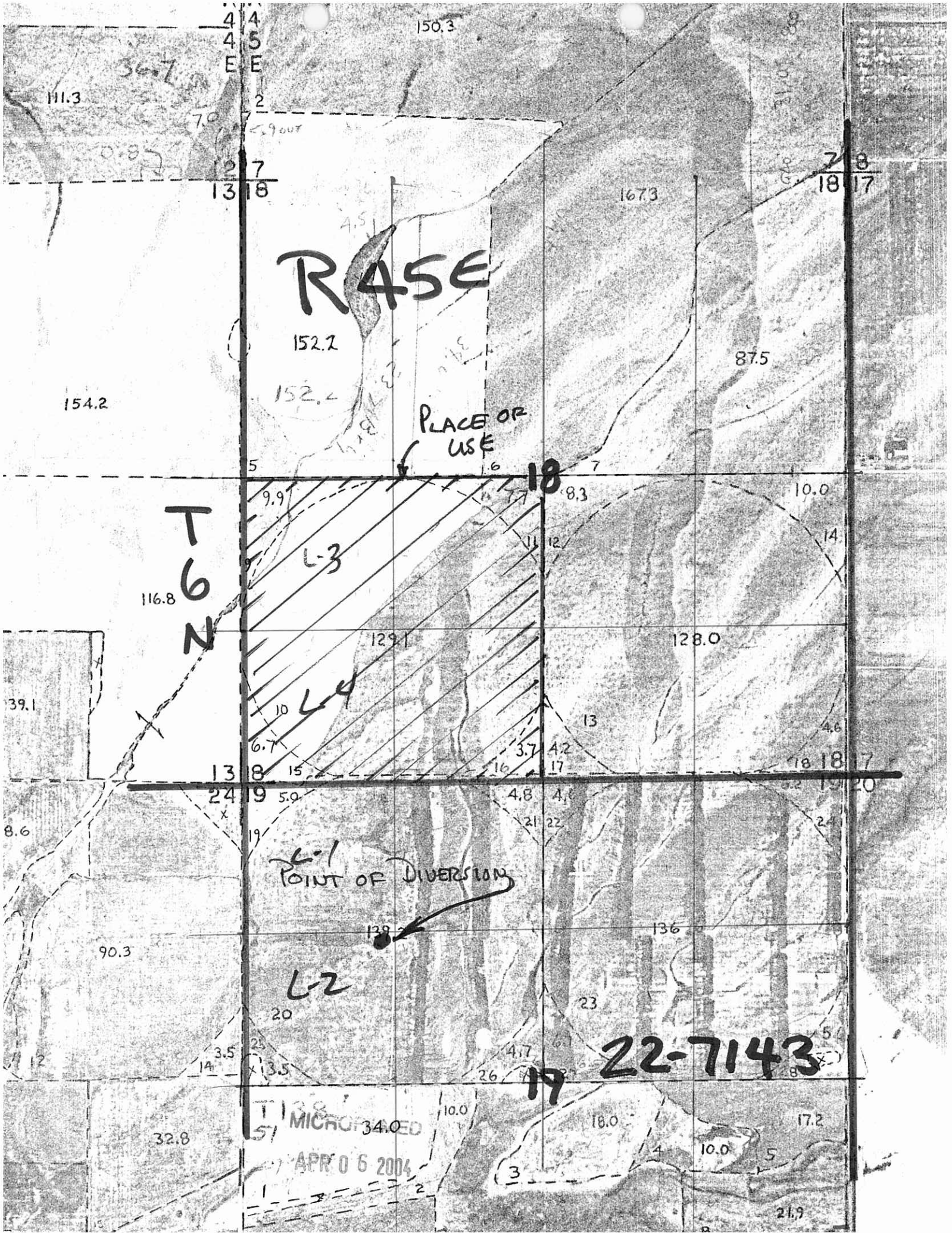
18 132.5

123

51

T120 LOT 3

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RASE

T6N

POINT OF DIVERSION

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MICRO 34.00

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POINT OF
DIVERSION



Sand Trap

SAND TRAP



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E. NARRATIVE/REMARKS/COMMENTS

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McCrometer 0.01 af/65sec

New Measurement at 11.985" od

0.102" thick

Polysonic Reading appears to be $\approx 70\%$ of actual reading

- System consists of Well pump mainline (w/ sand trap) to four (4) low pressure center pivots with end guns, and handlines to irrigate corners (License 22-7146 for NW $\frac{1}{4}$ Sec 19, T6N R45E) (License 22-7145 for NE $\frac{1}{4}$ Sec 19, T6N, R45E) (Permit 22-7143 for SW $\frac{1}{4}$ Sec 18, T6N, R45E) (Permit 22-7144 SE $\frac{1}{4}$ Sec 18, T6N, R45E)
- McCrometer reading appears to be more accurate than polysonic meter due to sand in water. (6.70 cfs $\approx$ 3006.96 gpm / 4 = 751.74 gpm per pivot) Low Pressure pivots $\approx$ 800 gpm / pivot

Have conditions of permit approval been met? ☒ yes ☐ no

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F. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

$$0.01 \text{ af} / 65 \text{ sec} = 0.01 \text{ af} (43560 \text{ ft}^2/\text{ac}) \div 65 \text{ sec} = 6.70 \text{ cfs capacity}$$

Acres 22-7145 + 22-7146 = 308 ac

cfs 22-07145 + 22-07146 = 3.36 cfs

$$\text{ACRES Remaining} = 626.5 - 308.0 = 318.5 \text{ ac}$$

$$6.70 \text{ cfs} - 3.36 \text{ cfs} = 3.34 \text{ cfs capacity remaining} / 318.5 \text{ ac} = 0.010486 \text{ cfs/ac}$$

$$\text{ACRES PERMITTED (22-7143)} = 160 \text{ ac}$$

$$\text{ACRES REMAINING for 22-7144} = 318.5 - 160 = 158.5 \text{ ac}$$

$$Q_{22-7143} = (160 \text{ ac})(0.010486 \text{ cfs/ac}) = 1.68 \text{ cfs}$$

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 160 \text{ ac} (3.5) = 560.0 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.68 (19835)(192) = 663.1 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 560.0 \text{ afa}$$

2. Volume Calculations for Other Uses:

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
IRRIGATION	4/15	10/31	1.68 cfs	560.0 afa
Totals:			1.68 cfs	560.0 afa

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

Field Examiner's Name

Keith C. Wilson
 KEITH C. WILSON

Date

6-12-2000
 7-17-1995

Reviewer

Date

SEAL

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