

Permit No: 22-7144

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
Page 1
FEB - 6 2004

Department of Water Resources

A. GENERAL INFORMATION

Permit No: 22-7144

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:

Phone No:

Address:

Relationship to Permit Holder:

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													38.5	40.0	40.0	38.5	157.0
06N	45E	19							L-1 1.5										1.5

Total Acres: 158.5

MICROFILMED
APR 06 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

22-07144

A. GENERAL INFORMATION

Permit No. 22-7144/71431. Owner: ^{MPS} Betty Linderman Phone No. 1-800-594-9797Current Address: 1366 N 1350W Newdale Id 834362. Accompanied by: Kirk Sargent EXAM DATE: 12 July 2000
17 July 95Address: 1364N 1350W Newdale Id 83436 Phone 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
	L-2	NE	SW	NW	19	6N	45E	TETON	On site / USGS Quad

2. Place(s) of Use:

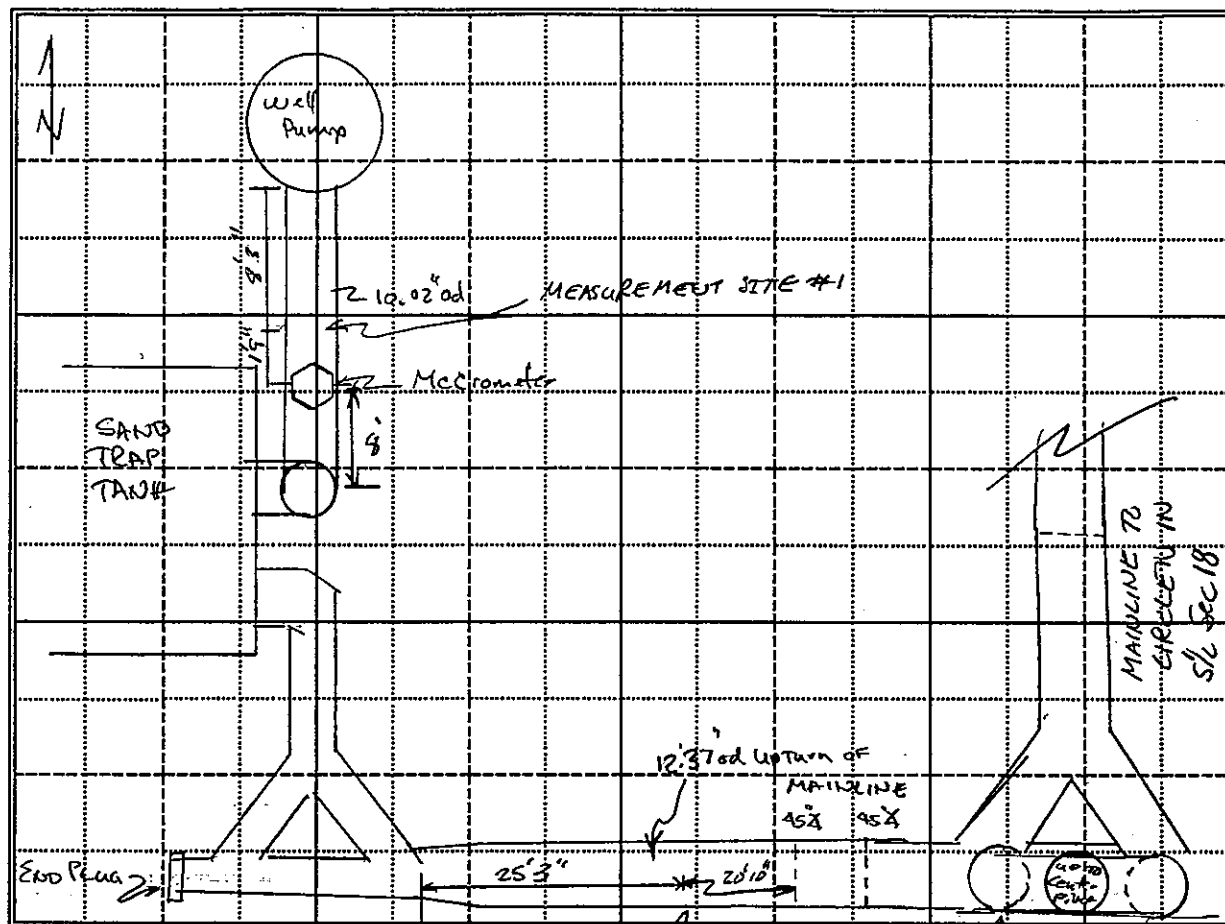
Indicate Method of Determination On site FSA Aerial

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	45E	18									40	40	39.2	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	45E	18													38.5	40	40	38.5	157
		19						L-1 7.5											1.5
																			158.5

APR 06 2004

22-07144

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 02930-01-17383-01649	Peerless	F 22 77 1

*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	Totolran	McCombs	—	—	10"	—
Sonic Meter		Polysonic	TF-P	14 9743/26863	—	—

2. Measurements: 71.985" od 0.102" thick

[McCombs 7-17-1995 Q = 0.01 cfs / 6 sec = 6.70 cfs (3007.6 gpm)]

Pressure @ Pump = 20 psi

MICROFILMED

APR 06 2004

22-07144

E. NARRATIVE/REMARKS/COMMENTS

22-7144

McCrometer 0.01 af/65 sec

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. ($6.70 \text{ cfs} = 3006.96 \text{ gpm} / 4 = 751.74 \text{ gpm per Pivot}$) Low Pressure pivots $\approx 800 \text{ gpm/pivot}$

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

22-7144

MICROFILMED
APR 06 2004

F. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Total flowrate = $0.01 \text{ af} / 65 \text{ sec} = 0.01 \text{ af} (43560 \text{ ft}^2 / \text{ac}) \div 65 \text{ sec} = 6.70 \text{ cfs}$ capacity
 Total acres = 626.5 ac
 Acres for 22-7145 + 22-7146 = 308 TOTAL ACRES REMAINING = 626.5 ac - 308 ac = 318.5 ac
 Total Capacity remaining = 6.70 cfs - (22-7145 + 22-7146) = 6.70 cfs - 3.36 cfs = 3.34 cfs
 Remaining rate per acre = 3.34 cfs / 318.5 ac = 0.010486 cfs/ac
 Acres remaining for 22-7144 = 318.5 ac - (22-7143 acres) = 318.5 ac - 160 ac = 158.5 ac
 $Q_{22-7144} = 158.5 \text{ ac} \times 0.010486 \text{ cfs/ac} = 1.66 \text{ cfs}$

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 158.5 \text{ ac} (3.5) = 554.8 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.66 \text{ cfs} (1.9835)(199) = 655.2 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 554.8 \text{ afa}$$

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	1.66 cfs	554.8 afa
Totals:			1.66 cfs	554.8 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

MICROFILMED

APR 06 2004

22-7144



POINT OF
DIVERSION

SAND TRAP



POINT OF DIVERSION

MICROFILMED
APR 06 2004

22-7144

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

7-12-2000
22-07143
22-07144

+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

7-12
22-07143
22-07144

FLOW MEASURED
7-12-2000
USING
Polaroid
TR-P

22-07144

MICROFILMED
APR 06 2004

SETUP NO. #2 *Better Measurement location*

PIPE O.D 12.374 IN
PIPE WALL THICKNESS 0.102 IN
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
nsec OFFSET = 7.97
usec OFFSET = -0.75
XMT DET DLY = 16.66
AERATION FAC. = 1.00
XDUCE: STANDARD/U

	UP	DOWN
WIN DLY	449.16	449.16
SE>R	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
DIFF COUNT		965
P2X	46	
SPS	23.12	
AERATION	0.000	

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

FLOW: 1963.850 GPM
5.416 F/S

FLOW MEASURED

7-17-95

Using Peek

Polysonics KTT-P Flowmeter

22-7144

MICROFILMED

APR 06 2004

Lot 2

18

HEL

HEL

HEL

59

7.7 6.7
6 7

38.5

Lot 3

39.2

40

40

HEL

HEL

Lot 4

39.2

40

40

38.5

HEL

HEL

HEL

HEL

18 10 6.7

5 124.1

11 6.1

12 5.5

8 135.2

13 4.6 18

19 8.2

PLACE OF USE

60 6.9
16 17

19 8.2

HEL

39.2

40

40

38.5

Lot 1

R45E

T
6
N

POINT OF
DIVERSION

EL

HEL

SYSTEM PLACE OF USE

Lot 2

37.7

38.2

40

37.5

22-7144

HEL

HEL

HEL

HEL

35

135.0

24

22 6.7

18 132.5

23

51

T 129 LOT 3

APR 06 2004

701.8

18

L-3 R45E

T
6
N

L-4

PLACE OF
HEL USE

2 →

10 6.7 5 124.1 11 6.1 12 5.5 8 135.2 13 4.6 18 17 19 20

HEL 6.0 16 HEL 6.9 17 HEL 8.0 19

L-1

HEL

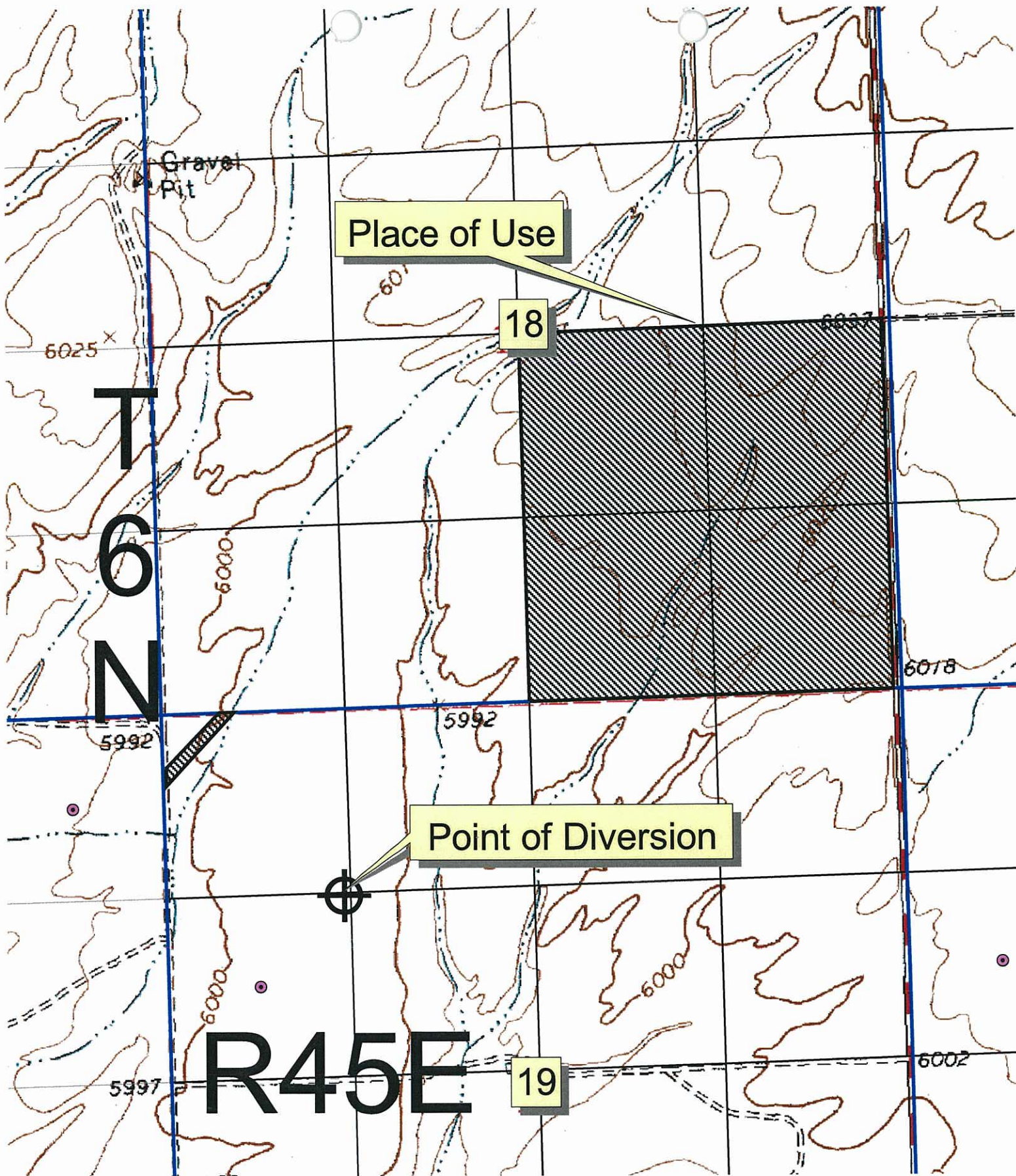
HEL

L-2
Point of
DIVERSION

MICROFILMED

22-7144

20 35 15 135.0 21 24 19 22 6.7 18 132.5 23 44 HEL



MICROFILMED
APR 06 2004

22-7144