

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-31257

Exam Date: 10/16/2002

1. Current Owner: SCOTT F WOODHEAD
10075 STAR ACRES DR
STAR ID 83669
(208)286-7931

And

JEANETTE Y BENNION
10075 STAR ACRES DR
STAR ID 83669
(208)286-7931

2. Accompanied by: Scott Woodhead
Phone No: Same as above.
Address: Same as above
Relationship to Permit Holder: Owner

3. **SOURCE**
GROUND WATER

TRIBUTARY**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

GROUND WATER NE1/4SW1/4NE1/4 Sec. 5, Twp 04N, Rge 01W, B.M.
ADA 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	
04N	01W	5			2.0													2.0	

Total Acres: 2

Method of Determination:

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
P/D	JACUZZI	3 Hp	2823028110	JACUZZI	3S445-11

*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
N/A						

2. Measurements: The irrigation system was buried and it was not possible to attain an accurate measurement. The piping was small enough that our Thyme Flyte polysonic unit wouldn't give an accurate reading. Therefore, the pump curve and theoretical calculations were used to determine the capacity of the system.

E. FLOW CALCULATIONS

YES Additional Computation Sheets Attached

Measured Method:

PUMP CURVE → 0.08 CFS
 THEORETICAL CALCULATION → 0.08 CFS
 MAXIMUM ALLOWABLE PER ACRE → 0.06 CFS (0.03 CFS x 2 ACRES = 0.06 CFS)
 PERMIT ALLOWS → 0.04 CFS

PLEASE NOTE: The diversion rate for this license should be limited by the permitted amount of 0.04 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4 \times 4.5 = 9.0 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \times 260 \times 1.9825 = 20.6 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 9.0 \text{ afa}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted from a well in T4N R1W S5 SWNE. The well is located in the northeast corner of the applicant's property, and irrigates approximately 2.5 acres of ground. The owner was only allowed to irrigate 1/2 acre under their exempt domestic right, and filed for this water right to cover the other 2 acres.

The well diverts into a mainline that runs across the northern boundary of the property and supplies buried sprinklers running due south from the mainline.

Farmers Union Ditch Company water rights overlap the place of use, but it is located on a hill that cannot be served from the company with their gravity flow system. Several other users in this same subdivision have water rights, but they shouldn't affect this water right. The owner does use their unrecorded water right for approximately 1/2 acre of the irrigation used on the property, but this water right was filed to ensure they could irrigate the entire 2.5 acres.

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

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	0.040 CFS	9.00 AF
<u>Totals:</u>		0.040 CFS	9.00 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 *2-16-05*

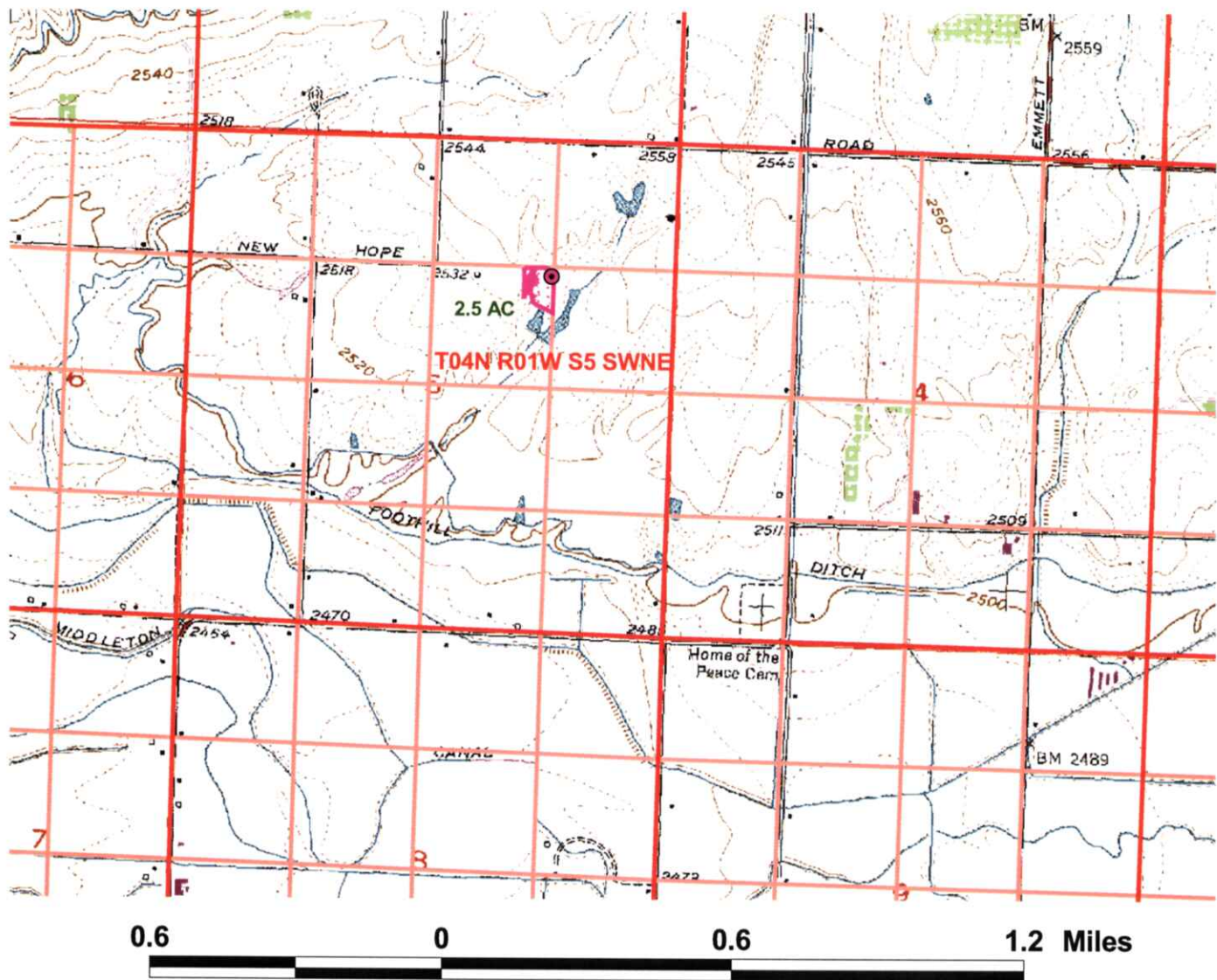
Reviewer _____ Date _____

SEAL

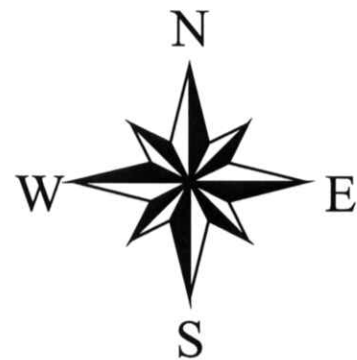
FIELD EXAM FOR 63-31257

QUADRANGLE MAP

BY DAN NELSON



- P/D Well
- P/U Irrigation Land
- Section Lines
- 1/4 1/4 Lines



FIELD EXAM FOR 63-31257

PLACE OF USE

BY DAN NELSON



0.09 0 0.09 0.18 Miles

-  P/D Well
-  P/U Irrigated land
-  Section Lines
-  1/4 1/4 Lines



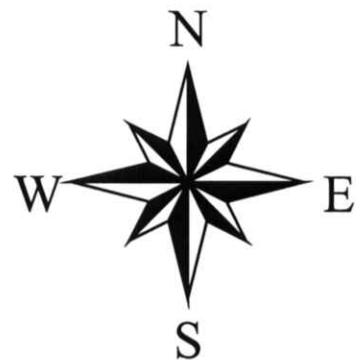
FIELD EXAM 63-31257

SYSTEM DIAGRAM

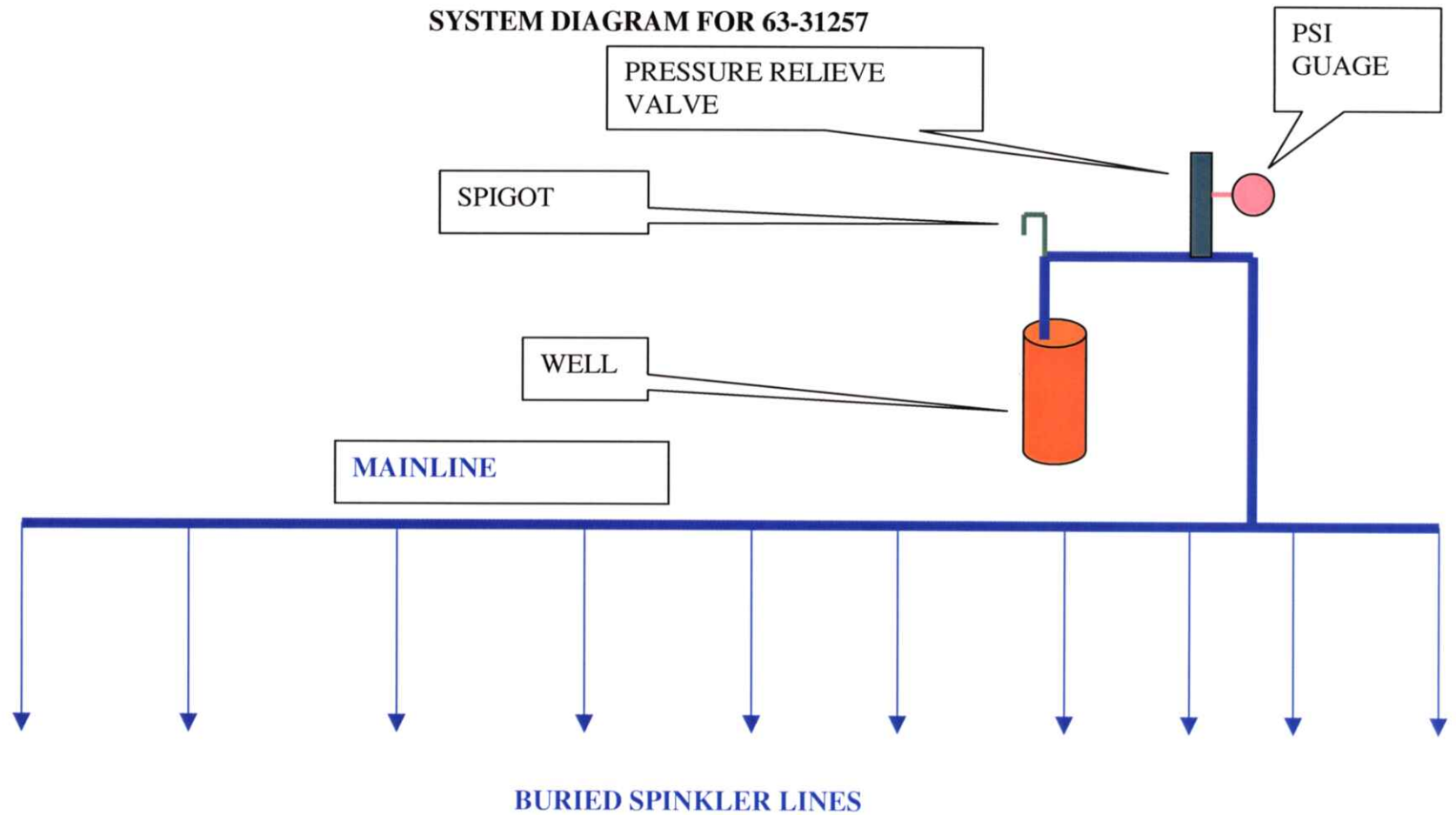
BY DAN NELSON



Water is diverted from the well into a mainline that runs across the north end of the property. The water is diverted out of the mainline into an underground sprinkler system.



SYSTEM DIAGRAM FOR 63-31257



GROUNDWATER THEORETICAL ANNALYSIS

FILE: 63-31257

DATE: 2-15-05

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 pupping water level

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

$$Q = \frac{(8.8) \times (3 \text{ hp}) \times (0.70) = 18.48}{[(80 \text{ FT}) + (60 \text{ psi} \times 2.31)] = 218.6} = 0.0845 \text{ } 37.9 \text{ gpm}$$

<u>LIFT FROM:</u>	<u>PSI FROM:</u>	<u>NOTES ON PUMP:</u>
Measurement ()	Measurement ()	Motor Make, Serial or ID
Owner ()	Owner ()	
Area estimate ()	Estimate ()	Pump Make, Serial or ID, rating
Well Logs (✓)	Owner Gage (✓)	
Booster (Y) (N)		

REMARKS: Well log states that the pumping level is at 80 ft.

pump curve also shows a well capacity of 37 gpm. This seems reasonable.

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DATE: 2-15-05

BY: Daniel A. Nelson.

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$$Q = \frac{(8.8) \times (\underline{3 \text{ hp}}) \times (0.70) \approx 18.48}{\text{TDH}} = \underline{0.0845} \text{ CFS}$$

$$[(\underline{80 \text{ FT}}) + (\underline{60 \text{ psi}} \times 2.31)] = 218.60$$

$$37.9 \text{ gpm.}$$

LIFT FROM:	PSI FROM:	NOTES ON PUMP:
Measurement ()	Measurement ()	Motor Make, Serial or ID
Owner ()	Owner ()	
Area estimate ()	Estimate (~~not~~)	Pump Make, Serial or ID, rating
Well Logs (~~+~~)	Owner Gage (~~-~~)	
Booster (Y) (N)		

REMARKS: Well ~~not~~ Log state Pumping level is at 80 FT. Pressure was Estimated at 60 psi to provide minimum pressure of 45 psi at the end of the up hill sprinkler lines.

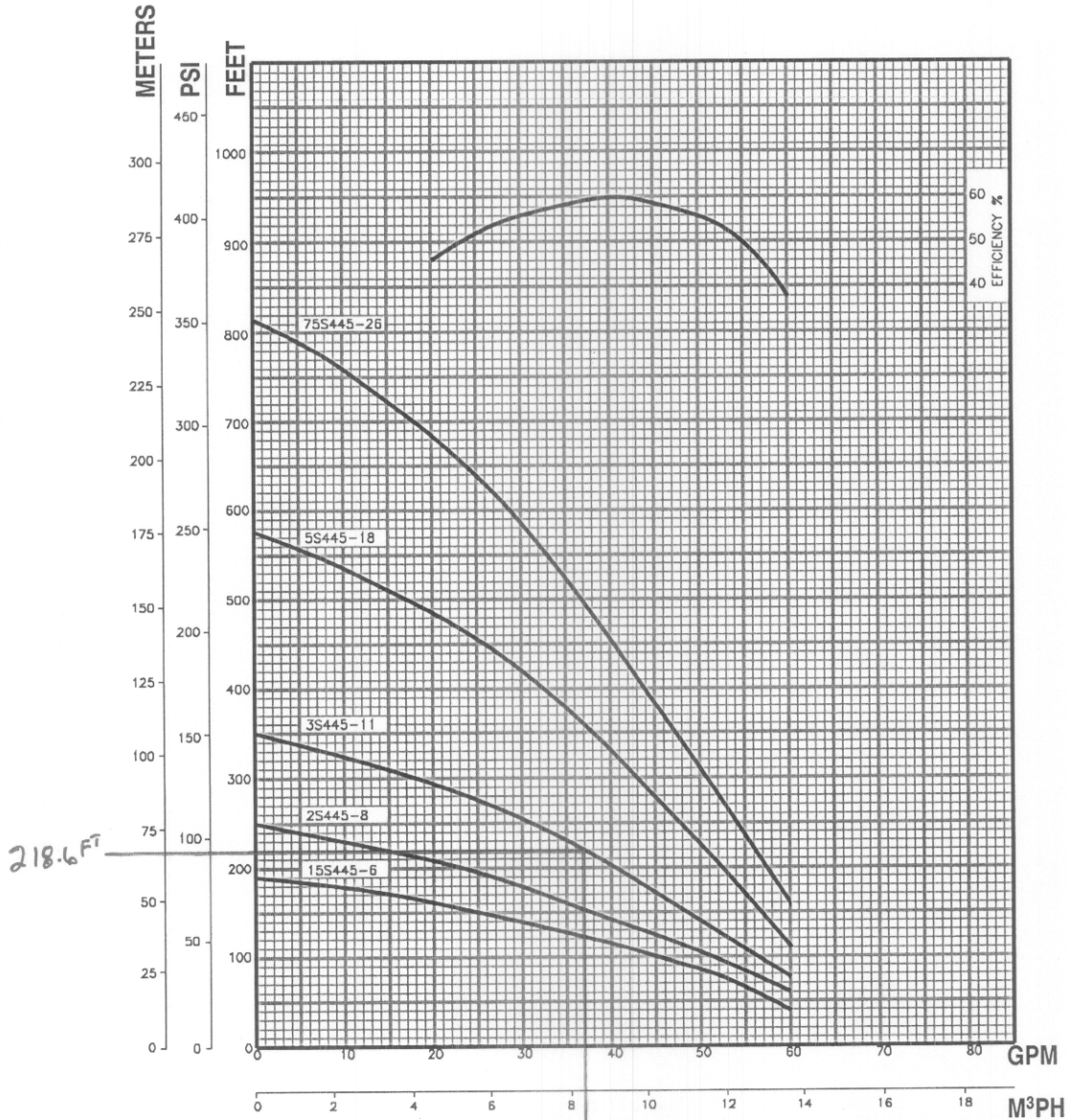
Pump curve also shows a well capacity of 37 gpm. This seems reasonable

JACUZZI

"The Most Trusted Name In Water"™

SandHandler™ High Capacity 45 GPM

Performance Curves



- Notes: 1) Performance shown does not include friction loss in the drop pipe.
2) All performance data is based on rated motor name plate voltage.

Pumping Level Per Well Log = 80 FT
 PSI Estimated at 60 PSI
 $80 \text{ FT LIFT} + (60 \text{ PSI} \times 2.31) = 218.6 \text{ FT TDH}$

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

1. DRILLING PERMIT NO: D0020198 OTHER APPLICABLE NO: 63-31257
2. OWNER: SCOTT WOODHEAD, JEANNETTE BENNION Phone: 286-7931
Address: 10075 STAR ACRES DR, STAR, ID 83669
3. WELL LOCATION: Twp 4N, Rge. 1W, Sec. 5, SW 1/4 NE 1/4
County ADA (Provide sketch map and photo on reverse.)
4. DRILLER: DOMESTIC PUMP & DRILL Lic. No. 483
When Drilled? 11-1-01 TO 11-2-01
5. WELL CONSTRUCTION:
Casing Diameter 6 inches Water tight cap? ☒ Yes ☐ No Access Port: ☒ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☒ Yes ☐ No - Describe _____
Depth of Casing UNKNOWN ft. Method Drilled UNKNOWN
Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____
Control Valve? ☒ Yes ☐ No Pressure Gauge: ☒ Yes ☐ No
Condition of Piping and Valving GOOD
Auger to a depth of 0 ft. Evidence of Annular Seal ☐ Yes ☒ No
Are there obvious construction problems that may be a source for contamination or waste of water?
☐ Yes ☒ No (Describe in Remarks and Attach Photo - On Reverse)
6. HYDROLOGIC INFORMATION:
Depth to Static Water UNKNOWN ft. Water Temperature UNKNOWN °F
Flowing Artesian ☐ Yes ☒ No Pressure: 60 (psi)
Water Sample Taken? ☐ Yes ☒ No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____
7. WELL USE:
☐ Domestic ☒ Irrigation ☐ Stock
☐ Test ☐ Municipal ☐ Industrial
☐ Abandoned ☐ Waste Disposal/Injection ☐ Not Used
☐ Other: _____

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☒ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

9. REMARKS: This well looks to be in good
condition and constructed properly

Donald A. Nelson - Senior Agent
Signature of Dept. Representative & Title

10-16-02
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:

See Application

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/16/2002

FILE NUMBER 63-31257



This is a photo of the well.

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 10/16/2002

FILE NUMBER 63-31257



These are photos of the land being irrigated. The well is located in the northeast corner of the property. The pictures were taken from this location.

FIELD NOTES

PERMIT NUMBER 63-31257

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

T4N R1W S5
SWNE

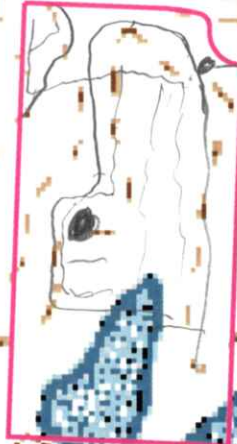


128m
No. 128

360'

2532 □

T4N R1W S5
SWNE



WATER
COMES
FROM

WELL
HERE

GOES
TO
UNDERGROUND
SPRINKLES

5

FRANKLIN

2823025110

3 HP

345 CRPOT

14.5 AMP

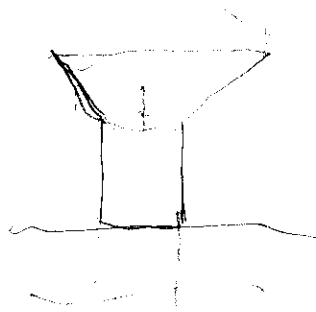
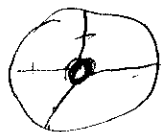
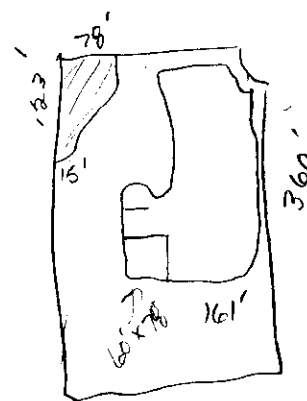
1.5 SF

ACOMPANIED
BY MR. WOODHEAD

FX DATP

10-10

9 AM.



6' ends

30 PSI

1.2 gpm
3.2 gpm

ave - 2 gpm
ave - 6 SPRINK

12 gpm
generally TO 18 gpm

25 gpm.
max

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

1. WELL TAG NO. D 0020198

DRILLING PERMIT NO. _____
Other IDWR No. Well ID # 343521

2. OWNER: Scott Woodhead
Name _____
Address 10075 Star Acres Dr.
City Star State ID Zip 83669

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N							
			X				
W						E	
						S	

Twp. 4 North ☒ or South ☐
Rge. 1 East ☐ or West ☒
Sec. 5 NE 1/4 SW 1/4 NE 1/4
Gov't Lot _____ County Ada
Lat: _____ Long: _____
Address of Well Site 10075 Star Acres Dr. City Star
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
<u>Dry 3/8 Bent</u> <u>Well Cutting</u>	<u>0</u>	<u>19</u>	<u>400 lb</u>	<u>Over bore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 99

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6</u>	<u>+2</u>	<u>99</u>	<u>1/4</u>	<u>Steel</u>	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe 8 Length of Tailpipe 0

9. PERFORATIONS/SCREENS

Perforations _____ Method Pull back
Screens SS Wire Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>111</u>	<u>101</u>	<u>16</u>		<u>5"</u>	<u>SS</u>	☒	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

45 ft. below ground Artesian pressure _____ lb.

Depth flow encountered _____ ft. Describe access port or control devices: Sanitary Well Cap

Office Use Only

Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat: _____ Long: _____

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>50+</u>	<u>NH</u>	<u>80</u>	<u>1/2 Hr</u>

Water Temp. 59° Bottom hole temp. NH

Water Quality test or comments: Clear

Depth first Water Encounter 58

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>10</u>	<u>0</u>	<u>6</u>	<u>Sandy Soil</u>		☒
<u>10</u>	<u>6</u>	<u>12</u>	<u>Cemented Sand</u>		☒
<u>10</u>	<u>12</u>	<u>19</u>	<u>Sandy Clay</u>		☒
<u>6</u>	<u>19</u>	<u>32</u>	<u>Brn Clay</u>		☒
<u>6</u>	<u>32</u>	<u>38</u>	<u>Sandy Clay</u>		☒
<u>6</u>	<u>38</u>	<u>40</u>	<u>Cemented Sand</u>		☒
<u>6</u>	<u>40</u>	<u>58</u>	<u>Coarse Sand Thin Clay Layers</u>		☒
<u>6</u>	<u>58</u>	<u>75</u>	<u>Gravel</u>	☒	
<u>6</u>	<u>75</u>	<u>98</u>	<u>Coarse Sand</u>	☒	
<u>6</u>	<u>98</u>	<u>105</u>	<u>Sandy Clay</u>		☒
<u>6</u>	<u>105</u>	<u>111</u>	<u>Coarse Sand</u>	☒	

RECEIVED

NOV 19 2001

WATER RESOURCES
WESTERN REGION

Completed _____ Depth 111 (Measurable)
Date: Started 11/1/01 Completed 11/2/01

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Domestic Pumps Drill Firm No. 483

Firm Official _____ Date _____
and _____
Driller or Operator [Signature] Date 11/14/01

(Sign once if Firm Official & Operator)

Performance Charts SandHandler™ High Capacity 45 GPM

CAPACITIES IN U.S. GALLONS PER MINUTE

CAPACITIES IN U.S. GALLONS PER MINUTE																						
PUMP MODEL	HP	PSI	DEPTH TO PUMPING WATER LEVEL, OR LIFT, IN FEET SHADED AREAS INDICATE MOST EFFICIENT PERFORMANCE																			
			20	40	60	80	100	120	140	160	180	200	240	260	280	300	320	340	360	380	400	
15S445-6	1-1/2	0	68	62	57	52	46	39	31													
		10	62	56	51	45	38	29	19													
		20	55	50	44	36	28	17	5													
		30	49	42	35	26	16	3														
		40	41	34	25	14	30															
		50	33	23	12																	
		60	22	10																		
Shut-off (ft.)	190	PSI	74	65	56	48	39	30	22	13	4											
2S445-8	2	0	71	65	60	56	52	48	44	40	35	29										
		10	64	59	55	51	48	44	40	34	28	20										
		20	58	54	51	47	43	39	33	27	19	9										
		30	54	50	47	43	38	32	26	17	7											
		40	50	46	42	37	32	24	16	5												
		50	45	41	36	31	23	14	3													
		60	41	36	29	22	13	1.5														
Shut-off (ft.)	250	PSI	104	95	87	78	69	61	52	43	35	26	9									
3S445-11	3	0	72	68	65	62	59	56	53	50	47	43	36	31	26	20						
		10	68	64	61	58	55	52	49	46	43	39	30	25	19	12						
		20	64	61	58	55	52	49	46	42	38	34	24									
		30	60	57	54	52	48	45	42	38	34	29	17									
		40	57	54	51	48	45	41	37	33	28	22	16									
		50	54	51	47	44	41	37	32	27	21	15										
		60	50	47	44	40	36	31	26	20	14											
		70	46	43	39	35	31	25	19	13												
		80	43	39	35	30	24	18	12													
		90	38	34	29	24	18	11														
Shut-off (ft.)	350	PSI	143	134	126	117	108	100	91	82	74	65	48	39	30	22	13	4				
5S445-18	5	0			69	66	63	61	59	57	55	53	50	48	46	44	42	40	38	36	33	
		20	68	65	63	60	57	56	54	52	51	49	46	44	42	40	38	35	32	29	26	
		40	62	60	57	56	54	52	50	48	48	47	45	39	37	34	32	28	25	21		
		60	57	55	51	51	50	48	46	44	43	41	36	33	31	27	24	20	16			
		80	53	51	49	47	46	44	42	40	38	35	30	26	23	19						
		100	49	47	45	43	41	39	37	34	32	29	25	18								
		120	45	43	41	39	36	34	31	28	24	20	16									
		140	40	38	35	33	30	27	23	19												
		160	35	32	29	26	22	18														
Shut-off (ft.)	575	PSI	236	227	219	210	201	193	184	175	167	158	141	132	123	115	106	97	89	80	71	
PUMP MODEL	HP	PSI	DEPTH TO PUMPING WATER LEVEL, OR LIFT, IN FEET SHADED AREAS INDICATE MOST EFFICIENT PERFORMANCE																			
			50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900		
75S445-26	7-1/2	0	-	-	-	-	57	54	50	47	44	40	36	32	28	24	18	11	3			
		20	-	-	-	57	54	50	47	44	40	36	32	28	24	18	11	3				
		40	-	-	58	54	51	48	45	41	37	33	29	24	18	12	5					
		60		58	55	52	48	45	41	37	33	29	25	19	12	5						
		80		55	52	48	45	41	37	33	29	25	19	12	5							
		100		52	48	45	42	38	34	30	25	20	14	6								
		120		49	45	42	38	34	30	25	21	14	7									
		140		45	42	38	35	30	26	21	15	7										
		160		42	39	35	31	26	21	15	8											
		180		39	35	31	27	22	16	8												
		200		35	31	27	22	16	9													
Shut-off (ft.)	815	PSI		331	310	288	266	245	223	201	180	158	136	115	93	71	50	28	6			

Notes: 1) Pump discharge tapping and minimum riser pipe size 2". 2) Performance shown does not include friction loss in the drop pipe.
3) All performance data is based on rated motor name plate voltage.