

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34729

Exam Date: April 30, 2019

1. Current Owner:
KURT KRAUSE 9951 W ROLLING HILLS DR STAR ID 83669-5115 AND
LESLIE KRAUSE 9951 W ROLLING HILLS DR STAR ID 83669-5115

2. Accompanied by: Kurt Krause
Phone No:
Address:
Relationship to permit Holder: Same

3. **SOURCE:**
GROUND WATER

Method of Determination: Site visit

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Comments: _____

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-21719	Groundwater	Domestic	Decree (1984)

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE¼ SE¼, Sec. 5, Twp 04N, Rge 01W, B.M. ADA County

Method of Determination: GPS, digital PLS map

PLACE OF USE: IRRIGATION

Twp	Rng	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													3.2				3.2

Total Acres: 3.2

Method of Determination: Aerial imagery, digital PLS map

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Grundfos	1.0		Grundfos	2" discharge

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
None						

2. Measurements:

None per IDAPA BU Exam Rule 35..01.r.i

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

SEE ATTACHED

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.2 \text{ acres} \times 4.5 \text{ afa/acre} = 14.4 \text{ afa}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 41.3 \text{ afa}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 14.4$$

2. Volume Calculations for Other Uses:

No other uses

G. NARRATIVE/REMARKS/COMMENTS

This permit authorizes the diversion of 0.18 cfs groundwater to irrigate 8.7 acres. Proof of beneficial use was submitted March 26, 2018. WRA Cody Parker completed this field exam on April 30, 2019.

The original ten-acre parcel was split into two separate parcels during the development period. Each parcel has its own well that irrigates a portion of the acreage authorized by the permit. The original owner submitted an assignment of permit for the portion he does not own, resulting in two separate licenses from this permit. This license (63-34729) represents the irrigation on the northern parcel which was assigned to the new owner.

The POD is an eight-inch well which was drilled to a depth of 180 ft. The owner claims a 1-hp Grundfos 22SQE10-190 pump diverts water from the well to two-inch line that feeds a series of movable water cannons with 3/16" nozzles.

The well driller's report shows a total depth of 180 ft for the well with screen set from 151 to 161 feet. The pump is likely set somewhere near 155 ft below ground surface. I would estimate the pumping level to be somewhere near 150 ft. Pressure at the well head is 65 psi. With a total dynamic head of 300 ft, the pump curve shows that the pump would not produce any flow rate, which indicates that the owner was mistaken about what pump was set in the well. The estimate of flow rate based on sprinkler size and pressure is more like 0.08 cfs. Because there was no direct measurement taken, I have decided to recommend the higher rate of 0.08 cfs. The recommended annual volume was determined from the headgate requirement.

The well also provides water to a home for domestic use. There are no surface water shares from an irrigation company/district available to water this acreage.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/01 to 11/15	0.08 CFS	14.4 AF

Totals: 0.08 CFS 14.4 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 ☒ None

I. AUTHENTICATION

Cody Parker - Water Resource Agent, Senior

Field Examiner's Name Cody Parker Date 7-3-19

Reviewer Patricia Miller Date 7-9-2019

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

Pump Curve:

Static Water Level = 49 ft (well driller's report)

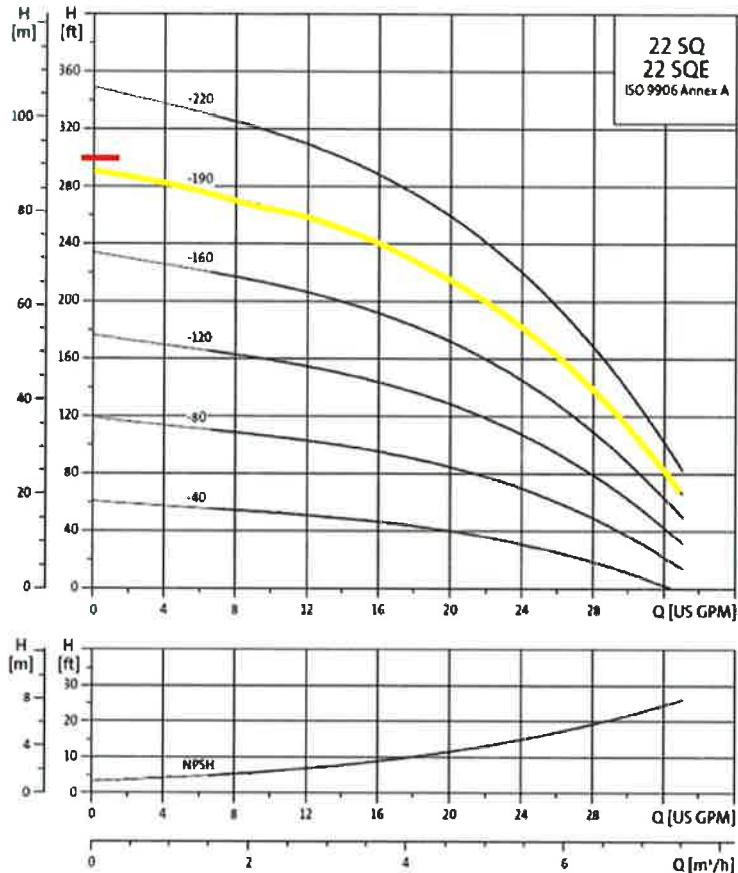
Pump set at 155 ft estimated from well driller's report

Pumping level estimated at 150 ft

Pressure at well head = 65 psi x 2.31 ft/psi = 150 ft

TDH = 300 ft

22 SQ, SQE



Flow Rate = 0 gpm

Sprinklers:

3/16" nozzles @ 60 psi = 8.5 gpm x 4 = 34 gpm = **0.08 cfs**

BU Standard: 3.2 acres x 0.03 cfs/acre = **0.10 cfs**

Permit: **0.18 cfs**

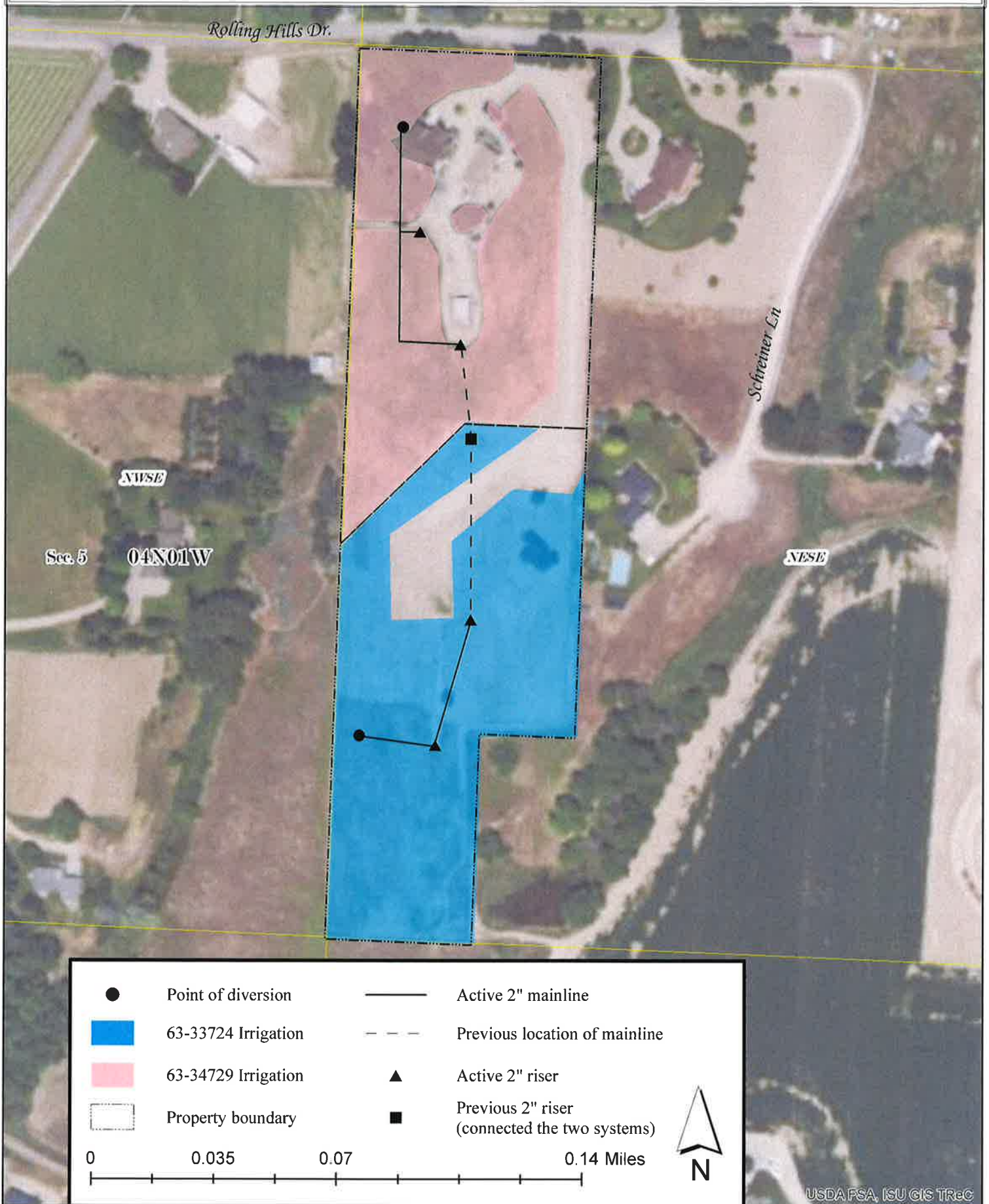
Exam Fee: **0.20 cfs**

RECOMMENDED: 0.08 cfs

Right No. 63-34729 &
63-33724

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

System Diagram

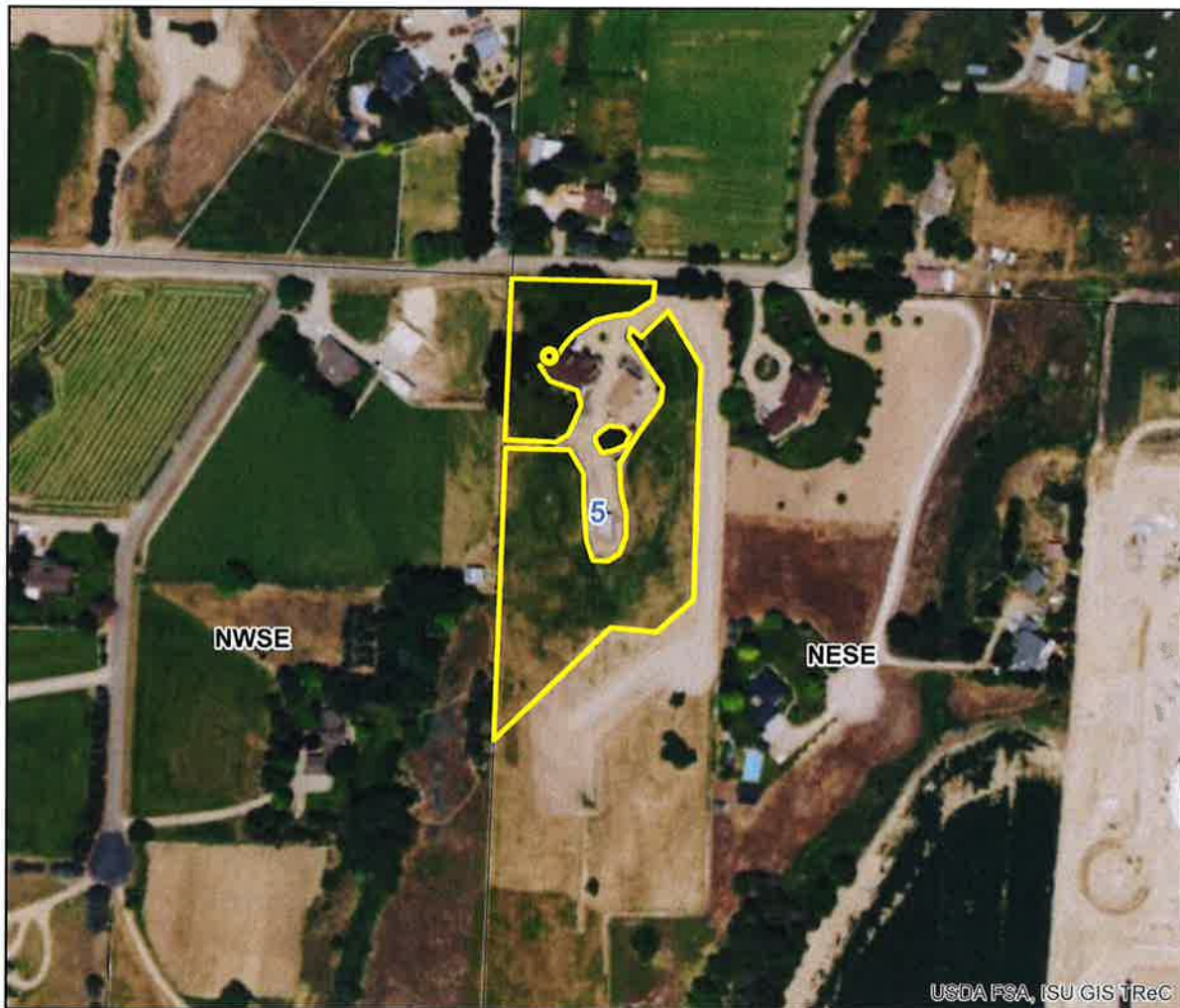


State of Idaho
Department of Water Resources
Beneficial Use Field Report
63-34729

IRRIGATION

01W

04N



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 0.035 0.07 0.14 Miles



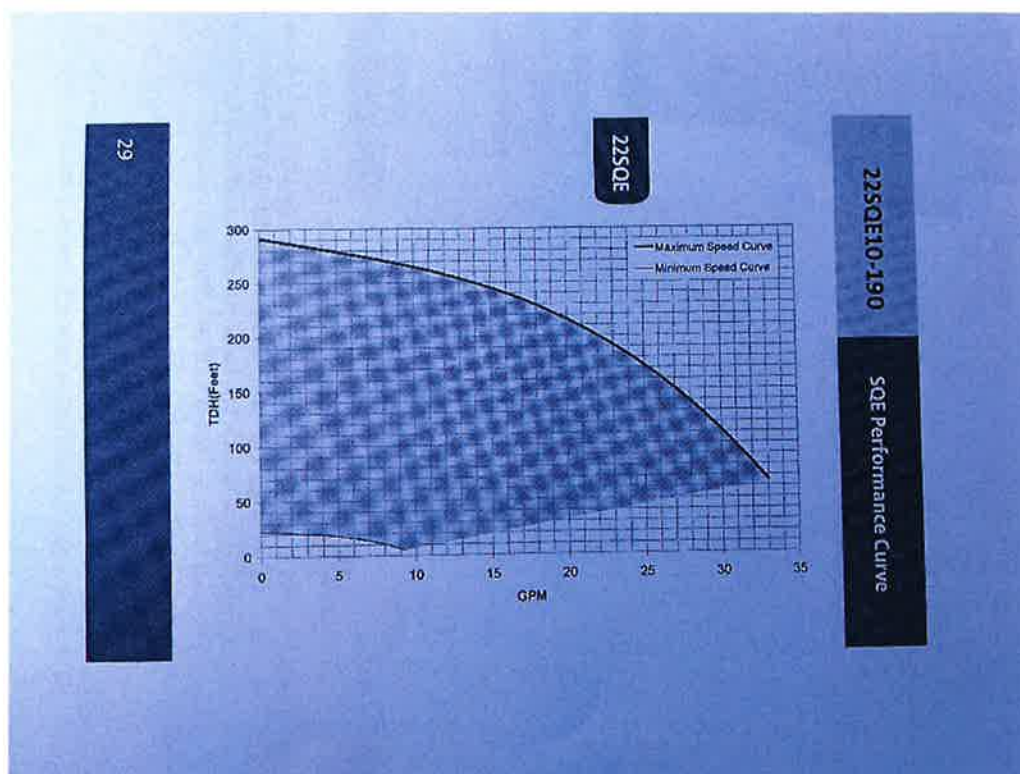
STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

This eight-inch well is the point of diversion for right 63-34729. There is no metal tag. It was drilled for Dianne Dow in '83.



The flow rate for the movable sprinklers used to irrigate the place of use.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT



The pump curve for the 1.5 hp submersible Grundfos pump.

USE TYPEWRITER OR
BALLPOINT PEN

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Location Corrected by IDWR To:

T04N R01W Sec. 5 SESWNE

By: mciscell 2012-12-21

State law requires that this report be filed with the Director, Department of
within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name DIANNA DOW

Address % B. Bruce 1278 E. Victory

Owner's Permit No. 63-83-C-0063-000

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal
or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 146 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>250</u> inches	<u>8</u> inches	<u>2</u> feet	<u>152</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☒ Yes ☐ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No

Manufacturer's name Johnson

Type _____ Model No. _____

Diameter 3" Slot size 015 Set from 151 feet to 161 feet

Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 25 Material used in seal: ☐ Cement grout

☒ Puddling clay ☐ Well cuttings

Sealing procedure used: ☐ Slurry pit ☒ Temporary surface casing

☐ Overbore to seal depth

7. WATER LEVEL

Static water level 49 feet below land surface.

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature N/A °F. Quality Good

Artesian closed-in pressure _____ p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA N.A.

☐ Pump ☐ Baller ☐ Other

Discharge G.P.M.	Drawdown	Hours Pumped

9. LITHOLOGIC LOG

072014

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
12	0	25	SAND & CLAY		✓
8	25	52	" "		✓
8	52	174	" "		✓
8	174	180	CLAY		✓

RECEIVED

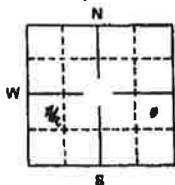
AUG 13 1984

Department of Water Resources
Western Regional Office

MICROFILMED

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Ada

NE % SE % Sec. 5, T. 4 N., R. 1 W

10.

Work started 8/9/83 finished 6/30/84

11. DRILLERS CERTIFICATION

Firm Name BAIRS Drilling Firm No. 237

Address R.R. #2 Date 8/4/84

Signed by (Firm Official) Charles Baur

and

(Operator)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

04N01W5

Basin/Sequ	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
63-11553	MATTOSS	GROUND	IRRIGATION			3.5														3.5
63-120G	ANDERS	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-12121	EWERT,	C WASTE W	IRRIGATION				2			5										5
63-12323	GREENE,	GROUND	IRRIGATION																	2
63-123C	FARMER	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-124N	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-124Q	CHASE,	R BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-125G	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-125J	CHASE,	R BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-126E	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-126F	BOWER	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-161X	CONSUM	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-165M	BOISE C'	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-168B	BORTLE,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-168D	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-173	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-198AC	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-198AG	FARMER	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-21729	FARMER	WASTE W	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-248	FARMER	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-254	FARRIS,	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-255	COUZEN	BOISE R'	IRRIGATION											X	X	X	X	X	X	
63-297	FARMER	BOISE R'	IRRIGATION	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
63-31230	KLEIN,	M GROUND	IRRIGATION														5.5			5.5
63-31257	BENNION	GROUND	IRRIGATION			2														2
63-31440	KLEIN,	M GROUND	IRRIGATION														5			5
63-31441	BRUCE S'	GROUND	IRRIGATION														4.5			4.5
63-32480	DRAINAC	UNNAME	IRRIGATION							X		X	X	X	X	X	X	X	X	
63-32518	FARRIS,	I UNNAME	IRRIGATION							X	X	X	X	X	X	X	X	X	X	
63-32519	FARRIS,	I UNNAME	IRRIGATION							X	X	X	X	X	X	X	X	X	X	
63-32520	FARRIS,	I UNNAME	IRRIGATION							X	X	X	X	X	X	X	X	X	X	
63-32521	FARRIS,	I WASTE W	IRRIGATION							X	X	X	X	X	X	X	X	X	X	
63-32522	FARRIS,	I WASTE W	IRRIGATION							X	X	X	X	X	X	X	X	X	X	
63-33724	NORTH	GROUND	IRRIGATION													4.4				4.4
63-34524	SCHREIN	GROUND	IRRIGATION													12				12
63-34729	K'RAUSE,	GROUND	IRRIGATION													3.2				3.2
63-370	FARRIS,	I BOISE R'	IRRIGATION						X			X	X	X	X	X	X	X	X	
63-4960	FARRIS,	I BOISE R'	IRRIGATION						X			X	X	X	X	X	X	X	X	
63-8191	MEDIN,	B GROUND	IRRIGATION														4			4
63-8526	KLEIN,	M UNNAME	IRRIGATION														5			5
63-9115	BARNETT	UNNAME	IRRIGATION														5			5

Separate portion of same parent right, no overlap

Surface water shares, none available for POU

Property to east of POU, no overlap

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

04N01W5

Basin/Sequ	Owner	Source	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
63-11353	MATTOS, GROUND WATER				X													
63-12003	MOON, GROUND WATER		X															
63-12100	STAR SEV GROUND WATER													X				
63-12121	EWERT, C WASTE WATER																	
63-12323	GREENE, GROUND WATER							X										
63-12370	STAR SEV GROUND WATER					X								X				
63-15614	KUCK, EL GROUND WATER															X		
63-16166	KELLER, I GROUND WATER												X					
63-16633	HARTLEY GROUND WATER		X															
63-17556	ACKERS, GROUND WATER					X												
63-17941	MALOTT, GROUND WATER																	X
63-18351	BRUCE SI GROUND WATER															X		
63-18375	KLEIN, M GROUND WATER															X		
63-18731	CHASE II, GROUND WATER																	
63-18735	HARRITT GROUND WATER		X														X	
63-19482	JEFFS, NC GROUND WATER											X						
63-19601	WELLING GROUND WATER										X							
63-19793	KELLAR, GROUND WATER						X											
63-19976	HUTTON, GROUND WATER							X										
63-19977	HUTTON, GROUND WATER							X										
63-20036	BARNING GROUND WATER													X				
63-20113	CHARLTC GROUND WATER					X												
63-20268	MAHLUM GROUND WATER		X															
63-20276	MINER, D GROUND WATER										X							
63-20277	MINER, D GROUND WATER										X							
63-20766	BOYACK, GROUND WATER											X						
63-21719	DOW, DIA GROUND WATER														X			
63-22892	SHIELDS, GROUND WATER				X													
63-22926	BROZ, CH GROUND WATER															X		
63-23010	GREENE, GROUND WATER			X														
63-23067	SIMMERA GROUND WATER															X		
63-24084	HADLEY, GROUND WATER											X						
63-24123	SUTRO CI GROUND WATER				X													
63-30102	WALTM GROUND WATER																	
63-30362	ELLIS, GR GROUND WATER									X								
63-31230	KLEIN, M GROUND WATER															X		
63-31257	BENNION GROUND WATER															X		
63-31440	KLEIN, M GROUND WATER															X		
63-31441	BRUCE SI GROUND WATER		X															
63-31511	M & J EN GROUND WATER													X				
63-31969	STAR SEV GROUND WATER													X				
63-32480	DRAINAG UNNAMED DRAINS												X					
63-32520	FARRIS, E UNNAMED DRAIN												X					
63-33724	NORTHRI GROUND WATER														X			
63-34729	KRAUSE, GROUND WATER														X			
63-5225	CHASE II, GROUND WATER																X	
63-8191	MEDIN, B GROUND WATER															X		
63-8526	KLEIN, M UNNAMED DRAIN															X		
63-9115	BARNETT UNNAMED DRAIN															X		

Same parent right, separate well

Decreased domestic use from same well