

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12007
Exam Date: 8/8/2018

1. Current Owner:
MIERS C JOHNSON III 14500 W LEWIS LN NAMPA ID 83686
2. Accompanied by: Sandi Johnson
Phone No: (208) 989-2925
Address: 14500 W Lewis Ln, Nampa, ID 83686
Relationship to permit Holder: spouse

3. **SOURCE:**
GROUND WATER

Method of Determination: Permit application, ArcMap, aerial imagery, USGS topography, and field examination

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-32330	Groundwater	Irrigation	Decreed
63-34688	Groundwater	Irrigation	Decreed

Comments: See overlap analysis spreadsheet

63-34688, 10 acre parcel, overlaps SE corner of original 140 acre pou but is not part of current property.

63-33625 overlaps NE corner of original 140 acre pou but is not part of current property.

63-31799 overlaps NE corner of original 140 acre pou but is not part of current property.

63-31801 overlaps NE corner of original 140 acre pou but is not part of current property.

63-3597K overlaps NW corner of original 140 acre pou but is not part of current property.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
N/A	N/A	N/A	N/A

Comments: None

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SW¼ NE¼, Sec. 10, Twp 02N, Rge 03W, B.M. CANYON County

GROUND WATER NW¼ SE¼, Sec. 10, Twp 02N, Rge 03W, B.M. CANYON County

Method of Determination: Garmin Handheld GPS point

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	
02N	03W	10			16	4									21	40	19	28	128

Total Acres: 128

Method of Determination: Aerial Imagery, and ArcMap Tools

3.

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

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

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

Y 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
D0067321					
D0068928	GE	150			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
McCrometer						

2. Measurements:

E. FLOW CALCULATIONS

 Additional Computation Sheets Attached

Measured Method:

Closed Conduit Flow Meter Reading:

150 hp vertical turbine pump

McCrometer flow meter reading = 800 gpm or 1.782 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 128 \times 4.5 = 576 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.78 \times 260 \times 1.9835 = 919 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 576 \text{ af}$$

2. Volume Calculations for Other Uses:

The permit was based on 14 head of range cattle. The volume recommended by Administrator's Memorandum #3 is:

$V = 0.4 \text{ AF/yr}$ or $Q = 0.02 \text{ cfs}$ for 11-25 head of range cattle, roughly based on 12 gpd per head.

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted on August 8, 2018 by water resource agents Cody Parker and Allen Bradbury. Sandi Johnson, spouse of permit holder, Miers Johnson, accompanied the agents on the field exam. Current Canyon County tax parcel data confirms Miers C. Johnson III to be the current owners of the property pertinent to the place of use (POU) and

points of diversion (POD). When the application was submitted in 1993 the original application map outlined 221 acres with a request to irrigate 160 acres. Since then the tax parcel and POU have undergone a number of splits including a 27 acre parcel in the SWNE 10 T02N R03W, a 10 acre parcel in SESE 10 T02N R03W, and 56 acres from SENE & NESE 10 T02N R03W. The current proof report shows a POU size of 140 acres. However, by subtracting other parcel ownerships the total is 221 acres minus 92 acres equals a tax parcel size of 128 acres. This agrees with both tax parcel acreage and calculated acreage. Aerial imagery and ArcMap GIS tools were used to measure acreage and determine the POU at 128 acres. As a result, the measured acreage is the limiting factor for my recommendation. No ownership change is required.

The permit describes two points of diversion from groundwater. Well #1 (tag #D0067321) is a 538 foot deep domestic well with a submersible pump that irrigates the lawn around the house and has spigots to provide stockwater. Well #2 (tag #D0068928) is a 559 foot deep irrigation well with a vertical turbine pump which supplies irrigation water to handlines, wheelines, and a 6-tower pivot with end gun. There is a 7.5 hp vertical centrifugal pump next to well #2 that goes to the pivot mainline. Another booster pump located part way up the hill is a 15 hp booster that also goes to the pivot. Well #2 has a McCrometer flow meter which measured 800 gpm (1.78 cfs) during the field exam. This was less than the permitted rate of 2.80 cfs for irrigation. It is not known whether or not the system was operating at maximum capacity during the field exam. No other measurement was taken during the field exam. I am recommending the measured rate of the system of 1.80 cfs for irrigation and 0.02 cfs for stockwater, a total of 1.82 cfs.

Overlap review found POU overlap but no POD overlap (see spreadsheet and description above). There are no surface water deliveries to this area, therefore groundwater is the primary water.

Condition 26A was removed as per licensing standards. Condition 121 was replaced with condition 103 as per department standards. Condition 046 was removed as per licensing standards, since the wells are drilled. Condition 004 is removed since the points of diversion are located on the property. Condition X02 states that stockwater use is for 14 range cattle, during the field visit 25 mixed age beef cattle were counted, this condition dropped at licensing. Condition 01M remains on license from the permit. Condition R65 remains on license from the permit. Condition 930 remains on license since it was conditioned by the permit. The wells were constructed with seals placed to restrict shallow water zones. The well logs are attached to this report.

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>Volume</u>
IRRIGATION	03/01 to 11/15	1.80 CFS	576 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.4 AF

Totals: 1.82 CFS 577 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 Allen Bradbury - Water Resource Agent, Senior

Field Examiner's Name Allen Bradbury Date 10-23-2019

Reviewer Patrick Kelly Date 10-23-2019

Beneficial Use Field Report

System Design



BENEFICIAL USE FIELD REPORT CALCULATIONS

Permit #: 63-12007

Owner: Meir Johnson

Proof Due: 5/1/2013 5/2/2018

Priority Date 4/14/1993

Flow Rate 2.01 to 3.00

Fee Rate 2.82

Exam Fee \$150.00

0.00 to 0.20	\$50.00	2.01 to 3.00	\$150.00
0.21 to 1.00	\$100.00	3.01 to 4.00	\$175.00
1.01 to 2.00	\$125.00	4.01 to 5.00	\$200.00

	cfs	gpm
Application Rate	3.40	1,526.02
Permit Rate	3.40	1,526.02
Proof Report	2.82	1,265.70
Irrig. Only	2.80	1,256.72
Stockwater	0.02	8.98

Acres Submitted:	160.0
Acres Permitted:	140.0
Acres Developed:	128.0

FLOW CALCULATIONS

Meter Type: McCrometer

 Meter Reading 800 gpm
 1.782 cfs
Theoretical Method

$$Q = \frac{(8.8) \times (HP) \times E}{TDH}$$

Est. Pump Set

220 minus 10' =

210

HP =	E =	H =	PSI =	Q =	Q =
150.0	70.0%	380	60	1.78	799.69
				cfs	gpm

$$TDH = [(LIFT) + (PSI \times 2.31)]$$

TDH =	Lift =	PSI =	2.31
518.6	380	60	2.31

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)]

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

Q = rate of flow in cubic feet per second,

Consumptive Use	4.5	Headgate Requirement	4.5	
Season of Use	3/1	11/15	=	260 days
Volume (VIR)	128.0	X	4.5	= 576.0 af
Volume (DR)	1.782	x	260	x 1.9835 = 919.21 af
BU Standard Rate	128.0	X	0.02	= 2.56 cfs
Rate/acre	1.782	/	128.0	= 0.014 cfs/ac

V I.R. = (Acres Irrigated) x (Irrigation Requirement)

V D.R. = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835

V = Smaller of V I.R. and V D.R.

Recommendation Standards for diversion rate (choose most restrictive)

1.78 Measured Value – the value measured in the field

2.56 Beneficial Use (BU) standard = x.x ac * 0.020 cfs/acre

2.82 Fee Rate – the maximum rated paid for on the fee schedule.

3.40 Permit Rate – the rate applied for

Process	Basin Sequence	Draft	Owner	Source	POD/POU	Use	NENE	NWNE	SWNE	SENE	NENW	SWNW	NWSW	SWSW	SESW	NESW	SWSE	NWSE	SWSE	SESE	Total Acres
Water Application	63-34542		JODI OLSON, TERRY MAHONEY	GROUND WATER	POU	IRRIGATION				0.1								0.1			0.2
Water Application	63-34608		JON CARTER, TARA ROSE-CARTER	GROUND WATER	POU	IRRIGATION															0.2
Water Permit	63-12007	N	JOHNSON, MIER; JOHNSON, ELIZABETH J	GROUND WATER	POU	IRRIGATION			10	5								25	40	20	140
Water Permit	63-33586	N	VALENTINE, JIM FAY; VALENTINE, SHERRI	GROUND WATER	POU	IRRIGATION															137
Water Permit	63-33625	N	WDT LAKE VIEW LLC	GROUND WATER	POU	IRRIGATION															137
Water Permit	63-34120	N	DANIELSON, JEFFREY J; JOHNSON, MIER; JOHNSON, ELIZABETH J; LACKEY, DAVE	GROUND WATER	POU	IRRIGATION				19								34.6		3.5	57.5
Water Right	63-11722	N	PERKINS, FRANCES; PERKINS, GALEN E	GROUND WATER	POU	IRRIGATION															9
Water Right	63-11773	N	TRACY, MARK S; TRACY, SUSAN	GROUND WATER	POU	IRRIGATION					27										51
Water Right	63-136	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOARD OF CONTROL; GIVENS, RAYM	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X	37	6	9						91
Water Right	63-137B	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOARD OF CONTROL; GIVENS, RAYM	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-198A	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-198A	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-199B	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-199B	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-200A	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOARD OF CONTROL; GIVENS, RAYM	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-200B	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-200B	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-2106	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-2109	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION															
Water Right	63-233K	N	AMERICAN DITCH CO; BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOARD OF CON	BOISE RIVER	POU	IRRIGATION															
Water Right	63-2388A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION															
Water Right	63-2392B	N	DRAINAGE DISTRICT NO 3; NAMPA & MERIDIAN IRRIGATION DISTRICT; RINGERT, WILLIA	BOISE RIVER	POU	IRRIGATION															
Water Right	63-2392F	N	BOISE PROJECT BOARD OF CONTROL	BOISE RIVER	POU	IRRIGATION															
Water Right	63-251A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-26671	N	BARKER ROSHOLT & SIMPSON LLP; BOISE KUNA IRRIGATION DISTRICT; FREDRICKS, RAND	BOISE RIVER	POU	IRRIGATION															
Water Right	63-2968	N	FARWEST LLC; GRAY, THOMAS P; KING, JAMES B; MC DERMOTT, JAY; MC DERMOTT, J G	GROUND WATER	POU	IRRIGATION															
Water Right	63-30181	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-30181	N	CARLOCK, CARROLL C; DAVIS, THOMAS; NAMPA & MERIDIAN IRRIGATION DISTRICT	BOISE RIVER	POU	IRRIGATION															
Water Right	63-301A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-302A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-31288	N	AGEE, JON M; AGEE, RICHARD E; DANIELSON, JEFFREY J; DANIELSON, KARRIE L; MILLAR, L	GROUND WATER	POU	IRRIGATION															10
Water Right	63-31799	N	CHAN, JASON; CHAN, JESSE; CHAN, VANESSA; ESTATE OF REX S JENSEN; HARRISON, GEO	GROUND WATER	POU	IRRIGATION			0.4	34.6								19		3.5	57.5
Water Right	63-31801	N	CHAN, JASON; CHAN, JESSE; CHAN, VANESSA; ESTATE OF REX S JENSEN; HARRISON, GEO	GROUND WATER	POU	IRRIGATION			0.4	34.6								19		3.5	57.5
Water Right	63-32390	N	MEYERS, KATHI L; MEYERS, ROBERT J; MILLAR, BRYCE; MONTERTH JR, HERBERT R; MON	GROUND WATER	POU	IRRIGATION			16									21	40	19	27
Water Right	63-32695A	N	NAMPA & MERIDIAN IRRIGATION DISTRICT	GROUND WATER	POU	IRRIGATION															123
Water Right	63-32695B	N	NAMPA & MERIDIAN IRRIGATION DISTRICT	GROUND WATER	POU	IRRIGATION															
Water Right	63-33251	N	BOISE PROJECT BOARD OF CONTROL	GROUND WATER	POU	IRRIGATION															
Water Right	63-33253	N	BOISE PROJECT BOARD OF CONTROL	GROUND WATER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-33688	N	GIPSON, ROY N; KLEIN, GEORGE M; PERKINS, GALEN E	GROUND WATER	POU	IRRIGATION	X	X	X		X	X									
Water Right	63-33689	N	GIPSON, ROY N; KLEIN, GEORGE M; PERKINS, GALEN E; WOODBURN, CARL R	GROUND WATER	POU	IRRIGATION	11	3.8													14.8
Water Right	63-33739	N	NAMPA & MERIDIAN IRRIGATION DISTRICT	GROUND WATER	POU	IRRIGATION	27	2.2													29.2
Water Right	63-34120	Y	DANIELSON, JEFFREY J; JOHNSON, MIER; JOHNSON, ELIZABETH J; LACKEY, DAVE	SPRINGS	POU	IRRIGATION															
Water Right	63-34121	N	CARTER, JON; JOHNSON, MIER; JOHNSON, ELIZABETH J; VALENTINE, JIM FAY	GROUND WATER	POU	IRRIGATION															9
Water Right	63-34687	N	ROSE-CARTER, TARA	GROUND WATER	POU	IRRIGATION															7.5
Water Right	63-34688	N	CARTER, JON; CARTER, TARA ROSE	GROUND WATER	POU	IRRIGATION															10
Water Right	63-3597B	N	FARM CREDIT BANK OF SPOKANE; MILLAR, BRYCE; TRACY, MARK S; TRACY, SUSAN	GROUND WATER	POU	IRRIGATION															0.4
Water Right	63-3597C	N	FARM CREDIT BANK OF SPOKANE; MARTINEZ, JORGE A; MEYERS, KATHI L; MEYERS, ROBE	GROUND WATER	POU	IRRIGATION			20	7											10
Water Right	63-3597N	N	MILLAR, BRYCE; VALENTINE, JIM FAY; VALENTINE, SHERRI; WELLS FARGO	GROUND WATER	POU	IRRIGATION															10
Water Right	63-372	N	BARKER ROSHOLT & SIMPSON LLP; BOISE KUNA IRRIGATION DISTRICT; FREDRICKS, RAND	BOISE RIVER	POU	IRRIGATION	X														
Water Right	63-373A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X		X	X									

Partially overlapping water right
 separate parcel inside POU
 split from original POU
 same QQ but not in POU

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D0067321

Drilling Permit No. 966775-872834

Water right or injection well #

2. OWNER:

Name Mier Johnson

Address 14500 W. Lewis Ln.

City Nampa State Idaho Zip 83686

3. WELL LOCATION:

Twp. 2 North ☒ or South ☐ Rge. 3 East ☐ or West ☒

Sec. 10 1/4 NW 1/4 SE 1/4

Gov't Lot County Canyon

Lat. 43 31.401'N (Deg. and Decimal minutes)

Long. 116 40.903'W (Deg. and Decimal minutes)

Address of Well Site Same

City Nampa

Lot. Blk. Sub. Name

4. USE:

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

5. TYPE OF WORK:

☐ New well ☒ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
3/8" Bentonite	0	220	5850 lbs.	12" Overbore
3/8" Bentonite	381	391	500 lbs.	12" Overbore

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
8"	1.5	476	.250	Steel	☒	☐	☒
6"	473	495	.250	Steel	☐	☒	☒
5"	515	517	.258	Steel	☐	☒	☒
5"	537	538	.258	Steel	☐	☒	☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 476'

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method

Manufactured screen ☒ Y ☐ N Type Johnson

Method of installation Washdown

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
595	515	.012	20'	5"	Stainless	304
517	537	.012	20'	5"	Stainless	304

Length of Headpipe 22' Length of Tailpipe 1'

Packer ☒ Y ☐ N Type 6"x8" K-Packer

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
N/A				

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG)

Describe control device

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) Static water level (ft) 370'

Water temp. (°F) Bottom hole temp. (°F)

Describe access port

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
410'	140 GPM	1 HR.
430'	100 GPM	3 HRS.

Test method:

Pump	Bailer	Air	Flowing artesian
☒	☐	☐	☐
☐	☐	☐	☐

Water quality test or comments:

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
12"	0	1	Top Soil		X
	1	24	Gravel		X
	24	140	Sandy Brown Clay		X
	140	220	Brown Clay w/ Sand Streaks		X
8"	220	280	Brown Clay w/ Sand Streaks		X
	280	288	Sand		X
	288	355	Brown Clay		X
	355	362	Sandy Brown Clay		X
	362	375	Brown Clay		X
	375	381	Blue Clay		X
12"	381	391	Blue Clay		X
8"	391	400	Blue Clay		X
	400	435	Blue Shale w/ Sand	X	
	435	448	Blue Shale w/ Brown Clay		X
	448	480	Blue Clay w/ Sand	X	
	480	530	Blue Sand w/ Clay Streaks	X	
	530	532	Blue Clay		X
	532	538	Blue Sand w/ Clay	X	

RECEIVED

AUG 21 2014

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 538'

Date Started: Jul 28, 2014

Date Completed: Aug 7, 2014

14. DRILLER'S CERTIFICATION:

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

Company Name Dennis Phipps Well Drilling In Co. No. 332

*Principal Driller Date Aug 8, 2014

*Driller Date

*Operator II Date Aug 8, 2014

Operator I Date Aug 8, 2014

* Signature of Principal Driller and rig operator are required.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0068928

Drilling Permit No 968568-874625

Water right or injection well # 63-12007

2. OWNER: Miers C. Johnson

Name

Address 14500 W. Lewis Ln

City Nampa State ID Zip 83686

3. WELL LOCATION:

Twp. 02 North ☒ or South ☐ Rge 03 East ☐ or West ☒

Sec. 10 1/4 SW 1/4 NE 1/4

Gov't Lot County Canyon

Lat. 43 31.554 (Deg and Decimal minutes)

Long -116 40.800 (Deg and Decimal minutes)

Address of Well Site 1450 W. Lewis Ln

City Nampa

(Circle at least name of road + distance to road or landmark)

Lot Blk Sub. Name

4. USE:

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

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:

☐ Air Rotary ☐ Mud Rotary ☐ Cable ☒ Other Reverse Rotary

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Cement grout	0	278	621 ft ³	Tremie pipe/pumped

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
16	+2	316	.375	Steel	☒	☐	☐	☒
16	326	334	.375	Steel	☒	☐	☐	☒
16	344	366	.375	Steel	☒	☐	☐	☒
16	386	426	.375	Steel	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N MethodManufactured screen ☒ Y ☐ N Type Wire wrap

Method of installation Lower in

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
316	326	.030		16	Stainless	
334	344	.030		16	Stainless	
366	386	.030		16	Stainless	

Length of Headpipe Length of Tailpipe

Packer ☐ Y ☒ N Type

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
#10-20 Sand	278	580	26,000	Dry pour

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG)

Describe control device

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 201 Static water level (ft) 201

Water temp (°F) 68 Bottom hole temp. (°F) 74.8

Describe access port 2" pipe on side

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
93'	1500	480

Test method:

Pump	Boiler	Air	Flowing Artesian
☒	☐	☐	☐

Water quality test or comments:

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
24	0	4	Top soil		X
24	4	12	Caliche		X
24	12	31	Fine-medium brown sand		X
24	31	76	Brown clay		X
24	76	99	Fine brown sand		X
24	99	156	Brown clay w/ brown sand streaks		X
24	156	170	Fine-medium brown sand		X
24	170	220	Brown clay w/ brown sand streaks	X	X
24	220	236	Fine-coarse brown sand	X	
24	236	238	Brown clay		X
24	238	256	Fine-medium brown sand	X	
24	256	268	Brown clay		X
24	268	295	Fine-med brown sand w/clay streaks	X	X
24	295	299	Brown clay		X
24	299	312	Blue clay		X
24	312	314	Brown clay		X
24	314	328	Fine-coarse brown sand	X	
24	328	334	Brown clay		X
24	334	336	Brown sandstone		X
24	336	346	Fine-medium brown sand	X	
24	346	366	Brown, blue clay		X
24	366	384	Fine-medium blue sand	X	
24	384	387	Blue clay		X
24	387	390	Fine-medium blue sand	X	
24	390	427	Blue clay		X
24	427	429	Brown clay		X
24	429	455	Fine-coarse blue sand	X	
24	455	469	Blue clay		X
24	469	471	Brown clay		X
24	471	473	Fine-medium blue sand	X	
24	473	475	Brown clay		X
24	475	506	Fine-coarse blue sand	X	

Completed Depth (Measurable) 559'

Date Started Feb 27, 2015

Date Completed Apr 25, 2015

14. DRILLER'S CERTIFICATION:

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

Company Name Riverside Inc

Co No 333

Principal Driller

Date 5/19/15

Driller

Date 5-23-15

Operator II

Date 5-23-15

Operator I

Date

* Signature of Principal Driller and rig operator are required

*PER CODY DAUGHERTY VIA PHONE CALL
10:34 AM 5/5/2015



Figure 1. Well #1, tag #D0067321 for Water Right 63-12007.



Figure 2. Well #1 near house.



Figure 3. Lawn irrigation from well #1.



Figure 4. Pump label from well #2 showing a 150 hp pump.



Figure 5.
McCrometer flow
meter reading 800
gpm (1.78 cfs)
during pivot and
wheeline operation
from well #2.



Figure 6. Well #2
with 150 hp
vertical turbine
pump and
centrifugal booster
pumps feeding
two mainlines.



Figure 7. 15 hp booster pump to pivot located part way uphill.



Figure 8. Valve leading to handlines irrigating pivot corner.



Figure 9.
Handlines and 6
tower pivot
irrigating alfalfa in
northwest quarter
of property.



Figure 10.
Wheel lines
irrigating long
field in southwest
quarter of property
along driveway.



Figure 11. Photo of valve and pipeline in the long narrow pasture west of driveway. Irrigation infrastructure is in place however the pasture sparsely irrigated.



Figure 12. Stockwater development.