

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33796
Exam Date: 08/08/2018

1. Current Owner:
JERRY SUMMERALL JR 6421 MC DERMOTT RD KUNA ID 83634
2. Accompanied by: Jerry Summerall Jr.
Phone No: 208-487-2133
Address: 6421 McDermott RD
Relationship to permit Holder: Same

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
Boise-Kuna Irrigation District	Boise River	Irrigation	Decree

Comments: Overlap of surface water from irrigation companies. Overlap of water right 63-11682 only shares same quarter-quarter but is on different parcels.

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 SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
GROUND WATER NE¼ SE¼, Sec. 32, Twp 02N, Rge 01W, 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	01W	32													36.0	40.0	2.4	2.2	80.6

Total Acres: 80.6

Method of Determination: Aerial Imagery, and ArcMap Tools

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 Y 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
D0066224		40			8" steel discharge pipe

D. FLOW MEASUREMENTS

1.

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

2. Measurements: Observed installed McCrometer flow meter to collect a flow measurement during the field exam.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

Closed Conduit Flow Meter Reading:

Open discharge from well into gated pipe and concrete ditch.

McCrometer flow meter reading = 450 gpm or 1.003 cfs

Theoretical calculation:

Open discharge from well into gated pipe and concrete ditch with 40 hp pump set at 220 feet.

$(8.8) \times (40 \text{ hp}) \times 0.70 / 220 = 1.12 \text{ cfs}$ or 502.7 gpm

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 80.6 \times 4.5 = 362.7 \text{ af}$

$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.6 \times 260 \times 1.9835 = 825.14$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 362.7 \text{ af}$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted on August 8, 2018 by water resource agents Cody Parker and Allen Bradbury. Permit holder and property owner, Jerry Summerall, accompanied the agents on the field exam. Current Canyon County tax parcel data confirms Jerry and Toni Summerall to be the current owners of the property pertinent to the place of use (POU) and point of diversion (POD). No ownership change is required.

Groundwater is pumped from a well drilled in 2014. The well drillers report, well tag # D0066224, describes a 265 foot deep well. At the time of the exam, a 40 hp motor and submersible pump were providing water by open discharge to a gated pipe and concrete ditch and siphon tube flood irrigation system. Mr. Summerall said the pump was set at 220 feet. A McCrometer flow meter attached to the system recorded a flow of 450 gpm or 1.003 cfs. This is less than the permitted rate of 1.6 cfs. No other measurement was taken. I am recommending the measured rate of the system of 1.0 cfs for irrigation.

Overlap review found POU overlap but no POD overlap. Surface water is provided by an irrigation company for this supplemental groundwater right. Water right 63-11682 shares a quarter-quarter but is for a different parcel. Aerial imagery and ArcMap GIS tools were used to clip out the unirrigated areas occupied by house, out buildings and farm yard foot prints. This reduced the permitted POU from 84 acres to 80.6 acres. As a result, the measured acreage is the limiting factor for my recommendation.

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 well is drilled. Condition 01M remain on license from the permit. Supplemental condition WB7 remains on the license. Conditions 065, and 104 were replaced with 943 as per department standards. Condition R65 was replaced with R61 as per department standards for supplemental rights.

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	1.00 CFS	363 AF

Totals: 1.00 CFS 363 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 9/18/2019

Reviewer Toni Summerall Date 9-13-2019

Right No. 63-33796

Beneficial Use Field Report

WRA Allen Bradbury

System Diagram



Legend

- Updated POU
- Concrete_Ditch
- Gated_Pipe



0 0.03 0.06 0.12 Miles

Pumping Capacity

40 HP pump set @ 220 ft through 8-inch steel pipe to
PVC gated pipe with open discharge

Pump Equation: $(8.8) \times (40) \times (0.7) / (220 + (2.31 \times 0))$
 $Q = 1.12 \text{ cfs or } 502.7 \text{ gpm.}$

BU Standard $(0.02 \text{ cfs/acre} \times 80 \text{ acres}) = 1.6 \text{ cfs}$



Figure 1. Well tag #D0066224 for Water Right 63-33796.



Figure 2. Well

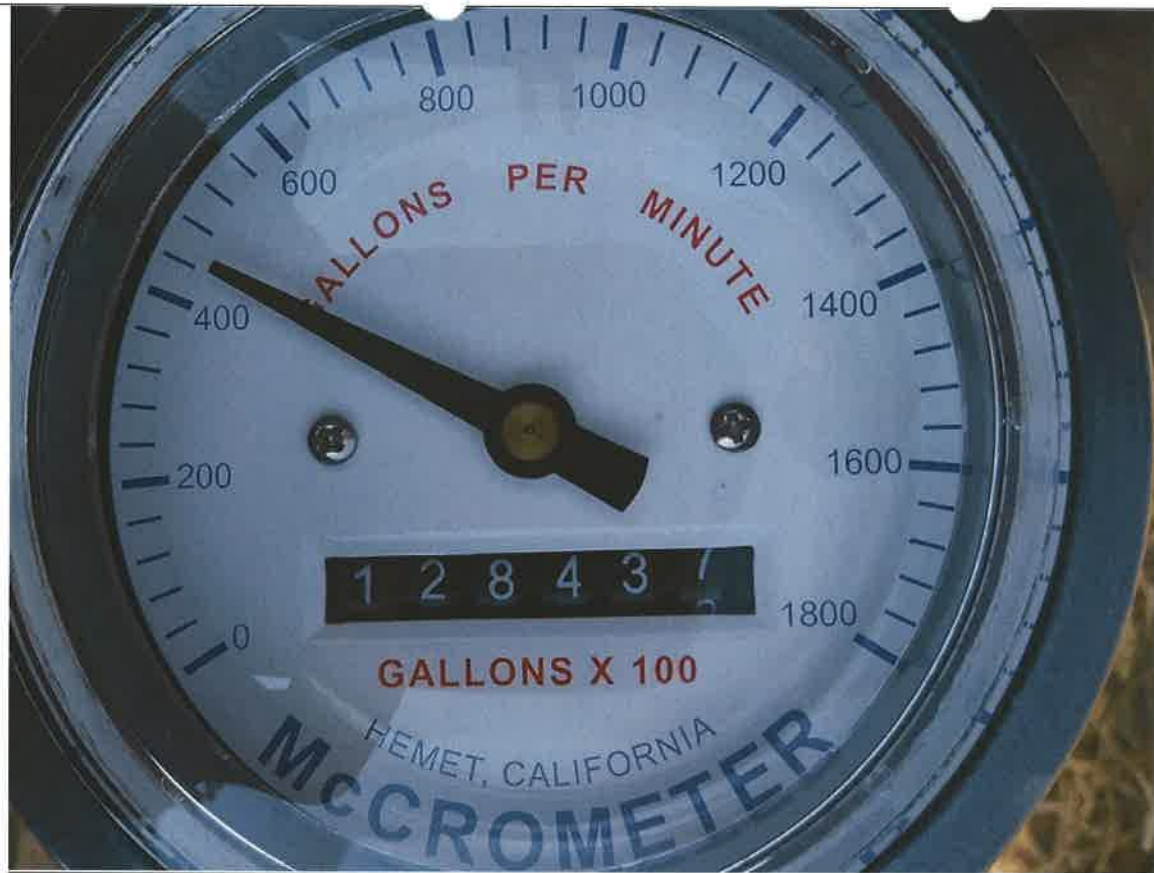


Figure 3. The McCrometer flow meter read 450 gpm when system running.



Figure 4. Gated pipe.

63-33796 Overlap Analysis

02N01W32

Process	Basin Sequence	Draft	Owner	Source	POD	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SESW	NESW	NWSW	SWSW	SESW	NESW	NWSE	SWSE	SESE	Total Acres	
Water Right	63-33796	Y	SUMMERALL JR, JERRY	GROUND WATER	POU	IRRIGATION														36	40	2.4	2.2	80.6
Water Right	63-11682	N	LOWE, DERALD W	GROUND WATER	POU	IRRIGATION									2	21	36	24			15	4	102	
Water Right	63-136	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOA	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-137B	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOA	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-200A	N	BARKER ROSHOLT & SIMPSON LLP; BOISE PROJECT BOA	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-2106	N	UNITED STATES OF AMERICA ACTING THROUGH FIVEMILE CREEK	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-233K	N	AMERICAN DITCH CO; BARKER ROSHOLT & SIMPSON LLP	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-2388A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-2392F	N	BOISE PROJECT BOARD OF CONTROL	WASTE WATER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-251A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-26671	N	BARKER ROSHOLT & SIMPSON LLP; BOISE KUNA IRRIGA	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-301A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	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	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-33251	N	BOISE PROJECT BOARD OF CONTROL	INDIAN CREEK	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-33253	N	BOISE PROJECT BOARD OF CONTROL	TENMILE CREEK	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-372	N	BARKER ROSHOLT & SIMPSON LLP; BOISE KUNA IRRIGA	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-373A	N	UNITED STATES OF AMERICA ACTING THROUGH	BOISE RIVER	POU	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Water Right	63-8793	N	COLE INC; SUMMERALL FARMS INC	GROUND WATER	POU	IRRIGATION	38	36	37	34	36	36	35	37	37	37	37	37	37	37	37	37	289	
Water Right	63-8904	N	COLE INC; SUMMERALL FARMS INC	GROUND WATER	POU	IRRIGATION	38	36	37	34	36	36	35	37	37	37	37	37	37	37	37	37	289	

Overlap in same quarter-quarter but different ownership parcels

X Surface water through irrigation company

8/8/2018

E. NARRATIVE/REMARKS/COMMENTS

DO066234 Tag #1
Waypoint # 318 N 43° 27' 46.5" W 116° 28' 25.5"
McChrometer Flowmeter
10" casing → 8" steel to PUG gated p.p.
500 ~~440~~ gpm
40 Hp
220' pump set

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☐ Yes ☐ No If no, what must be done to meet the permit requirements?

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATION

Permit No. _____

1. Owner Terry Sammerell Jr. Phone No. _____

Current address _____

2. Examiner's name Cody Parker EXAM DATE 8/8/20183. Accompanied by Allen Bradbury Email _____

Address _____

Relationship to permit holder _____ Phone No. _____

4. Source groundwater tributary to _____**B. OVERLAP REVIEW**

1. Other water rights with the same place of use _____

2. Other water rights with the same source and point of diversion _____

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks

2. Place(s) of Use: Method of determination _____

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.

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

*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

2. Measurements: _____

F. FLOW CALCULATIONS☐ Additional computation sheets attached

Measured Method:

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____ $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____ $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

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		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Totals:			_____	_____

2. Recommended Amendments

☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☐ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

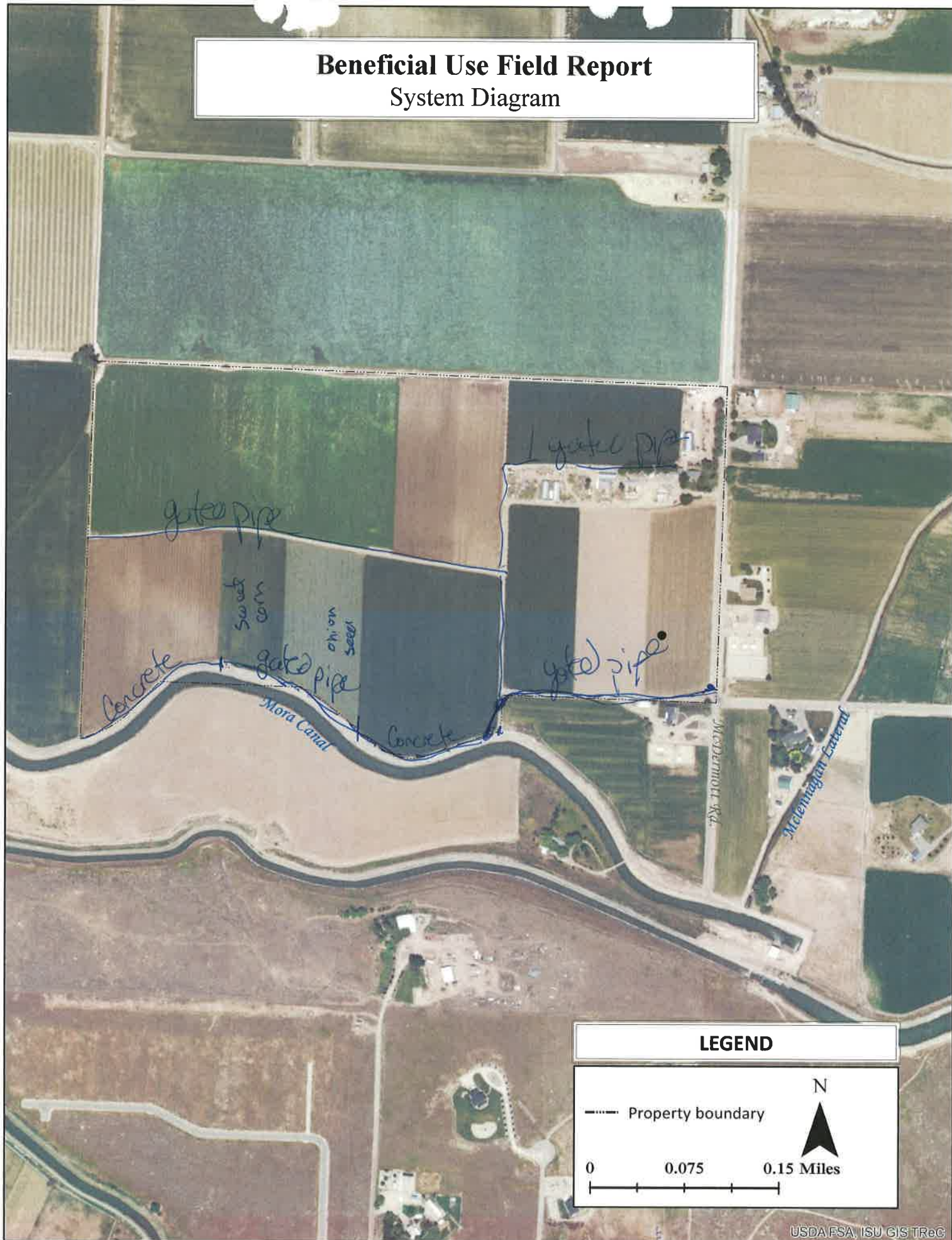
Field Examiner's Signature _____ Date _____

SEAL

Reviewer _____ Date _____

Beneficial Use Field Report

System Diagram



LEGEND

----- Property boundary

0 0.075 0.15 Miles

N

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0066224

Drilling Permit No 965199-871258
Water right or injection well # 63-33796

2. OWNER

Name Summerall, Jerry
Address 6421 McDermott Rd.
City Kuna State ID Zip 83634

3. WELL LOCATION:

Twp 2 North ☒ or South ☐ Rge. 1 East ☐ or West ☒
Sec 32 1/4 NE 1/4 SE 1/4
10 acres 40 acres 160 acres

Gov't Lot _____ County Canyon
Lat 43 ° 27.731 (Deg and Decimal minutes)
Long 116 ° 28.451 (Deg and Decimal minutes)
Address of Well Site NW Corner of McDermott /Green Lane

City Kuna
Lot _____ Blk. _____ Sub Name _____

4. USE:

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

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

☒ 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 ft³)	Placement method/procedure
Heat Cement	10	63	250 gal	Poured into trionie
chips	0	10	750lbs	Poured

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
8"	+2	244	250	Steel	☒	☐	☐	☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 244'

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☐ N Method _____
Manufactured screen ☒ Y ☐ N Type Johnson
Method of installation Washed In

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
245'	265'	.50		6"	Stainless	.304

Length of Headpipe 20' Length of Tailpipe 0

Packer ☒ Y ☐ N Type Figure K 8"X6"

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method
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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) 120' Static water level (ft) 120'
Water temp. (°F) 59 Bottom hole temp. (°F) 59
Describe access port Welded Plate

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
220	350	120

Test method:

Pump ☐ Bailor ☐ Air ☒ Flowing artesian ☐

Water Quality test or comments: Good/No odor

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
15"	0	3	Top Soil	X
15"	3	6	Hard Pan	X
15"	6	11	Clay	X
12"	11	60	Lava Rock	X
12"	60	70	Broken Lava	X
12"	70	114	Lava Rock	X
12"	114	119	Cinders /Red	X
8"	119	150	Gravel	X
8"	150	195	Sand	X
8"	195	213	Brown Clay	X
8"	213	223	Sand/ 200 GPM	X
8"	223	235	Brown Clay	X
8"	235	238	Sand /300 GPM	X
8"	238	245	Brown Clay	X
8"	245	265	Sand / 350 GPM	X
8"	265		Clay	X

RECEIVED

MAY 01 2014

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable) 265'

Date Started 3/4/2014 Completed 4/2/2014

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 Can-Ada Well Drilling and Pump Co No. 304

*Principal Driller Earl Skinner Date 4/29/2014

*Driller _____ Date _____

*Operator II Brad Skinner Date 4/29/2014

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

State of Idaho
Department of Water Resources

Attachment to Permit to Appropriate Water

63-33796

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



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

0 0.075 0.15 0.3 Miles

