

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
APR 19 2016
DEPT OF WATER RESOURCES

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 INFORMATIONPermit No. 63-122111. Owner Lavar ThorntonPhone No. 208-922-5779Current address 2800 Forrey Rd, Kuna ID 836342. Examiner's name Scott N. KingEXAM DATE April 6, 20163. Accompanied by Lavar Thornton

Email _____

Address _____

Relationship to permit holder same

Phone No. _____

4. Source Ground Water

tributary to _____

B. OVERLAP REVIEW1. Other water rights with the same place of use Boise-Kuna Irrigation District water2. Other water rights with the same source and point of diversion None**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
			SE	SE	19	2N	1E	Ada	Field Exam, 2015 Aerial Photo, GPS
									N 43 29' 18.49", W 116 22' 43.95"

2. Place(s) of Use:

Method of determination Field Exam, 2015 Aerial Photo

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
2N	1E	19												34			32	18	84

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
D0067225	US Motors	30	H027612744	unknown	6" discharge head

*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
Portable Flowmeter	Ultrasonic	GE	PT878	7140	various	3/28/2016

2. Measurements: _____

Examiner measured 1.41 cfs.

E. NARRATIVE/REMARKS/COMMENTS

Well with pump provides ground water to supplement surface water provided by Boise-Kuna Irrigation District. Water is delivered via series of concrete and dirt ditches, pipes, a siphon and a flume.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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?

[illegible]

F. FLOW CALCULATIONS☒ Additional computation sheets attached

Measured Method:

Discharge was measured at 1.41 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 84 \times 4.5 = 378 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.41 \times 260 \times 1.9835 = 727 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 378 \text{ afa}$$

2. Volume Calculations for Other Uses:

None

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	3/1	11/15	1.41 cfs	378 afa
Totals:			1.41 cfs	378 afa

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

Scott N. King

Date

Reviewer

Date



ATTACHMENT A

PERMIT RECORD AND PROOF OF BENEFICIAL USE

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-12211

Priority: May 11, 1995

Maximum Diversion Rate: 1.80 CFS

This is to certify, that **LAVAR THORNTON**
2800 S TEN MILE RD
KUNA ID 83634

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
IRRIGATION	03/01 to 11/15	1.80 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SE1/4SE1/4 Sec. 19, Twp 02N, Rge 01E, B.M., ADA County

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	
02N	01E	19																	

36.0 36.0 18.0 90.0

Total Acres: 90

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **November 01, 2013**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
5. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.
6. The right holder shall make full beneficial use of all surface water rights available to the right holder for irrigation of the lands authorized to be irrigated under this right. The right holder shall limit the diversion of ground water under this right to those times when the surface water supply is not available or the surface water supply is not reasonably sufficient to irrigate the place of use authorized under this right.

State of Idaho
Department of Water Resources
Permit to Appropriate Water
NO. 63-12211

7. This right does not grant any right-of-way or easement across the land of another.
8. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor exceed a combined annual maximum diversion volume of 405 af at the field headgate for the lands above.
9. This right when combined with all other rights shall provide no more than 4.5 afa per acre at the field headgate for irrigation of the lands above.
10. The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 27th day of October, 2008.



JOHN WESTRA, Western Regional Manager

COPY

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY

Amt. of Fee \$: _____
Receipt No. _____
Receipt By: _____
Date Received: _____

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been **completed** and that water has been applied to beneficial use to the extent described below. **This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner.** Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an *Assignment of Permit* form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

1. Permit No.: 63-12211 Telephone No.: 208-922-5779

2. Name of Permit Holder(s): Lavar Thornton

3. Mailing Address: 2800 Forrey Rd City: Kuna

State: ID Zip: 83634 Email: _____

4. Source of Water: Ground Water If **GROUND WATER** (well), Date Drilled: mo. Dec / yr. 2014

Well Driller: Johnston Drilling No. 92 Drilling Permit Number: 966259-872318

5. Extent of use(s) completed (as authorized by the water right permit):

Domestic (No. of households): _____ Stockwater (No. and type of stock): _____

Irrigation (No. of acres): 90 Other: _____

6. Total rate of diversion or storage volume for which proof is submitted: 1.8 cfs OR _____ acre-feet.

7. Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: **Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.**

Measuring Device: Is a measuring device required?

Yes ☐ No ☒
If yes, has the measuring device been installed? Yes ☐ No ☐

Lockable Controlling Device: Is a lockable device required to control the diversion?

If yes, has the lockable device been installed?

Yes ☐ No ☒
Yes ☐ No ☐

Other Conditions of Permit: Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information.

Completed? Yes ☐ No ☒

8. Fee Enclosed: \$ n/a See fee schedule on back of the instructions for filing proof of beneficial use. Proofs filed without an appropriate fee, will be considered incomplete.

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: _____ Telephone Number: _____

Mailing Address: _____ City: _____

State: _____ Zip: _____ Email: _____

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder: Lavar Thornton
(Include your title, if on behalf of company or organization)

Date: 4/9/16

Mail to: Idaho Department of Water Resources, PO Box 83720, Boise, ID 83720-0098

ATTACHMENT B
WELL DRILLERS REPORT

3

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0067225

Drilling Permit No. 966259-872318

Water right or injection well # 63-12211

2. OWNER: Lavar Thornton

Name Lavar Thornton

Address 2800 Farrey Rd.

City Kuna State 10 Zip 83634

3. WELL LOCATION:

Twp. 2 North ☒ or South ☐ Rge. 1 East ☒ or West ☐

Sec. 19 1/4 SE 1/4 SE 1/4

Gov't Lot _____ County Ada

Lat. 43 ° 29-308 (Deg and Decimal minutes)

Long. 116 ° 22-728 (Deg and Decimal minutes)

Address of Well Site Kuna Rd. 1/4 mi. west of Locust Grove

City Kuna

(Give 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 _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
benzoinite	0	58	4900 #s	overlure dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
12	12	279	14	steel	☒	☐	☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 279'

9. PERFORATIONS/SCREENS:

Perforations ☒ Y ☐ N Method machine cut

Manufactured screen ☐ Y ☒ N Type _____

Method of installation drill

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
174	274	009x4	6400	12	steel	1/4"

Length of Headpipe 174 Length of Tailpipe 5'

Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

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

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) 47 ^{primal static} Static water level (ft) 109

Water temp. (°F) 58 Bottom hole temp. (°F) 58

Describe access port 1 1/2 pipe welded into casing

Well test: _____ Test method: _____

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
1	50	10	☐	☒	☐	☐

Water quality test or comments: good

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
20	0	6	TORSOIL		
	6	21	gravel cemented		
	21	29	basalt broken		
	29	40	basalt solid		
20	40	52	basalt broken brown		
16	52	57	basalt black		
	57	67	basalt black hard		
	67	75	basalt red		
	75	82	basalt black		
	82	84	clinders black		
	84	98	basalt black		
	98	99	clinders black		
	99	155	basalt black		
	155	160	clinders - clay black		
16	160	171	clay - ash tan		
12	171	198	gravel yellow		
	198	202	sand - coarse spill gravel		
	202	212	gravel cemented		
	212	220	gravel very coarse sand		
	220	230	sand coarse		
	230	242	sand #020		
	242	250	sand #050		
	250	252	pea gravel		
	252	263	sand same gravel		
	263	275	sand #030		
12	275	279	clay brown		

Cement placed in bottom
RECEIVED

DEC 17 2014

Completed Depth (Measurable) 279 ^{ATE} WATER RESOURCES

WESTERN REGION

Date Started Aug 7 2014 Date Completed Dec. 9 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 Johnson Drilling Co No. 92

*Principal Driller Samuel Johnson Date Dec 13 2014

*Driller _____ Date _____

*Operator II Samuel Johnson Date Dec 13 2014

Operator I _____ Date _____

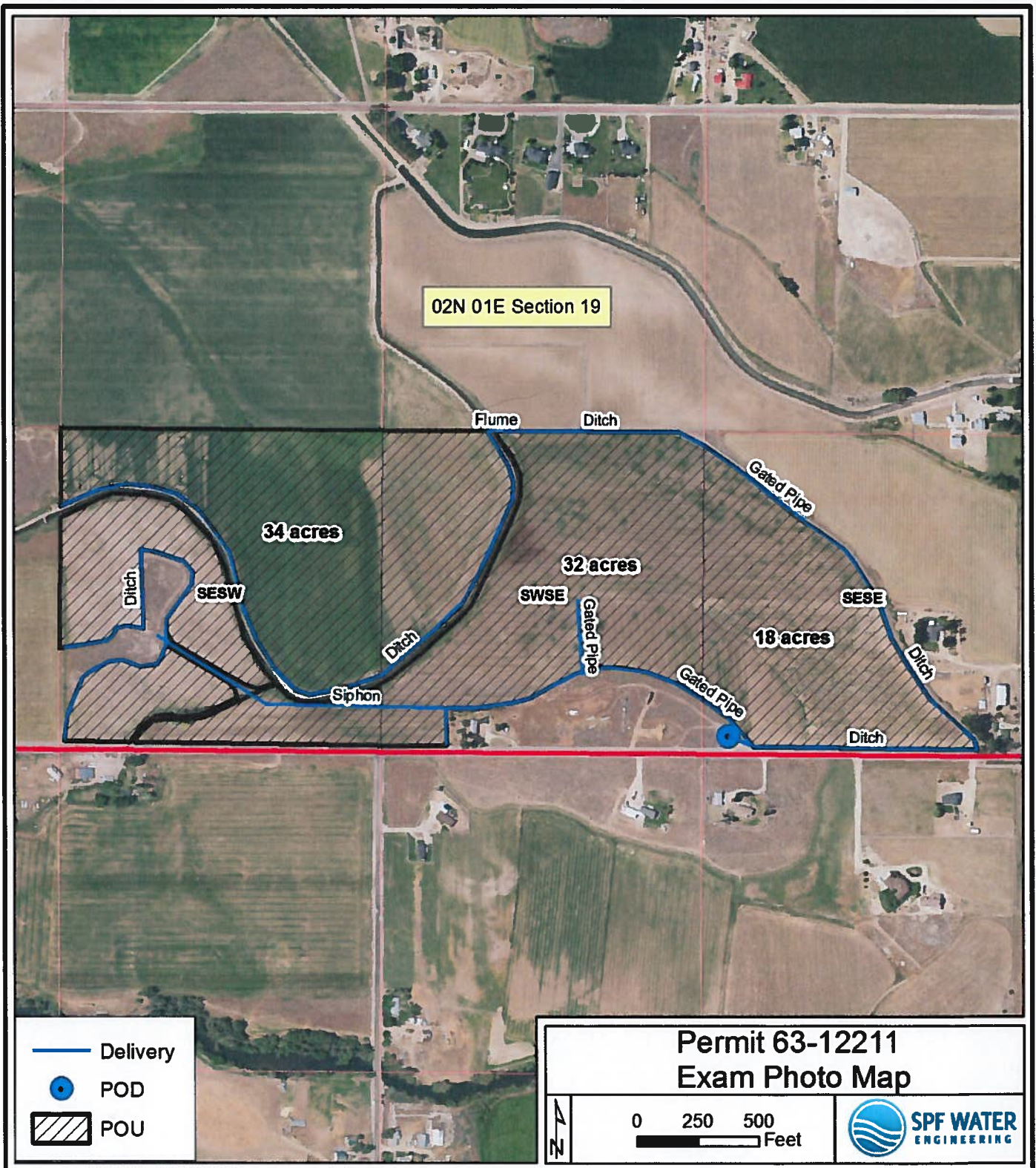
* Signature of Principal Driller and rig operator are required

RECEIVED

DEC 23 2014

WATER RESOURCES

ATTACHMENT C
2015 AERIAL PHOTO AND TOPO MAP



02N 01E Section 19

34 acres

32 acres

18 acres

SESW

SWSE

SESE

Ditch

Flume

Ditch

Gated Pipe

Siphon

Gated Pipe

Gated Pipe

Ditch

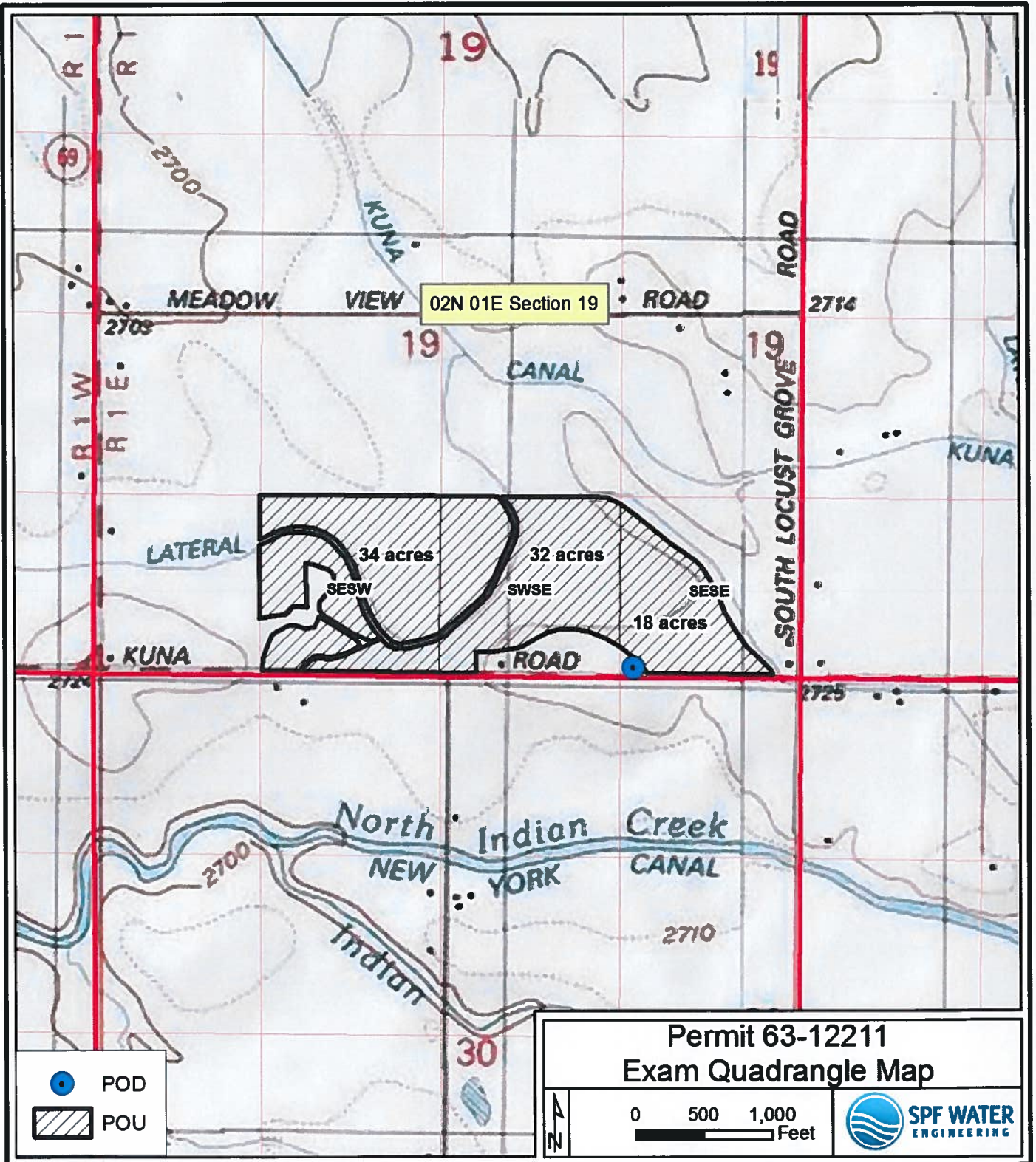
Ditch

- Delivery
- POD
- ▨ POU

Permit 63-12211
Exam Photo Map

0 250 500
Feet





ATTACHMENT D

PHOTOS



Figure 1: Well is equipped with 30-hp motor and vertical-turbine pump.



Figure 2: Discharge rate measured with Panametrics meter on



Figure 3: Flow enters CMP standpipe where it is directed to a gated pipeline (NW) or ditch (E).

ATTACHMENT E
FLOW MEASUREMENT

Permit: 63-12211
 Owner: Lavar Thornton
 Site Name: Irrigation Well
 POD Location: 02N 01E 19 SESE
 Tag No: D0067225
 Meter: GE TransPort PT878
 Type: Portable Ultrasonic Time Flight Liquid Flow Meter
 Serial Number: 7140
 Calibration Date: March 28, 2016
 Operator: Scott King

Date/Time	Volume (gal/m)	(+)Total (gal)	(-)Total (gal)	Error #
4/6/2016 11:19:08	630	8106	0	0
4/6/2016 11:20:09	637	8759	0	0
4/6/2016 11:21:08	627	9367	0	0
4/6/2016 11:22:08	620	9980	0	0
4/6/2016 11:23:08	651	10639	0	0
4/6/2016 11:24:08	652	11261	0	0
4/6/2016 11:25:08	642	11915	0	0
4/6/2016 11:26:08	649	12530	0	0
4/6/2016 11:27:08	636	13184	0	0
4/6/2016 11:28:08	647	13802	0	0
4/6/2016 11:29:08	643	14451	0	0

Time	10 minutes
Volume	6345 gallons
Rate	635 gpm
Rate	1.41 cfs