

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-8355
Exam Date: 04/03/2015

1. Current Owner:

J R SIMPLOT SELF DECLARATION REVOCABLE TRUST
1099 W FRONT ST
PO BOX 27
BOISE ID 83707-0027

2. Accompanied by: Consulted with permit developer Gerald Tews and Simplot employee Clair Kempton
Phone No:
Address:
Relationship to permit Holder:

3. SOURCE:

GROUND WATER

Method of Determination: Located well during field exam and confirmed location by ArcMap aerial imagery.

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
47-31A	Cedar Creek	Stockwater	Decree

Comments: 47-31A overlaps the POU of this permit in one QQ near Cedar Creek.

2. Other water rights with the same point-of-diversion: None

Water Right No.	Source	Purpose of Use	Basis

Comments: POD is used solely to supply water for this permit.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SW¼SW¼, Sec. 23, Twp 14S, Rge 13E, B.M. TWIN FALLS County

Method of Determination: Site visit and ArcMap aerial imagery.

PLACE OF USE: STOCKWATER

[illegible]

14S	14E	17							X									
14S	14E	20															X	
14S	14E	30							X									
									L7									
14S	14E	31						X										
								L1										
15S	14E	6						X										
								L5										

Method of Determination: Site visit, ArcMap aerial imagery and interview with Gerald Tews, permit developer.

3.

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

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

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

X 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
		5			

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No measurement made per Beneficial Use Examination rules as permitted flow rate is below 0.25 cfs. Theoretical flow rate calculation yielded a rate of 0.25 cfs, which is sufficient to supply the permitted rate of 0.20 cfs. See attached sheet.

E. FLOW CALCULATIONS

Measured Method: NA

x Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: NA

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses: Application sought stockwater for 700 head of range cattle, so that figure will be used to calculate volume. 700 head x 12 gallons/day/head = 8400 gpd x 365 days/year = 3066000 gallons/325850 gallons/AF = **9.4 AF**

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 47-8355 was conducted on February 5, 2015 and on April 3, 2015. This permit originally had domestic and stockwater uses, but the field exam revealed no water lines in or near the house, and an interview with the permit applicant, Gerald Tews, revealed that no water had been used in the house, so the domestic portion of the permit will be dropped. Additionally, Mr. Tews indicated that less troughs were developed in this system than had been applied for in the original application. Mr. Tews was if our office on other business during that time period, and he confirmed the trough locations for me. I also emailed a map of the locations to Clair Kempton, who is a Simplot employee on the ranch, and he said that he believed I had located the troughs correctly.

Because some of the troughs were found to be in locations that differed from the permitted locations, an Amendment of Permit will be sent to the permit holders.

The water for this permit is pumped from a ground water well located near the headwaters of Cedar Creek Reservoir, just off the Three Creek/Jarbridge Road which leads from Rogerson to Jarbridge. From the horsepower of the pump listed on the application, the static water level from the well log, with an assumption of a pressure of 50 psi, a flow rate of 0.25 cfs was calculated, which is more than sufficient to supply the permitted rate of the stockwater segment of the permit. No direct measurement was made per Beneficial Use Exam Rules. From scraps observed around the trough locations, it appears that the water was transported via 2" HDPE pipe. Six of the nine POU locations had storage tanks, in addition to the troughs and ponds, and the tanks appeared to be approximately 10,000 gallons in size. One location, #4 on the system map, had only a faucet, but since it was a holding corral, would have likely had at least one trough in the past to water cattle being held there. Location #5 was the site of a trough in the past according to Mr. Tews, though no trough was present at the time of the exam. Most of the troughs in the system were visited during the exam, and the volumes of the troughs varied from 583 gallons to over 8000 gallons. All appeared to have float valves to regulate the water level in the troughs. Two POU locations had small ponds that appeared to be supplied by this permit, along with troughs at those locations.

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>
STOCKWATER	1/01 to 12/31	0.16 CFS	9.4 AF

Totals: 0.16 CFS 9.4 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

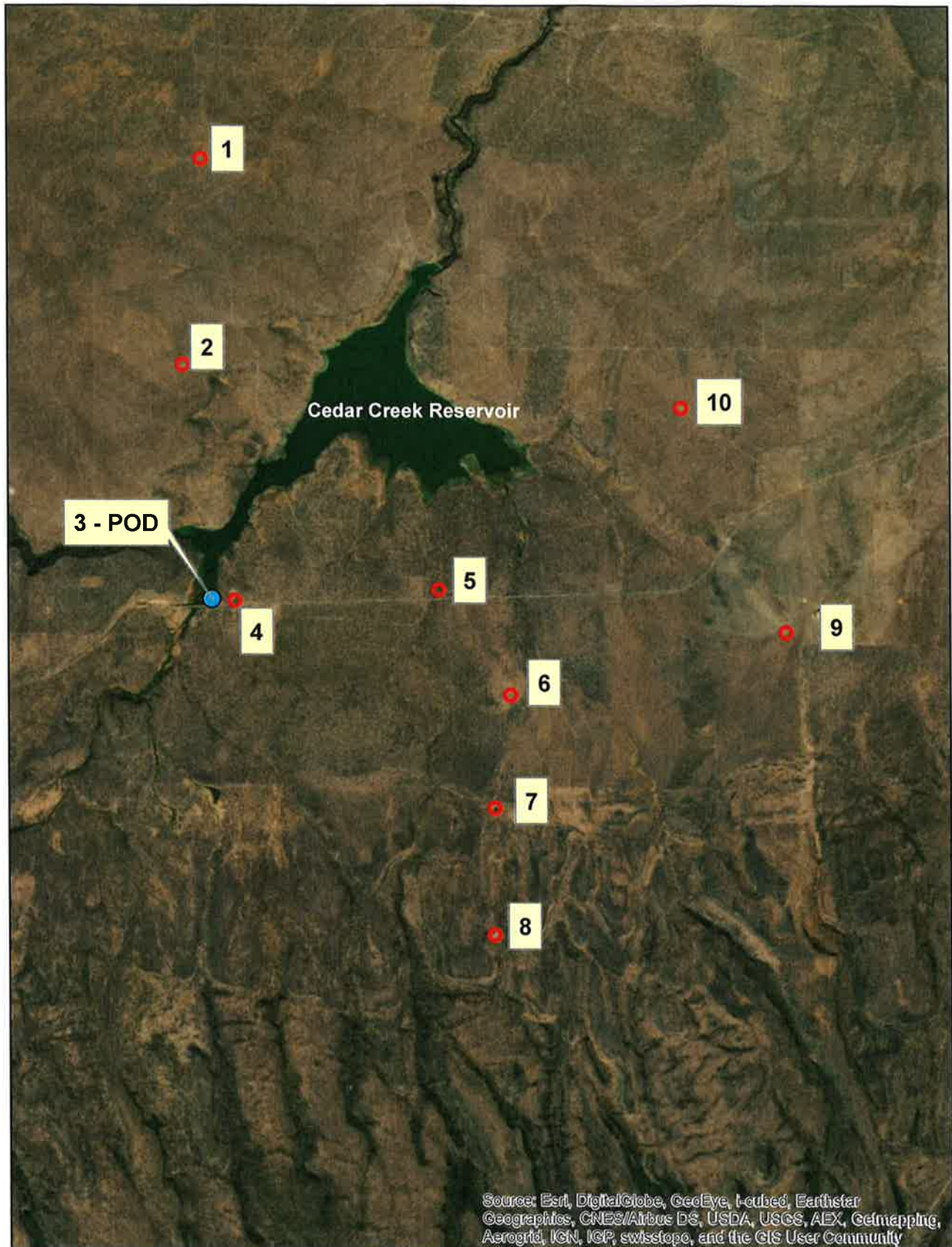
I. AUTHENTICATION

Field Examiner's Name Jim Bitzenburg Date 7-2-19

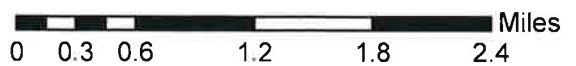
Jim Bitzenburg - Senior Water Resource Agent, Southern Region

Reviewer _____ Date _____

47-8355 System Diagram



Key to map is on following page



Field Exam 47-8355

47-8355 SYSTEM DIAGRAM MAP KEY

1. Storage tank and water trough.
2. Storage tank and water trough.
3. Point of diversion- well.
4. Frost free faucet in corrals.
5. Valve and pipe at surface. Trough was apparently located here during development period.
6. Storage tank, trough, and small pond that appears to be fed by pipeline.
7. Storage tank, trough, and two small ponds that appear to be fed by pipeline. POU straddles section line.
8. Storage tank and two troughs.
9. Trough.
10. Storage tank and trough.



The point of diversion.

The Simplot well with the old truck body that housed the generator used to power the well.



Simplot 47-8355



Troughs served by permit 47-8355.



Simplot 47-8355



Permit 47-8355 troughs.

Permit 47-8355 trough and pond.



Simplot 47-8355



Storage tanks in the distribution system for permit 47-8355.



Simplot 47-8355

GROUNDWATER THEORETICAL ANALYSIS

FILE: 47-8355 Simplot

DATE: 7/2/19

BY: J. Bitzenburg

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times \text{HP}) \times (\text{EFF.})}{\text{TDH}}$

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 pumping water level

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

(8.8) X (5.0) X (0.70) 30.800

[(32.0) + (40.0 X 2.31)] 124.400

Q = 0.248

LIFT FROM:

PSI FROM:

NOTES ON PUMP:

Measurement ☐

Owner ☐

Area estimate ☐

Well Logs ☒

Booster Y ☐ N ☐

Measurement ☐

Owner ☐

Estimate ☒

Owner Gage ☐

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: _____

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

1. WELL OWNER

Name Tews Land & Livestock--Gerald Tews

Address 2473 E 4100 N Filer, Idaho 83328

Drilling Permit No. 47-91-S-005

Water Right Permit No. ok

2. NATURE OF WORK

☒ New well
☐ Deepened
☐ Replacement

☐ Well diameter increase

☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☐ Domestic
☐ Irrigation
☐ Test
☐ Municipal

☐ Industrial
☒ Stock
☐ Waste Disposal or Injection

☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary
☒ Air
☐ Hydraulic
☐ Reverse rotary

☐ Cable
☐ Dug
☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
<u>.250</u> inches	<u>6-5/8</u> inches	<u>1</u> feet	<u>19</u> 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 ☐ Gun

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 _____

Type _____ Model No. _____

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

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

Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 19 Material used in seal: ☐ Cement grout

☒ Bentonite ☐ Puddling clay ☐ _____

Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing

☒ Overbore to seal depth

Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent

Weld _____

☐ Cemented between strata

Describe access port _____ Well cap _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

Subdivision Name _____

Lot No. _____ Block No. _____

County Twin Falls

SW ☐ SE ☐ NE ☐ NW ☐
SW ☐ SE ☐ NE ☐ NW ☐
SW ☐ SE ☐ NE ☐ NW ☐
SW ☐ SE ☐ NE ☐ NW ☐

7. WATER LEVEL

Static water level 32 feet below land surface.

Flowing? ☐ Yes ☒ No G.P.M. flow _____

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

Controlled by: ☐ Valve ☐ Cap ☐ Plug

Temperature _____ °F. Quality _____

Describe artesian or temperature zones below.

8. WELL TEST DATA

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG

023316

Bore Diam.	Depth		Material	Water Yes No
	From	To		
8"	0	7	Topsoil	
6"	7	24	Red rhyolite	
	24	32	Broken rhyolite, clay	x
	32	56	Brown rhyolite	
	56	61	Broken rhyolite	x
	61	90	Brown rhyolite	
	90	98	Broken rhyolite	x
	98	104	Brown rhyolite	
	104	111	Broken rhyolite	x
	111	120	Rhyolite	x

10.

Work started 2-1-91 finished 2-1-91

11. DRILLERS CERTIFICATION

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

Firm Name Elsing Drilling Firm No. 31

P.O. Box 919

Address Twin Falls, ID 83301 Date 2-7-91

Signed by (Firm Official) Gerald Elsing

and

(Operator) Mark E. Elsing