

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 29-14309
Exam Date: 10/24/2024

1. Current Owner:
BRADLEY R HOGGAN PO BOX 193 DOWNEY ID 83234-0193 AND
CATHY P HOGGAN PO BOX 193 DOWNEY ID 83234-0193
2. Accompanied by: Brad Hoggan
Phone No:
Address:
Relationship to permit Holder: Owner

3. **SOURCE:**
WASTE WATER

Method of Determination: Field Exam

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 29-14309 YES Overlap

Water Right No.	Source	Purpose of Use	Basis
29-2328	Ground Water	Irrigation	Decreed
29-12566	Waste Water	Irrigation	Decreed

2. Other water rights with the same place of use: 29-14541 YES Overlap

Water Right No.	Source	Purpose of Use	Basis
29-14467	Ground Water	Irrigation	Decreed
29-14468	Ground Water	Irrigation	Decreed
29-14469	Ground Water	Irrigation	Decreed
29-14470	Waste Water	Irrigation	Decreed

Comments: 29-14309 was split into 29-14309 & 29-14541

3. Other water rights with the same point-of-diversion: 29-14309 YES Overlap

Water Right No.	Source	Purpose of Use	Basis
29-12566	Waste Water	Irrigation	Decreed
29-14470	Waste Water	Irrigation	Decreed

4. Other water rights with the same point-of-diversion: 29-14541 YES Overlap

Water Right No.	Source	Purpose of Use	Basis
29-12566	Waste Water	Irrigation	Decreed
29-14470	Waste Water	Irrigation	Decreed

Comments: Ground water rights 29-14467, 29-14468, 2914469, & 29-2328 utilize the same water delivery system.

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:** 29-14541 & 29-14309
WASTE WATER NE¼ SE¼, Sec. 23, Twp 11S, Rge 37E, B.M. BANNOCK County

Method of Determination: Field Examination, GPS

PLACE OF USE: IRRIGATION 29-14309

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
11S	37E	23									34.0	34.0	34.0	34.0					136

Total Acres: 136.0

PLACE OF USE: IRRIGATION 29-14541

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
11S	37E	23			35	8.1									.8	8.1			52

Total Acres: 52

Method of Determination: Aerial Photography and Site Visit

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

☒ x 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

☒ x 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
938678					12" all pressure is gravity fed

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	electromagnetic	Valley	0980872	05220845		

2. Measurements: 1465 GPM

E. FLOW CALCULATIONS☐ Additional Computation Sheets Attached

Measured Method:

Valley Magnetic flowmeter that is installed on the irrigation system was used to obtain a flow rate. Rate of diversion observed was 1465 PGM, 3.26 CFS

Rights: 29-12566 = .99 CFS

29-14470 = .21 CFS

29-14309 = 1.5 CFS -> Split (29-14309 = 1.34 CFS and 29-14541 = .16 CFS)

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 152 \text{ acres} \times 3.5 \text{ IR} = 532 \text{ AFA}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.5 \text{ CFS} \times 214 \times 1.9835 = 636.7 \text{ AFA}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 532 \text{ AFA}$$

$$29-14309 = 476 \text{ AFA}$$

$$29-14541 = 56 \text{ AFA}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

This water right permit utilizes wastewater that spills from the City of Downey's water tower and is used to irrigate 152 acres. Wastewater spills from the top of the tower into a 12" pipe, then into a cement collection tank. From the collection tank, water is gravity fed through a pipeline to a pumping station. Wastewater delivery system is interconnected with a groundwater system associated with water rights 29-14469, 29-2328, 29-14467, and 29-14468. It passes through a Valley magnetic flowmeter and then to a 15 HP booster pump. From the pumping station the wastewater is distributed to 5 pivots. Unused wastewater is captured in ponds adjacent to the pumping station and sinks into the ground. No water is diverted from the ponds.

Between December 17, 2019, the permit approval date, and November 9, 2021, the date proof of beneficial use was submitted for permit 29-14309, the maximum area irrigated at the described Place of Use was 152 acres.

In 2022, Approved Transfer No. 86405 relocated a combined 24 acres from water rights 29-2328 and 29-12566 to the permit holder's property in the S ½ of the NE ¼ and the N ½ of the SE ¼ of Section 23. Permit 29-14309 overlapped the 24 acres (see map for details). The 152 acres are currently irrigated at different property locations but utilize the same water delivery system. Specifically, 136.0 acres are irrigated by four pivots situated in the SW ¼ of Section 23, while 16 acres are irrigated by a single pivot located in the S ½ of the NE ¼ and the N ½ of the SE ¼ of Section 23.

The existing 152-acre water right will be divided into two separate water rights: 29-14309, covering 136.0 acres with a flow rate of 1.34 cfs, and 29-14541, covering 16.0 acres with a flow rate of 0.16 cfs.

Water rights 29-14467, 29-14468, 29-14469, 29-14470 and 29-14541 when combined are limited to 1.04 cfs, 182.0 af, and the irrigation of 52.0 acres.

Water rights 29-2328, 29-12566 and 29-14309 when combined are limited to 2.72 cfs, 476.0 af, and 136.0 acres.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts 29-14309**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Volume</u>
IRRIGATION	04/01 to 10/31	1.34 CFS	476 AFA
<u>Totals:</u>		1.34 CFS	476 AFA

1. Recommended Amounts 29-14541

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Volume</u>
IRRIGATION	04/01 to 10/31	.16 CFS	56 AFA
<u>Totals:</u>		.16 CFS	56 AFA

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 Jonathan Davidson - Water Resource Agent

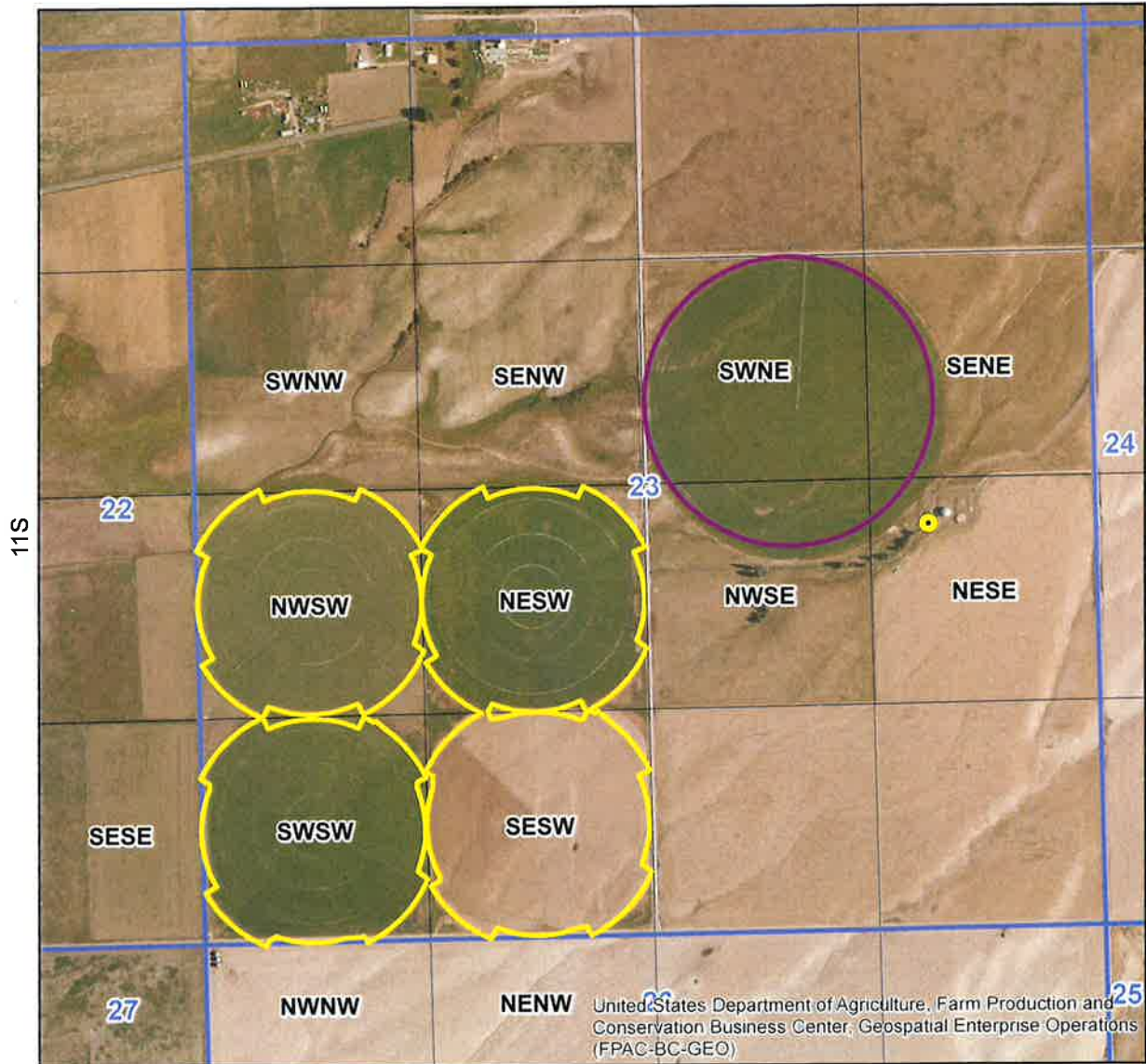
Field Examiner's Name Jonathan Davidson Date 5/1/2025
 Reviewer Blake Jordan Date 5/1/2025

State of Idaho
Department of Water Resources

Water Right

29-14309, 29-14541

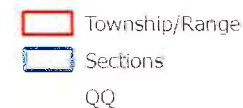
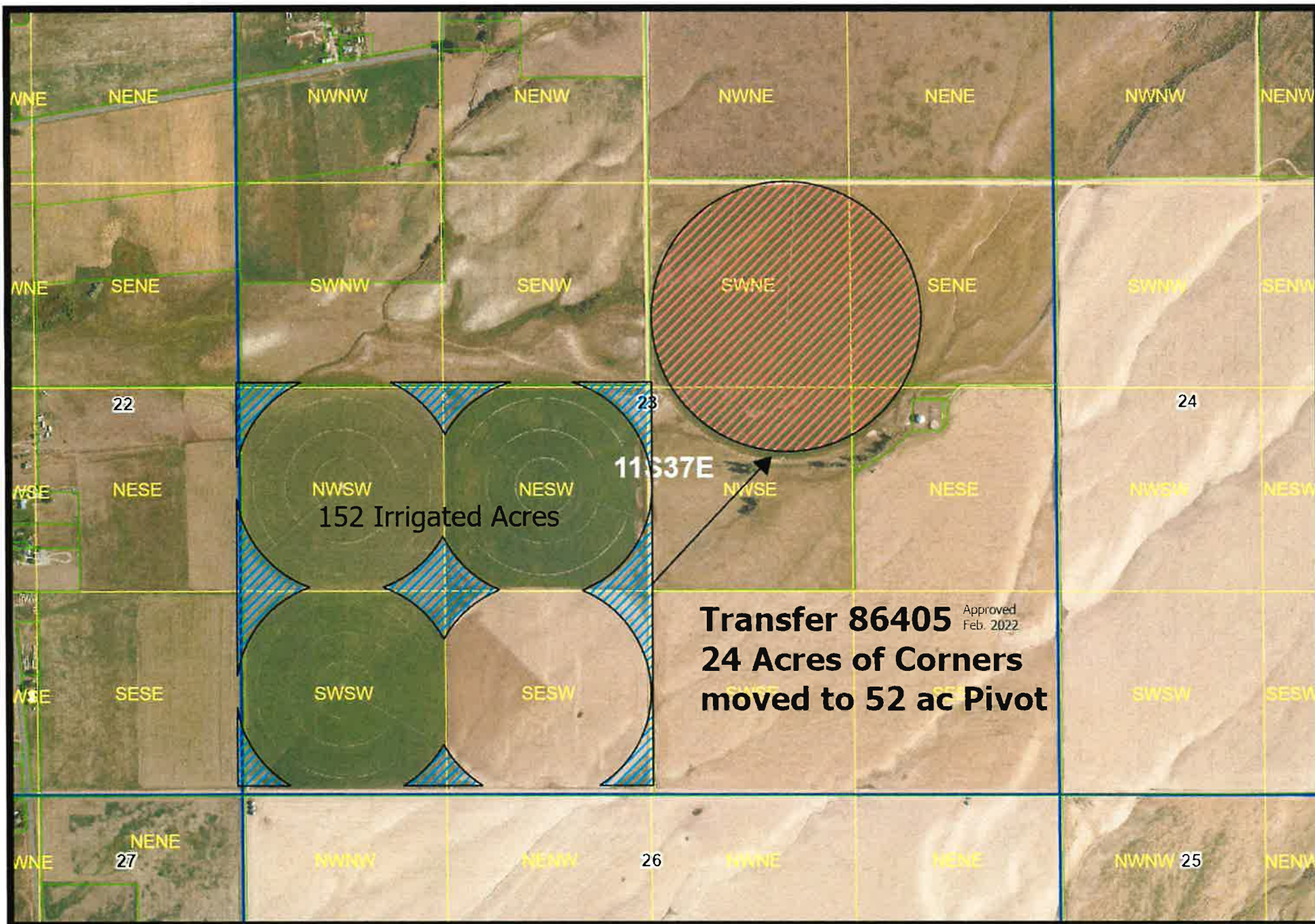
37E

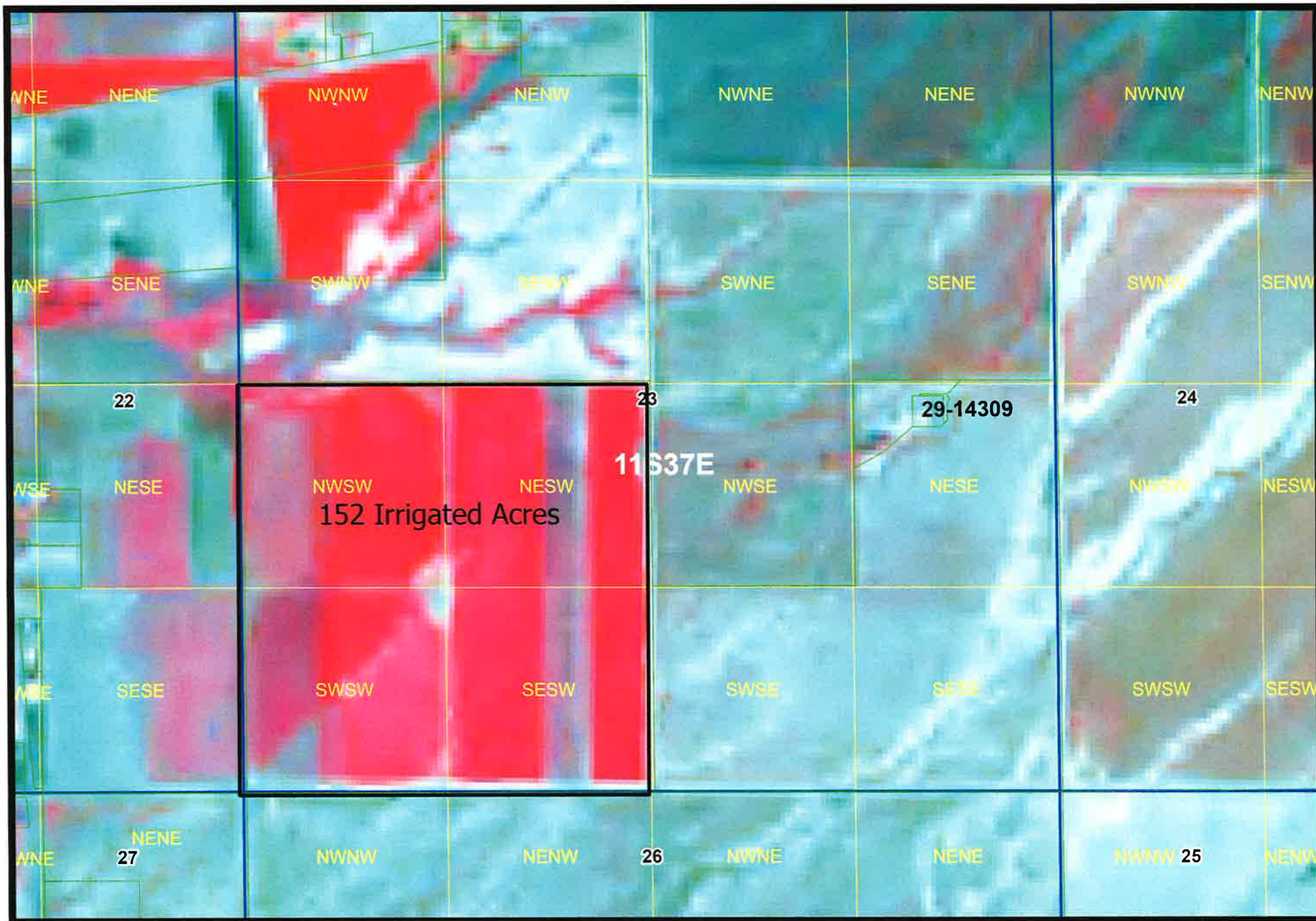


- 29-14309 (136.0 Acres)
- 29-14541 (16.0 Acre-Limit)
- Point of Diversion
- State Outline
- Townships
- PLS Sections
- Quarter Quarters

0 0.125 0.25 0.5 Miles





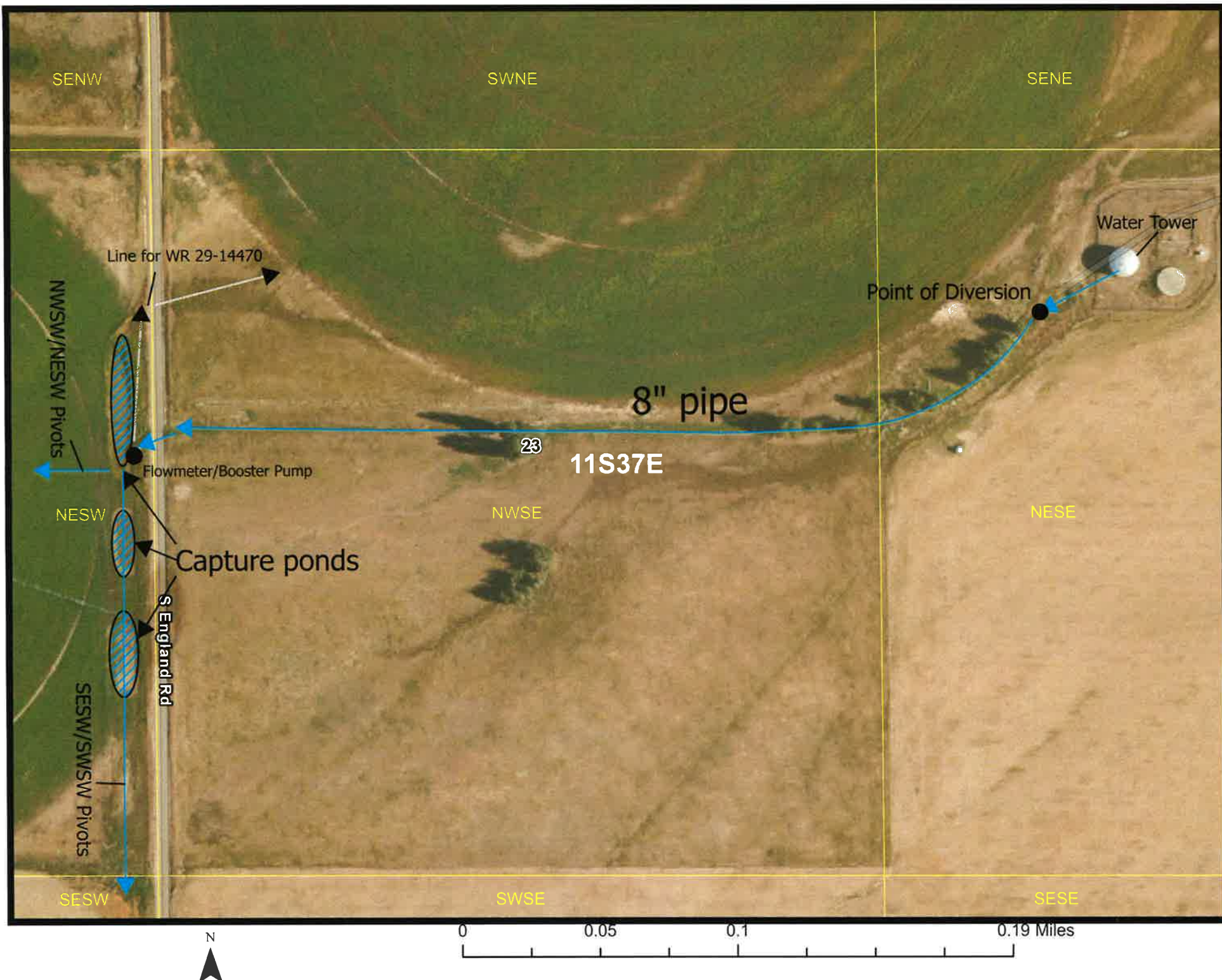


July 2020
Satellite Imagery

0 0.17 0.35 0.7 Miles

Township/Range
Sections
QQ







Water Tower spill pipe

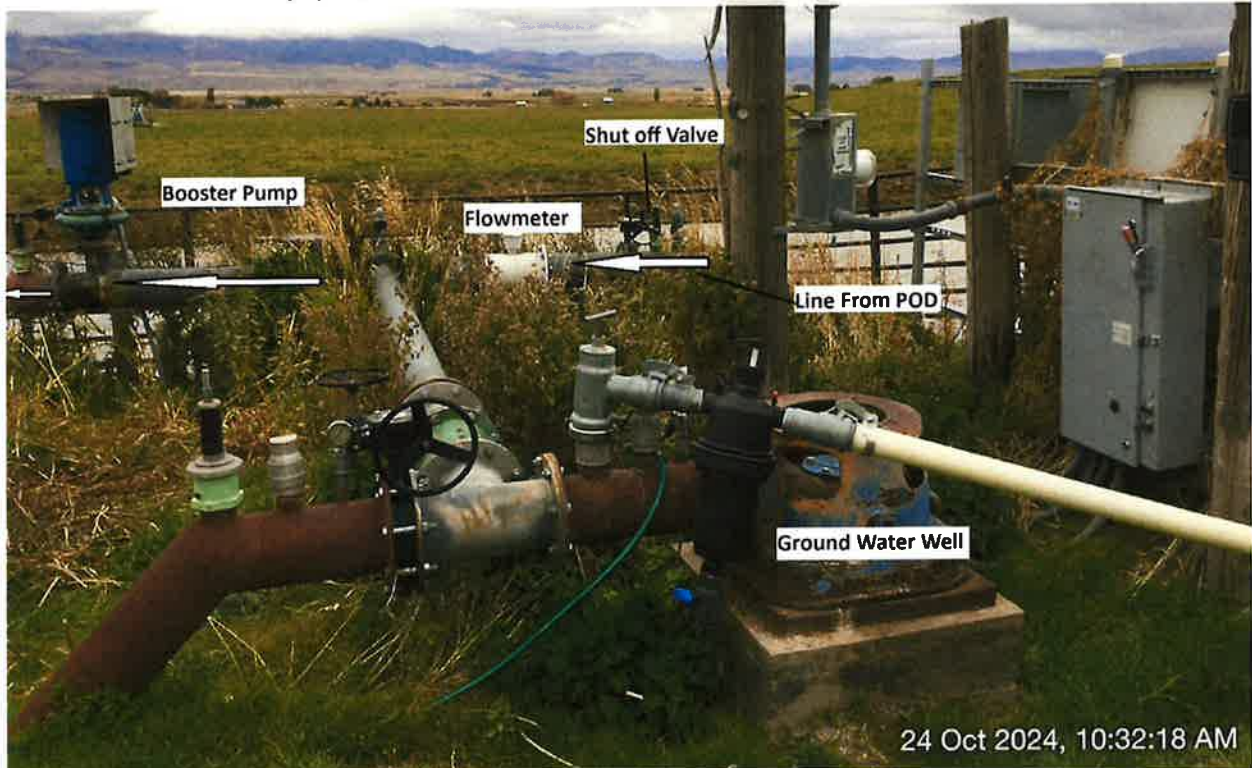


diversion into system

POD, Shut off valve for water

South East Elevation

☉ 303°NW (T) ☉ 42°27'2.90"N, 112°6'2.84"W ±16ft ▲ 5017ft



Line in and Shut off valve for waste water diversion into system

North East Elevation

☉ 225°SW (T) ☉ 42°27'2.97"N, 112°6'2.81"W ±16ft ▲ 4991ft



☉ 1°N (T) ☉ 0°0'0.00"N, 0°0'0.00"E ▲ 0ft



24 Oct 2024, 10:06:33 AM



☉ 269°W (T) ☉ 42°27'2.98"N, 112°6'3.05"W ±16ft ▲ 5012ft



24 Oct 2024, 10:12:32 AM



☉ 257°W (T) ☉ 0°0'0.00"N, 0°0'0.00"E ▲ 0ft



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