

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 45-14183
Exam Date: 07/28/2020

1. Current Owner:
SOUTHWEST IRRIGATION DISTRICT PO BOX 668 BURLEY ID 83318
2. Accompanied by:
Phone No: Brian Higgs
Address: 355 W 500 S, Burley ID 83318
Relationship to permit Holder: Representative for Southwest Irrigation District

3. **SOURCE:**
WASTE WATER

Tributary
SNAKE RIVER

Method of Determination: On-site inspection

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
1-23A	Snake River	Irrigation	Decreed
01-10566	Snake River	Irrigation	License
01-10572	Waste Water	Irrigation	License

Comments: 1-10566 & 1-10572 are currently permits that will be forwarded for licensing with this right

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

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

Comments: This right and 01-10572 represent a single diversion and use of water. The duplicate was created to facilitate regulation by Water District 01 to prevent injury to Senior Snake River water right holders. These rights are comingled with water right 01-10566, which source is the Snake River, at the point of diversion.

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

WASTE WATER L2 (SW¼ NE¼), Sec. 20, Twp 10S, Rge 22E, B.M. CASSIA County

Method of Determination: On-site inspection

PLACE OF USE: IRRIGATION

Southwest Irrigation District's Service Area/Digital Boundary (Large POU)

Method of Determination: On-site inspection, GPS coordinates and aerial imagery

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
☒ 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 1:24,000 or greater.
☒ Aerial Photo Attached (required for irrigation of 10+ acres).
☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp		Pump Make	Pump Serial No. or Discharge Size
SWID Pumps	9 total pumps	Combined 4300Hp	8 @ 500 Hp 1@ 300 Hp		

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 Installed Meters	Magnetic	Sparling Tiger Mag				

2. Measurements: There are 5 pipelines in the system- three 24" pipelines and two 30" pipelines, each is metered. Flow rates are reported to Water District 01 as daily mean values. During the beneficial use development period (2010 – 2015) a maximum flow rate of **55 cfs was reported on 6/13/2014** (see Attachment #2)

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Direct measurement utilizing installed meters reported a high daily mean of **55 cfs on 6/13/2014**, Recommend licensing a flow rate of **55 cfs** (see Attachment #2).

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: Southwest Irrigation District water right accounting reports submitted with Proof of Beneficial Use were utilized to determine the volumes for irrigation (soft conversion).
 The highest volume reported for irrigation during the beneficial use development period was **6455.6 acre feet in 2011** (see Attachment #1).
2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

I met with Brian Higgs of Water Well Consultants who was representing Southwest Irrigation District (SWID) on 7/28/2020 to conduct the field exam for this permit. When I met up with Mr. Higgs (Brian) near the location of the point of diversion (POD), the first question I asked him was in relation to the place of use (POU). Since the POU or service area is large and has multiple PODs along the Snake River, how much of the SWID's POU could water diverted for irrigation from this POD be delivered to? He indicated that water from this POD which is located in Lot 2 (SWNE1/4) of Sec. 20, Twp 10S, Rge 22E, could be delivered to any irrigated ground throughout the service area as needed. While this right is for waste water, it is comingled with Snake River water at the point of diversion under right 01-10566 and will be administered by Water District 01 and Water District 140. This irrigation use is for "soft conversions" of ground water when water is available for delivery under this right. More simply, if there is water available in excess of what is required to fulfill all senior rights along the river during the irrigation season, it can be diverted and delivered to farms within the SWID service area and used in lieu of pumping ground water. Those who take delivery of these soft conversions are required to have a valid ground water right. Typically, this "extra" water is usually available early in the irrigation season during good water years. During the development period for this right (2010 – 2015), records show that water was delivered under this right for irrigation in 4 of the 5 years reported (see Attachment #1).

The canal that this water is diverted from is a Burley Irrigation District (BID) waste water return (to the Snake River) and as mentioned above when this water is diverted from the canal at the pump station, Snake River water will also be diverted. There are headgates on the BID waste water side (south side of pumping station) that can be used to control return flows and can prevent pumping of the waste water at the pumping station if needed. While BID waste water can be controlled, the canal has no controlling works (other than a debris screen) between the pump station and the river. There is also an engineered wetland to the northeast of the pumping station that a portion of BID return flows are delivered into and then returned to the main canal through a head gate north of the pump station. Since this diversion comingles waste water and Snake River water, the volumes reported by SWID include both sources. There is the previously mentioned duplicate permit 01-10572 and also permit 01-10566 for irrigation and ground water recharge that diverts Snake River water as its water source that will be licensed along with these two licenses. All three licenses will be assigned the same irrigation volume with a condition that also limits all three rights to that irrigation volume when combined.

Next, we went into the pumping station and there were 9 pumps (8 @ 500 Hp and 1 @ 300 Hp) that divert the water into 5 pipelines (three 24" pipes and two 30" pipes) with a meter installed on each pipeline. The meter displays were installed just inside the door to the building for convenience. Since the system was energized and running, I did not collect additional information on the pumps.

Recommend licensing a flow rate of 55 cfs and not the permitted 60.00 cfs based on SWID data reported to Water District 01 during the developmental use period for the year 2014 (see Attachment #2). Recommend the volume of 6455.6 af based on the SWID water right accounting data provided during the developmental use period for the year 2011 (see Attachment #1). Please note that on Attachment #2 the output file populated the wrong calendar year on the printouts. I have verified the data for each year and corrected the year as reported on the attachment.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 11/15	55.00 CFS	6,455.6 AF

Totals: 55.00 CFS 6,455.6 AF

2. Recommended Amendments

_____ Change P.D. as reflected above _____ Add P.D. as reflected above X None

_____ Change P.U. as reflected above _____ Add P.U. as reflected above X None

I. AUTHENTICATION

Bill Mills - Water Resource Agent, Senior

Field Examiner's Name Bill Mills Date 10-22-20

Reviewer _____ Date _____



Figure 1: BID waste water flowing into engineered wetland (looking north)



Figure 2: The wetland



Figure 3: Headgate southwest side of wetland diverting into return canal



Figure 4: Water diverted from wetland through headgate (Figure 3) into return canal



Figure 5: SWID pump station



Figure 6: Pumps inside pump station



Figure 7: Meter displays inside pump station

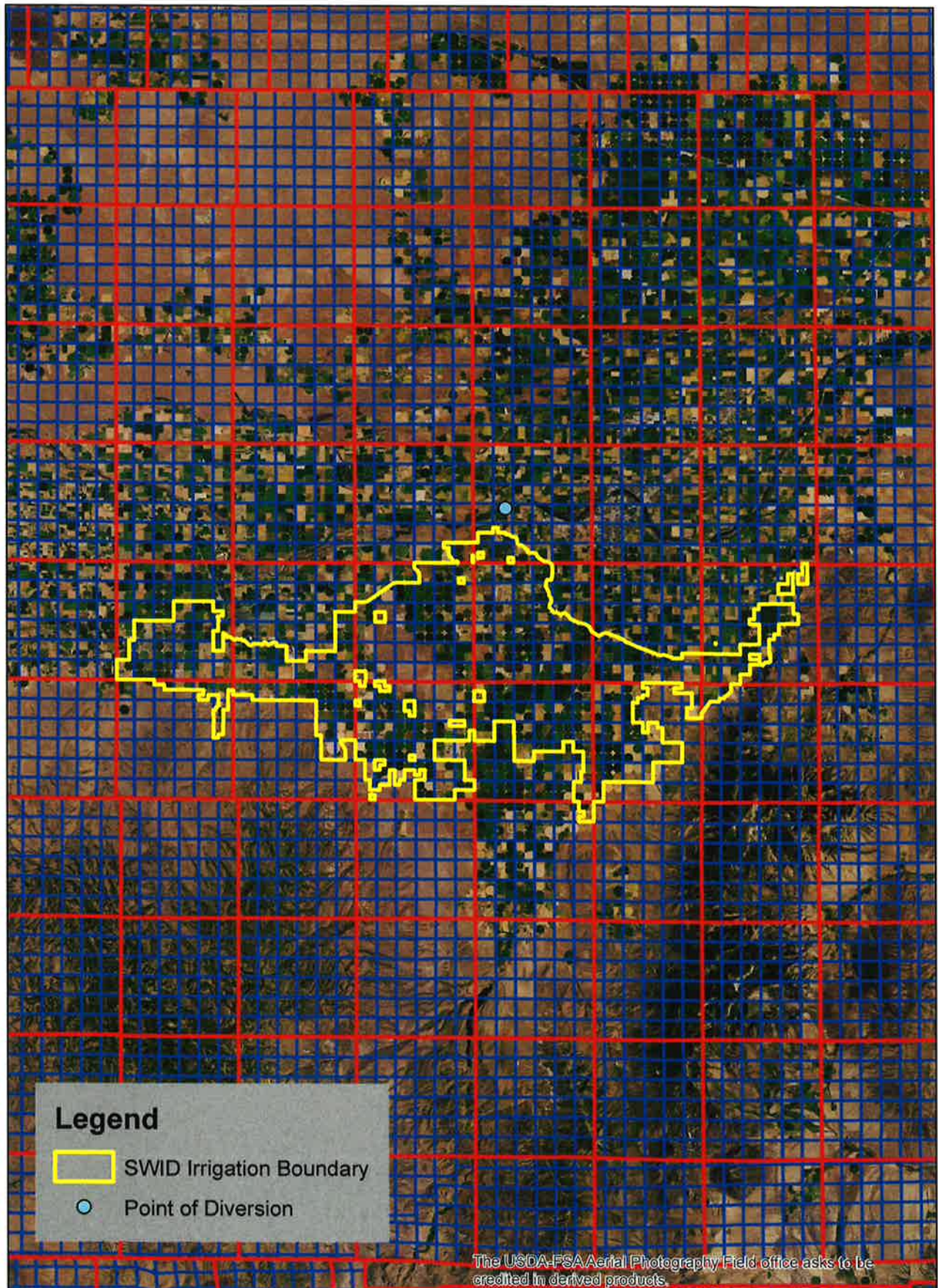


Figure 8: System control screen inside pump station

System Diagram: 45-14183 Diversion System



Irrigation POU 45-14183



SWID Water Right Accounting
1-10566 and 1-10572

Field Exam 45-14183

Jaxon Higgs 6-15-2015 email attachment #1

Attachment #1

SWID Water Right Accounting
1-10566 and 1-10572

[illegible]

Attachment #1

ESPA Recharge Volume (ac-ft)																			
Year	Pendola	Dunbar	Roseville	Stahle	Grt. Western/Water	ASCC	United	FMID	GFCC	SFAC	ID	SRVID	NSCC	AFRD2	TFCC	SWID	BWCC	above AF	below AF
2006*	3035	34	46	528	3058	14890							5000	4959				21,591	9,750
2007													27360					27,360	0
2008						0	4,860	0	0	0	0	0	0	0	0	0	0	4,860	0
2009						18,563	37,317	20,944	0	1,004	0	0	4,519	11,698		1,491	0	77,828	46,708
2010						5,322	49,466	0	0	0	1,125	0	0	2,002		3,436	157	55,913	5,595
2011						15,213	2,740	18,286	0	4,191	0	0	14,942	17,792		1,895	3,025	40,430	77,614
2012						7,824	0	23,903	18,961	19,459	0	0	16,050	6,817		341	11,443	70,147	54,671
2013						0	0	0	0	0	0	0	0	2711		1156	0	3,867	0
2014													1924	8962		1904	0	10,455	0
2014fall-2015spr						1349		1349	1349				2180	26100	9582	602	0	4,047	39,114
Total (ac-ft)						48,271	2,740	125,181	41,254	23,650	1,004	1,125	83,455	118,427	9,582	10,915	14,625	253,724	228,432
% of total						9.8	0.6	27.5	8.4	4.8	0.2	0.2	15.0	19.5	2.4	2.7	3.6	52	47

all figures except percentages in acre-feet

ESPA Recharge Costs (\$)																			
Year						ASCC	United	FMID	GFCC	SFAC	ID	SRVID	NSCC	AFRD2	TFCC	SWID	BWCC	above AF	below AF
2008						0		14,580	0	0	0	0	0	0		0	0	14,580	0
2009						40,438		30,878	62,966		8,012	0	19,357	118,094		4,473	0	137,294	140,124
2010						15,967		148,399	0		0	3,375	0	6,806		10,308	469	167,741	16,774
2011						45,000	5,000	46,535	0	12,573	0	0	45,000	118,256		5,635	9,075	109,108	173,016
2012						23,472	0	50,000	36,500	30,200	0	0	95,168	20,511		1,621	14,329	140,172	155,131
2013						0	0	0	0	0	0	0	0	8131		3466	0	11,601	0
2014													10662	18600		5712	0	31,304	0
2014fall-2015spr													7140	75380	28746	2076	0	117,342	0
Total \$ =						124,877	5,000	290,392	99,466	42,773	8,012	3,375	181,657	256,280	28,746	22,745	43,864	568,895	616,546
% of Total \$ =						10.3	0.4	23.9	8.2	3.5	0.2	0.3	15.0	19.5	2.4	2.7	3.6	47	51

all figures except percentages in dollars

ASCC
AFRD2
BWCC
FMID

Aberdeen-Springfield Canal Co.
American Falls Reservoir Dist. No. 2 (Mäner-Gooding Canal)
Big Wood Canal Co., (non-Snake)
Fremont-Madison Irrigation Dist.

GFCC Great Feeder Canals
IID Idaho Irrigation Dist.
NSCC North Side Canal Co.
SRVID Snake River Valley Irrigation Dist.

SWID Southwest Irrigation dist.
SFAC South Fork area canals (Enterprise, Farmer's Friend, Progressive)

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2010 To DECEMBER 2010

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	0	0	0	0	30	0	--	--
2	--	--	--	0	0	0	0	0	36	20	--	--
3	--	--	--	0	0	0	0	0	31	28	--	--
4	--	--	--	0	0	0	0	0	34	28	--	--
5	--	--	--	0	0	0	0	0	37	1.5	--	--
6	--	--	--	0	0	0	0	0	30	0	--	--
7	--	--	--	0	0	0	0	0	33	0	--	--
8	--	--	--	0	0	0	0	0	30	0	--	--
9	--	--	--	0	0	0	0	0	31	0	--	--
10	--	--	--	0	0	0	0	0	20	0	--	--
11	--	--	--	0	0	0	0	0	29	0	--	--
12	--	--	--	0	0	0	0	0	16	0	--	--
13	--	--	--	0	0	0	0	0	26	0	--	--
14	--	--	--	0	0	0	0	0	31	0	--	--
15	--	--	--	0	0	0	0	0	0	0	--	--
16	--	--	--	0	0	0	0	0	0	0	--	--
17	--	--	--	0	0	0	0	0	0	0	--	--
18	--	--	--	0	0	0	0	0	0.5	0	--	--
19	--	--	--	0	0	0	0	0	23	0	--	--
20	--	--	--	0	0	0	0	0	8.6	0	--	--
21	--	--	--	0	0	0	0	0	0	0	--	--
22	--	--	--	0	0	0	0	0	16	0	--	--
23	--	--	--	0	0	0	0	0	31	0	--	--
24	--	--	--	0	0	0	0	0	31	0	--	--
25	--	--	--	0	0	0	0	0	16	0	--	--
26	--	--	--	0	0	0	0	28	0	0	--	--
27	--	--	--	0	0	0	0	29	41	0	--	--
28	--	--	--	0	0	0	0	33	43	0	--	--
29	--	--	--	0	0	0	0	32	40	0	--	--
30	--	--	--	0	0	0	0	35	27	0	--	--
31	--	--	--	--	0	--	0	32	--	0	--	--
TOTAL	--	--	--	0.00	0.00	0.00	0.00	188.80	691.20	77.80	--	--
MEAN	--	--	--	0.0	0.0	0.0	0.0	6.1	23	2.5	--	--
MAX	--	--	--	0	0	0	0	35.1	42.9	28.3	--	--
MIN	--	--	--	0	0	0	0	0	0	0	--	--
AC-FT	--	--	--	0.0	0.0	0.0	0.0	374	1371	154	--	--

CALENDAR YEAR 2010 TOTAL 958 MEAN 10 AC-FT 1900

2009

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2011 To DECEMBER 2011

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	19	23	23	41	47	47	0	0
2	--	--	--	0	18	30	28	44	47	49	0	0
3	--	--	--	0	19	33	40	46	47	46	0	0
4	--	--	--	0	9.1	21	40	44	47	44	0	0
5	--	--	--	0	12	30	41	44	45	45	0	0
6	--	--	--	0	7	30	40	42	46	45	0	0
7	--	--	--	0	20	28	46	47	48	46	0	0
8	--	--	--	0	26	17	45	46	46	45	0	0
9	--	--	--	0	37	35	48	46	46	45	0	0
10	--	--	--	0	44	44	46	46	48	45	0	0
11	--	--	--	0	28	38	44	47	47	45	0	0
12	--	--	--	0	0.3	40	45	47	45	44	0	0
13	--	--	--	0	0.2	42	47	47	45	45	0	0
14	--	--	--	0	0	41	46	46	46	46	0	0
15	--	--	--	0	0	40	45	47	45	46	0	0
16	--	--	--	2	0	43	44	46	45	45	0	0
17	--	--	--	29	23	36	46	46	44	44	0	0
18	--	--	--	35	43	45	47	46	43	44	0	0
19	--	--	--	16	45	43	46	48	43	46	0	0
20	--	--	--	33	45	43	46	48	45	34	0	0
21	--	--	--	39	43	45	45	47	46	44	0	0
22	--	--	0	31	40	45	46	47	43	42	0	0
23	--	--	0	0	30	45	45	48	40	25	0	0
24	--	--	0	0	31	47	46	48	41	0.3	0	0
25	--	--	0	0	35	46	48	49	50	16	0	0
26	--	--	0	0	37	47	46	47	50	41	0	0
27	--	--	0	0	13	45	29	46	49	24	0	0
28	--	--	0	17	2.1	44	47	48	50	0	0	0
29	--	--	0	18	0.2	45	42	48	50	0	0	0
30	--	--	0	21	0	44	40	49	48	0	0	0
31	--	--	0	--	0	--	39	49	--	0	--	0
TOTAL	--	--	0.00	240.80	626.10	1153.00	1323.50	1440.40	1379.80	1088.80	0.00	0.00
MEAN	--	--	0.0	8.0	20	38	43	46	46	35	0.0	0.0
MAX	--	--	0	39.4	45.4	47	47.7	49	50.2	49.3	0	0
MIN	--	--	0	0	0	17.1	23.1	41.3	40.3	0	0	0
AC-FT	--	--	0.0	478	1242	2287	2625	2857	2737	2160	0.0	0.0

CALENDAR YEAR ~~2011~~ TOTAL 7252 MEAN 34 AC-FT 14385

2010

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2011 To DECEMBER 2011

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	8.8	25	0	34	47	14	47	39	0	--
2	0	0	0	25	0	35	47	47	47	36	0	--
3	0	0	0	25	0	35	44	47	47	32	0	--
4	0	0	12	25	12	46	42	46	47	33	0	--
5	0	0	22	25	27	46	39	41	47	27	0	--
6	0	0	23	25	33	47	41	47	47	21	0	--
7	0	0	22	25	34	44	32	39	44	20	0	--
8	0	0	23	25	14	46	45	44	46	20	0	--
9	0	0	23	25	2.4	41	44	44	46	18	0	--
10	0	0	14	25	0	43	48	44	50	15	0	--
11	0	0	6.8	25	0	39	46	44	49	15	0	--
12	0	0	23	25	0	41	48	45	48	19	0	--
13	0	0	23	25	15	43	46	46	47	21	0	--
14	0	0	18	18	24	45	46	47	48	19	0	--
15	0	0	11	25	17	47	45	44	46	22	0	--
16	0	0	0	18	11	45	48	46	47	26	0	--
17	0	0	0	0	23	45	49	46	44	26	--	--
18	0	0	0	0	22	48	48	45	42	24	--	--
19	0	0	0	0	17	47	49	45	42	24	--	--
20	0	0	0	0	17	46	46	45	47	25	--	--
21	0	0	0	0	23	46	46	44	46	23	--	--
22	0	0	0	0	22	36	46	45	42	24	--	--
23	0	0	0	0	24	31	47	46	43	24	--	--
24	0	0	13	0	22	47	47	46	41	8.4	--	--
25	0	0	24	0	22	47	30	45	37	20	--	--
26	0	0	24	0	25	43	43	46	43	6	--	--
27	0	0	24	0	26	46	38	47	47	0	--	--
28	0	21	24	0	26	48	44	45	45	0	--	--
29	0	--	25	0	26	47	44	44	44	0	--	--
30	0	--	25	0	24	47	41	46	41	0	--	--
31	0	--	25	--	26	--	18	48	--	0	--	--
TOTAL	0.00	21.30	411.70	384.70	535.50	1299.50	1342.20	1366.80	1356.80	586.86	0.00	--
MEAN	0.0	0.8	13	13	17	43	43	44	45	19	0.0	--
MAX	0	21.3	25	25.2	34.4	48.2	49.1	47.6	50.1	39.2	0	--
MIN	0	0	0	0	0	31	18.1	14.2	37.3	0	0	--
AC-FT	0.0	42	817	763	1062	2578	2662	2711	2691	1164	0.0	--
CALENDAR YEAR 2011 TOTAL 7305 MEAN 27 AC-FT 14490												

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2013 To DECEMBER 2013

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	23	41	46	45	44	41	40	0	--
2	--	--	0	23	45	49	46	47	42	39	0	--
3	--	--	15	0	47	36	49	51	39	31	0	--
4	--	--	15	0	47	41	52	50	42	31	0	--
5	--	--	15	0	46	36	52	45	42	35	0	--
6	--	--	5.7	0	47	42	50	44	43	30	0	--
7	--	--	5.7	0	49	43	48	50	40	17	0	--
8	--	--	5.7	0	50	47	49	49	42	17	0	--
9	--	--	5.7	8.9	49	47	48	47	41	24	0	--
10	--	--	5.7	33	48	39	50	46	42	33	0	--
11	--	--	20	32	42	44	48	46	41	37	0	--
12	--	--	20	38	50	49	45	39	43	35	5.9	--
13	--	--	14	42	51	48	50	40	44	32	9.6	--
14	--	--	11	44	51	48	47	45	42	29	9.4	--
15	--	--	12	48	50	50	42	48	41	30	11	--
16	--	--	3	40	49	49	47	43	41	27	12	--
17	--	--	16	15	49	48	48	45	38	21	18	--
18	--	--	24	0	45	48	49	45	40	22	27	--
19	--	--	0.03	0	45	47	51	33	38	17	14	--
20	--	--	0.03	12	49	47	51	46	36	7.4	10	--
21	--	--	0.03	45	40	46	50	46	35	0	16	--
22	--	--	11	44	41	46	49	38	37	0	28	--
23	--	--	10	44	45	47	48	38	37	0	11	--
24	--	--	16	45	46	46	48	38	35	0.32	0	--
25	--	--	29	44	48	43	49	38	33	0.32	--	--
26	--	--	16	45	43	47	48	38	34	0	--	--
27	--	--	14	34	28	47	48	28	35	0	--	--
28	--	--	14	6.5	15	44	48	36	34	0	--	--
29	--	--	14	7.7	33	47	43	44	37	0	--	--
30	--	--	13	34	42	41	45	42	38	0	--	--
31	--	--	11	--	44	--	46	44	--	0	--	--
TOTAL	--	--	340.59	708.30	1373.00	1357.70	1488.30	1331.30	1172.60	554.14	172.16	--
MEAN	--	--	11	24	44	45	48	43	39	18	7.2	--
MAX	--	--	29.3	48	51	49.7	51.5	50.5	44	40.4	28.37	--
MIN	--	--	0	0	15.2	35.7	41.5	28.1	33.2	0	0	--
AC-FT	--	--	676	1405	2723	2693	2952	2641	2326	1099	341	--

CALENDAR YEAR ~~2013~~ TOTAL 8498 MEAN 32 AC-FT 16856

2012

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2014 To DECEMBER 2014

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	--	0	33	51	23	30	0	0	0	23
2	--	--	--	0	33	49	23	30	0	0	0	7.7
3	--	--	--	0	25	47	21	31	0	0	0	--
4	--	--	--	0	42	49	0.56	30	0	0	0	--
5	--	--	--	0	43	50	9	30	0	0	12	--
6	--	--	--	0	49	52	19	30	0	0	14	--
7	--	--	--	0	50	52	18	31	0	0	11	--
8	--	--	--	0	50	37	22	30	0	0	12	--
9	--	--	--	0	51	44	26	29	0	0	13	--
10	--	--	--	0	51	50	26	29	0	0	9.5	--
11	--	--	--	0	51	49	27	20	0	0	11	--
12	--	--	--	0	51	47	24	10	0	0	13	--
13	--	--	0	0	33	46	23	0	0	0	8.9	--
14	--	--	22	0	43	25	22	26	0	0	14	--
15	--	--	22	0	53	9.3	21	25	0	0	14	--
16	--	--	22	0	52	16	22	10	0	0	9	--
17	--	--	22	0	51	15	22	0	0	0	8.4	--
18	--	--	22	0	45	15	22	0	0	0	15	--
19	--	--	22	0	46	15	23	25	0	0	13	--
20	--	--	22	0	47	15	22	25	0	0	12	--
21	--	--	22	0	50	16	22	25	0	0	12	--
22	--	--	0	0	52	16	21	24	0	0	14	--
23	--	--	0	33	51	16	21	24	0	0	14	--
24	--	--	0	33	50	15	21	24	0	0	14	--
25	--	--	0	33	50	18	25	25	0	0	14	--
26	--	--	0	33	50	23	25	24	0	0	18	--
27	--	--	0	33	50	24	29	24	0	0	25	--
28	--	--	0	33	49	24	31	25	0	0	25	--
29	--	--	0	33	49	23	30	17	0	0	25	--
30	--	--	0	33	51	24	31	0	0	0	25	--
31	--	--	0	--	51	--	31	0	--	0	--	--
TOTAL	--	--	177.90	261.60	1454.49	932.03	703.84	653.29	0.00	0.00	373.80	30.90
MEAN	--	--	9.4	8.7	47	31	23	21	0.0	0.0	12	15
MAX	--	--	22.3	32.7	53.46	52.1	31.11	30.86	0	0	25.4	23.2
MIN	--	--	0	0	24.95	9.29	0.56	0	0	0	0	7.7
AC-FT	--	--	353	519	2885	1849	1396	1296	0.0	0.0	741	61

CALENDAR YEAR ~~2014~~ TOTAL 4588 MEAN 22 AC-FT 9100

2013

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2015 To DECEMBER 2015

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	22	0	40	54	53	47	35	20	0	--
2	--	--	24	0	47	54	52	47	38	20	0	--
3	--	--	24	0	51	53	53	47	43	20	0	--
4	--	--	24	0	51	53	51	46	46	22	0	--
5	--	--	24	0	49	52	50	44	42	21	0	--
6	--	--	24	0	45	52	51	7.2	42	21	0	--
7	--	--	24	0	32	52	51	0	43	17	1.4	--
8	--	22	24	0	25	52	52	0	37	17	2.5	--
9	--	22	24	0	9.1	52	50	0	18	29	14	--
10	--	22	24	0	0	53	49	0	17	28	11	--
11	--	24	25	0	0	53	50	14	32	27	--	--
12	--	24	25	0	0	54	52	30	32	24	--	--
13	--	24	25	0	0	55	52	40	38	23	--	--
14	--	24	25	0	5.6	54	53	40	39	29	--	--
15	--	22	25	0	24	52	52	27	39	30	--	--
16	--	22	25	18	39	49	53	26	42	34	--	--
17	--	22	21	33	39	49	51	33	38	34	--	--
18	--	22	21	54	41	51	51	22	35	30	--	--
19	--	22	21	46	45	51	50	40	38	31	--	--
20	--	0	21	46	49	54	51	41	39	19	--	--
21	--	0	21	46	52	53	51	42	39	17	--	--
22	--	21	21	45	49	52	51	12	38	15	--	--
23	--	21	21	37	48	52	50	0	37	22	--	--
24	--	21	0	36	48	50	49	0	36	21	--	--
25	--	22	0	20	51	49	49	8.7	34	4.1	--	--
26	--	22	0	5.8	52	53	49	15	30	0	--	--
27	--	22	0	0	51	50	49	18	26	0	--	--
28	--	22	0	0	48	52	49	9.5	20	0	--	--
29	--	--	0	8	48	52	48	24	7.6	0	--	--
30	--	--	0	23	50	52	48	33	16	0	--	--
31	--	--	0	--	54	--	48	34	--	0	--	--
TOTAL	--	424.10	535.80	416.40	1142.40	1564.00	1566.50	748.00	1015.50	573.90	28.90	--
MEAN	--	20	17	14	37	52	51	24	34	19	2.9	--
MAX	--	24	25.2	53.7	54.3	55	52.9	47.3	46	34.4	14.2	--
MIN	--	0	0	0	0	49	47.5	0	7.6	0	0	--
AC-FT	--	841	1063	826	2266	3102	3107	1484	2014	1138	57	--

CALENDAR YEAR ~~2015~~ TOTAL 8016 MEAN 29 AC-FT 15899

2014

Attachment #2

28-JAN-2019

13085350 SWID PUMPS

DAILY MEAN VALUES FOR FLOW IN CUBIC FEET PER SECOND, CALENDAR YEAR, JANUARY 2016 To DECEMBER 2016

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	--	--	32	28	43	26	46	41	49	42	0	0
2	--	--	28	0	44	39	48	45	48	46	0	0
3	--	--	36	11	44	39	46	46	47	46	0	0
4	--	--	35	31	43	39	45	47	48	30	0	0
5	--	--	35	31	46	43	45	48	44	31	0	0
6	--	1.1	23	31	44	22	47	48	42	33	0	0
7	--	16	9	32	39	28	50	48	44	35	0	0
8	--	11	0	28	42	41	49	43	48	37	0	0
9	--	15	0	26	44	48	50	42	49	38	0	0
10	--	27	8.1	28	45	41	43	43	49	39	4.9	0
11	--	27	26	22	44	51	49	43	48	36	9.7	0
12	--	27	31	24	44	47	46	45	45	37	18	0
13	--	27	30	26	44	45	45	46	43	39	16	0
14	--	27	22	18	42	47	46	47	43	38	18	0
15	--	27	35	0	40	49	43	47	42	38	15	0
16	--	29	34	15	26	47	29	46	42	37	3	0
17	--	30	33	33	26	47	33	47	42	35	0	0
18	--	30	17	36	20	46	46	47	43	29	0	0
19	--	30	0	42	0	45	44	47	44	23	0	0
20	--	30	0	42	0	47	40	46	42	22	0	0
21	--	30	0	40	0	47	42	45	42	21	0	0
22	--	12	0	38	0	47	45	44	43	20	0	0
23	--	0	0	39	0	38	45	43	44	19	0	0
24	--	4.4	0	37	0	41	47	42	44	0	0	0
25	--	24	3.3	42	0	45	43	43	40	0	0	0
26	--	24	15	41	0	42	44	44	39	0	0	0
27	--	24	29	41	0	36	44	44	32	0	0	0
28	--	24	32	41	0	40	44	46	26	0	0	0
29	--	--	29	40	0	42	45	45	28	0	0	0
30	--	--	33	23	18	39	45	45	34	0	0	0
31	--	--	38	--	26	--	46	47	--	0	--	0
TOTAL	--	495.90	612.10	883.70	763.00	1253.10	1379.70	1397.00	1273.00	769.50	84.80	0.00
MEAN	--	22	20	29	25	42	45	45	42	25	2.8	0.0
MAX	--	30.3	37.9	41.7	46.4	50.9	49.7	48.3	49.4	46.1	18.1	0
MIN	--	0	0	0	0	21.6	29.1	41.2	25.6	0	0	0
AC-FT	--	984	1214	1753	1513	2486	2737	2771	2525	1526	168	0.0

CALENDAR YEAR ~~2016~~ TOTAL 8912 MEAN 30 AC-FT 17677

2015

Field Exam 45-14183