

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17123
Exam Date: 08/05/2021

1. Current Owner:
C & K LEASING 3110 N GOVERNMENT WAY COEUR D ALENE ID 83815-3756
2. Accompanied by: Jason Peterson
Phone No: 208-277-6111
Address: Same as above.
Relationship to permit Holder: Permit Holders' representative.

3. SOURCE:
GROUND WATER

Method of Determination: ArcMap and DRG layer.

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
95-18609	Groundwater	Industrial	Permit – Active status

Comments: Active Permit 95-18609 uses the same two Groundwater wells & common water system infrastructure and was filed by the applicant due to demonstrated over-diversion under this Permit 95-17123. I don't recommend inclusion of condition X35 toward licensing this Permit, as the junior Right 95-18609 hasn't been validated through a beneficial use field examination at time of this Permit's license approval. Any overlap will be added to 95-18609 once validated in a future field examination and license review.

2. Other water rights with the same point-of-diversion: YES Overlap

Comments: The Applicant has filed a new Application for Permit No. 95-18609, which contemplates using the same two GW well PODs; the filing was submitted based on current WR 95-17123's maximum diversion rate being enlarged by current pump(s) as developed. I don't recommend condition F06 be added toward licensing 95-17123 as the new filing hasn't been developed through the Applicant submitting a Statement of Completion for 95-18609 by the license approval date for this Permit. F06 shall be added to Right 95-18609.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE¼ SW¼, Sec. 36, Twp 51N, Rge 06W, B.M. KOOTENAI County
GROUND WATER SE¼ SW¼, Sec. 36, Twp 51N, Rge 06W, B.M. KOOTENAI County

Method of Determination: GPS; Well D0079452 located at -117°2.192, 47°43.051 and
Well D0069998 located at -117°2.196, 47°43.043

PLACE OF USE: INDUSTRIAL and DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N	06W	36												X					

Method of Determination: Beneficial use field examination and ArcMap 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	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0079452		50	Unknown	Goulds	Unknown
D0069998		50	Unknown	Goulds	Unknown

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Ultrasonic Time Transit	GE Panametric	PT900	M06210033	Clamp On	4/2/2024

2. Measurements: Well D0069998 as constructed with pitless adapter didn't have adequate pipe requirements to install the Department's flowmeter mounting fixture; I was able to install a PT900 flowmeter on the outflow pipe for Well D0079452, with pipe in vaulted concrete rings situated between the pitless adapter and the 30,000 gal storage reservoir. The diversion rate for Well D0079452's 50 hp pump equals 747 gpm or 1.67 cfs considering Department rounding standards.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method: Flowmeter on well D0079452. Proxy information for same pump installed in well D0069998 hung at similar depth as D0079452.

- Permit authorized a maximum diversion rate = 2.00 cfs.
- Field examination measurement 1.67 cfs (D0079452) + 1.67 cfs (D0069998) = 3.34 cfs.
- License recommendation = **2.00 cfs** Industrial BU rate and maximum diversion rate; **0.04 cfs** Domestic BU rate.
- Enlargement of Permit diversion rate = 3.34 cfs (observed) – 2.00 cfs (recommended for licensing) = 1.34 cfs.
 - New application for permit submitted by Applicants and subsequently Permit approved (95-18609) for Industrial use with maximum diversion rate = 1.50 cfs (buffered on high end to cover any standard deviation of diversion rate from measurement equipment).

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses:

- **Domestic** annual volume = 67 employees x 35 gpd x (5-day work week x 52 work weeks per year) = 609,700 gal
3 non-employee bathroom x 5 gal per day x 260 workdays per year = 3,900 gal
[609,700 gal (employee use) + 3,900 gal (non-employee use)] / 325,850 gal per af = **1.9 af** considering Department rounding standards.
- **Industrial** annual volume = *17.6 af (Truck wash water) + **10.7 af (Concrete mix water) + ***4.4 af (Recirculation Pond) = **32.7 af**.

Note: * and **: reference volumetric data report worksheets attached to beneficial use report.

*** reference pond analysis worksheet

- **Maximum Diversion Volume** = 1.9 af + 32.7 af = **34.6 af**.

G. NARRATIVE/REMARKS/COMMENTS

An initial field exam was performed on 8/5/2021 but inadequate data was obtained to finalize the Permit for licensing purposes. A follow-on exam was conducted on 9/5/2024 primarily to conduct flow measurements. I worked with Mr. Jason Peterson during the field exam process, which included multiple iterations of meetings to discuss how to pursue volume reporting toward evaluating the maximum diversion volume for licensing purposes.

PODs – the water system incorporates two Groundwater wells housed in vaulted concrete rings, one on each side of a buried 30,000-gal storage cistern. Wells D009998 & D0079452 each have a 50-hp Goulds pump installed coupled with pitless adapters housing 30-hp booster pumps that divert via buried 6-inch pipelines to the common storage reservoir prior to distribution for beneficial uses (BU). Following the initial exam, I worked with Mr. Peterson and the pump installer Mr. Tom Bangle, who provided pumping system component information via email on 4/28/2022 (see attached correspondence). The information provided by Mr. Bangle asserts each 50 hp pump was rated at 750 gpm.

During my site visit on 9/5/2024 I was able to perform flow measurements on Well D0079452 using an ultrasonic flowmeter which derived a flow rate of 747 gpm; this is consistent with pump specifics provided by Mr. Bangle. I wasn't able to attach the flowmeter on Well D009998 due to inadequate pipe requirements but have recommended the same diversion rate as the other well with same make/model/hp Goulds pump installed on the system and using the pump installers declared 750 gpm. Considering each well can divert 747 gpm or 1.67 cfs, if both pumps operate simultaneously this equates to a total diverting rate of 3.34 cfs.

The permit authorized development of **2.00 cfs** maximum diversion rate, which is what I've recommended for licensing purposes. **2.00 cfs** is recommended for the industrial diversion rate, and **0.04 cfs** as permitted is recommended for the domestic use diversion rate. A smaller 33 gpm 2 hp Goulds pump is installed on the pitless adapter for well D009998 to provide low flow water usage, which is related to domestic use for office and bathroom water usage by employees and customers. An important declaration from Mr. Bangle's email correspondence asserts that "PSI Setpoints are staggered so they do not all operate at the same time, only times of heavy flow demand". Based on this information and discussion with Mr. Peterson, both wells do operate simultaneously during periods of maximum processing operations at the concrete plant.

I notified the Applicant that their current Permit was enlarged when both pumps divert simultaneously and recommended that they apply for additional water rights to mitigate enlargement of water rights by diversion rate. The Applicant has submitted a new Application for Permit and subsequently gained Permit approval, No. 95-18609, for the additional diversion rate I'm unable to recommend for licensing purposes on Permit 95-17123.

POUs – the Domestic POU consists of bathroom facilities and small office space located on-site at the concrete plant. I took photographs of the domestic use facility during the field exam, and I used ArcMap aerial imagery during licensing review to assign the POU shape. Mr. Peterson provided correspondence related to average employee's and customer numbers from within the development period of the Permit. The year 2020 is the last reported period from within the development period, which showed 67 employees and an average of 3 non-employees per day who primarily utilize restroom domestic usage at the POU. The plant is operational 5 days per week throughout the year, with 5 days x 52 weeks per year = 260 days in the season of use. As shown above I have derived a domestic annual volume of **1.9 af** considering department rounding standards.

The Industrial POU consists of a concrete plant with a rock crushing/washing station, concrete plants (2ea) batch mixing, truck washing stations, and maintenance facilities. I've taken photographs of the concrete plant during the field exam, to illustrate the primary water using functions of the industrial POU. Review of Arcmap aerial imagery shows the Applicant's facilities have grown in the sense of excavated acreage, but all the water usage falls within the Permit approval legal description toward licensing purposes, which I've designated using ArcMap aerial imagery during licensing review. I conducted a follow-up meeting with Mr. Peterson at CDA Paving's headquarter office in Coeur D'Alene to ascertain industrial volume values. Following the meeting held in 2022 Mr. Peterson provided internal Material Usage Reports quantifying annual "WATER" usage related to the two (2) concrete batch plant operations for year 2021. A truck washing water volume calculation sheet was developed identifying water used during the distribution of concrete products and truck washing stations throughout the year 2021.

Water from the wells is pumped in-part to a rock crushing & washing station located in the NW1/4SE1/4SW1/4 of Sec 36. Rock washing wastewater is repurposed by filling a settling pond that is then recirculated for use throughout the year. The pond is lined and clearly visible using aerial imagery. The Permit didn't contemplate storage related beneficial uses and I've evaluated the rock washing volume as a direct flow industrial use coupled with 24-hr impoundment consisting of the required volume to account for evaporative loss from the recirculation pond on an annual basis. I calculated pond capacity and evaporation volume using a pond analysis worksheet. The attached pond analysis worksheet demonstrates the 1.3 ac lined pond with max depth of 6 ft has a pond capacity of 3.1 af, evaporative loss volume of 1.3 af, and total pond volume = 4.4 af.



Rock crushing & gravel washing recirculation pond

Water usage related to concrete batch operations between both plants equals 7.31 af (Plant 1) + 3.36 af (Plant 2) = 10.7 af combined considering Department rounding standards for the 2021 year. Water usage related to Truck "head tank" during distribution and Truck "wash down" water after distribution equaled 17.6 af for year 2021. The total industrial volume for year 2021 equals 4.4 af + 10.7 af + 17.6 af = **32.7 af** (see attached volumetric reporting worksheets). I determined that on average for the year 2021 the concrete plant used an average of 26 gallons of water per yard of concrete processed after evaluating Material Usage Reports for both Plants 1 & 2. I have recommended the maximum diversion volume equal to domestic use plus industrial use = **34.6 af** for licensing purposes.

During the licensing review, I removed conditions 046 & 26A from the Permit due to Permit Holder compliance being met. I revised condition X04 to accurately describe the Domestic water use is for an office and restroom facilities. All other conditions on the Permit shall be carried forward to the License. Aside from the new Permit recently approved for the Permit Holders, 95-18609 (discussed on PG1 of this report), there are no overlapping water right concerns for Licensing 95-17123.

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>
INDUSTRIAL	01/01 to 12/31	2.00 CFS	32.7 AF
DOMESTIC	01/01 to 12/31	0.04 CFS	1.9 AF

Totals: 2.00 CFS 34.6 AF

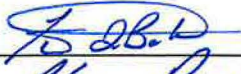
2. Recommended Amendments

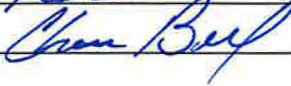
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION

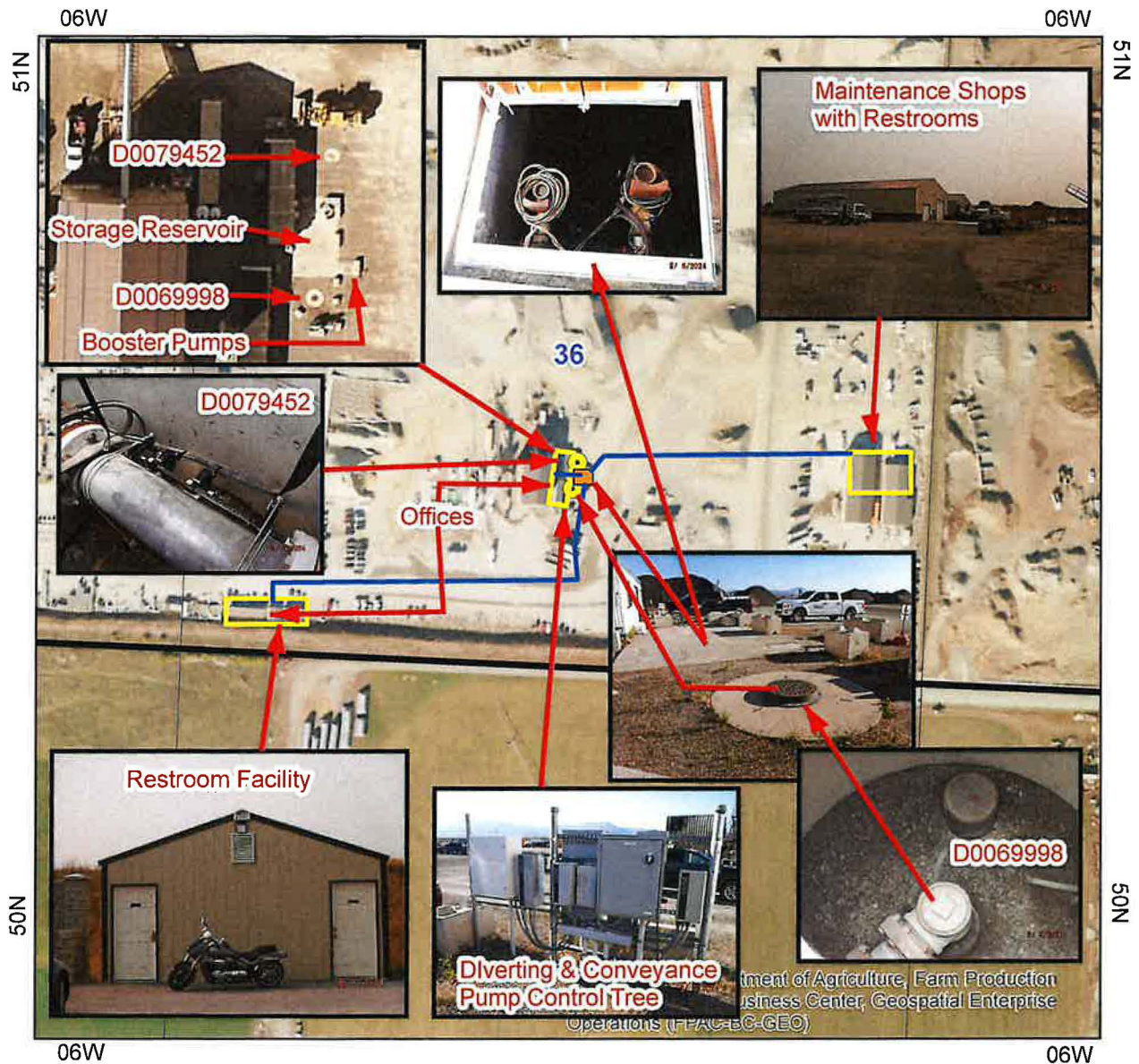
Luke Bates – Sr Water Resource Agent

Field Examiner's Name  Date 2/4/2025

Reviewer  Date 4/7/2025

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17123

This map depicts the DOMESTIC system diagram.



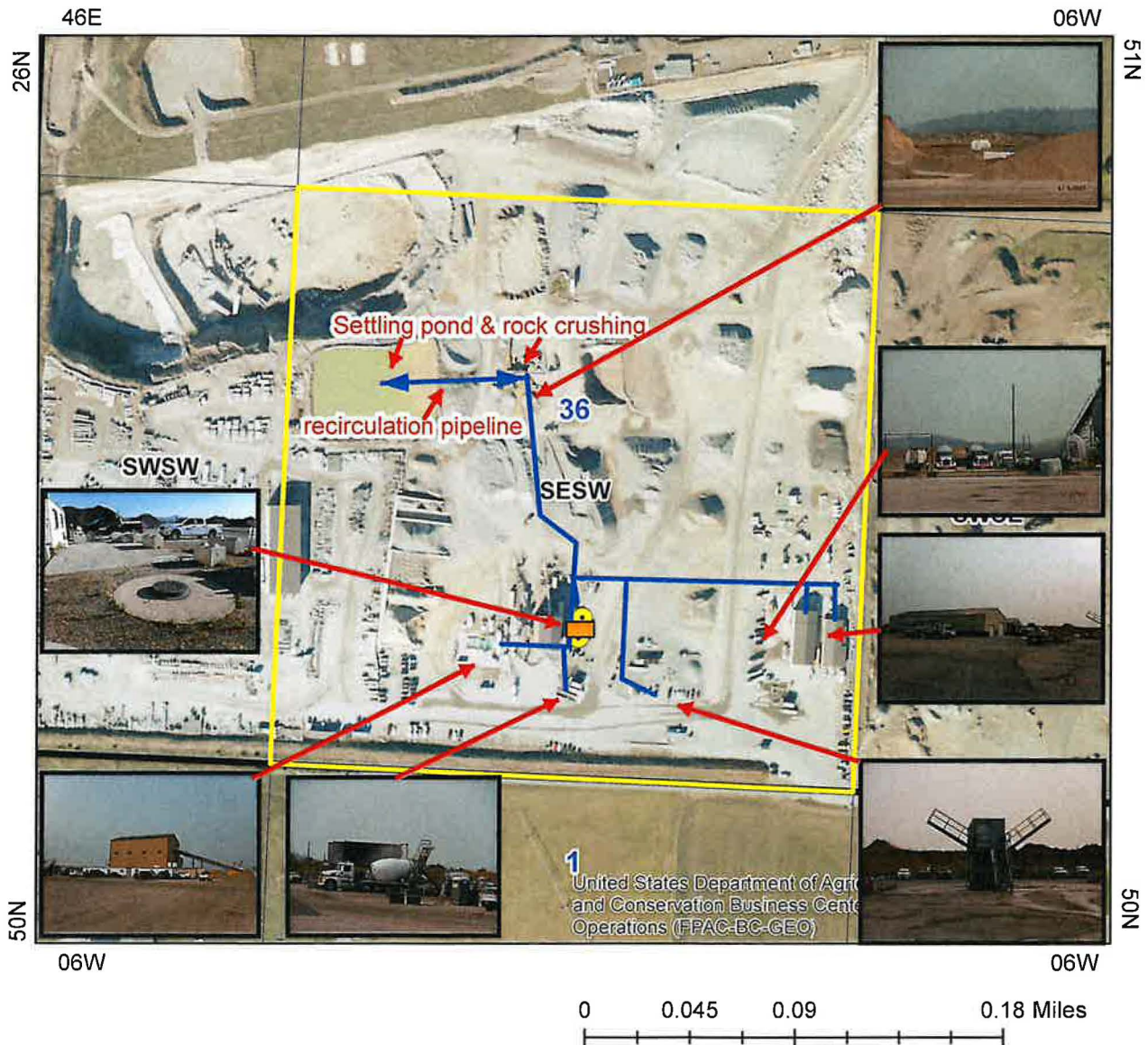
- Place Of Use Boundary
- Point of Diversion
- Townships
- PLS Sections
- Quarter Quarters

0 0.035 0.07 0.14 Miles



State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17123

This map depicts the INDUSTRIAL system diagram.



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

Bates, Luke

From: Bates, Luke
Sent: Thursday, September 5, 2024 11:56 AM
To: Jason Peterson
Subject: IDWR Permit 95-17123

Good morning Jason,

Hopefully you're in full recovery mode, I was told you had a back surgery. Best wishes on a speedy recovery!

I partially completed flow measurements this morning at the Beck Rd water system. The original well didn't have sufficient pipe length between the vertical pitless adapter and the concrete ring to install my flowmeter mounting fixture, so I didn't get that one.

I was able to capture flow rates for the 2nd (newer well) with 50 hp well pump. Rates ranged from 770 gpm to 733 gpm averaging in a 10-minute measurement run at 747 gpm or 1.67 cfs considering department rounding standards.

Facts and findings:

- The same 50 hp well pump is in each of the two groundwater wells. Assumptions are they produce approximately the same diversion rate = 1.67 cfs per pump.
- If the water system operates under a lead/lag normal operations where only one well pump diverts at a given time the water system is within the 2.0 cfs authorized for diversion on the Permit approval.
- If the water system operates normally with both well pumps diverting simultaneously, then the water system exceeds the authorized 2.0 cfs by $(3.34 \text{ cfs} - 2.0 \text{ cfs}) = 1.34 \text{ cfs}$.

I offer this information for your consideration as excess diversion is not authorized by the current Water Right. I'm only able to recommend up to 2.0 cfs associated with Permit 95-17123. The Right Holder is required to file a new application for permit to request right for the offset amount 1.34 cfs for industrial use.

I'm going to be on block leave for a couple weeks starting 9/11/2024 but will be happy to discuss this with you in the near future.

Thank you Sir,

Luke Bates

Sr. Water Resource Agent

Northern Region

P: 208-762-2817



IDAHO DEPARTMENT OF
WATER RESOURCES

7600 N. Mineral Dr., Suite 100
Coeur D'Alene, ID 83815-7763



Jason Peterson <jasonp@wearecda.com>

Re: stateline pit

1 message

Bridget Sundahl <bridgets@wearecda.com>
To: Jason Peterson <jasonp@wearecda.com>

Wed, May 4, 2022 at 2:47 PM

Hi!

- 1 Stateline Pit opened 4/19/2016
- 2 Avg number of employees, see Nicole's email
- 3 Bathroom added November 2019
- 4 Estimate number of customers per day - 3

Bridget Sundahl

bridgets@wearecda.com
Corporate ph: 208.762.0235
3110 N. Government Way, Coeur d'Alene, ID 83815
www.CDApaving.com www.CDAredimix.com



On Thu, Apr 28, 2022 at 3:08 PM Jason Peterson <jasonp@wearecda.com> wrote:

1. date pit opened for business
2. average employees since opening pit
3. year permanent bathrooms were added not portable
4. estimate of customers per day that may use permanent bathrooms

 jasonp.jpg

Domestic Volume Support Document

Pg 1 of 2

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MAY 18 2022
IDWR / NORTH

Average Number of Stateline Employees By year 2019

January	37
February	37
March	45
April	50
May	49
June	54
July	62
August	59
September	58
October	55
November	54
December	54
	614
	51

Average Number of Stateline Employees By year 2020

January	53
February	56
March	66
April	67
May	67
June	68
July	72
August	70
September	69
October	70
November	71
December	69
	798
	67

Average Number of Stateline Employees By year 2021

January	68
February	65
March	74
April	79
May	82
June	83
July	92
August	80
September	79
October	78
November	75
December	76
	931
	78

- Period of time outside Permit authorized Development Period.
- Statement of Completion Form Received on 12/14/2020

Average Number of Stateline Employees By year		Average Number of Stateline Employees By year		Average Number of Stateline Employees By year	
2016		2017		2018	
January	0	January	10	January	23
February	1	February	10	February	26
March	2	March	13	March	36
April	3	April	20	April	35
May	3	May	22	May	40
June	4	June	24	June	40
July	6	July	28	July	38
August	8	August	28	August	43
September	10	September	27	September	43
October	10	October	26	October	40
November	10	November	25	November	40
December	10	December	23	December	37
Total	67		256		441
Average	6		21		37



JOB DESCRIPTION

RECEIVED

Name: _____ Date: _____
Phone: _____ Cell: _____ Fax: MAY 18 2022 Email: _____
Job Address: _____ Billing/ Mailing Address: IDWR/NORTH
City: _____ State: _____ Zip: _____ City: _____ State: _____ Zip: _____
Job Directions: _____
Start Date: _____ Estimated Finish Date: _____

Head Tank - ~~100-150~~ 100-150 gallon per load
Wash Down - 50 gallons per load
= 200gal per Load

Wash Tank

30 Trucks

20 Trucks - 4 Loads Per Day (M-F) > Year Round Avg.
10 Trucks - 3 Loads Per Day (M-F)

2021: $[(20 \text{ trucks} \times 4 \text{ Loads per Day}) + (10 \text{ trucks} \times 3 \text{ Loads per Day})] \times 200 \text{ gal per Load} \times 260 \text{ work days} =$
 $= 5,720,000 \text{ gallons annually} / 325,850 \text{ gal per acre-foot} =$
 $= 17.6 \text{ acre feet assigned to truck wash water}$

Job #

Estimated By: _____

Estimated

Actual

Sq. Ft. _____

Notes: _____ Tons Asph. . . _____

Tons Rock . . _____

Material Usage

Print Date: 1/3/2022 7:49 AM

Plant: 01

PLANT 1

From Date: 1/1/2021 12:00 AM

To Date: 12/31/2021 11:59 PM

Pg 1 of 2

Page: 1 of 1

RECEIVED

MAY 18 2022

Ingredient/Material

IDWR/NORTH

Location: 01

Company: 01

Material	Tracking	Target	Batched	Error%	Auto	Manual	Total	Unit Cost	Usage Cost
01.EUCON MR	Plant	15,756.93 gl	15,739.28	-0.11	15,739.33 gl	5.08	15,744.41	0.00 / gl	0.00
01.ITDSIZENO1	Plant	256.91 tons	255.94	-0.38	255.75 tons	96.22	351.97	0.00 / ton:	0.00
01.P6400	Plant	2,564.37 gl	2,557.97	-0.25	2,557.84 gl	77.19	2,635.03	0.00 / oz	0.00
01.STASIS	Plant	617.02 gl	616.00	-0.17	615.93 gl	103.22	719.15	0.00 / gl	0.00
01.STASIS B	Plant	0.00 gl	0.00	0.00	0.00 gl	149.22	149.22	0.00 / gl	0.00
1 12 ROUND	Location	239.49 ton	238.67	-0.34	238.71 ton	39.70	278.41	0.00 / ton	0.00
1 1-2 ROUND	Location	8.38 ton	8.42	0.48	8.42 ton	30.76	39.18	0.00 / ton	0.00
12EXP	Location	90.64 ton	90.76	0.13	90.75 ton	7.75	98.50	0.00 / ton	0.00
34ROUND	Location	58,367.56 ton	58,200.45	-0.29	58,117.78 ton	67.50	58,185.28	0.00 / ton	0.00
AC534	Location	12,565.27 gl	12,546.36	-0.15	12,546.34 gl	108.67	12,655.01	0.00 / gl	0.00
AE90	Location	2,500.34 gl	2,501.70	0.05	2,501.59 gl	9.34	2,510.93	0.00 / gl	0.00
CALCIUM	Location	4,651.44 gl	4,642.01	-0.20	4,642.04 gl	31.80	4,673.84	0.00 / gl	0.00
CEMENT	Location	24,385.36 ton	24,306.38	-0.32	24,279.66 ton	14.59	24,294.22	0.00 / ton	0.00
C-SAND	Location	35,406.50 ton	35,292.22	-0.32	35,291.55 ton	62.66	35,354.21	0.00 / ton	0.00
FLYASH	Location	874.34 ton	869.61	-0.54	869.35 ton	0.62	869.96	0.00 / ton	0.00
F-SAND	Location	33,482.97 ton	33,429.94	-0.16	33,429.74 ton	44.99	33,474.73	0.00 / ton	0.00
HOT	Location	0.00 gl	0.00	0.00	0.00 gl	126.00	126.00	0.00 / gl	0.00
PEA GRAVEL	Location	0.00 tn	0.00	0.00	0.00 tn	5.51	5.51	0.00 / ton	0.00
PEAGRAV	Location	12,129.41 ton	12,143.04	0.11	12,135.31 ton	597.42	12,732.73	0.00 / ton	0.00
SIZE 67	Location	32.23 ton	32.19	-0.12	32.14 ton	0.00	32.14	0.00 / ton	0.00
WATER	Location	2,315,469.67 gl	2,313,259.00	-0.10	2,313,019.00 gl	69,152.00	2,382,171.00	0.00 / gl	0.00

*** End of Report ***

Mix Production

Print Date: 1/3/2022

7:49 AM

Plant: 01

PLANT 1

From: 1/1/2021 12:00 AM
To: 12/31/2021 11:59 PM

Page: 7 of 7

Pg 2 of 2

	Batched	Shipped	Reshipped	Loads
Grand Totals:	90,933.65 yd	91,442.50 yd	508.85 yd	12614

*** End of Report ***

Material Usage

Print Date: 1/3/2022 8:03 AM

Plant: PL2

PLANT 2

From Date: 1/1/2021 12:00 AM

To Date: 12/31/2021 11:59 PM

RECEIVED

Pg 1 of 2

Page: 1 of 1

MAY 18 2022

Ingredient/Material

IDWR / NORTH

Location: 01

Company: 01

Material	Tracking	Target	Batched	Error%	Auto	Manual	Total	Unit Cost	Usage Cost
34ROUND	Location	25,473.99 ton	25,396.22	-0.31	25,353.82 ton	86.68	25,440.50	0.00 / ton	0.00
AC534	Location	3,318.69 gl	3,310.28	-0.25	3,310.31 gl	0.00	3,310.31	0.00 / gl	0.00
AE90	Location	1,231.37 gl	1,230.55	-0.07	1,230.48 gl	0.99	1,231.47	0.00 / gl	0.00
CALCIUM	Location	679.42 gl	677.21	-0.33	677.19 gl	1.41	678.59	0.00 / gl	0.00
CEMENT	Location	10,245.49 ton	10,221.63	-0.23	10,213.86 ton	20.40	10,234.24	0.00 / ton	0.00
C-SAND	Location	16,324.37 ton	16,277.29	-0.29	16,276.85 ton	61.53	16,338.38	0.00 / ton	0.00
FLYASH	Location	457.57 ton	457.68	0.02	457.55 ton	4.49	462.04	0.00 / ton	0.00
F-SAND	Location	15,274.45 ton	15,225.90	-0.32	15,225.53 ton	65.35	15,290.87	0.00 / ton	0.00
PEAGRAV	Location	5,709.34 ton	5,727.95	0.33	5,723.64 ton	163.84	5,887.48	0.00 / ton	0.00
PL2.EUCON MR	Plant	6,664.99 gl	6,659.85	-0.08	6,659.74 gl	3.31	6,663.05	0.00 / gl	0.00
PL2.P6400	Plant	895.70 gl	894.22	-0.17	894.11 gl	51.56	945.67	0.00 / oz	0.00
PL2.STASIS	Plant	435.71 gl	435.02	-0.16	435.01 gl	11.67	446.68	0.00 / gl	0.00
WATER	Location	1,059,921.39 gl	1,059,211.00	-0.07	1,059,211.00 gl	34,726.00	1,093,937.00	0.00 / gl	0.00

*** End of Report ***

Mix Production

Print Date: 1/3/2022

8:02 AM

Plant: PL2

PLANT 2

From: 1/1/2021 12:00 AM
To: 12/31/2021 11:59 PM

Page: 5 of 5
Pg 2 of 2

	Batched	Shipped	Reshipped	Loads
Grand Totals:	40,605.55 yd	40,725.50 yd	119.95 yd	5030

*** End of Report ***

172,168

Bates, Luke

From: Dying Breed <ampedcontrols@gmail.com>
Sent: Thursday, April 28, 2022 10:20 AM
To: Jason Peterson; Bates, Luke
Cc: Craig Cozad
Subject: Re: IDWR permit 95-17123

RECEIVED
APR 28 2022
IDWR / NORTH

Gentlemen,

Sorry for delaying this information. Have had a hard time seeing as of late, so I have not been able to regularly check messages. The information I have is as follows:

Installed in 2019

750 GPM Goulds Pump w/ 50 Hp 3 Phase Motor, Softstarter for Controls - Well Pump Set at 147'

750 GPM Goulds Pump w/ 30 Hp 3 Phase Motor, VFD Controls - Cistern Pump Set on Pitless

Installed in 2020

250 GPM Goulds Pump w/ 10 Hp 3 Phase Motor, VFD Controls - Cistern Pump Set on Pitless

Installed Originally w/ Sandpoint Pump & Power (Prior to 2019)

750 GPM Goulds Pump w/ 50 Hp 3 Phase Motor, Softstarter for Controls - First Well Pump

750 GPM Goulds Pump w/ 30 Hp 3 Phase Motor, VFD Controls - Cistern Pump Set on Pitless

33 GPM Goulds Pump w/ 2 Hp 3 Phase Motor, VFD Controls - Cistern Pump Set on Pitless for low usage flows

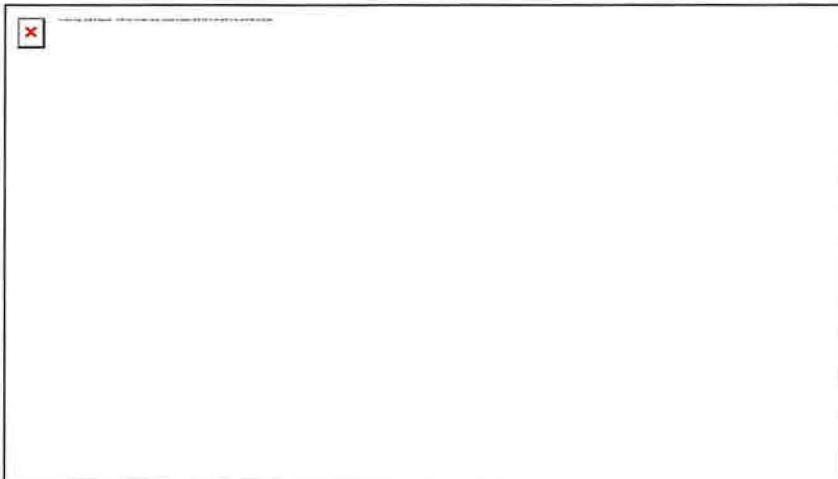
These are all the pumps we have installed at the State Line Pit. PSI Setpoints are staggered so they do not all operate at the same time, only times of heavy flow demand.

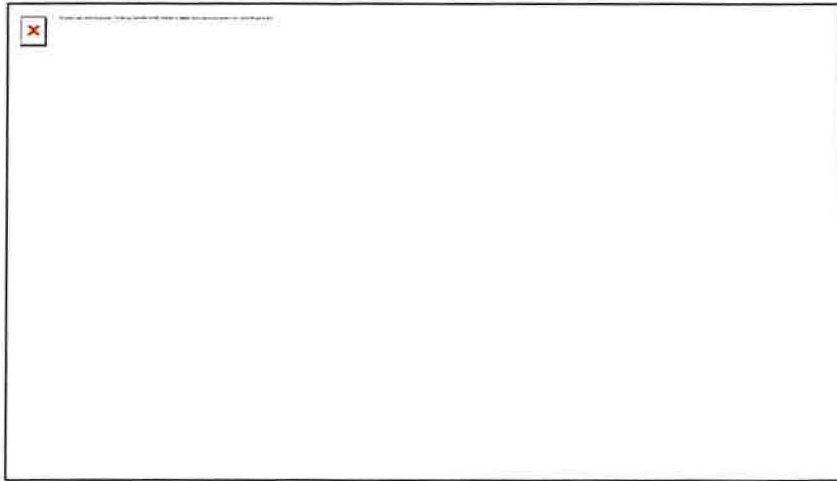
Again, sorry for the delay in this information. Hope this helps.

Thanks,

Tom Bangle

On Thu, Apr 28, 2022 at 10:01 AM Jason Peterson <jasonp@wearecda.com> wrote:
conversation with Luke with water department





----- Forwarded message -----

From: **Bates, Luke** <Luke.Bates@idwr.idaho.gov>

Date: Thu, Apr 28, 2022 at 9:28 AM

Subject: IDWR permit 95-17123

To: Jason Peterson <jasonp@wearecda.com>

Mr. Jason Peterson,

Good morning. Following my meeting with you & Todd Kaufman earlier this spring to discuss volume metrics toward licensing permit 95-17123, I have reached out to the well pump installed who's info was provided to me by Mr. Kaufman.

I contacted Tom Bangle by phone 208-610-6476 as well as by email (CC'd yourself) on March 9th and March 30th requesting information pertaining to the well(s) pump information & transfer pump information. To date, I have not received any information from Mr. Bangle. He seemed receptive on the phone to locate and send this information, but since then I haven't heard word.

I send this email with hope that you (the applicant) can request the information and that Mr. Bangle may be more responsive. If I don't get any traction on this request for information in the next 30 days, I will likely be routed down the path of a more official letter to the applicant requesting information with a suspense date associated.

I also need to get the volume metrics worked out with you regarding water usage similar to what we had to do with the pit in Rathdrum.

Thank you for considering this request,

Luke Bates

Water Resource Agent

Northern Region

P: 208-762-2817

Idaho Department of Water Resources

7600 N. Mineral Dr., Suite 100

Coeur D'Alene, ID 83815-7763

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Amped Pump & Controls LLC
(208) 610-8822

Flow Measurement Beneficial Use Field Exam 95-17123

Date/Time 9/5/2024	Velocity ft/s	Volume Gallons/min	Fwd Totalizer Fwd Gallons	Error																								
8:02:00	9.4463	753.688	1895.762	Error:0																								
8:03:00	9.1886	733.1251	2655.5098	Error:0																								
8:04:00	9.5255	760.0064	3398.8638	Error:0																								
8:05:00	9.367	747.359	4150.4551	Error:0																								
8:06:00	9.4983	757.841	4897.6343	Error:0																								
8:07:00	9.2282	736.2861	5640.376	Error:0																								
8:08:00	9.3734	747.876	6387.7959	Error:0																								
8:09:00	9.6575	770.5414	7130.9116	Error:0																								
8:10:00	9.2254	736.0612	7878.417	Error:0																								
8:11:00	9.2962	741.7169	8626.2529	Error:0																								
8:12:00	9.2632	739.0818	9369.0234	Error:0																								
<table><tr><td>Average Velocity</td><td>9.37</td></tr><tr><td>Max Velocity</td><td>9.6575</td></tr><tr><td>Min Velocity</td><td>9.1886</td></tr></table> 50 HP GOULDS WELL PUMP IN D0079452 <table><tr><td>Average GPM</td><td>747.6</td></tr><tr><td>Max GPM</td><td>770.5</td></tr><tr><td>Min GPM</td><td>733.1</td></tr></table><table><tr><td>Beginning Reading</td><td>1895.762</td></tr><tr><td>Ending Reading</td><td>9369.023</td></tr><tr><td>Difference in Readings</td><td>7473.261</td></tr><tr><td>Difference / 10 readings</td><td>747.326</td><td>GPM</td></tr><tr><td>Conversion from GPM to CFS (/448.83)</td><td>1.67</td><td>CFS</td></tr></table> Measure Device: GE PT900 S/N M06210033 Last Calibration Date: 4/2/2024					Average Velocity	9.37	Max Velocity	9.6575	Min Velocity	9.1886	Average GPM	747.6	Max GPM	770.5	Min GPM	733.1	Beginning Reading	1895.762	Ending Reading	9369.023	Difference in Readings	7473.261	Difference / 10 readings	747.326	GPM	Conversion from GPM to CFS (/448.83)	1.67	CFS
					Average Velocity	9.37																						
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Conversion from GPM to CFS (/448.83)	1.67	CFS																										

**50 HP GOULDS WELL PUMP
IN D0079452**

GPM

CFS

Total Storage Calculations

FILE NUMBER	95-17123
REVIEWER	Luke Bates
DATE	9/5/2024

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

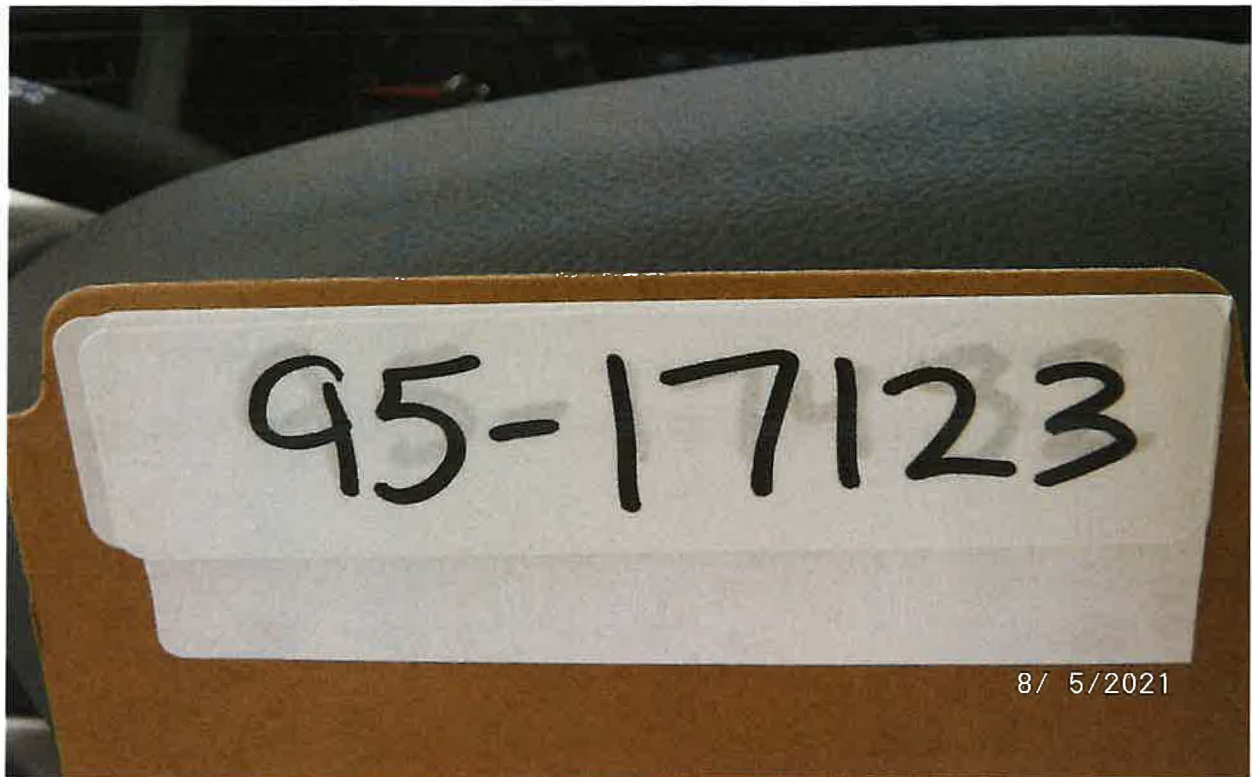
Surface Area (AC.)	1.3	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	2.4	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	3.1	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a " <u>From Storage</u> " component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.3	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	4.4	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

* Recirculation Pond associated with gravel washing processes.

3.1af Industrial waste water captured in Lined pond and used as Recycled water for gravel washing.

1.3af volume pumped to pond throughout year accounting for evaporative volume loss. This water use is considered 24-Hr Impoundment use.

Total Volume related to gravel washing (Industrial) use = 4.4af



BENEFICIAL USE FIELD EXAM DATE 8/5/2021 & FOLLOW-UP SITE VISIT ON 9/5/2024 (FOR FLOWMEASUREMENTS)



WATER SYSTEM CONTROL PUMP STATION COMPONENTS – CO-LOCATED WITH RESERVOIR



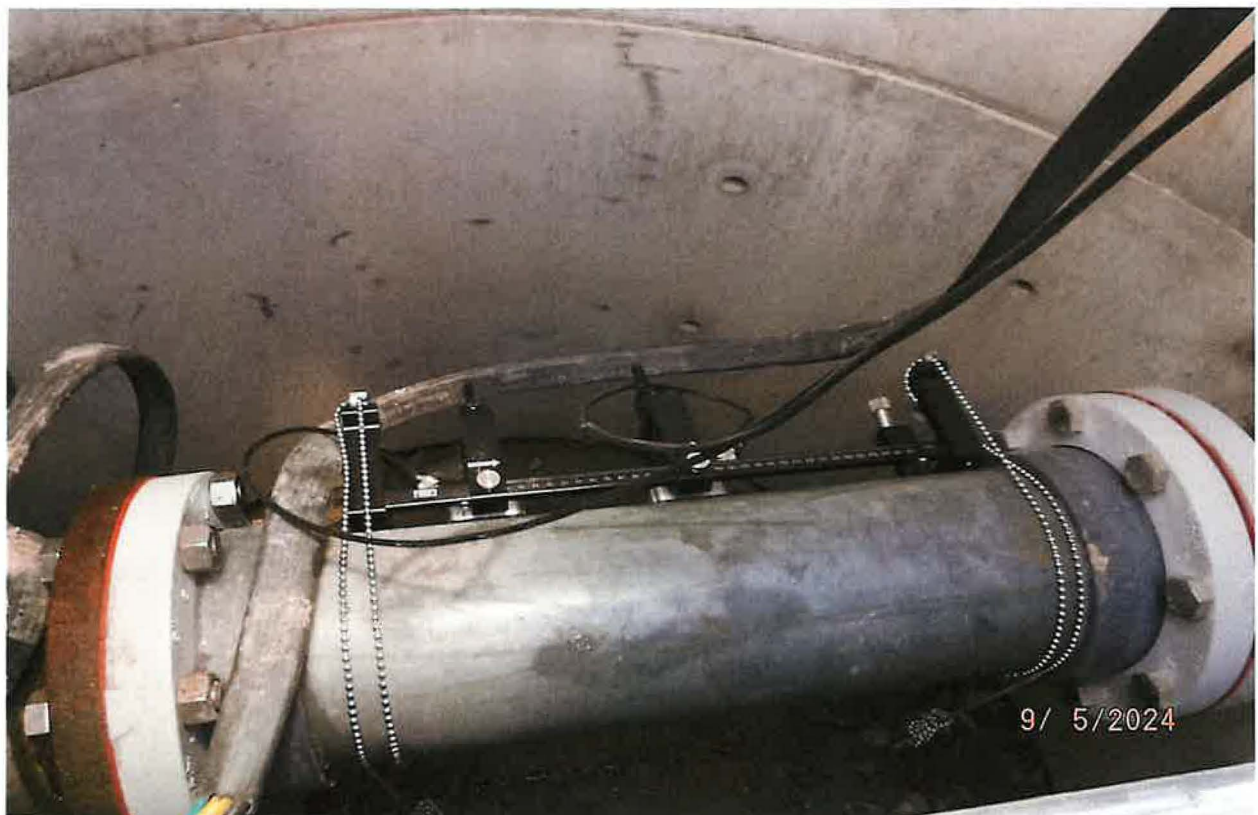
STANDING BETWEEN PUMP STATION CONTROL PANEL TREE & WELL D0069998. 30,000-GAL STORAGE RESERVIOR CONCRETE RECTANGLE IN IMAGE; WELL D0079452 LOCATED BEHIND BLACK TRUCK IN IMAGE



POD – VAULTED GROUNDWATER WELL D0069998 (50 HP GOULDS PUMP IN WELL) & PITLESS ADAPTER



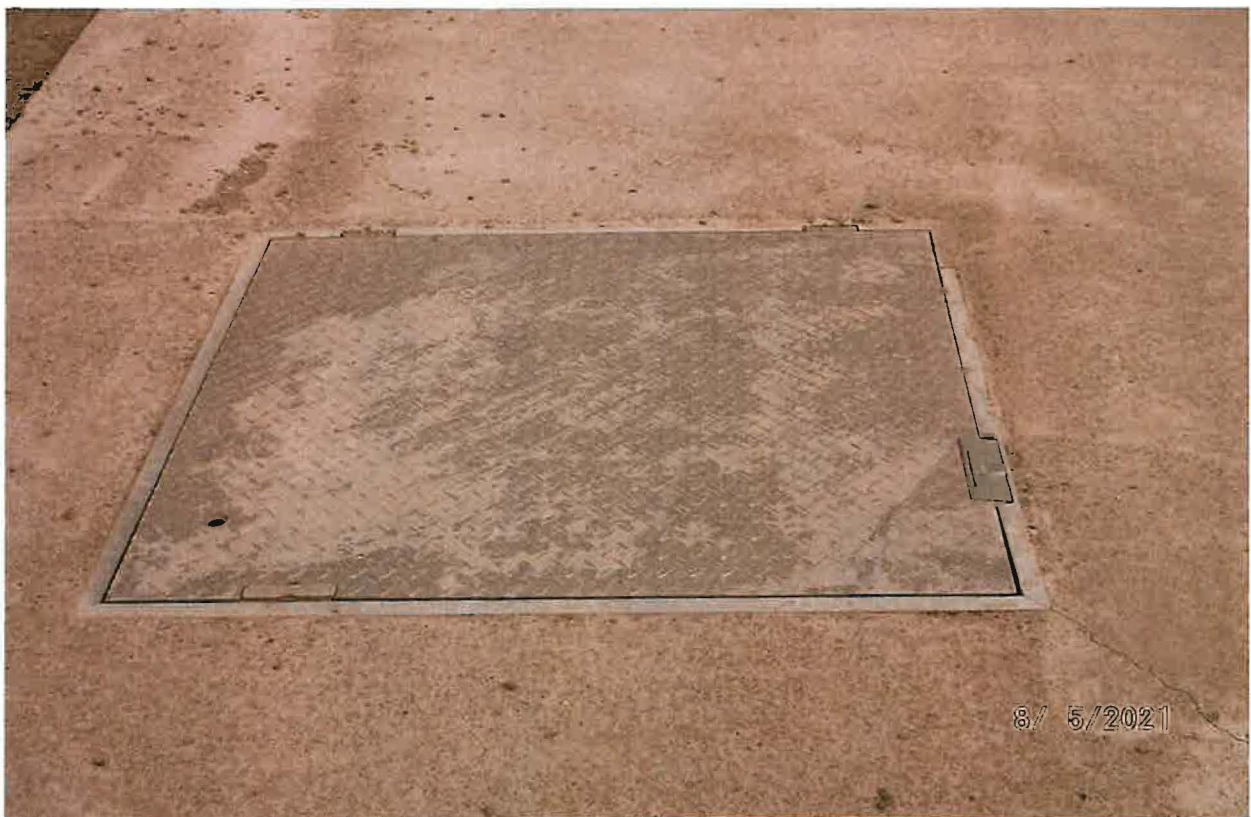
POD – GROUNDWATER WELL D0079452 (50 HP GOULDS PUMP IN WELL) & PITLESS ADAPTER



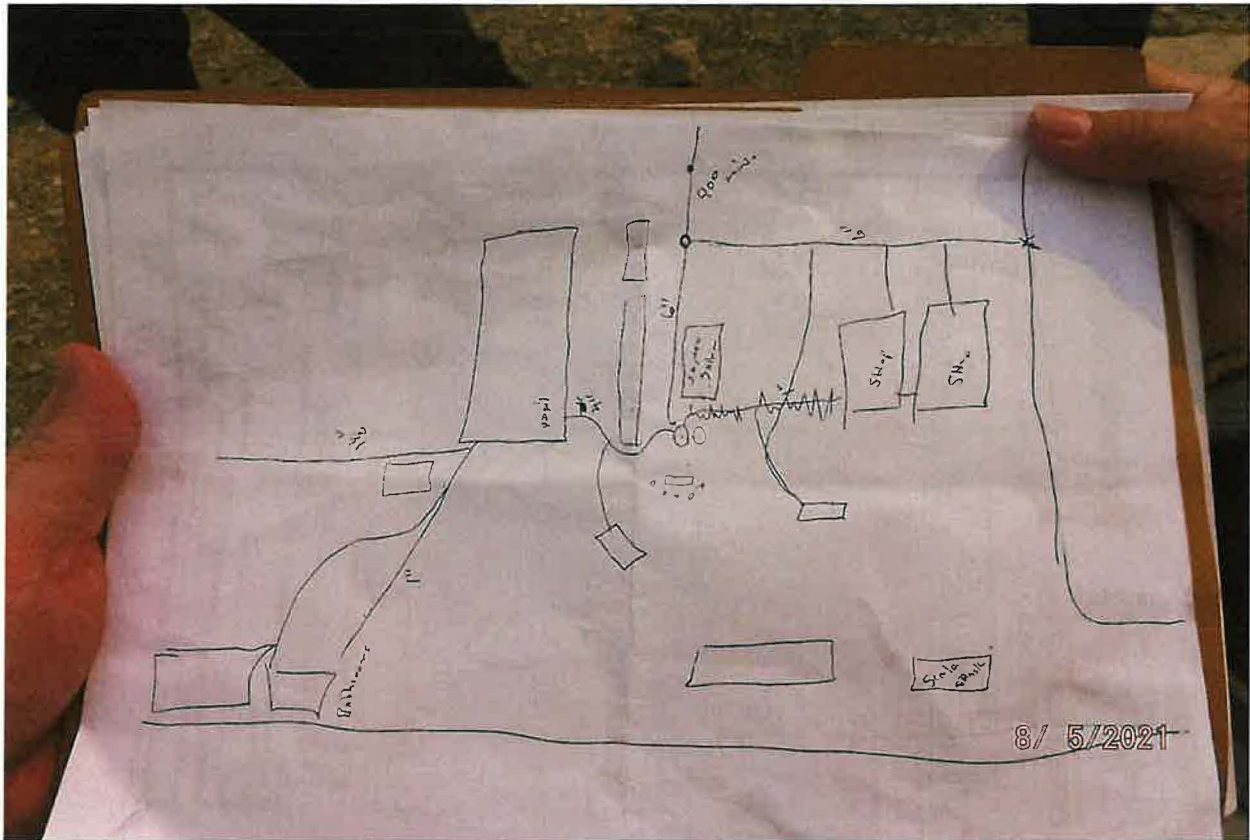
FLOW MEASUREMENT TAKEN FROM D0079452 USING GE PANEMETRIC ULTRASONIC FLOW METER



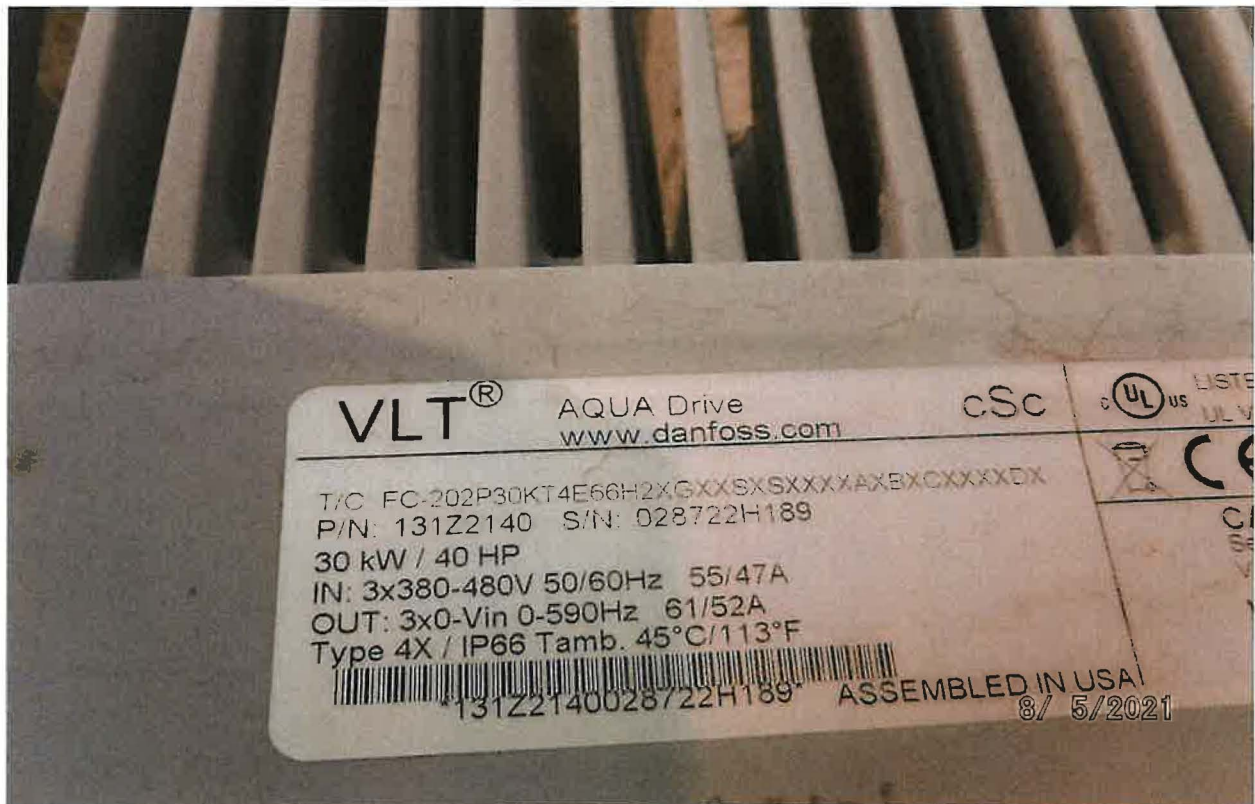
INFLOW FROM WELL TO 30,000-GAL STORAGE RESERVOIR FROM WELL D0079452



30,000 GALLON STORAGE RESERVOIR



APPLICANT'S ROUGH SKETCH OF WATER SYSTEM INFRASTRUCTURE



PUMP CONTROL PANEL 40 HP – PAIRED WITH A 30 HP GOULDS CISTERN PUMP USED FOR DISTRIBUTION FROM STORAGE RESERVOIR



PUMP CONTROL PANEL 25 HP PAIRED WITH 30 HP GOULDS PUMP SET AT LOWER HZ FOR COMPATABILITY AS A DISTRIBUTION PUMP FROM STORAGE RESERVOIR



PUMP CONTROL PANEL 15 HP PAIRED WITH 10 HP GOULDS TRANSFER PUMP – FROM RESERVOIR PUMPING TO INDUSTRIAL USES



30 HP PITLESS ADAPTER FROM STORAGE RESERVOIR DISTRIBUTING TO INDUSTRIAL USES



30 HP GOULDS PUMP SET ON PITLESS ADAPTER & 10 HP GOULDS PUMP SET ON PITLESS ADAPTER FROM STORAGE RESERVOIR DISTRIBUTING TO INDUSTRIAL USES



VAULTED WATER CONVEYANCE SYSTEM PRESSURE TANKS 6-EA & DISTRIBUTION PIPELINE TO DOMESTIC USES (CO-LOCATED WITH STORAGE RESERVOIR)





DOMESTIC POU – COMMON USE RESTROOMS



INDUSTRIAL POU – WASH OFF RACKS



INDUSTRIAL POU – WASH OFF RACKS



INDUSTRIAL POU



INDUSTRIAL POU



INDUSTRIAL POU



INDUSTRIAL POU



INDUSTRIAL POU



INDUSTRIAL POU