

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33336
Exam Date: 1/9/2018

1. Current Owner:
NUNHEMS USA INC 1200 ANDERSON CORNER RD PARMA ID 83660 (208) 674-4079
2. Accompanied by: SHANE ROE
Phone No: (208) 674-4079
Address: 1200 ANDERSON CORNER RD PARMA ID 83660
Relationship to Permit Holder: Senior Site Services Manager for Nunhems
3. **SOURCE:**
GROUND WATER

TRIBUTARY:**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 63-30069 (abandoned), 63-30202 (inefficient and disconnected), and 63-32892 (converting to an irrigation only use)
2. Other water rights with the same point-of-diversion: None

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

GROUND WATER SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 9, Twp 06N, Rge 05W, B.M. PAYETTE County

Method of Determination: Field exam and aerial imagery.

2.

PLACE OF USE: FIRE PROTECTION, FIRE PROTECTION FROM STORAGE, and COMMERCIAL FROM STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06N	05W	9							X	X									

PLACE OF USE: FIRE PROTECTION STORAGE, COMMERCIAL STORAGE, INDUSTRIAL STORAGE, and INDUSTRIAL FROM STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06N	05W	9							X										

Method of Determination: Field exam and aerial imagery.

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 Tag Number	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0059096	Franklin Electric	25	10G19-01-60022A	UNKNWN	UNKNWN
Booster	Baldor	60	C0802070238		
Boster	Baldor	60	C0607190758		

*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
NA	NA	NA	NA	NA	NA	NA

2. Measurements: Measurements were not obtained during the field exam due to a closed system.

E. FLOW CALCULATIONS X Additional Computation Sheets Attached

Measured Method: The diversion is attached to a SCADA system flow meter totalizer that is located in a vault downstream of the well pump prior to the storage unit as shown on the enclosed SCADA cartoon. Mr. Roe provided the last three years of flow data in a spreadsheet. Because this is a closed system, volume calculations were manipulated into instantaneous averages shown on the attached spreadsheet. The SCADA system differentiates use as "process water" (Commercial from Storage) and "non-process water" (Industrial from Storage).

Calculations were based on 8 hour days, three year average work days/month, and peak use/month totals. Two 60,000 gallon storage tanks are used to store fire protection from storage, commercial from storage, and industrial from storage uses, which offset peak diversions from the well.

Fire Protection was permitted at 0.66 cfs. There are no Department standards relative to fire protection. As such, it is assumed that the well capacity developed can produce 0.66 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Commercial from Storage: See attached spreadsheet

V_R = Highest year of commercial use = 1,501,420 gallons = **4.6 AF**

$V_{D,R}$ = [Diversion Rate (cfs)] x (Days in season of use) x 1.9835 = 0.05 cfs X 365 X 1.9835 = **36.2 AF**

V = Smaller of V_R and $V_{D,R}$ = **4.6 AF**

Volume Calculations for Industrial from Storage: See attached spreadsheet

V_R = Highest year of industrial use = 1,091,484 gallons = **3.4 AF**

$V_{D,R}$ = [Diversion Rate (cfs)] x (Days in season of use) x 1.9835 = 0.03 cfs X 365 X 1.9835 = **21.7 AF**

V = Smaller of V_R and $V_{D,R}$ = **3.4 AF**

Volume Calculations for Industrial Storage and Commercial Storage: See attached spreadsheet

V_R = The spreadsheet identifies the storage fill rate at 0.08 (0.05 cfs + 0.03 cfs) takes 2.31 days to refill the two 60,000 gallon tanks. Relative to the highest combined use and working Monday – Friday, refill would be necessary every 9.5 days or two work weeks. At this rate, the storage tanks would be refilled 22 times annually (2,592,904 gal - highest combine use total) divided by 120,000 gallons). Therefore, volume required calculations are determined by 2,592,904 / 325,850 = 7.96 AF or **8.0 AF**

$V_{D,R}$ = [Diversion Rate (cfs)] x (Days in season of use) x 1.9835 = 0.08 cfs X 365 X 1.9835 = **57.9 AF**

V = Smaller of V_R and $V_{D,R}$ = **8.0 AF**

Volume Calculations for Fire Protection Storage and Fire Protection From Storage: See attached spreadsheet

V_R = There is no Department standard relative to these uses.

$V_{D,R}$ = The initial fill of the two 60,000 gallon storage tanks was used to calculate a volume limit. 60,000 gallons X 2 storage tanks = 120,000 gallons, which equals 0.368 AF or **0.4 AF** (per department recording standards)

V = Smaller of V_R and $V_{D,R}$ = **0.4 AF**

G. NARRATIVE/REMARKS/COMMENTS

Permit No. 63-32066 authorizes a diversion rate of 0.67 cfs for Industrial (0.27 cfs), Commercial (0.27 cfs), Domestic (0.01 cfs) and Fire Protection (0.66 cfs) purposes. A field exam was conducted by WRAs Cody Parker and Aaron Skinner on January 9, 2018, who were accompanied by Shane Roe, Senior Site Service Manager for Nunhems.

BACKGROUND:

The purpose of this right is to provide more water for vegetable seed processing and office use. Existing wells are either abandoned or inefficient. During the field exam, Mr. Roe explained the well associated to WR No. 63-30069 has been abandoned, WR No. 63-30202's well is not used because it's undersized and inefficient, and WR No. 63-32892's well is only used for irrigation. Nunhems is in the process of preparing an application to convert the well to 100% irrigation.

System Description:

Ground water is pumped via a variable speed pump up and through a pump house and into two 60,000 gallon tanks. Water is then delivered to the various buildings. Commercial from Storage use is identified as process water and Industrial from Storage use is non-process water as described on the attached spreadsheet. Nunhems incorporates a SCADA system, which includes a flow meter totalizer located in a vault downstream of the well pump prior to the storage unit (see attached cartoon and schematic).

All beneficial use is stored in the two 60,000 gallon tanks as outlined in Section F before being delivered to the various buildings. Therefore, Commercial and Industrial use will be adjusted to Commercial Storage and Industrial Storage. Commercial from Storage and Industrial from Storage will also be added.

The storage tanks initial fill is recommended as Fire Protection Storage use. Thereafter, all diverted water is considered Commercial from Storage and Industrial from Storage use. Commercial from Storage use will take place of the domestic use because Idaho Code 42-111 (1b) states domestic use cannot exceed 2,500 gallons per day for exempt domestic use, but in water rights, it's also used to define domestic use. Water used for Domestic type uses (bathrooms, offices, etc.) is accounted for in the Commercial from Storage and/or Industrial from Storage uses since all water diverted goes through these two lines. The three year average rate/day is 4,460 gallons. Mr. Roe suggests all the buildings were developed to use Commercial from Storage water as identified on the POU map. Industrial from Storage use will be limited to Buildings M and L. Fire Protection and Fire Protection from Storage will include the whole parcel as building sprinklers and fire hydrants are located all over the facility. **An amendment is necessary to add the buildings and extend the parcel to the SENW of Section 9 06N05W.**

Diversion Rate and Volume:

The permitted rate of 0.67 cfs for Industrial (0.27 cfs), Commercial (0.27 cfs), Domestic (0.01 cfs) and Fire Protection (0.66 cfs) purposes. Each B/U has been calculated and outlined in Section E, F and the attached spreadsheet. Three year averages for Commercial from Storage and Industrial from Storage use was determined as well as year/month three year highs. Daily and month peak use is absorbed by the storage component of this right. Annual volumes are calculated based on the highest yearly use from 2015 to 2017. B/U adjustments are explained above and in Section F. Below are the recommended uses for each purpose;

Industrial from Storage – 3.4 AF
 Commercial from Storage – 4.6 AF
 Fire Protection – 0.66 cfs
 Fire Protection Storage – 0.4 AF
 Fire Protection from Storage – 0.4 AF

The diversion rate of 0.66 cfs for Fire Protection is understood to be a rate to fulfill local fire ordinance requirements. Therefore, an assumption is made in regards to the well capacity, which suggests the well was developed to facilitate this rate and adequately suppress a fire anywhere on the property. A pump test was done at construction for 8 hours that produced 450 gpm or 1.0 cfs. Pump information is unavailable to verify pump size. Mr. Roe provided well motor information as identified above in Section B-4. The best educated guess corresponding to a 25 hp Franklin Electric motor pump generates ~325 gpm or 0.72 cfs as shown on the enclosed submersible pump curve. This justifies recommending 0.66 cfs for Fire Protection.

Ownership:

Current Canyon County taxlot data was used to verify land ownership and shows Nunhems as the parcel owner.

Overlap:

The POD analysis did not identify any overlap for WR Permit No. 63-33336. POU analysis identified three rights that overlap with WR Permit No. 63-33336; WR No. 63-30202 (inefficient and disconnected), 63-30069 (abandoned), and 63-30892 (converting to 100% irrigation). WR No. 63-30892 services an old house that has since been demolished. All three rights are domestic. As a result, combine use limits will not be recommended to licensing.

Conditions:

Conditions 26A, 046, and 004 were removed and not forwarded to licensing. Condition 121 was updated to 103 and forwarded to licensing. Conditions 01M and 077, and the language "All uses are for seed processing operation" are forwarded to licensing.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
FIRE PROTECTION	01/01 to 12/31	0.66 CFS	
INDUSTRIAL FROM STORAGE	01/01 to 12/31		3.4 AF
COMMERCIAL FROM STORAGE	01/01 to 12/31		4.6 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		0.4 AF
FIRE PROTECTION FROM STORAGE	01/01 to 12/31		0.4 AF

Totals: 0.660 CFS 8.40 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ ~~None~~ **NATURE OF USE**
☐ Change P.U. as reflected above ☒ Add P.U. as reflected above ☐ None

I. AUTHENTICATION

Field Examiner's Name Aaron Skinner Date 5/8/2018
Reviewer Angela M. Quinn Date 5/8/18

State of Idaho
Department of Water Resources
Place of Use and Point of Diversion
Water Right Permit No. 63-33336

This map depicts the COMMERCIAL STORAGE, INDUSTRIAL STORAGE, and FIRE PROTECTION STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.045 0.09 0.18 Miles

Legend

- Well
- Storage Tanks



State of Idaho
Department of Water Resources
Place of Use and Point of Diversion
Water Right Permit No. 63-33336

This map depicts the INDUSTRIAL FROM STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.05 0.1 0.2 Miles

Legend

- Well
- Storage Tanks
- Industrial from Storage



State of Idaho
Department of Water Resources
Place of Use and Point of Diversion
Water Right Permit No. 63-33336

This map depicts the COMMERCIAL FROM STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



Legend

-  Well
-  Storage Tanks
-  Commercial from Storage

0 0.05 0.1 0.2 Miles

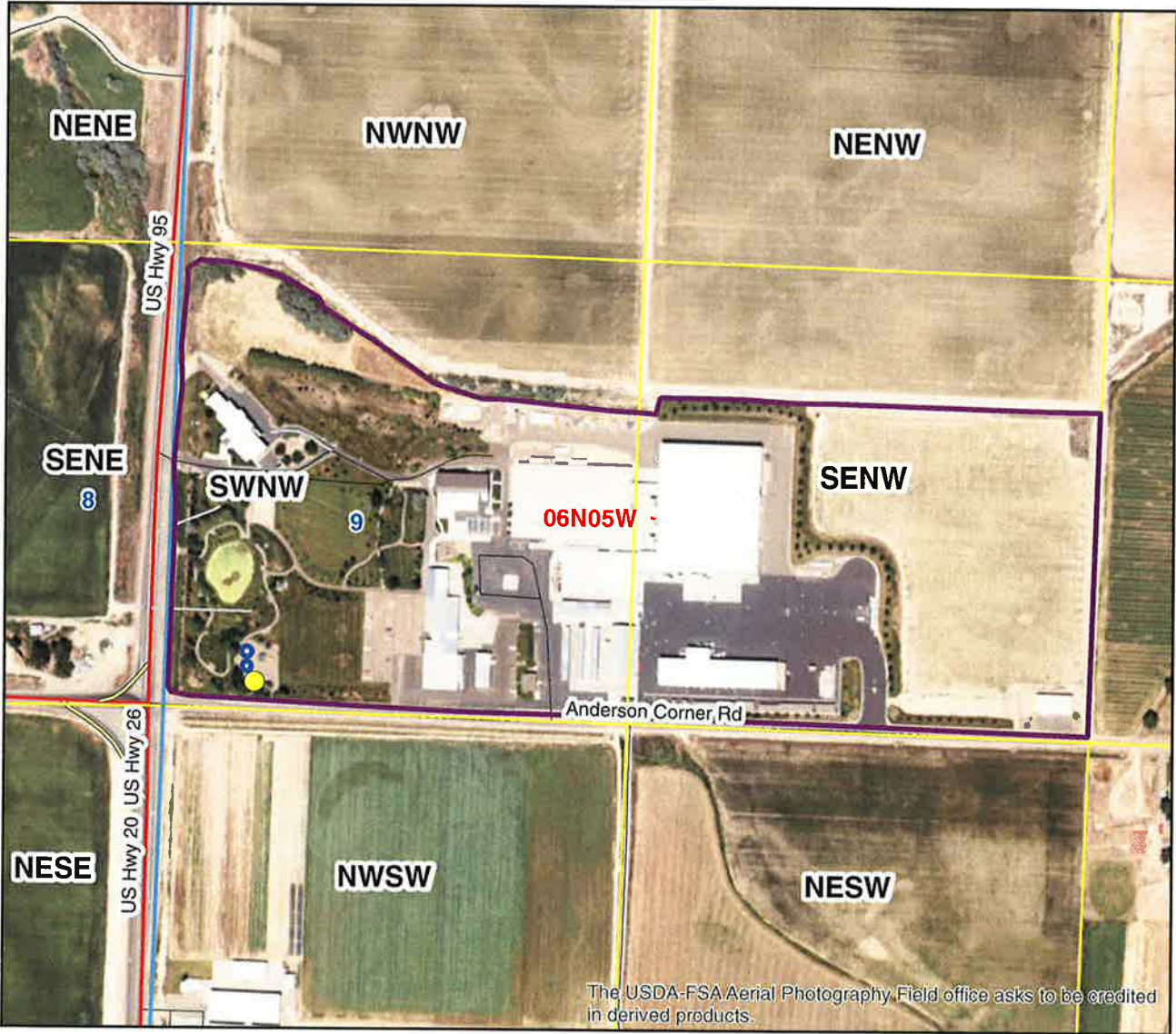


State of Idaho
Department of Water Resources

Place of Use and Point of Diversion

Water Right Permit No. 63-33336

This map depicts the FIRE PROTECTION and FIRE PROTECTION FROM STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

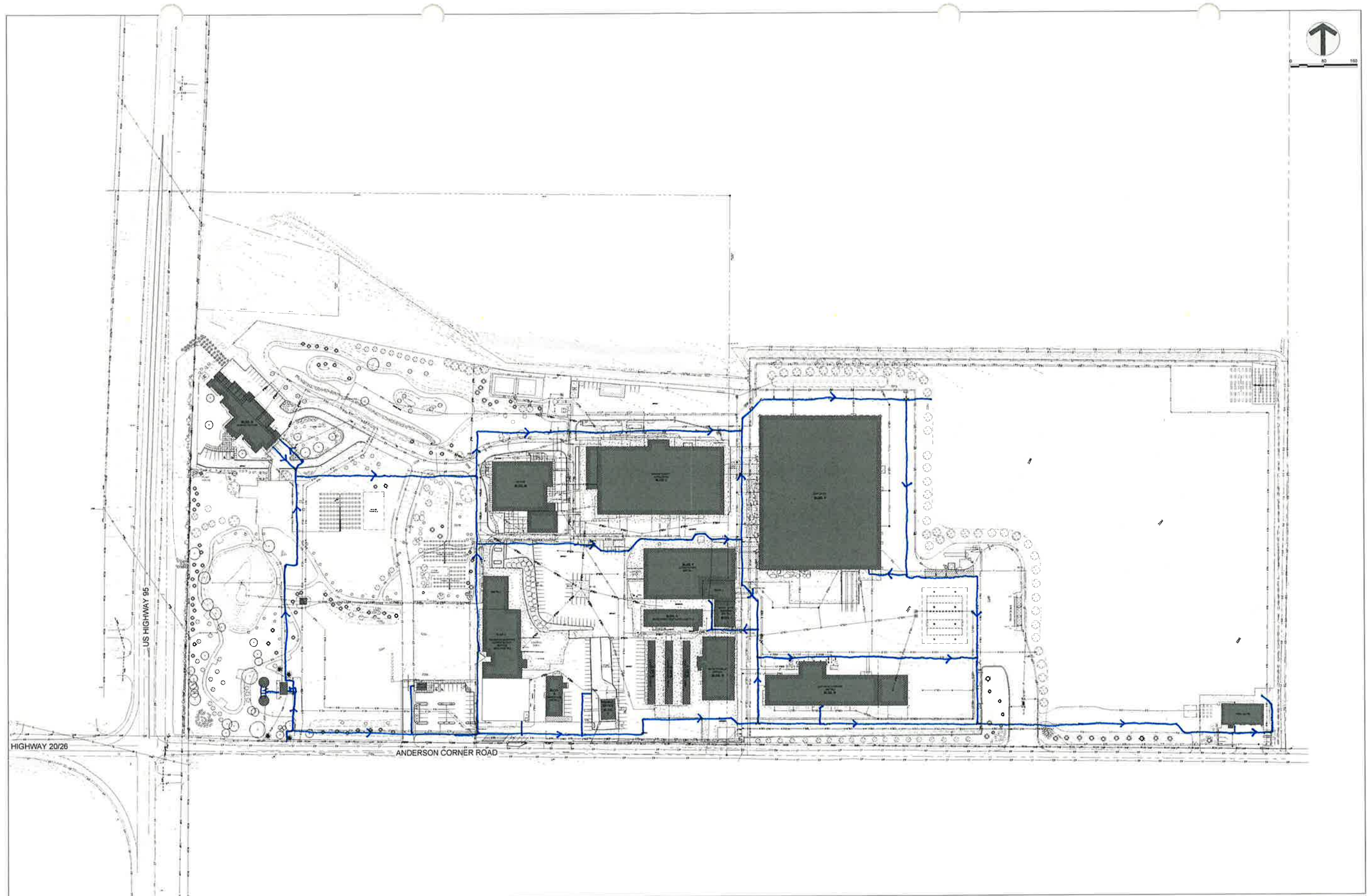


Legend

- Well
- Storage Tanks
- Fire Protection/Fire Protection from Storage

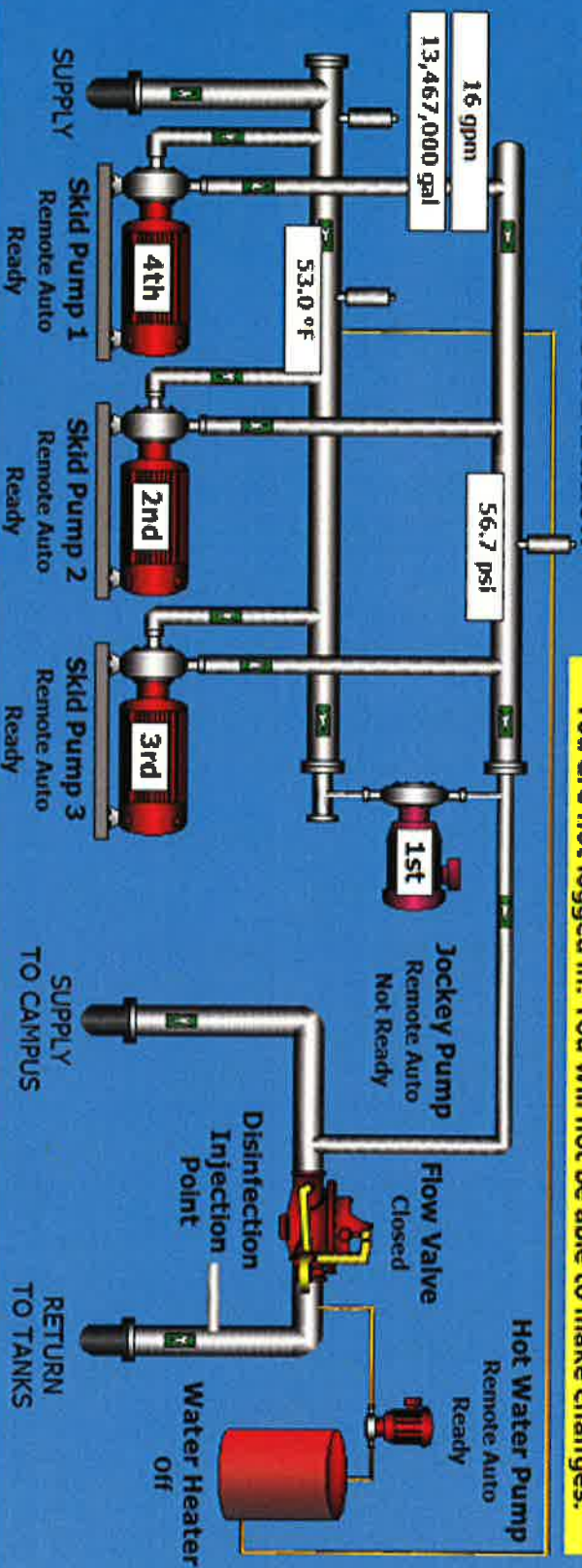
0 0.05 0.1 0.2 Miles





Well House - Water Distribution

You are not logged in. You will not be able to make changes.



Weekly Reports			
Last Week	Two Weeks Ago	Four Weeks Ago	User Defined Query
Three Weeks Ago			
Custom Time			

Dosing Log
Last Run

Building M	Disabled	64.87 psi	Trend	Building L	Disabled	54.06 psi
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Well House Room Temperature	54.9 °F
Room Temp Control	

Disinfection Dosing Pressure Control	
Water Temp Control	

Enviro	Waste Sm	Home
Wellhouse	Chillers	Alarm Test
Seedwash	Drum Prime	Comments
OSP		Users
3x Drum		
Building P		

Level Control

0 gpm

16,045,000 gal

Well Pump
Remote Auto
Ready

South Tank

12.56 ft

South Tank Mixer 2
Remote Auto
Running

North Tank

12.73 ft

North Tank Mixer 1
Remote Auto
Running

WATER METER READING LOG
LOG CONTACT: Jim Duncan
LAST UPDATED: 12/31/2017

2017 METER READING LOG FOR WATER USAGE

BUILDING	TYPE	LOCATION	ASSET ID	SERIAL NUMBER	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		TOTAL 2017
					METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	
DATE OF METER READING					January 4, 2017		February 1, 2017		March 1, 2017		April 1, 2017		May 1, 2017		June 1, 2017		July 1, 2017		August 1, 2017		September 1, 2017		October 1, 2017		November 1, 2017		December 1, 2017		January 4, 2018		TOTAL 2017
Building L	Building Main	Storage Room	WME-L01	09 013275	4,556,008	43,704	4,599,712	55,133	4,654,845	60,926	4,715,771	42,634	4,758,405	53,835	4,812,240	38,021	4,850,261	26,978	4,877,239	34,379	4,911,618	42,645	4,954,263	60,098	5,014,361	41,021	5,055,382	81,328	5,136,710	NA	1,092,000
Building L	Department	Disinfection	WME-L02	09 013276	3,142,525	39,379	3,181,904	48,946	3,230,850	54,438	3,285,288	37,130	3,322,418	47,697	3,370,115	26,150	3,396,265	34,844	3,431,109	3,832	3,434,941	26,829	3,461,770	41,261	3,503,031	34,360	3,537,391	75,418	3,612,809	NA	875,750
Building L	Department	Pelleting	WME-L03	10 004530	34,092	326	34,418	420	34,838	519	35,357	106	35,463	161	35,624	76	35,700	404	36,104	360	36,464	359	36,823	288	37,111	345	37,456	340	37,796	NA	2,340
Building L	Soft Water	Osmotic Priming	WME-L04	11 791180	252,432	1,460	253,892	1,597	255,489	1,762	257,251	324	257,575	1,624	259,199	1,007	260,206	1,524	261,730	18	261,748	759	262,507	1,185	263,692	872	264,564	797	265,361	NA	17,730
Building L	Hard Water	Osmotic Priming	WME-L05	10 004525	74,868	232	75,100	105	75,205	358	75,563	79	75,642	45	75,687	242	75,929	427	76,356	65	76,421	55	76,476	108	76,584	14	76,598	54	76,652	NA	1,920
Building L	Department	Drum Priming	WME-L06	10 004529	41,142	595	41,737	1,386	43,123	1,192	44,315	230	44,545	5	44,550	16	44,566	143	44,709	233	44,942	14	44,956	31	44,987	66	45,053	213	45,266	NA	4,120
Building L	Department	Chillers	WME-L07	150277772	3.3	0.0	3.3	0.0	3.3	0.1	3.4	74.6	78.0	15.0	93.0	0.0	93.0	3.0	96.0	4.0	100.0	0.0	100.0	1.0	101.0	38.0	139.0	4.0	143.0	NA	1.0
Building M	Building Main	Equipment Room	WME-M01	12 002293	918,000	8,271	926,271	18,920	945,191	23,440	968,631	19,983	988,614	27,467	1,016,081	32,090	1,048,171	34,440	1,082,611	28,413	1,111,024	19,200	1,130,224	20,720	1,150,944	19,091	1,170,035	19,131	1,189,166	NA	77,150
PROCESS WATER SUB-TOTAL					39,053		48,526		53,919		57,024		47,536		26,074		34,440		3,472		26,470		40,973		34,015		75,078				406,980
NON-PROCESS WATER TOTAL					114,947		67,474		91,081		38,976		126,464		140,926		114,560		252,528		193,530		237,027		62,985		60,922				1,201,420
Well House	Campus Main	NOT ACCURATE (DO NOT USE)	Well House Flow	From SCADA	110,000		49,000		100,000		36,000		112,000		68,000		51,000		178,000		147,000		131,000		58,000		52,000				1,092,000
Well House	Campus Main	Valve	Well Pump Flow	From SCADA	15,000		15,000		15,000		76,000		174,000		174,000		174,000		174,000		174,000		174,000		174,000		174,000				1,980,000
Date					1-1-17 to 1-31-17		2-1-17 to 2-28-17		3-1-17 to 3-31-17		4-1-17 to 4-30-17		5-01-17 to 5-31-17		6-01-17 to 6-30-17		7-01-17 to 7-31-17		8-01-17 to 8-31-17		9-01-17 to 9-30-17		10-01-17 to 10-31-17		11-01-17 to 11-30-17		12-01-17 to 12-31-17		1-1-18 to 1-31-18		1-1-17 to 12-31-17

2016 METER READING LOG FOR WATER USAGE

BUILDING	TYPE	LOCATION	ASSET ID	SERIAL NUMBER	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		TOTAL 2016	
					METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED		
DATE OF METER READING					January 4, 2016		February 1, 2016		March 1, 2016		April 1, 2016		May 1, 2016		June 1, 2016		July 1, 2016		August 1, 2016		September 1, 2016		October 1, 2016		November 1, 2016		December 1, 2016		January 1, 2017		TOTAL 2016	
Building L	Building Main	Storage Room	WME-L01	09 013275	3,895,541	56,370	3,951,911	61,874	4,013,785	76,702	4,090,487	71,046	4,161,533	33,542	4,195,075	38,694	4,233,769	47,518	4,281,287	33,818	4,315,105	66,580	4,381,685	54,190	4,435,875	52,691	4,488,566	67,442	4,556,008	NA	624,997	
Building L	Department	Disinfection	WME-L02	09 013276	2,661,155	50,239	2,711,394	54,916	2,766,310	70,132	2,836,442	65,303	2,901,745	22,647	2,924,392	15,405	2,939,797	22,865	2,962,662	12,938	2,975,600	24,310	2,999,910	40,499	3,040,409	43,033	3,083,442	59,083	3,142,525	NA	211,131	
Building L	Department	Pelleting	WME-L03	10 004530	30,791	476	31,267	346	31,613	173	31,786	80	31,866	21	31,887	106	31,993	292	32,285	311	32,596	345	32,941	419	33,360	295	33,655	437	34,092	NA	3,820	
Building L	Soft Water	Osmotic Priming	WME-L04	11 791180	222,084	3,372	225,456	3,486	228,942	2,977	231,919	2,308	234,227	656	234,883	2,893	237,776	1,933	239,709	732	240,441	1,002	241,443	3,463	244,906	4,039	248,945	3,487	252,432	NA	26,072	
Building L	Hard Water	Osmotic Priming	WME-L05	10 004525	67,394	294	67,688	565	68,253	1,049	69,302	280	69,582	416	69,998	61	70,059	407	70,466	211	70,677	301	70,978	848	71,826	1,289	73,115	1,753	74,868	NA	7,180	
Building L	Department	Drum Priming	WME-L06	10 004529	38,033	290	38,323	651	38,974	1,102	40,076	441	40,517	254	40,771	17	40,788	35	40,823	1	40,824	12	40,836	50	40,886	16	40,902	240	41,142	NA	1,810	
Building L	Department	Chillers	WME-L07	150277772	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	
Building M	Building Main	Equipment Room	WME-M01	12 002293	593,525	16,850	610,375	22,448	632,823	21,752	654,575	25,943	680,518	27,221	707,739	29,650	737,389	34,926	772,315	35,597	807,912	23,648	831,560	27,649	859,209	23,906	883,115	34,885	918,000	NA	107,620	
PROCESS WATER SUB-TOTAL					49,763		54,570		69,959		65,223		22,626		15,299		22,573		12,627		23,965		40,080		42,738		58,646					476,080
NON-PROCESS WATER TOTAL					77,237		86,430		53,041		91,777		116,374		117,701		141,427		130,373		157,035		158,920		51,262		30,354					1,711,911
Pump House	Campus Main	Building	Well House Flow	From SCADA	73,000		82,000		79,000		106,000		67,000		58,000		75,000		58,000		88,000		140,000		47,000		42,000					772,000
Pump House	Campus Main	Building	Well Pump Flow	From SCADA	127,000		141,000		123,000		157,000		139,000		133,000		164,000		143,000		181,000		199,000		94,000		89,000					1,980,000
Date					1-1-16 to 1-31-16		2-1-16 to 2-28-16		3-1-16 to 3-31-16		4-1-16 to 4-30-16		5-01-16 to 5-31-16		6-01-16 to 6-30-16		7-01-16 to 7-31-16		8-01-16 to 8-31-16		9-01-16 to 9-30-16		10-01-16 to 10-30-16		11-01-16 to 11-30-16		12-01-16 to 12-31-16		1-1-16 to 12-31-16			

2015 METER READING LOG FOR WATER USAGE

BUILDING	TYPE	LOCATION	ASSET ID	SERIAL NUMBER	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		TOTAL 2015
					METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	METER READING	MONTHLY GALLONS USED	
DATE OF METER READING					NONE	February 25, 2015		March 2, 2015		April 1, 2015		May 1, 2015		June 1, 2015		July 1, 2015		August 1, 2015		September 1, 2015		October 1, 2015		November 1, 2015		December 1, 2015		January 4, 2016	TOTAL GALLONS USED		
Building L	Building Main	Storage Room	WME-L01	09 013275	NA	3,326,658	12,872	3,339,530	63,621	3,403,151	28,140	3,431,291	54,228	3,485,519	58,805	3,544,324	45,026	3,589,350	74,019	3,663,369	48,006	3,711,375	85,910	3,797,285	55,000	3,852,285	43,256	3,895,541	NA	772,000	
Building L	Department	Disinfection	WME-L02	09 013276	NA	2,332,625	11,870	2,344,495	57,480	2,401,975	18,348	2,420,323	13,846	2,434,169	14,794	2,448,963	13,347	2,462,310	43,142	2,505,452	18,206	2,523,658	52,611	2,576,269	46,963	2,623,232	37,923	2,661,155	NA	211,131	
Building L	Department	Pelleting	WME-L03	10 004530	NA	25,594	63	25,657	638	26,295	206	26,501	287	26,788	487	27,275	416	27,691	628	28,319	419	28,738	1,146	29,884	623	30,502	284	30,791	NA	5,101	
Building L	Soft Water	Osmotic Priming	WME-L04	11 791180	NA	208,773	598	209,371	1,861	211,232	146	211,378	2,050	213,428	897	214,325	394	214,719	2,832	217,551	1,217	218,768	2,560	221,328	756	222,084	0	222,084	NA	13,711	
Building L	Hard Water	Osmotic Priming	WME-L05	10 004525	NA	66,213	30	66,243	471	66,714	194	66,908	2	66,910	54	66,964	8	66,972	269	67,241	98	67,339	44	67,383	16	67,399	0	67,399	NA	1,133	
Building L	Department	Drum Priming	WME-L06	10 004529	NA	36,597	0	36,597	101	36,698	111	36,809	65	36,874	220	37,094	127	37,221	141	37,362	125	37,487	346	37,833	156	37,989	44	38,033	NA	1,518	
Building M	Building Main	Equipment Room	WME-M01	12 002293	NA	393,299	1,862	395,161	13,095	408,256	19,356	427,612	23,385	450,997	34,962	485,959	21,884	507,843	22,772	530,615	19,210	549,825	16,814	566,639	11,818	578,457	15,068	593,525	NA	200,728	
SUB-TOTAL					0	27,295		137,267		66,501		93,863		110,219		81,202		143,803		87,281		159,431		115,332		96,575				1,118,708	
Pump House	Campus Main	Building	Well House Flow	From SCADA	60,000	65,000		43,000		27,000		60,000		52,000		58,000		100,000		45,000		67,000		56,000		138,000				772,000	
Pump House	Campus Main	Building	Well Pump Flow	From SCADA	133,000	149,000		111,000		96,000		169,000		165,000		172,000		234,000		139,000		199,000		126,000		157,000				2,880,000	
Date					1-1-15 to 1-31-15	2-1-15 to 2-28-15	3-1-15 to 3-31-15	4-1-14 to 4-30-15	5-01-15 to 5-31-15	6-01-15 to 6-30-15	7-01-15 to 7-31-15	8-01-15 to 8-31-15	9-01-15 to 9-30-15	10-01-15 to 10-30-15	11-01-15 to 11-30-15	12-01-15 to 12-31-15	1-1-15 to 1-31-15														

Year	Beneficial Use	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Total
2015	Industrial from Storage			137,267	66,501	93,863	110,219	81,202	143,803	87,291	159,431	115,332	96,575	1,091,484
	Commercial from Storage			43,000	27,000	60,000	52,000	58,000	100,000	45,000	67,000	56,000	138,000	646,000
TOTAL				180,267	93,501	153,863	162,219	139,202	243,803	132,291	226,431	171,332	234,575	1,737,484
2016	Industrial from Storage	49,763	54,570	69,959	65,223	22,626	15,299	22,573	12,627	23,965	40,080	42,738	58,646	478,069
	Commercial from Storage	77,237	86,430	53,041	91,777	116,374	117,701	141,427	130,373	157,035	158,920	51,262	30,354	1,211,931
TOTAL		127,000	141,000	123,000	157,000	139,000	133,000	164,000	143,000	181,000	199,000	94,000	89,000	1,690,000
2017	Industrial from Storage	39,053	48,526	53,919	37,024	47,536	26,074	34,440	3,472	26,470	40,973	34,015	75,078	466,580
	Commercial from Storage	114,947	67,474	91,081	38,976	126,464	140,926	114,560	252,528	193,530	237,027	62,985	60,922	1,501,420
TOTAL		154,000	116,000	145,000	76,000	174,000	167,000	149,000	256,000	220,000	278,000	97,000	136,000	1,968,000
AVERAGE	Industrial from Storage	44,408	51,548	87,048	56,249	54,675	50,531	46,072	53,301	45,909	80,161	64,028	76,766	678,711
	Commercial from Storage	96,092	76,952	62,374	52,584	100,946	103,542	104,662	160,967	131,855	154,316	56,749	76,425	1,119,784
TOTAL		140,500	128,500	149,422	108,834	155,621	154,073	150,734	214,268	177,764	234,477	120,777	153,192	1,798,495

Gal/Day Per Month	Industrial from Storage	2,115	2,577	3,957	2,679	2,485	2,297	2,194	2,423	2,087	3,644	2,910	3,489
	Commercial from Storage	4,368	3,848	2,835	2,504	4,588	4,706	4,984	7,317	5,993	7,014	2,580	3,474
GPM	Industrial from Storage	3.52	4.30	6.59	4.46	4.14	3.83	3.66	4.04	3.48	6.07	4.85	5.82
	Commercial from Storage	7.28	6.41	4.73	4.17	7.65	7.84	8.31	12.19	9.99	11.69	4.30	5.79
CFS	Industrial from Storage	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Commercial from Storage	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.02	0.03	0.01	0.01

	Beneficial Use	Gal/Month	Gal/Day	GPM/10 Hrs	CFS	GPM/8 Hrs	CFS	Tanks (gal)	GPM at 0.08 cfs	GPD at 0.08 cfs	Days to Refill	Refill Occurrence (days)	Number of Refills per Year
RATE	Commercial from Storage (High)	252,528	11,479	19.13	0.043	23.91	0.053						
	Commercial from Storage (3 Yr Average)	98,122	4,460	7.43	0.017	9.29	0.021						
	Industrial from Storage (High)	137,267	6,239	10.40	0.023	13.00	0.029	120,000	36	51,840	2.31	9.50	21.61
	Industrial from Storage (3 Yr Average)	59,225	2,692	4.49	0.010	5.61	0.012						
	Highest Total Combined Use	278,000	12,636	21.06	0.047	26.33	0.059						
	Highest Total Combined 3 Yr Average Use	234,477	10,658	17.76	0.039	22.20	0.049						

	Beneficial Use	Gal/Year	AF/Year
VOLUME	Commercial from Storage (High)	1,501,420	4.61
	Commercial from Storage (3 Yr Average)	1,119,784	3.44
	Industrial from Storage (High)	1,091,484	3.35
	Industrial from Storage (3 Yr Average)	678,711	2.08
	Highest Total Combined Use	2,592,904	7.96
	Highest Total Combined 3 Yr Average Use	1,798,495	5.52

59,225
98,122

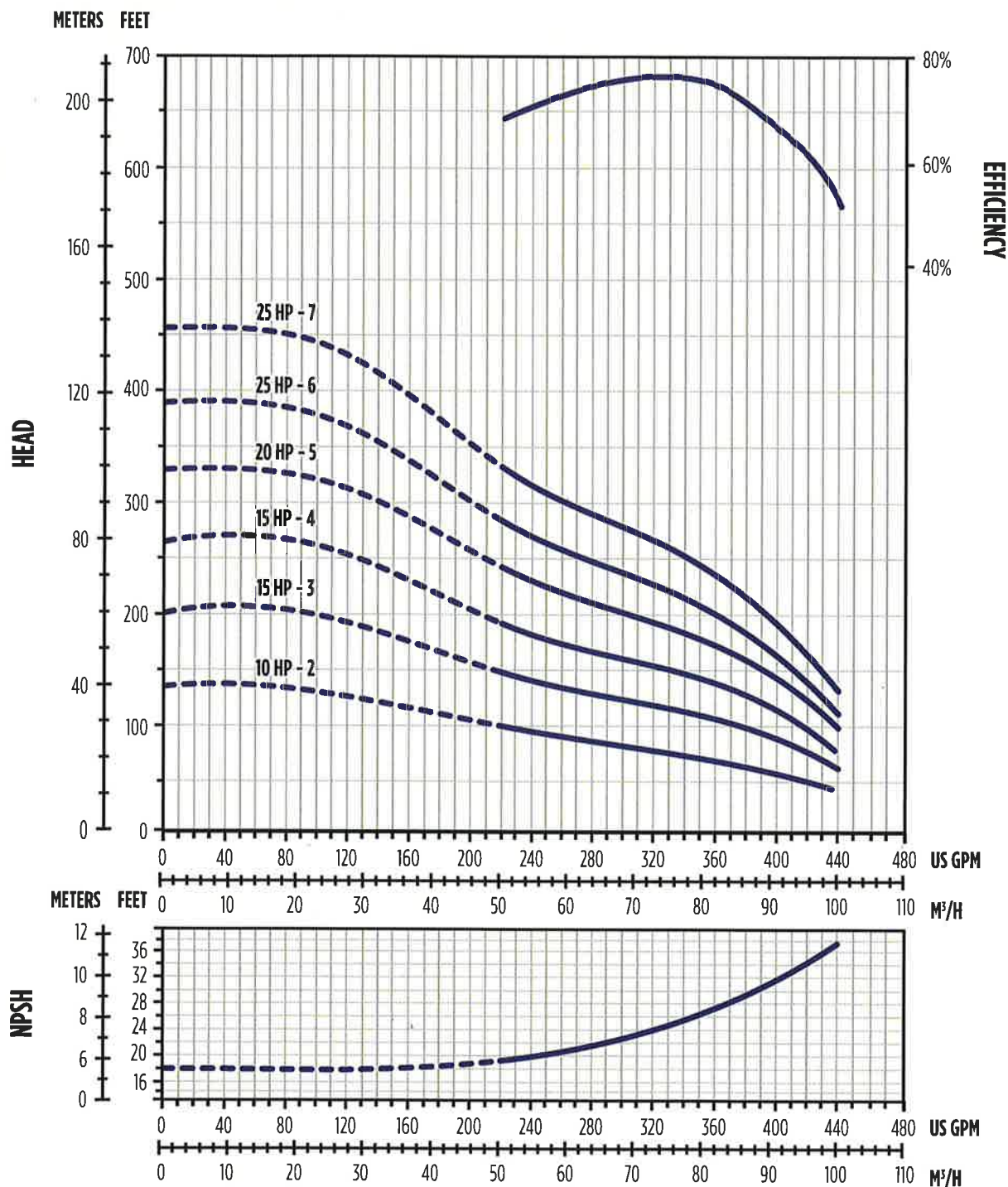
SUBMERSIBLE PUMPS

6" STAINLESS STEEL SR SERIES



PERFORMANCE

325 GPM



[illegible][illegible]

	UNDO/M9	BathSequence	Draft	Owner	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESSE	NWSE	SWSE	SESE	TotalsAcres
	Water Right	63-10683	N	BROWN, VERNIE	IRRIGATION																	12
	Water Right	63-10725	N	FORTIN, CELIL	GROUND WATER STOCKWATER			X														
	Water Right	63-139C	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.; STEENBERG COOP DITCH CO.; TUCKER, R M	BOSES RIVER IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-188	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	BOSES RIVER IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-189	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	BOSES RIVER IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-190	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	BOSES RIVER IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-191	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	BOSES RIVER IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-21556	N	SCHOCKMAN, BARBARA	GROUND WATER DOMESTIC													X				
	Water Right	63-21556	N	SCHOCKMAN, BARBARA	STOCKWATER																	
	Water Right	63-21562	N	UNITED STATES OF AMERICA ACTING THROUGH ELIJAH SLOUGH	IRRIGATION		X	X		X								X		X		
	Water Right	63-2322	N	UNITED STATES OF AMERICA ACTING THROUGH WILSON SLOUGH	IRRIGATION		X	-	X	X								X		X		
	Water Right	63-2878	N	BLACK CANYON IRRIGATION DIST	ELIJAH DRAIN IRRIGATION		X	X	X	X								X		X		
	Water Right	63-2878	N	BLACK CANYON IRRIGATION DIST	WILSON DRAIN IRRIGATION		X	X	X	X								X		X		
	Water Right	63-296	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	BOSES RIVER IRRIGATION							X						X				
	Water Right	63-30011	N	ELIBEE, BONNIE L.	GROUND WATER DOMESTIC							X						X				
	Water Right	63-30011	N	ELIBEE, BONNIE L.	GROUND WATER STOCKWATER								X							X		
	Water Right	63-30015	N	HARTMAN, ARMINIE P	GROUND WATER DOMESTIC													X				
	Water Right	63-30018	N	LOEFFLER, A.W.	GROUND WATER DOMESTIC																	
	Water Right	63-30069	N	MORRIS GARDNER, KATHLEEN; PATRICIA J. MORRIS; JOE ANN MORRIS	GROUND WATER DOMESTIC																	
	Water Right	63-30383	N	HOCHEN, CAROLYN N.; HOCHEN, MOHAI N.; PARKS, ANNETTE LUNE; PARKS, PAUL	GROUND WATER DOMESTIC																	
	Water Right	63-30392	N	NOVOTNY BRUCE; NOVOTNY DAVID; NOVOTNY CHARLES INC.	CALADON WATER DOMESTIC																	
	Water Right	63-30942	N	KOCHER BOB USA INC.	GROUND WATER DOMESTIC																	
	Water Right	63-33336	Y	NUNHEMS USA INC	GROUND WATER COMMERCIAL																	
	Water Right	63-33336	Y	NUNHEMS USA INC	GROUND WATER DOMESTIC																	
	Water Right	63-33336	Y	NUNHEMS USA INC	GROUND WATER FIRE PROTECTION																	
	Water Right	63-33336	Y	NUNHEMS USA INC	GROUND WATER INDUSTRIAL																	
	Water Right	63-4851	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	SAND HOLLOW DR IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-4852	N	FARMERS COOPERATIVE DITCH CO.; HONINGER, CHARLES L.	CANNAY DRAIN IRRIGATION		X	X		X	X	X	X	X	X	X	X	X	X	X		
	Water Right	63-9948	N	DESSERT SEED CO.; PACI & NIESTEN FARMS	GROUND WATER IRRIGATION							40										
	Water Right	63-2433	N	UNITED STATES OF AMERICA ACTING THROUGH PAYETTE RIVER	IRRIGATION		X	X														

[illegible][illegible]

X X

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

860050

1. WELL TAG NO. D 0059096

Drilling Permit No. 911405-860050

Water right or injection well # 63-33336

2. OWNER: Nunhems, USA Inc.

Name

Address 1200 Anderson Corner Rd

City Parma State ID Zip 83660

3. WELL LOCATION:

Twp. 6 North ☒ or South ☐ Rge. 5 East ☐ or West ☒
Sec. 9 SW 1/4 SW 1/4 NW 1/4

Gov't Lot County Payette

Lat. N 43 ° 52.391 (Deg. and Decimal minutes)

Long. W 116 ° 57.209 (Deg. and Decimal minutes)

Address of Well Site NE corner of Anderson Corner Rd and Hwy 95 city Parma

(Give at least name of road - Distance to Road or Landmark)

Lot. Blk. Sub. Name

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection☒ Other Fire Protection/Commercial/Industrial

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well☐ Abandonment ☐ Other

6. DRILL METHOD:

☐ Air Rotary ☐ Mud Rotary ☐ Cable ☒ Other Reverse

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Bentonite Chips	0	330	35,000	Dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Linear	Threaded	Welded
8	+2	354	.322	Steel	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☐ N MethodManufactured screen ☒ Y ☐ N Type Wire Wrap

Method of installation Lower in

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
354	369	.025		8	S.S.	w/Bottom plate

Length of Headpipe Length of Tailpipe

Packer ☐ Y ☒ N Type

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
#10-20 Sand	330	372	9,000	Dry pour

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) Static water level (ft) 52' 3"

Water temp. (°F) 74 Bottom hole temp. (°F)

Describe access port Baker Pitless Well Cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
148	450	480

Test method:

Pump	Ball	Air	Flowing artesian
☒	☐	☐	☐

Water quality test or comments:

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	2	Top soil		X
20	2	21	Brown clay		X
20	21	43	Fine-coarse sand some gravel		
20	43	55	Brown, tan clay		X
20	55	65	Fine-coarse sand	X	
20	65	84	Gravel	X	
20	84	169	Blue clay		X
20	169	175	Fine sand	X	
20	175	181	Blue clay		X
20	181	200	Fine-med sand	X	
20	200	211	Blue clay		X
20	211	215	Fine sand	X	
20	215	227	Blue clay		X
20	227	231	Fine sand	X	
20	231	340	Blue clay		X
20	340	344	Fine sand	X	
20	344	350	Blue clay, some sandy clay		X
20	350	355	Fine sand	X	
20	355	365	Fine-coarse sand w/some pea gravel	X	
20	365	379	Sandy blue clay		X
20	379	393	Fine sand	X	X
20	393	400	Sandy blue clay		X

RECEIVED

OCT 22 2010

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 369'

Date Started: Sep 29, 2010

Date Completed: Oct 14, 2010

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 Riverside Inc

Co. No. 333

*Principal Driller

Date 10-20-10

*Driller

Date

*Operator II

Date 10-20-10

Operator I

Date 10-20-10

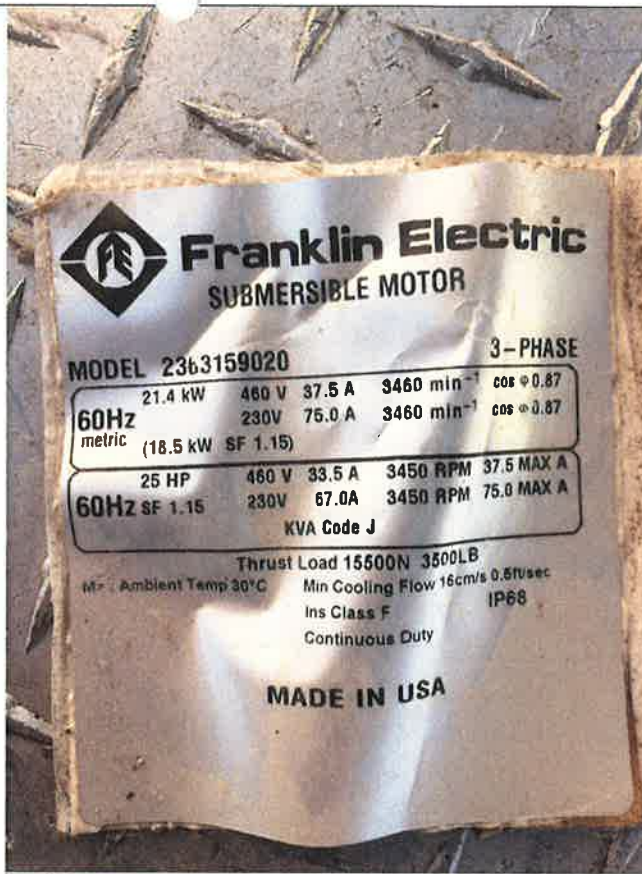
* Signature of Principal Driller and rig operator are required.



8" well for
commercial,
industrial, and fire
protection use.
Drill complete
October 14, 2010
to 400' with static
water at 52'3".



Well Tag No.
D0059096



Franklin Electric submersible motor information for well.



Three phase 25 hp motor. Pump information is not available for this well.



Pump house with three booster pumps.



60 hp booster.
Serial No.
C0802070223



60 hp booster.
Serial No.
C0807190758



60 hp booster.
Serial No.
C0802070238



Two 60,000 gallon storage tanks used to store fire protection water and minimize peak use impact to the well.



Eye wash station in Building L.



Specialized seed
disease
disinfection
process before
pelleting begins.



Water tank for
seed disinfection
process.



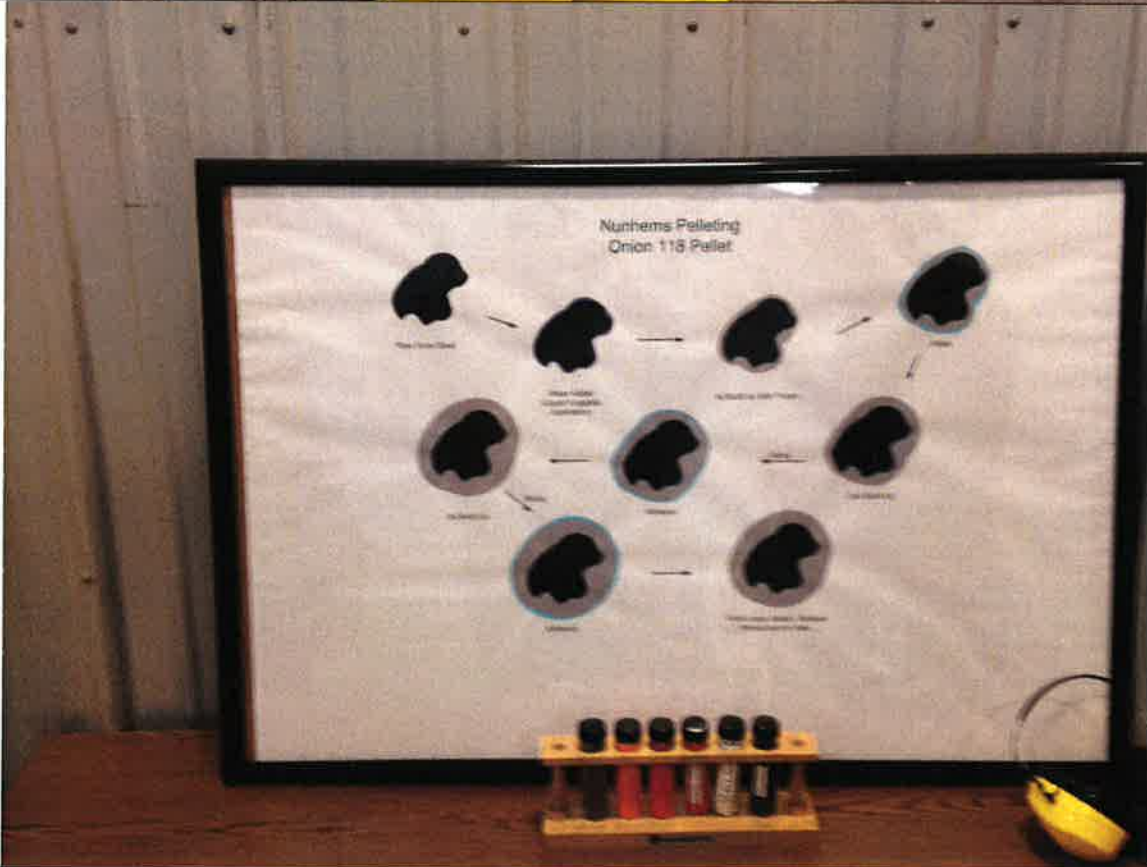
Another area of industrial water use in the seed pelleting process.



Water used to prime seeds and soak seeds so that the seed will pre-germinate.



Industrial water use mixed with specific chemicals is used during the disinfection and pelleting processes.



Pelleting process for onions, carrots, melons, and cucumbers performed at the facility (round outer layer around seed)



Well for WR 63-30202 that has been disconnected due to inefficient production.

From: Aaron Harrigfeld <aaron.harrigfeld@bayer.com>
Sent: Wednesday, March 21, 2018 2:08 PM
To: Skinner, Aaron
Cc: Shane Roe
Subject: RE: Water Meter Reading Log
Attachments: 2017-02-27 Nunhems USA PARMA-TOPO - 2017.pdf

The flow meter that is measuring the potable water is located in a vault downstream of the well pump prior to the storage tanks as shown below.

Well House - Water Distribution

You are not logged in. You will not be able to make changes.

16 gpm
13,467,000 gal

56.7 psi

53.0 °F

1st Jockey Pump Remote Auto Not Ready

2nd Skid Pump 2 Remote Auto Ready

3rd Skid Pump 3 Remote Auto Ready

4th Skid Pump 1 Remote Auto Ready

SUPPLY

SUPPLY TO CAMPUS

RETURN TO TANKS

Flow Valve Closed

Disinfection Injection Point

Hot Water Pump Remote Auto Ready

Water Heater Off

Weekly Reports

Last Week	Two Weeks Ago
Three Weeks Ago	Four Weeks Ago
Custom Time	User Defined Query

Dosing Log

Last Run

Level Control

0 gpm
16,045,000 gal

Well Pump Remote Auto Ready

South Tank

12.56 ft

South Tank Mixer 2 Remote Auto Running

North Tank

12.73 ft

North Tank Mixer Remote Auto Running

Well House Room Temperature 54.9 °F

Room Temp Control

Disinfection Dosing Pressure Control

Water Temp Control

Enviro Wellhouse Seedwash OSP 3x Drum Building P Waste Str Chillers Drum Prime Home Alarm Test Correns Users

Best regards,

Aaron Harrigfeld
Reliability Engineer



Bayer U.S. LLC
Crop Science, Vegetable Seeds
Site/Facility Management
1200 Anderson Corner Road
Parma, Idaho 83660 USA
Tel: +1 208 674-4063
Mobile: +1 208 614-7436
E-mail: aaron.harrigfeld@bayer.com
Web: <http://www.bayer.com>

From: Skinner, Aaron [<mailto:Aaron.Skinner@idwr.idaho.gov>]
Sent: Tuesday, March 20, 2018 3:08 PM
To: Aaron Harrigfeld
Cc: Shane Roe
Subject: RE: Water Meter Reading Log

Got it! Thank you, Aaron.

Two more questions... Where is the location of the SCADA flow meter? In flow to storage tanks or out flow from storage tanks? Also, according to the water line schematic I received, a 2" W to 8" W line runs from the well east along the property line to the southeast corner for domestic use. Does this run directly from the well or via the pump house? I've also assumed "W" stands for water.

Thanks for your help.

Aaron

From: Aaron Harrigfeld [<mailto:aaron.harrigfeld@bayer.com>]
Sent: Tuesday, March 20, 2018 1:43 PM
To: Skinner, Aaron <Aaron.Skinner@idwr.idaho.gov>
Cc: Shane Roe <shane.roe@bayer.com>
Subject: RE: Water Meter Reading Log

Aaron,

- Non-Process Water = Potable Water for employee use (Entire Site subtract Process Water)
- Process Water = Industrial Water for Building L (Disinfection and Pelleting Only)

We started tracking the water usage on February 25, 2015. I would recommend omitting January and February 2015 in order to determine the monthly average water use.

Hope this helps.

Best regards,

Aaron Harrigfeld
Reliability Engineer



Bayer U.S. LLC
Crop Science, Vegetable Seeds
Site/Facility Management
1200 Anderson Corner Road
Parma, Idaho 83660 USA
Tel: +1 208 674-4063
Mobile: +1 208 614-7436
E-mail: aaron.harrigfeld@bayer.com
Web: <http://www.bayer.com>

From: Skinner, Aaron [<mailto:Aaron.Skinner@idwr.idaho.gov>]
Sent: Monday, March 19, 2018 12:24 PM
To: Aaron Harrigfeld
Subject: RE: Water Meter Reading Log

Couple quick questions, Aaron.

On the spreadsheet, there are two rows labeled "Process water sub-total" and Non-Process Water Total." I've interpreted this as process water subtotal = commercial/industrial use and non-process water total = domestic use. Is this correct?

Also, in trying to find a monthly average, the 2015 Water Meter Reading Log tab is set-up a little different than the more recent tabs. The more recent tabs add the process and non-process cells together equaling the Well Pump Flow from SCADA rows. Not so much for 2015. Specifically, January and February. Would it be best to leave those two columns out and run with the rest of the data?

Any help would be greatly appreciated.

Thanks,

Aaron

From: Aaron Harrigfeld [<mailto:aaron.harrigfeld@bayer.com>]
Sent: Monday, March 19, 2018 9:36 AM
To: Skinner, Aaron <Aaron.Skinner@idwr.idaho.gov>
Subject: RE: Water Meter Reading Log

Aaron,

Do we still need to catch up to discuss the water log?

Best regards,

Aaron Harrigfeld
Reliability Engineer



Bayer U.S. LLC
Crop Science, Vegetable Seeds
Site/Facility Management
1200 Anderson Corner Road
Parma, Idaho 83660 USA
Tel: +1 208 674-4063
Mobile: +1 208 614-7436
E-mail: aaron.harrigfeld@bayer.com
Web: <http://www.bayer.com>

From: Skinner, Aaron [<mailto:Aaron.Skinner@idwr.idaho.gov>]
Sent: Thursday, March 15, 2018 11:37 AM
To: Aaron Harrigfeld
Cc: Shane Roe
Subject: Water Meter Reading Log

Aaron,

Do you have time today to chat about the spreadsheet you and Jim developed? I'm in the process of crunching numbers and wanted to make sure I was interpreting everything correct. I'll be in the office until 5 pm. Feel free to call when/if it is convenient.

Thank you,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent
(208) 334-2190
aaron.skinner@idwr.idaho.gov

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Freundliche Grüße / Best regards,

Shane Roe

Sr. Manager Site Services



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Crop Science, Crop Science
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United States
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E-mail: shane.roe@bayer.com
Web: <http://www.bayer.us>

From: Skinner, Aaron [<mailto:Aaron.Skinner@idwr.idaho.gov>]
Sent: Wednesday, January 31, 2018 12:52 PM
To: Shane Roe
Subject: RE: Nunhems USA, Inc. Pump Information

Hi Shane,

If you will send me an updated version of the meter reading log Aaron created, I can back calculate a daily average (I got the updated yearly total, but not monthly breakdown). This will hopefully make things easier for the both of us with respect to the well information. I'll also be able to break it down to a gallon per minute based on your normal operating hours per day. Below is a list of a few items that would help in the process:

1. Daily hours of operation (max and average) **6:00 am to 4:00 pm | 8 Hours to 10 Hours Typical & second shift from 4:00 pm to 12:00 am in Building P from September thru December with minimal water usage.**
2. Month and year use total from the reading log spreadsheet (2017 log is great) **See attached updated 2017 Water Meter Reading Log.**
3. General map of the main lines from the well to the buildings and size of main line **See attached Utility Plan with water piping.**

Let me know if you have any questions.

Thank you,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent
(208) 334-2190
aaron.skinner@idwr.idaho.gov

From: Shane Roe [<mailto:shane.roe@bayer.com>]
Sent: Monday, January 22, 2018 3:28 PM
To: Skinner, Aaron <Aaron.Skinner@idwr.idaho.gov>
Subject: RE: Nunhems USA, Inc. Pump Information

Hi Aaron,

Skinner, Aaron

From: Aaron Harrigfeld <aaron.harrigfeld@bayer.com>
Sent: Monday, February 05, 2018 10:17 AM
To: Skinner, Aaron
Cc: Shane Roe; James Duncan
Subject: RE: Nunhems USA, Inc. Pump Information
Attachments: 2017-02-27 Nunhems USA PARMA-TOPO - 2017.pdf; WATER METER READING LOGS.xlsx

Aaron and Shane,

Jim and I were able to get the updated February 2018 meter readings and I updated the 2017 Water Meter Reading Log by month.

Please see my comments in **Red** below and let me know if you need any additional information.

Best regards,

Aaron Harrigfeld

Reliability Engineer



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E-mail: aaron.harrigfeld@bayer.com
Web: <http://www.bayer.com>

From: Shane Roe
Sent: Thursday, February 01, 2018 2:03 PM
To: Aaron Harrigfeld
Subject: FW: Nunhems USA, Inc. Pump Information

Hi Aaron,
Please see below. Can you help me pull this together for IDWR?

Thanks,

It was very nice meeting with you the other day and looking at our water systems and wells. I have been working on obtaining information on our main well's pump. To date I have only been able to get the basic information. My next step is to contact the pump manufacturer and get the pump curves you requested.

Here is the Pump information I have been able to derive thus far: See attached

Freundliche Grüße / Best regards,

Shane Roe

Sr. Manager Site Services

////////////////

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State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

December 27, 2017

COPY

NUNHEMS USA INC
1200 ANDERSON CORNER RD
PARMA, ID 83660

RE: Scheduling Field Exam for Water Right Permit No. 63-33336

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **0.67 cfs of GROUND WATER** for **INDUSTRIAL, COMMERCIAL, DOMESTIC, AND FIRE PROTECTION** use. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment form. If the Department does not received a response by January 29, 2018, your permit will become void. Thank you for your attention to this matter.

Sincerely,

Aaron Skinner
Water Resource Agent
Idaho Department of Water Resources
Phone: (208) 334-2190
Email: aaron.skinner@idwr.idaho.gov

Enclosures: Relinquishment of Permit form
Water Permit Report and Map