STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12347
Exam Date: 07/28/2020

1. Current Owner:
FRIENDS DAIRY LLC PO BOX 580 MARSING ID 83639

2. Accompanied by: Jacob and Jeff
Phone No: (208)573-5407
Address: 18730 Tucker Rd, Greenleaf, ID 83626
Relationship to permit Holder: Son of permit holder, employee

3. **SOURCE:**
GROUND WATER

Method of Determination: Site visit, well logs

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
63-28989	Groundwater	Stockwater	Decreed
63-28990	Groundwater	Stockwater	Decreed
63-31599	Groundwater	Commercial, Stockwater	License

Comments: These three WR's are also owned and operated by the permit holder for the same dairy.

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

Water Right No.	Source	Purpose of Use	Basis
63-28989	Groundwater	Stockwater	Decreed
63-28990	Groundwater	Stockwater	Decreed
63-31599	Groundwater	Commercial, Stockwater	License

Comments: Old wells serving overlapping water rights have been abandoned, and all now operate out of same single well and delivery system as this permit. It is recommended that the commercial use under 63-34599 and 63-12347 have a combined limit of 14.3 af.

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
GROUND WATER SE¼ NE¼, Sec. 32, Twp 04N, Rge 04W, B.M. CANYON County

Method of Determination: GPS, site visit, wells logs

PLACE OF USE: STOCKWATER & COMMERCIAL

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	04W	33							X										

Method of Determination: Site visit, Aerial imagery, digital PLSS map

3.

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

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

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

X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
446677	Franklin – Submersible	50	n/a	Goulds	4"

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
n/a	n/a	n/a	n/a	n/a	n/a	n/a

2. Measurements: No measurements were taken.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method:

$$Q = \frac{8.8 * (\text{Efficiency}) * hp}{\text{depth to water} + 2.31*(psi)+\text{friction}} = \frac{8.8*0.7*50}{400*2.31*50} = \mathbf{0.60\ cfs}$$

Permit (SW & Comm.)	0.50 cfs
B.U. Standard	0.52 cfs
B.U. Fee Paid	$100 → 0.21 to 1.00 cfs
Theoretical System Capacity	0.60 cfs
Existing SW BU	0.41 cfs
Existing Comm. BU	0.33 cfs

License Recommendation SW **0.19 cfs**

License Recommendation Comm. **0.27 cfs**

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: n/a

2. Volume Calculations for Other Uses: See attached Dairy Water Use spreadsheet for commercial volume

AP memo states stockwater volume for 800 dairy cattle use 35 gpd/hd, at 800 hd = 32 af.

The annual commercial volume used by the dairy is calculated at 4.7 af. Commercial volume of 14.3 afa is already authorized by existing water right 63-31599, and therefore a combined limit of 14.3 afa for both rights is recommended.

G. NARRATIVE/REMARKS/COMMENTS

This permit authorizes 0.50 cfs for stockwater and commercial use for a dairy in Canyon County. The original application was submitted by Marie and Norman Vermeer, but the permit was assigned to Friends Dairy, LLC on June 2, 2015. Proof of B.U. was initially due June 1, 2015, but Friends Dairy, LLC requested an extension of time for 5 years, indicating they had purchased the property in December 2012 and were unaware of the permit until receiving the proof due notice. The request for an extension of time was received June 2, 2015, after the permit proof due date. Therefore, the priority date advanced to November 14, 2009. Proof of B.U. was then submitted on April 13, 2020, and the exam was conducted by agent Tyler Smith on July 28, 2020 and was accompanied by Jacob, the permit holders son and dairy operator, and employee Jeff Beus. The application was filed in order to fully cover the amount of stock and commercial water being used by the dairy, as well as add another existing well to the 6 wells already authorized under current water rights.

The permit authorized diversion from 7 wells located on the property. According to Jacob, the old milking barn was torn down and a new barn was built after they purchased the property. As a result, the water system had been consolidated and uses only one well (43° 38' 29" N; 116° 49' 60" W) for both the stockwater and commercial use of the dairy. 4 of the wells in the SWSWNW were abandoned and sealed, one domestic well in the NWSWNW was removed from the delivery system, and a well in the SENW is going to be converted to use for irrigation of an adjacent field. It was brought to the attention of the permit holders that a transfer was needed in order to bring the existing water rights into compliance to accurately reflect the current usage of one POD. This was accomplished when the permit holders filed transfer no. 84403 to change the POD's for the respective rights to the new well.

The new well contains a Franklin 50 hp motor for a Goulds submersible pump set at 352 ft below surface level. Water is pumped from the well via 8" pipe into an approximately 12,000 gal holding tank (typically kept between 1/3 – 2/3 full) to dampen demand on the pumps during peak usage. Water is then diverted to the diary for commercial use and to corrals for stockwater from the storage tank with a 25 hp pump. Average theoretical rate of diversion is 0.60 cfs. The stockwater use was permitted for a rate of 0.50 cfs, and according to AP Memo no. 3, the standard rate for 800 dairy cows, which the permit was limited to, is 0.52 cfs. Water rights 63-28989, 63-28990 and 63-31599 already authorize a combined rate of 0.41 cfs for stockwater use. Therefore, subtracting the already authorized stockwater rate from the system capacity gives a recommended rate of 0.19 cfs, which is within the limits of the permit.

According to Jacob, there are currently 1,900 milking cows and no dry cattle as replacements are raised on another farm. According to AP memo 3, the total stockwater volume required for the 1,900 dairy cows is 74.3 af. This permit is limited to 800 dairy cows, which has a standard volume of 32 af. The current stockwater volume for the dairy authorized under 63-31599 is 7.9 af, and together with the 32 af from this permit, the dairy needs an additional 35.1 af in order to cover its total stockwater volume usage.

Additionally, the dairy water use worksheet that was filled out by Jacob indicates the annual volume for commercial use of the dairy is 4.7 af. This is consistent with his indication that most equipment and methods used at the dairy are modern, efficient, and use very little water in their processes. Overlapping water right 63-31599 authorizes 14.3 afa for commercial use, which satisfies the commercial volume, and thus a combined volume limited of 14.3 afa is recommended for commercial use under these permits.

Have conditions of permit approval been met? _X_ Yes ____ No

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
STOCKWATER	01/01 to 12/31	0.19 CFS	32 AF
COMMERCIAL	01/01 to 12/31	0.27 CFS	4.7
	Totals:	0.46 CFS	32 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

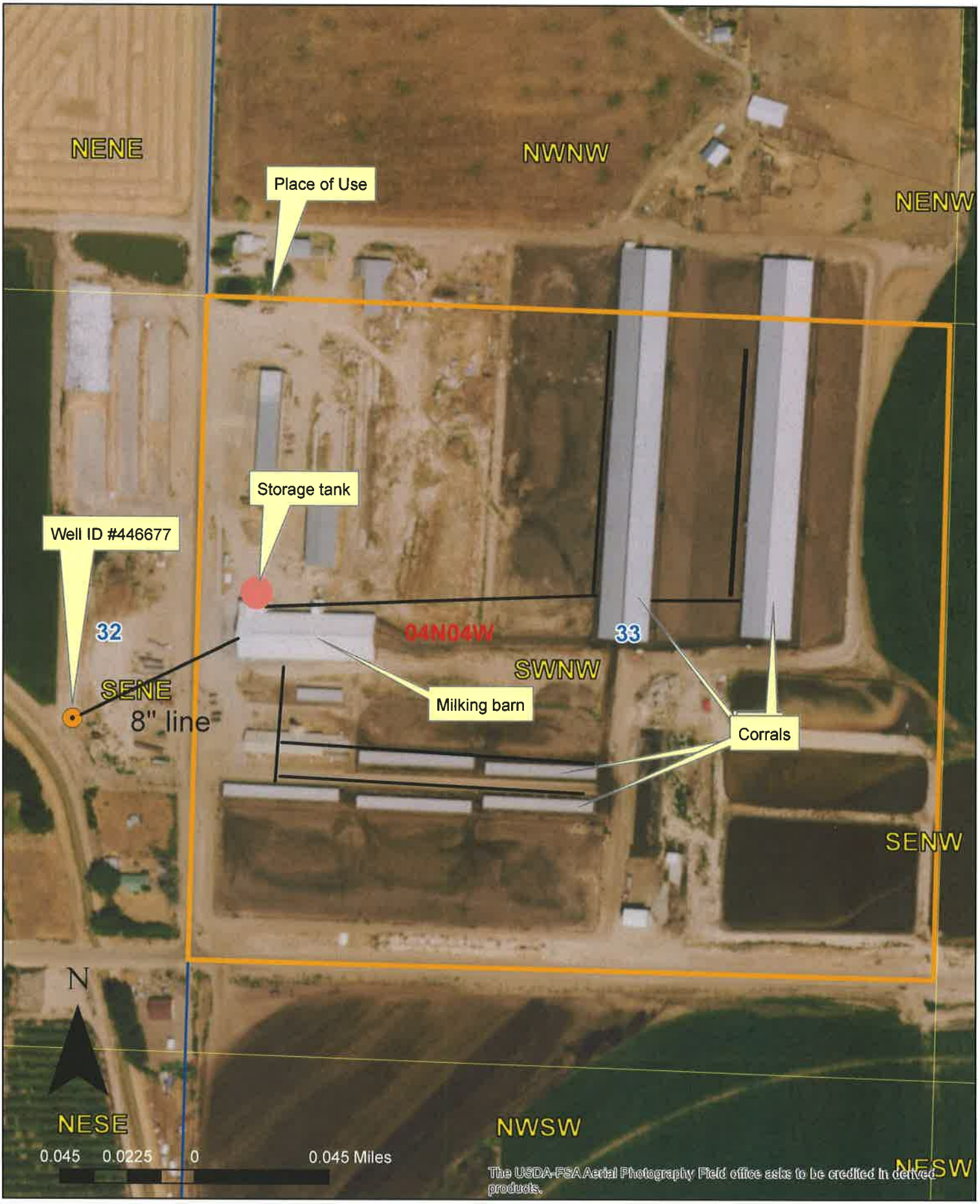
I. AUTHENTICATION

Tyler Smith - Water Resource Agent

Field Examiner's Name _____ Date 10/15/2020

Reviewer Patrick Kelly Date 10-26-2020

Delivery System Diagram 63-12347



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

Dairy Water Use Worksheet

Number of Milking Cattle: 1900

Number of Dry Cattle: 0

Number of Replacement Cattle:

- -0 to 2 months: 0
- -3 to 4 months: 0
- -5 to 8 months: 0
- -9 to 12 months: 0
- -13 to 15 months: 0
- -16 to 24 months: 0

Manual washing, automatic washing, or sprinklers used to flush holding pen **(circle one)** None

- -If sprinklers are used:
- -Number of Sprinklers in holding pen: ~~7~~ 8
- -Nozzle Discharge N/A
- -Total operation time (min/day) ~~2~~ 3 hrs

Number of milkings per day: 2

Avg lbs of milk per animal per day: 88

Separate stockwater and commercial pumps?: Yes

- -Hrs/day for stockwater pump: 24 but on VFD
- -Hrs/day for commercial pump: 14 hrs for milking

If only one pump, hrs/day

Is a plate cooler used?: yes

Is plate cooler water recycled?: Yes

Corral misters in holding pen?: Yes

- -Number of misters: 12
- -Nozzle discharge: N/A
- -Spray interval (ex. 2 min of every 5): Yes
- -Operation time of misters (hrs/day): 90°+
- -Days/year misters are used: Approx 40 days

Total volume for miscellaneous uses

FILE NUMBER ---------- 63-12347
REVIEWER ---------- Tyler Smith
DATE ---------- September 30, 2020

DAIRIES: WATER USE WORKSHEET

REQUIRED DAIRY DATA

NUMBER OF MILKING CATTLE	1900
NUMBER OF DRY CATTLE	0
NUMBER OF REPLACEMENT CATTLE: 0-2 MONTHS	0
3-4 MONTHS	0
5-8 MONTHS	0
9-12 MONTHS	0
13-15 MONTHS	0
16-24 MONTHS	0
ENTER 1 FOR MANUAL COW WASHING, 2 FOR AUTOMATIC COW WASHING, OR 3 IF SPRINKLERS ARE USED TO FLUSH HOLDING PEN AND WASH COWS	3
IF SPRINKLERS ARE USED: NUMBER OF SPRINKLERS IN HOLDING PEN	8
NOZZLE DISCHARGE (USE 5.0 GPM IF UNKNOWN)	5.00
TOTAL OPERATION TIME OF SPRINKLERS (MIN/DAY)	3
NUMBER OF MILKINGS PER DAY	2
AVG. LBS. OF MILK PRODUCED PER DAY PER ANIMAL (IDAHO AVG IS 70 LBS.)	88
ARE THERE SEPARATE PUMPS FOR COMMERCIAL AND STOCKWATER USES?	Y
IF SO: HOW MANY HOURS PER DAY DOES THE STOCKWATER PUMP RUN?	24.0
HOW MANY HOURS PER DAY DOES THE COMMERCIAL PUMP RUN?	14.0
IF ONLY ONE PUMP, HOW MANY TOTAL HOURS PER DAY DOES IT RUN?	0.0
IS A PLATE COOLER USED?	Y
IS PLATE COOLER WATER LATER RECYCLED FOR OTHER USES? (IF NO PLATE COOLER, LEAVE BLANK)	Y
ARE CORRAL MISTERS USED IN HOLDING PEN?	Y
IF USING CORRAL MISTERS: NUMBER OF MISTERS (IF UNKNOWN, ASSUME 1 MISTER FOR EVERY 5 COWS)	12
NOZZLE DISCHARGE (USE 5 GPH IF UNKNOWN)	5.00
SPRAY INTERVAL (EX - 2 MIN ON EVERY 5 MIN = 2/5)	##
OPERATION TIME OF MISTERS (HRS/DAY)	2
DAYS PER YEAR MISTERS ARE USED	40
ENTER A TOTAL VOLUME IN GPD FOR MISCELLANEOUS WATER USES NOT INDIVIDUALLY CALCULATED BELOW (EX - RESTROOMS, WASHING MACHINES)	0

CALCULATIONS

DIVERSION RATE (CFS):

STOCKWATER	
MILKING CATTLE (BASED ON MILK PRODUCTION)	0.12
DRY CATTLE @17.0 GPD/HD	0.00
REPLACEMENT CATTLE	0.00
TOTAL	**0.12**
COMMERCIAL	
TOTAL	**0.01**
TOTAL DIVERSION RATE	**0.13**

DIVERSION VOLUME (AFA):

STOCKWATER	
MILKING CATTLE	75.3
DRY CATTLE	0.0
REPLACEMENT CATTLE	0.0
TOTAL	**75.3**
COMMERCIAL	
WASHING OF BULK TANK AND RELATED EQUIPMENT	0.4
BACKFLUSH	2.1
PARLOR/MILKHOUSE/HOLDING PEN CLEANUP	2.0
CATTLE WASHING BASED UPON METHOD OF WASHING	0.1
PLATE COOLER	0.0
CORRAL MISTERS	0.0
MISCELLANEOUS USES	0.0
TOTAL	**4.7**
TOTAL DIVERSION VOLUME	**80.0**

CONSUMPTIVE USE VOLUME (AFA)(assuming 100% consumptive):

STOCKWATER	**75.3**
COMMERCIAL	**4.7**
TOTAL CONSUMPTIVE USE	**80.0**

THEORETICAL FLOW ESTIMATION WORKSHEET

REQUIRED PUMP INFORMATION

	PUMP 1	PUMP 2	PUMP 3	PUMP 4	PUMP 5
PUMP HORSEPOWER (HP)	50.00	25.00	0.00	0.00	0.00
PUMP EFFICIENCY (%)	70	70	70	70	70
LIFT (FT)	327	5	0	0	0
DISCHARGE PRESSURE (PSI)	50	50	0	0	0
FRICTION LOSSES (FT)	3.0	3.0	0.0	0.0	0.0
HOURS PER DAY PUMP OPERATES	14.0	12.0	0.0	0.0	0.0

CALCULATIONS

THEORETICAL FLOW RATE (CFS) *	0.69	1.25	0.00	0.00	0.00
DIVERSION VOLUME (AFA) **	292.0	451.4	0.0	0.0	0.0

* IF PUMP EFFICIENCY IS UNKNOWN, 70% MAY BE ASSUMED
** DIVERSION VOLUME IS THE ABSOLUTE MAXIMUM VOLUME BASED ON THE THEORETICAL FLOW RATE ASSUMING PUMP RUNS EVERY DAY OF THE YEAR

EVALUATION OF EQUIVALENT IRRIGATED ACREAGE

IRRIGATION RIGHT (BEFORE CHANGE)

DIVERSION RATE	4.80	CFS
ACRES OF IRRIGATION	240.0	ACRES
DIVERSION VOLUME	4.0	AC-FT/AC
CONSUMPTIVE USE VOLUME	3.0	AC-FT/AC
IRRIGATION IS BEING CONVERTED FOR WHICH PORTION OF THE DAIRY OPERATION - STOCKWATER (S), COMMERCIAL (C), OR BOTH (B)?	B	

CALCULATIONS

IRRIGATION DIVERSION RATE PER ACRE	0.020	CFS/AC
REDUCTION OF IRRIGATION BASED ON DIVERSION RATE	6.5	ACRES
REDUCTION OF IRRIGATION BASED ON DIVERSION VOLUME	20.0	ACRES
REDUCTION OF IRRIGATION BASED ON CONSUMPTIVE USE	26.7	ACRES

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-12347
Reviewer: Tyler Smith
Date of Review: 9/30/2020

P/D No.:	Senerio 1	Senerio 2	Senerio 3	
PUMP HORSEPOWER	50	50	50	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	400	400	400	
DISCHARGE PRESSURE	40	50	60	
RATE OF FLOW (cfs)	0.63	0.60	0.57	0.60

The above calculates the formula = $$Q = \frac{8.8 * (\text{Efficiency}) * hp}{\text{depth to water} + 2.31*(psi)+\text{friction}}$$

Assumptions: %70 efficiency.
No Friction

Examiners Notes:

50 hp pump. Pump invoice shows head at 400 ft. A range of discharge pressures were used base on expected system pressures (40-60 psi). Theoretical average flow rate is 0.60 cfs.

Form 238-7
6/97

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IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0074542
Drilling Permit No. 975086-881143
Water right or injection well # 63-12394
2. OWNER: Friends Dairy
Name
Address Rt #1 Box 197
City Marsing State ID Zip 83639

3.WELL LOCATION:
Twp. 04 North ☒ or South ☐ Rge. 04 East ☐ or West ☒
Sec. 32 ____ (10 acres) 1/4 SE (40 acres) 1/4 NE (160 acres) 1/4
Gov't Lot ____ County Canyon
Lat. 43 ° 38.483 (Deg. and Decimal minutes)
Long -116 ° 50.003 (Deg. and Decimal minutes)
Address of Well Site NW of the intersection of Tucker Rd and Bochner Rd (Give street name of road + Distance to Road or Landmark) City Greenleaf
Lot. ____ Blk. ____ Sub. Name

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☒ Other Commercial

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:
☐ Air Rotary ☐ Mud Rotary ☐ Cable ☒ Other Reverse Rotary

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure
Bentonite Chips	0	286	30,000 lbs	Dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
12	+2	332	.375	Steel	☒	☐	☐	☒
12	352	400	.375	Steel	☒	☐	☐	☒
12	410	445	.375	Steel	☒	☐	☐	☒
12	475	513	.375	Steel	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method
Manufactured screen ☒ Y ☐ N Type Johnson Wire Wrap
Method of installation Lower in one string set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
332	352	.030		12	Stainless	
400	410	.030		12	Stainless	
445	475	.030		12	Stainless	

Length of Headpipe ____ Length of Tailpipe 5'
Packer ☐ Y ☒ N Type

10.FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method
10x20 Sand	286	550	36,000 lbs	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) 54.8
Water temp. (°F) 68° Bottom hole temp. (°F)
Describe access port 2" pipe on side

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Test method: Pump	Bailer	Air	Flowing artesian
184	550	667	☒	☐	☐	☐
			☐	☐	☐	☐

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	Water N
20	0	2	Top soil		X
20	2	15	Caliche		X
20	15	40	Hard brown clay,coarse sand		X
20	40	54	Fine-medium sand some gravel	X	
20	54	83	Brown clay,rusty clay,some sand		X
20	83	97	Fine-medium sand	X	
20	97	159	Brown clay,sandy clay,		X
20	159	167	Blue clay,dark blue clay,black clay		X
20	167	170	Brown clay		X
20	170	176	Medium-coarse sand,some gravel	X	
20	176	185	Brown, blue clays		X
20	185	193	Fine sand	X	
20	193	197	Brown, blue clays		X
20	197	207	Fine-medium blue sand	X	
20	207	305	Blue clay,sea shells @282'		X
20	305	309	Sandy blue clay		X
20	309	313	Fine blue sand	X	
20	313	331	Sandy blue clay		X
20	331	352	Fine blue sand, sm.blue clay streaks	X	X
20	352	360	Sandy blue clay		X
20	360	362	Dark brown clay		X
20	362	387	Blue clay, sandy blue clay		X
20	387	391	Dark brown clay		X
20	391	400	Blue clay		X
20	400	409	Fine blue sand	X	
20	409	448	Blue clay, sandy blue clay		X
20	448	462	Fine-medium bl. sand,brn clay seam	X	X
20	462	464	Sandy blue clay		X
20	464	474	Ultra fine sand, silt	X	
20	474	479	Sandy blue clay		X
20	479	481	Fine sand, silt	X	
20	481	510	Blue clay w/silt seams	X	X

Completed Depth (Measurable): 547'
Date Started: Dec 7, 2016 Date Completed: Jan 27, 2017

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 1/31/17
*Driller Date
*Operator II Date
Operator I Date 2/6/17
* Signature of Principal Driller and rig operator are required.

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WATER RESOURCES
WESTERN REGION

Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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3.WELL LOCATION:
Twp. 04 North ☒ or South ☐ Rge. 04 East ☐ or West ☒
Sec. 32 ____ 1/4 (10 acres) SE 1/4 (40 acres) NE 1/4 (160 acres)
Gov't Lot ____ County Canyon
Lat. 43 ° 38.483 (Deg. and Decimal minutes)
Long. -116 ° 50.003 (Deg. and Decimal minutes)
Address of Well Site NW of the intersection of Tucker Rd and Bochner Rd (Give at least name of road + Distance to Road or Landmark) City Greenleaf
Lot. ____ Blk. ____ Sub. Name

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☒ Other Commercial

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:
☐ Air Rotary ☐ Mud Rotary ☐ Cable ☒ Other Reverse Rotary

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
12	523	532	.375	Steel	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☐ N Method
Manufactured screen ☐ Y ☒ N Type Johnson Wire Wrap
Method of installation Lower in one string set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
513	523	.030		12	Stainless	
532	542	.030		12	Stainles	

Length of Headpipe ____ Length of Tailpipe
Packer ☐ Y ☐ N Type

10.FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method

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) ____
Water temp. (°F) ____ Bottom hole temp. (°F) ____
Describe access port

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Test method: Pump	Bailer	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	Water N
20	510	513	Sandy blue clay		X
20	513	520	Fine silt	X	
20	520	521	Blue clay		X
20	521	523	Dark brn clay,sand, seashell seam	X	X
20	523	525	Blue clay		X
20	525	530	Firm chunky silt	X	
20	530	534	Sandy blue clay		X
20	534	535	Dark brown, blue clay		X
20	535	537	Sandy blue clay		X
20	537	543	Firm chunky silt,seashells	X	
20	543	550	Blue clay		X

Completed Depth (Measurable):
Date Started: Date Completed:

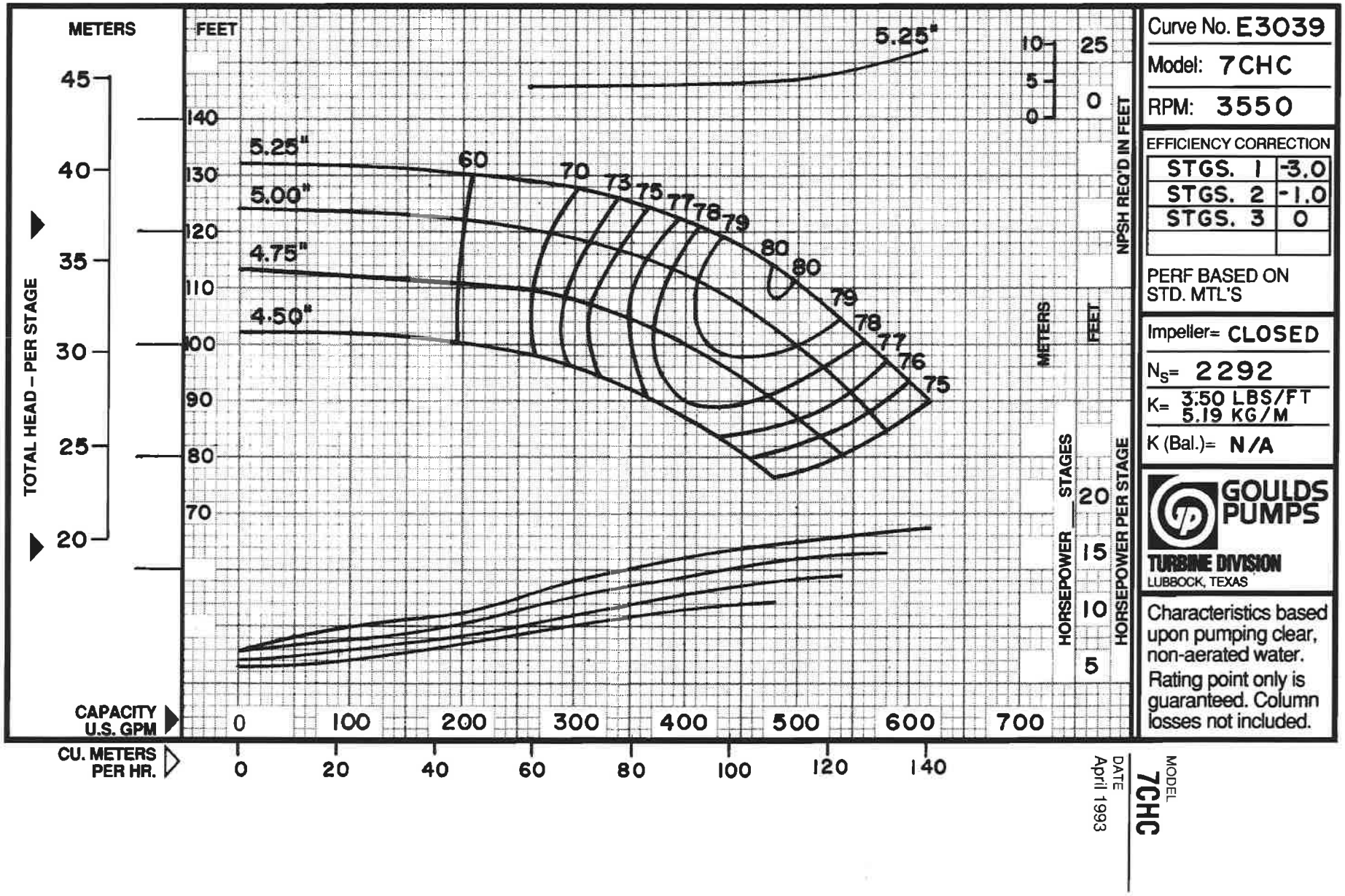
14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Riverside Inc Co. No. 333
*Principal Driller Date
*Driller Date
*Operator II Date
Operator I Date

*** Signature of Principal Driller and rig operator are required.**

GOULDS PROPOSAL NO.	GOULDS S.O. NO.	INQUIRY NO.	CUSTOMER P.O. NO.	P.O. DATE	ITEM NO.	CUSTOMER

PROJECT	SERVICE	GPM CAPACITY	F.T. TDH	% EFFICIENCY	RPM



Curve No. E3039

Model: 7CHC

RPM: 3550

EFFICIENCY CORRECTION

STGS. 1	-3.0
STGS. 2	-1.0
STGS. 3	0

PERF BASED ON STD. MTL'S

Impeller= CLOSED

N_S= 2292

K= 3.50 LBS/FT
5.19 KG/M

K (Bal.)= N/A

GOULDS PUMPS
TURBINE DIVISION
LUBBOCK, TEXAS

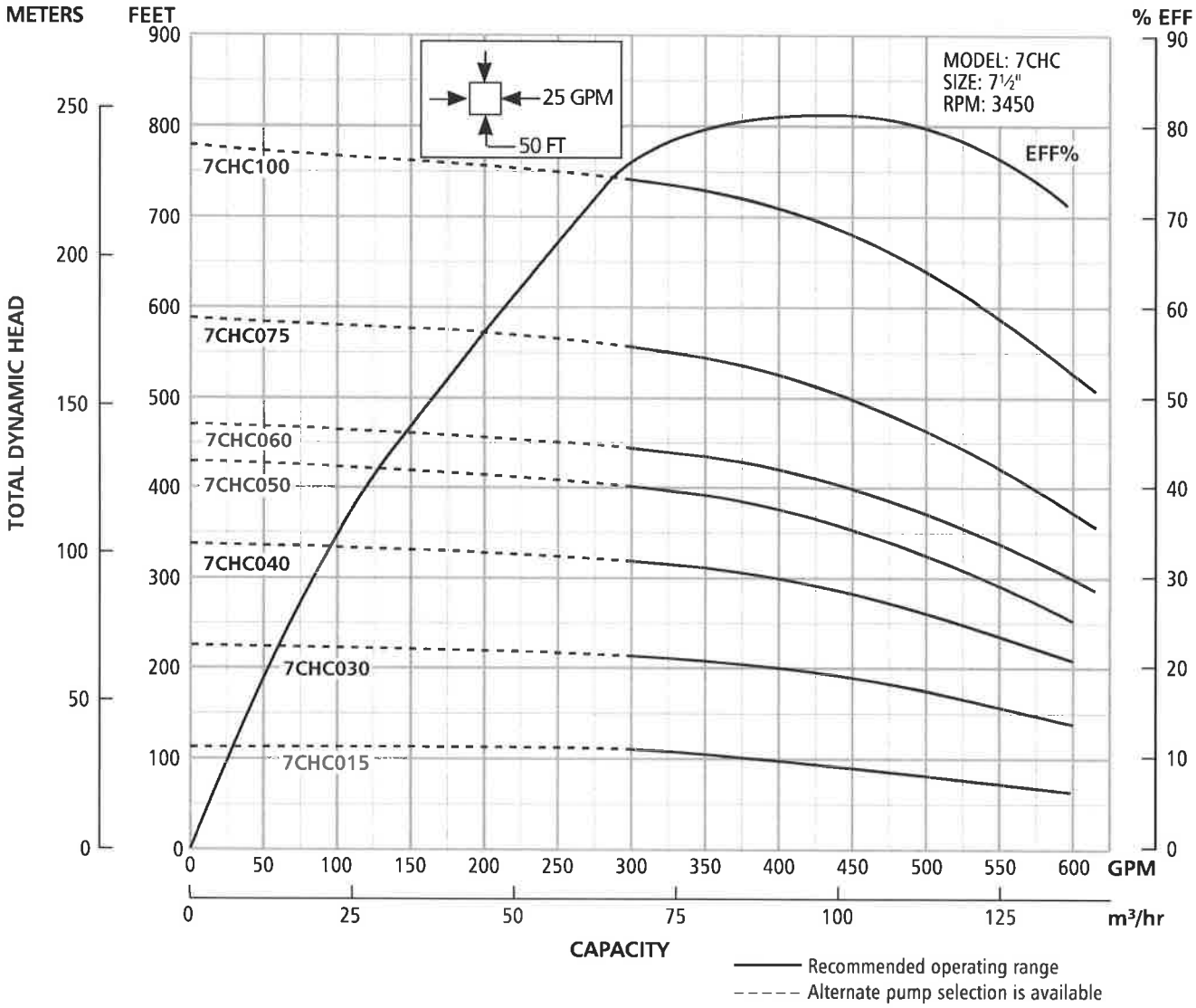
Characteristics based upon pumping clear, non-aerated water.
Rating point only is guaranteed. Column losses not included.

DATE April 1993

MODEL 7CHC

Model 7CHC 450 GPM

GOULDS PUMPS

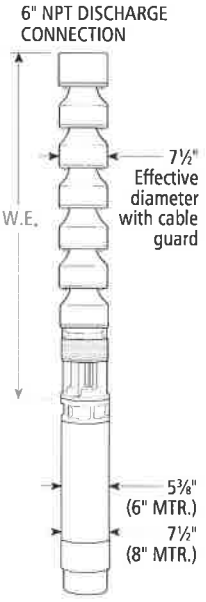


DIMENSIONS AND WEIGHTS

HP	Stages	W.E. Order Number	W.E. Length	W.E. Wt. (lbs.)
15	1	07CHC01566ATS	22.9	75
30	2	07CHC03066ATS	29.3	103
40	3	07CHC04066ATS	35.6	131
50	4	07CHC05066ATS	42.0	159
60	4	07CHC06066ATS		
75	5	07CHC07586ATS	50.0	199
100	6	07CHC10086ATS	56.5	227

(All dimensions in inches and weights in lbs. Do not use for construction purposes.)

PLEASE NOTE:
- Order motors separately.
- For intermediate horsepower pumps consult factory.
- Solid line is recommended operating range. The dotted line (– – – –) signifies an alternate pump selection is available.
- Please specify all options changes in W.E. order number.



MATERIALS OF CONSTRUCTION

Part Name	Material
Shaft	ASTM A582 TYPE 416
Coupling	ASTM A582 S41600 CD
Suction Adapter	Ductile Iron ASTM A536
Discharge Bowl	ASTM A48 CL 30B
Rubber Bearings	RUBBER
Optional Bronze Bearings	ASTM B584
Discharge Bowl Bearing	ASTM B584
Taperlocks	ASTM A108 GR 101B
Bowl	ASTM A48 CL 30B
Upthrust Collar	Polyethylene
Impeller	ASTM B584
Fasteners	SAEJ429 GR 8
Cable Guard	ASTM A240 S 30400
Suction Strainer	ASTM A240 S 30400

Riverside Inc.

Order

PO Box 720 Parma, Idaho 83660
Office 208.722.6731 Fax 208.722.6736
Email riverside@rsicorp.net

Customer Number	Order Date	Ship Date	Order Number
DERUYTER DAIRY	3/30/2017		3-10385

Bill To:

DeRuyter Dairy LLC
P.O. Box 580
Marsing, ID 83639
(208) 896-5402 x

Ship To:

DeRuyter Dairy LLC
4699 Buntrock Road
MARSING, ID 83639
(208) 896-5402 x

Ship Via	Terms	Salesperson	Customer PO	Contact
BESTWAY	Net 30	House Employee		

Product ID	Qty	Ship Weight	Description	Sales Price	Total
Labor	1	1	BOOM TRUCK TO INSTALL PUMP		
Shop Supplies	1	1	50 HP 460 VOLT 6" SUB MOTOR FRANKLIN		
Shop Supplies	1	1	GOULDS 7CHC-5 STAGE 4" DISCHARGE 4.875 TRIM 325 GPM @ 400'		
4IN X 6IN BLACK NIPPLE	1	1			
Shop Supplies	1	1	500' roll of 3/4" pex		
Shop Supplies	20	20	4" X 21' GALVANIZED COLUMN PIPE WITH COUPLERS		0
Shop Supplies	1	1	4" TEE		
Shop Supplies	2	2	4" X 6" NIPPLIES		0
	1	1	Job Materials	3	

Reason Sent For Repair: NEW INSTALL ON WELL DRILLED IN EARLY SPRING 2017.

Cause of Failure: PROGRESS INVOICE ON PUMP INSTALLATION. INVOICE FOR ELECTRICAL WORK AND PLUMBING WILL BE DONE AFTER FINAL COMPLETION WHICH WOULD BE AFTER WELL HOUSE IS BUILT.

	Subtotal:	2
	Freight:	0.00
	Other:	0.00
0.0000 %	Sales Tax 1:	0.00
0.0000 %	Sales Tax 2:	0.00
	Total:	

Thank You!

Charge Card: ... Exp Date

Customer Signature: _____ **Date:** _____

Printed Name: _____ **Total Weight:** 0

Point of Diversion Comparison

State of Idaho
Department of Water Resource
Beneficial Use Field Exam

Water Right no. 63-12347

BasinSequence	Owner	Source	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
63-11203	ALLEN, GEORGE H	GROUND WATER											X					
63-23181	ALLEN, GEORGE H; ALLEN, MELVA I	GROUND WATER											X					
63-23397	ENEBO, SIGURD ARTHUR; ENEBO, WILMA	GROUND WATER	X															
63-23844	BARKER ROSHOLT & SIMPSON LLP; BOISE	GROUND WATER				X												
63-24089	ENEBO, SIGURD ARTHUR; ENEBO, WILMA	GROUND WATER	X															
63-28987	FRIENDS DAIRY LLC; VERMEER, MARIE; VE	GROUND WATER					X											
63-28988	FRIENDS DAIRY LLC; VERMEER, MARIE; VE	GROUND WATER							X									
63-28989	FRIENDS DAIRY LLC; VERMEER, MARIE; VE	GROUND WATER							X									
63-28990	FRIENDS DAIRY LLC; VERMEER, MARIE; VE	GROUND WATER							X									
63-29753	INGRAM, DONALD E	GROUND WATER														X		
63-2983A	ARROW FARMS INC; BARTLETT, BRUCE C;	GROUND WATER												X				
63-2983B	BARTLETT, BRUCE C	GROUND WATER									X							
63-30098	MAGGARD, JOHN; MAGGARD, SHIRLEY S	GROUND WATER			X													
63-31022	SCHMIDT, DONNA Y; SCHMIDT, WALTER V	GROUND WATER													X			
63-31599	FRIENDS DAIRY LLC; VERMEER, NORMAN	GROUND WATER							X		X							
63-8408A	ARROW FARMS INC; BARTLETT, BRUCE C;	GROUND WATER												X				
63-8408B	BARTLETT, BRUCE C	GROUND WATER									X							
63-8776	BARTLETT, BRUCE C; SUNSET HILLS CORP;	GROUND WATER									X			X				
63-12347	FRIENDS DAIRY LLC; VERMEER, MARIE; VE	GROUND WATER				X												

= this right
= overlap (once transfer 84403 is complete)

Place of Use Comparison

State of Idaho
Department of Water Resources
Beneficial Use Field Exam

Water Right no. 63-12347

BasinSequence	Owner	Source	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	TotalAcres
63-11203	ALLEN, GEORGE H	GROUND WATER	IRRIGATION											2.8						2.8
63-12347	ERO RESOURCES CORP; FRIEN	GROUND WATER	COMMERCIAL							X										
63-12347	ERO RESOURCES CORP; FRIEN	GROUND WATER	STOCKWATER							X										
63-136	BARKER ROSHOLT & SIMPSOI	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-137B	BARKER ROSHOLT & SIMPSOI	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-200A	BARKER ROSHOLT & SIMPSOI	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2106	UNITED STATES OF AMERICA	FIVEMILE CREEK	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-23181	ALLEN, GEORGE H; ALLEN, M	GROUND WATER	DOMESTIC											X						
63-23181	ALLEN, GEORGE H; ALLEN, M	GROUND WATER	STOCKWATER											X						
63-23397	ENEBO, SIGURD ARTHUR; EN	GROUND WATER	DOMESTIC	X																
63-233K	AMERICAN DITCH CO; BARKE	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-23844	BARKER ROSHOLT & SIMPSOI	GROUND WATER	DOMESTIC				X													
63-2388A	UNITED STATES OF AMERICA	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-2392F	BOISE PROJECT BOARD OF C(	WASTE WATER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-24089	ENEBO, SIGURD ARTHUR; EN	GROUND WATER	DOMESTIC	X																
63-251A	UNITED STATES OF AMERICA	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-28987	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	DOMESTIC					X												
63-28988	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	DOMESTIC							X										
63-28989	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	STOCKWATER							X										
63-28990	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	STOCKWATER							X										
63-29753	INGRAM, DONALD E	GROUND WATER	DOMESTIC														X			
63-2983B	BARTLETT, BRUCE C	GROUND WATER	IRRIGATION									16			9					25
63-30098	MAGGARD, JOHN; MAGGARI	GROUND WATER	DOMESTIC			X														
63-30098	MAGGARD, JOHN; MAGGARI	GROUND WATER	STOCKWATER			X														
63-301A	UNITED STATES OF AMERICA	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-302A	UNITED STATES OF AMERICA	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-31022	SCHMIDT, DONNA Y; SCHMIL	GROUND WATER	DOMESTIC													X				
63-31599	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	COMMERCIAL							X										
63-31599	FRIENDS DAIRY LLC; VERMEE	GROUND WATER	STOCKWATER							X										
63-33251	BOISE PROJECT BOARD OF C(	INDIAN CREEK	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-33253	BOISE PROJECT BOARD OF C(	TENMILE CREEK	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-372	BARKER ROSHOLT & SIMPSOI	BOISE RIVER	IRRIGATION											X						
63-373A	UNITED STATES OF AMERICA	BOISE RIVER	IRRIGATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
63-8408B	BARTLETT, BRUCE C	GROUND WATER	IRRIGATION									16			9					25

= this right
= overlap

Fig. 1 – Stockyard corrals looking south. Water is pumped from well to holding tank, then to corrals.

Fig. 2 – Stockyard corrals looking south.

Fig. 3 – Stockyard looking northeast. Corner of milking barn shown on left side of picture.

Fig. 4 – Stockyard corrals after cows have been removed. Cleaning of holding pens uses minimal water.

Fig. 5 – Rotolactor inside of the milking barn.

Fig. 6 – Well drilling permit I.D. Tag # D0074542 for the well.

Fig. 7 – Well cap at:

48° 38' 29"N,

116° 49' 60" W

Fig. 8 – Well control box with well in background. The well overlaps POD's of 63-28989, 63-28990 and 63-31599.

Fig. 9 – Water flows into holding tank from well via pipe on right side of picture, then out via upper left pipe to milking barn and via lower left pipe to corrals.

Fig. 10 – Section of pipe from well to holding tank inside of milking barn.

Fig 11 – Booster pump for water leaving holding tank seen in bottom right.

Fig 12 – Motor/pump information for booster pump was corroded. Only discernable information was 25 hp and 230/? Volts.

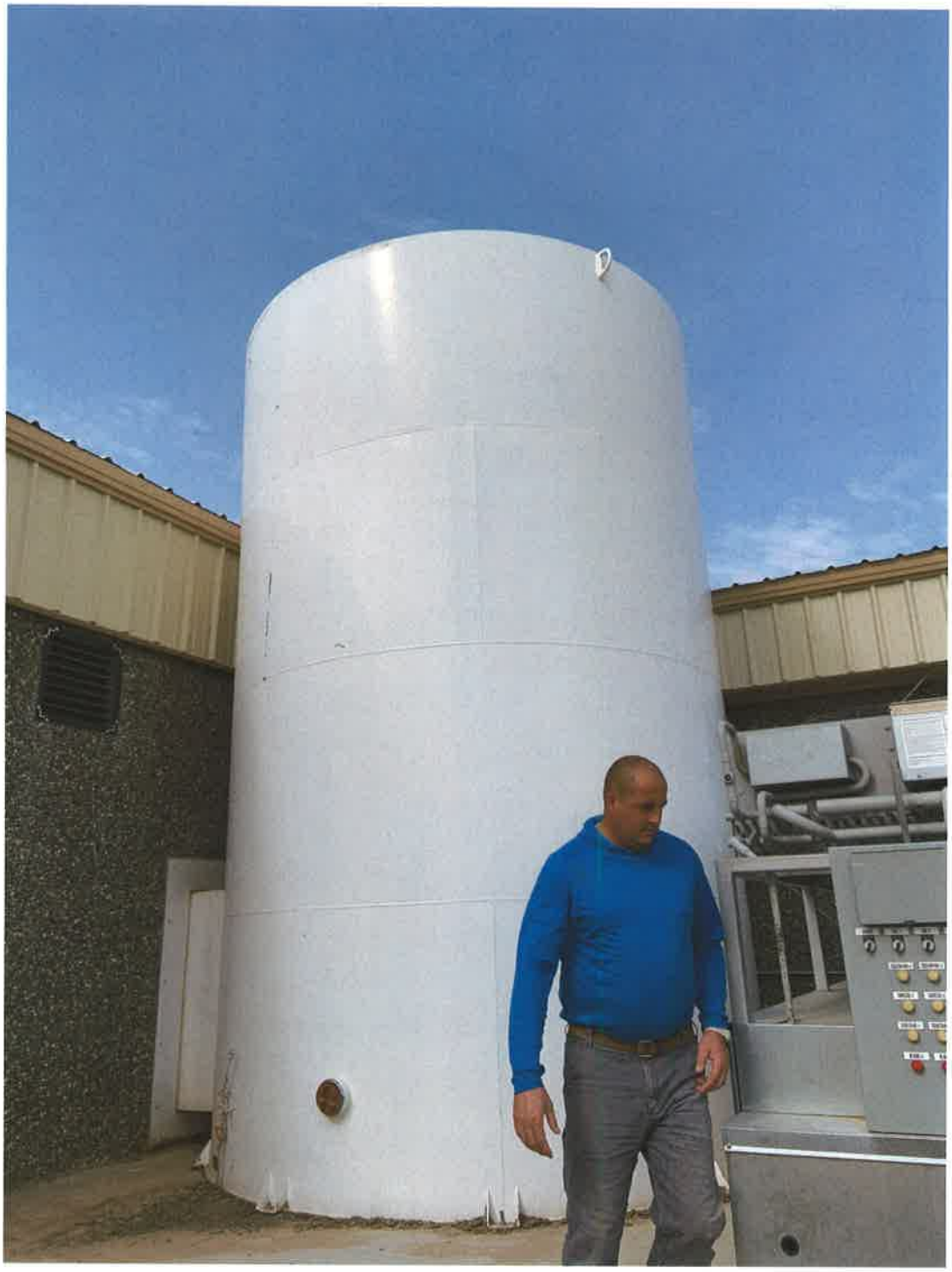


Fig. 13 – Roughly 12,000 gal holding tank, which was about 24' tall. Tank is usually held 1/3 to 2/3 full according to employees.

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region • 2735 W Airport Way • Boise ID 83705-5082
Phone: (208) 334-2190 • Fax: (208) 334-2348
Website: idwr.idaho.gov • Email: westerninfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

August 26, 2020

COPY

FRIENDS DAIRY LLC
PO BOX 580
MARSING, ID 83639

Re: Filing Application for Transfer of Water Right

Dear Permit Holder:

As per my phone conversation with Jacob this morning (8/26), during the beneficial use field exam for your water right permit 63-12347 it was brought to my attention that wells previously used for water rights 63-28989, 63-28990 and 63-31599 had been abandoned and sealed, or moved to other uses after your purchase of the property in 2012. These 3 water rights are now being diverted through a single well drilled by Riverside Inc. in January of 2017, located across Tucker Rd from the milking barn, along with water right permit 63-12347.

When a water right changes its source (in this case, the well it draws water from) an *Application for Transfer of Water Right* must be filed for each water right that is being modified. This change needs to be recorded with the Department to keep records accurate and to ensure you are in compliance with your water right. This change needs to take place before permit 63-12347 can be licensed.

I have completed an *Application for Transfer* as I observed during my site visit and included it with this letter for your convenience. If it appears correct, please sign and date the application and return to the Western Regional office, along with a fee of $500 and the rest of the documents included with this letter in order to finish licensing of water right permit 63-12347

Please submit the form within the next thirty (30) days. If IDWR does not receive your written response within thirty (30) days, the department may begin the process of voiding the water right permit. IDWR forms and other information are available on the internet at www.idwr.idaho.gov. Please contact me at (208) 334-2190 or tyler.smith@idwr.idaho.gov if you need more information.

Sincerely,

Tyler Smith
Water Resource Agent
Western Region

Enclosures: Application for Transfer of Water Right – Point(s) of Diversion

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region • 2735 W Airport Way • Boise ID 83705-5082
Phone: (208) 334-2190 • Fax: (208) 334-2348
Website: idwr.idaho.gov • Email: westerninfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

June 24, 2020

COPY

FRIENDS DAIRY LLC
P.O. BOX 580
MARSING, ID 83639

RE: Scheduling Field Exam for Water Right Permit No. 63-12347

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 **0.50 CFS** of **GROUNDWATER** for **STOCKWATER & COMMERCIAL** 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).

If you did develop a beneficial use of water under the permit, but you no longer own the place of use property identified in the permit, please submit the enclosed Assignment of Permit form with the applicable $25 processing fee.

Please contact me within the next thirty (30) days at (208) 334-2190 or tyler.smith@idwr.idaho.gov to either schedule an examination or submit a relinquishment or assignment form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Tyler Smith
Water Resource Agent

Enclosures: Relinquishment of Permit form
Assignment of Permit form
Proof Report and Map