State of Idaho
Department of Water Resources

Water Right License

Water Right No. 63-33895

Priority: January 16, 2014 **Maximum Diversion Rate:** 2.00 CFS

It is hereby certified that:

GREGORY T TROOST 30540 SABIN RD PARMA ID 83660-6787

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated January 16, 2014, and has submitted Proof of Beneficial Use on June 10, 2019. An examination confirms water is diverted from:

Source : GROUND WATER

Beneficial Use	Period of Use	Rate of Diversion
IRRIGATION	03/01 to 11/15	2.00 CFS

Location of Point(s) of Diversion
GROUND WATER SE¼ SW¼, Sec. 21, Twp 04N, Rge 05W, B.M. CANYON County

Place of Use: IRRIGATION

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	05W	20															33	29	62.0
04N	05W	21									34	35	37	31		20	31		188.0
04N	05W	29	8.0	22 L1		31													61.0

Total Acres: 311.0

Conditions of Approval

1. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor exceed a combined annual maximum diversion volume of 1400 af at the field headgate for the place of use.
2. This right when combined with all other rights shall provide no more than 4.5 afa per acre at the field headgate for irrigation of the place of use.
3. The right holder shall make full beneficial use of all surface water available to the right holder for irrigation of lands within the authorized place of use for this right. The right holder may divert ground water under this right to irrigate land with appurtenant surface water rights when the surface water supply is not reasonably sufficient to irrigate the place of use for this water right or is not available due to drought, curtailment by priority, or the seasonal startup and shutoff or maintenance schedule for canal company deliveries. The right holder shall not divert ground water for irrigation purposes under this right if use of the surface water supply is intentionally discontinued or reduced (for example abandoned, forfeited, sold, disallowed by court decree, or leased to the Water Supply Bank), or is not deliverable due to non-payment of annual assessments, without an approved transfer pursuant to Idaho Code § 42-222 or other Department approval.
4. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.

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State of Idaho
Department of Water Resources

Water Right License

Water Right No. 63-33895

5. This right does not grant any right-of-way or easement across the land of another.
6. When ordered by the Director, the right holder shall provide mitigation acceptable to the Director to offset depletion of lower Snake River flows needed for migrating anadromous fish. The amount of water required for mitigation, which is to be released into the Snake River or a tributary for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this right. Any order of the Director issued in accordance with this paragraph shall be in conformance with applicable rules allowing the right holder due process as the need for mitigation and the amount of mitigation are determined.

This license is issued pursuant to the provisions of Idaho Code § 42-219. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 25th day of August, 2023.

PHILL HUMMER
Water Rights Supervisor

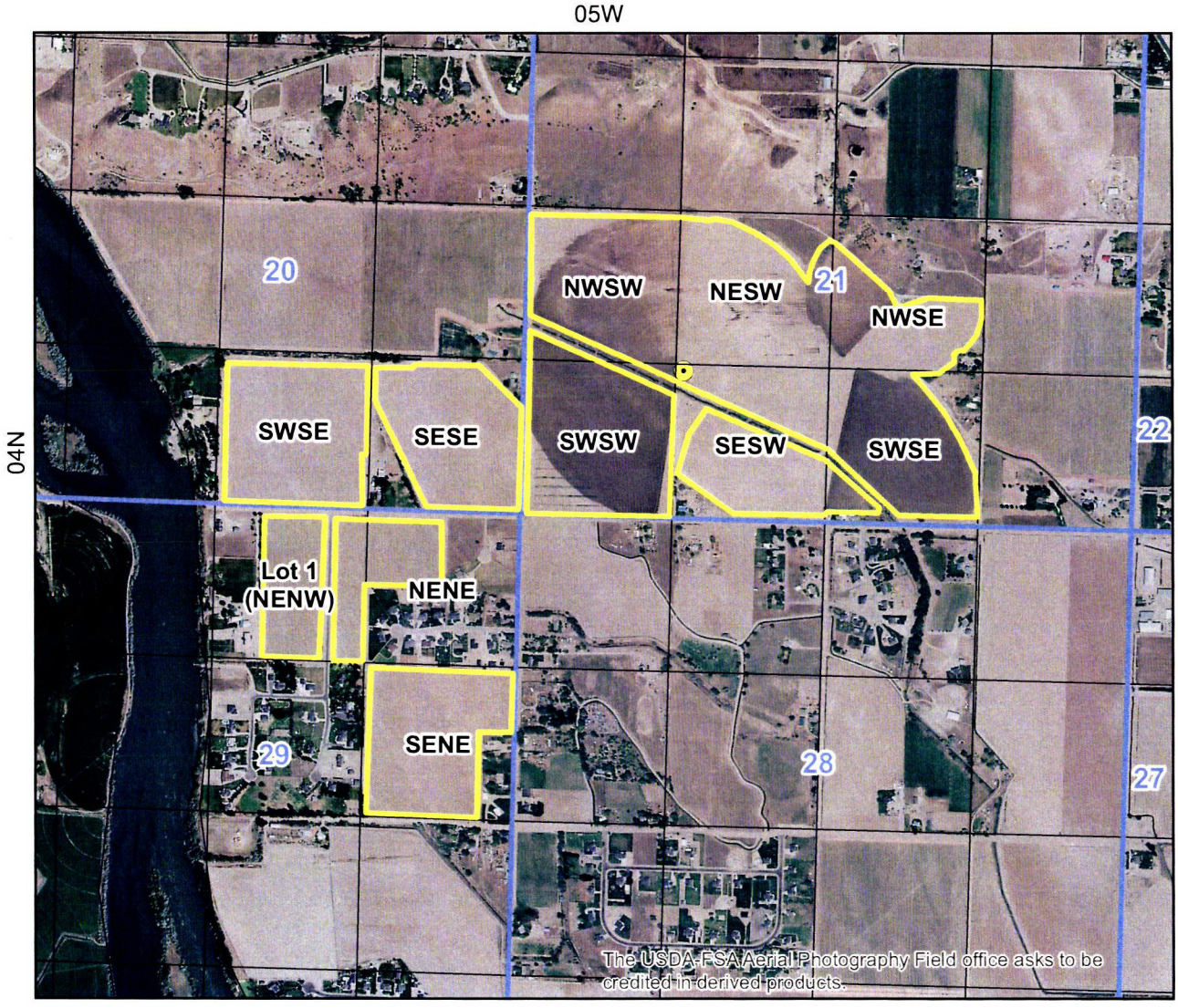
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State of Idaho
Department of Water Resources

Attachment to Water Right

63-33895

This map depicts the IRRIGATION 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 0.175 0.35 0.7 Miles

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

N

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AUG 2 9 2023

IDAHO DEPARTMENT OF
WATER RESOURCES

322 E Front Street, Suite 648, Boise ID 83702 • PO Box 83720, Boise ID 83720-0098
Phone: 208-287-4800 • Fax: 208-287-6700 • Email: idwrinfo@idwr.idaho.gov • Website: idwr.idaho.gov

Governor Brad Little **Director Gary Spackman**

August 28, 2023

GREGORY T TROOST
30540 SABIN RD
PARMA ID 83660-6787

RE: License No. 63-33895

ISSUANCE OF LICENSE

Dear Water Right Holder(s):

The Department of Water Resources ("Department") has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review all the conditions of approval listed on your license. The conditions may include ongoing requirements, such as maintenance of a measuring device or implementation of mitigation, as well as information about how your water use may be administered, such as regulation by a watermaster in a water district.

The license is a PRELIMINARY ORDER issued by the Department pursuant to Rule 730 of the Department's Rules of Procedure (IDAPA 37.01.01.730). It can and will become a final order without further action by the Department unless a party petitions for reconsideration, files exceptions, or requests a hearing as described in the enclosed information sheet.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Water right forms are available from any office of the Department or on the Department's website at idwr.idaho.gov

If you have any questions concerning the enclosed information, please contact me at (208) 287-4925.

Sincerely,

Jean Hersley

For
Phill Hummer
Water Rights Supervisor

Enclosure(s)

SCANNED
AUG 2 9 2023

CERTIFICATE OF SERVICE

I hereby certify that on August 28, 2023, I served a true and correct copy of Water Right License No. 63-33895 by U.S. Mail, postage prepaid, to the following:

GREGORY T TROOST (Current Owner)
30540 SABIN RD
PARMA ID 83660-6787

ERO RESOURCES CORP (Representative)
C/O DAVE SHAW
802 S PLAZA RD
EMMETT ID 83617-9114

Jean Hersley
Technical Records Specialist 2

SCANNED
AUG 29 2023

EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was **not** held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "**Preliminary Order**" issued by the department pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:**

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

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CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

> Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:
>
> (a) The petition for reconsideration is disposed of; or
> (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33895
Exam Date: 3/24/2020

1. Current Owner:
GREG TROOST 30540 SABIN RD PARMA ID 83660

2. Accompanied by: Rob Comfort
Phone No: (208) 989 - 3711
Relationship to permit Holder: Employee

3. **SOURCE:**
GROUND WATER

Method of Determination: Well log, Metal Tag

B. OVERLAP REVIEW

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

Comments: Boise Project Board of Control, Wilder Irrigation District

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

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
GROUND WATER SE¼ SW¼, Sec. 21, Twp 04N, Rge 05W, B.M. CANYON County

Method of Determination:

PLACE OF USE: IRRIGATION

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	05W	20															33	29	62
04N	05W	21									34	35	37	31		20	31		188
04N	05W	29	8	22 L1		31													61

Total Acres: 311

Method of Determination: Aerial Imagery

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

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4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0069044	GE	200	33075633	American-Marsh	8"

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Inline	Ultrasonic	Octave	AWWA C750	56506810	8"	-

2. Measurements:

Inline flow meter = 1.0 cfs
Standard rate: 311 ac x 0.02 cfs/ac = 6.22 cfs
Manufacturer Pump-curve, max capacity: 1500 gpm / 454.55 = 3.30 cfs
Theoretical Pump curve based on days pumped and power consumption: 31,400 kwh over 16 days = 2.00 cfs
License Recommendation: 2.00 cfs

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: In-line flowmeter

t (minute)	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*Avg. gpm (cfs)*
total gallons	**8500**	**8960**	**9429**	**9878**	**10342**	**10786**	**11235**	**11684**	**12146**	**12575**	**13026**	
gpm	-	460	469	449	464	444	449	449	462	429	451	452.6 (1)

Power Consumption:

$$31{,}400\ kwh * \frac{1}{24\ hrs * 16\ days} = 110\ hp$$

$$Q_{theoretical} = \frac{110\ hp * 8.8 * 70\%\ efficiency}{260\ ft + (34\ psi * 2.31)} = 2.0\ cfs = 898\ gpm$$

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 311 acres * 4.5 = 1400 af
$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 = 2.0 cfs * 260 days * 1.9835 = 1031 af
V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = 1031

2. Volume Calculations for Other Uses: N/A

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G. NARRATIVE/REMARKS/COMMENTS

The applicant, Greg Troost, applied for a supplemental groundwater right of 5.62 cfs on 819 acres January 16th, 2014 and supplied an application amendment on May 14th, 2014. Proof was submitted on June 10th, 2019 and exam conducted on March 24th, 2020. I was accompanied by Rob Comfort, an employee of the applicant.

The point of diversion (POD) is a 24" diameter well completed to 510 ft and drilled in 2015 (Metal Tag: D0069044). Static water level is 10 feet below ground surface per the driller's report. The well is screened at three intervals; 175-205 ft, 209-219 ft, and 440-450 ft. The place of use (POU) is planted in hops and onions. Onions are grown by a tenant on the fields surrounding the well. Both onions and hops are under a drip system, though several pivots exist on the POU.

Water is pumped from the POD by a variable frequency drive into an 8" pipe that splits into the nearby filtration system as well as to another 8" pipe that runs underground to deliver water to the field downgradient of the POD. The groundwater delivery system is tied into the surface water system underground. The surface water system is pressured by gravity and is diverted at the northern edge of the field out of the Fargo Low Line Canal. Mr. Comfort stated that both systems could be used simultaneously.

The system does not deliver groundwater to all the fields described in the permit's POU. I provided a map of the permitted POU during the exam that Mr. Comfort used to outline fields that can currently receive deliveries of water from this system. Total acreage for these fields is 311 acres, compared to 819 acres in the application.

The exact pathways of water lines are unknown to Mr. Troost and Mr. Comfort. At the time of permitting, ERO mentioned that the property was recently purchased. Since then, Mr. Troost said the person knowledgeable about the system has left. Based on the crops visible in the aerial imagery and the lack of overlapping POUs other than the Boise Project, the system appears to be able to deliver water to the smaller POU identified during the exam.

Surface water is delivered by Wilder Irrigation District. The groundwater diverted for this right is supplemental to the irrigation district water deliveries. This was the first season in which the pump was used to supplement surface water. The applicant expects that the well will only be used for a few days in the beginning of the growing season each year.

At the time of the exam, the system had been running for a few days and was not running at full capacity. Wes Freeman, the current tenant, noted in an email on June 30th, 2020 that the pump was operated for 16 days. A 10 minute measurement was taken using the in-line flow meter installed by the applicant. The diversion rate was measured at 1.00 cfs (453 gpm). Mr. Comfort said when the system is charging that the pump runs at approximately 1.98 cfs (900 gpm). Riverside Inc installed the pump in 2015 and provided me with the pump curve for the pump in a correspondence on April 22nd, 2020. The 200 HP pump was designed for 1500 gpm (3.30 cfs) at 353 TDH with the pump set at 260 feet.

No records had been kept of water levels and pumping as required by permit conditions 12 and 14. The conditions were applied to the permit not as the result of a protest, but due to rule 40 as the permitted diversion was over 5 cfs. In addition to the licensed diversion being lesser than the rule 40 threshold, absence of concerns over water levels, water levels themselves, and ERO's Theis drawdown support removing conditions 12 and 14.

First, at the time of licensing, IDWR had not received notice of any concerns about water levels in the area. Secondly,

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ERO's Theis analysis in the application suggests a drawdown of approximately 2 ft a ½ mile from the well after 90 days of pumping. My review of this analysis suggests ERO's values for aquifer transmissivity and storativity are reasonable for sandy aquifers. Re-running the analysis for 2 cfs resulted in a 0.75 foot drawdown ½ mile from the well after 90 days. If the well was used for the entire season, the drawdown would be approximately 3 feet.

Lastly, water levels from IDWR's groundwater level database indicate stable water table conditions. Well 04N 05W 07DCD1 is about 3 miles to the north west of the POD and the only well covering the proof period with water level records. Other than periods of pumping that were recorded by the datalogger, levels recover to ambient conditions and do not exhibit long term declines. Other wells have a handful of measurements predating the permit. Measurements in 04N 05W 14DAD1 stop in 2015, but do not show long term declines.

Based on a pumping level of 260 feet, a power bill for 31,400 kwh, Mr. Freeman's accounting of 16 days of pumping, and a theoretical pump curve at 70% efficiency, I calculated a pumping rate of 2.0 cfs, which will be recommended for the license. No total volume is recommended due to the license being for supplemental groundwater.

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
IRRIGATION	03/01 to 11/15	2.0 CFS	NA
	Totals:	2.0 CFS	NA

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

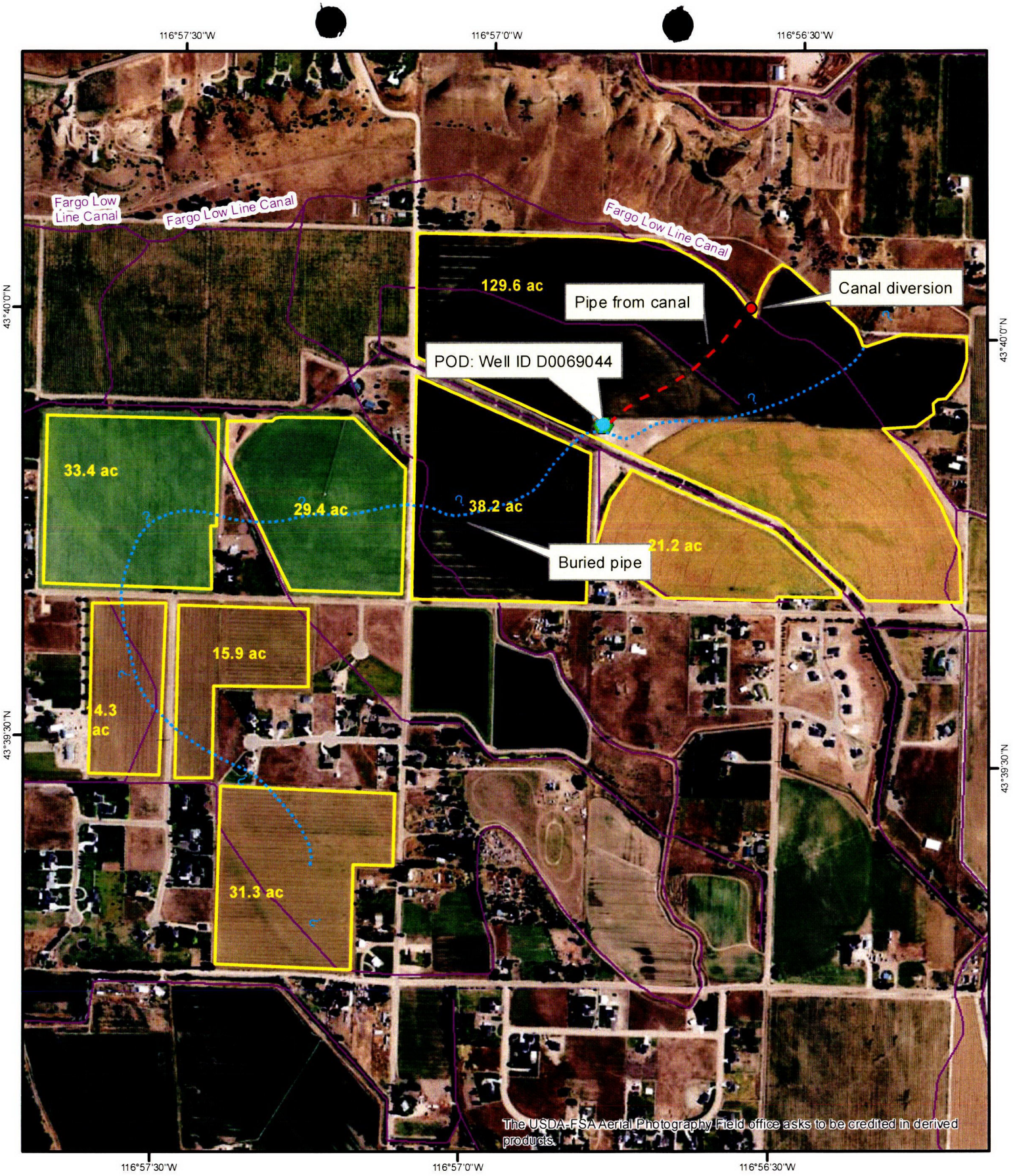
I. AUTHENTICATION

Alex Moody - Hydrogeologist, Staff

Field Examiner's Name _____ Date 8/11/2023

Reviewer _____ Date 8/25/23

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63-33895 System Diagram

Place of Use

CanalDitch

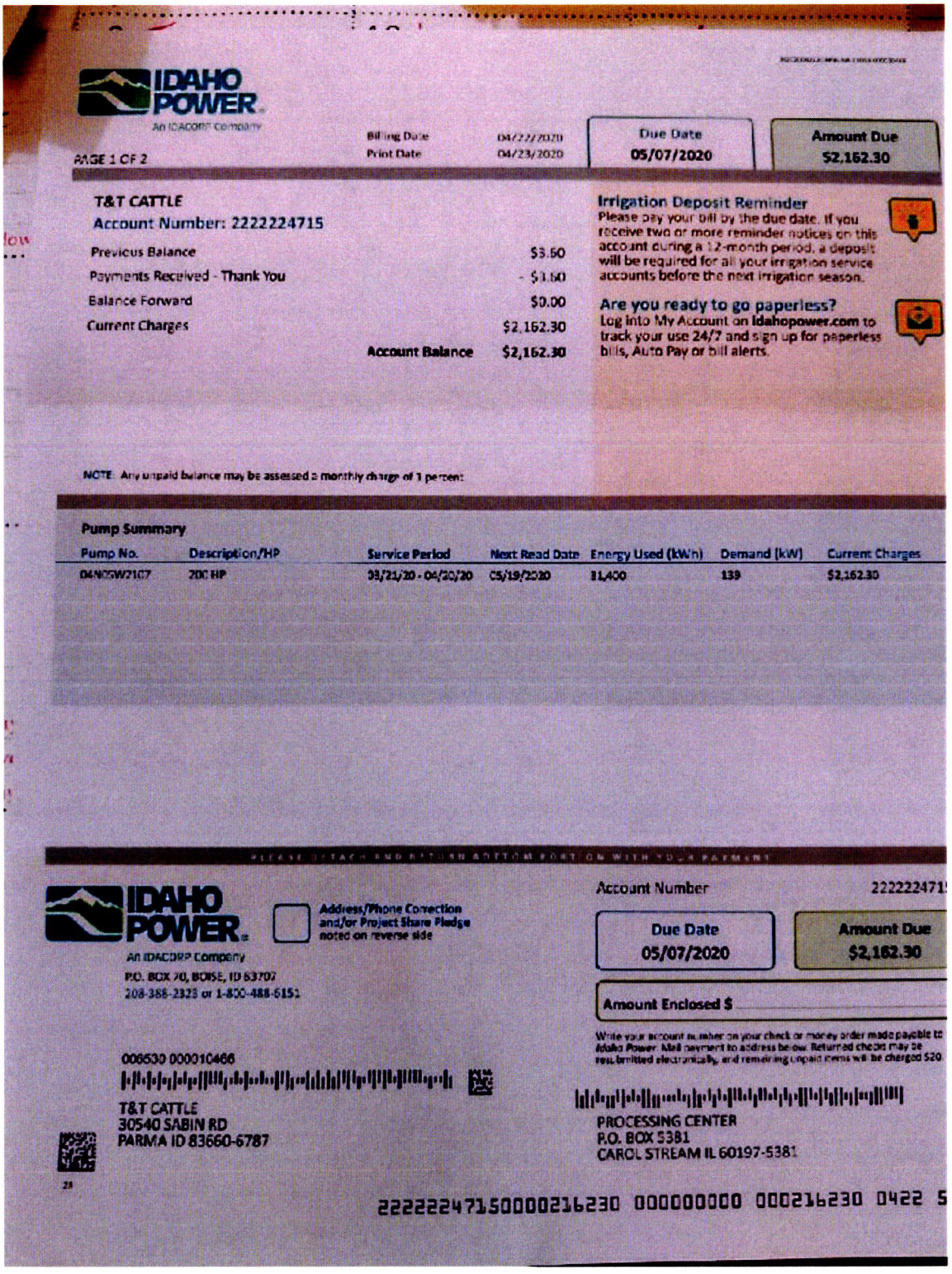
Water Permit POD

0 250 500 1,000 1,500 2,000 Feet

N

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Power Bill



IDAHO POWER
An IDACORP Company

PAGE 1 OF 2

Billing Date 04/22/2020
Print Date 04/23/2020

Due Date
05/07/2020

Amount Due
$2,162.30

T&T CATTLE
Account Number: 2222224715

Previous Balance		$3.60
Payments Received - Thank You		- $3.60
Balance Forward		$0.00
Current Charges		$2,162.30
	Account Balance	$2,162.30

Irrigation Deposit Reminder
Please pay your bill by the due date. If you receive two or more reminder notices on this account during a 12-month period, a deposit will be required for all your irrigation service accounts before the next irrigation season.

Are you ready to go paperless?
Log into My Account on **idahopower.com** to track your use 24/7 and sign up for paperless bills, Auto Pay or bill alerts.

NOTE: Any unpaid balance may be assessed a monthly charge of 1 percent.

Pump Summary

Pump No.	Description/HP	Service Period	Next Read Date	Energy Used (kWh)	Demand (kW)	Current Charges
04N05W21C7	200 HP	03/21/20 - 04/20/20	05/19/2020	31,400	139	$2,162.30

PLEASE DETACH AND RETURN BOTTOM PORTION WITH YOUR PAYMENT

IDAHO POWER
An IDACORP Company
P.O. BOX 70, BOISE, ID 83707
208-388-2323 or 1-800-488-6151

☐ Address/Phone Correction and/or Project Share Pledge noted on reverse side

Account Number 222222471

Due Date
05/07/2020

Amount Due
$2,162.30

Amount Enclosed $

Write your account number on your check or money order made payable to Idaho Power. Mail payment to address below. Returned checks may be resubmitted electronically, and remaining unpaid items will be charged $20.

006530 000010466

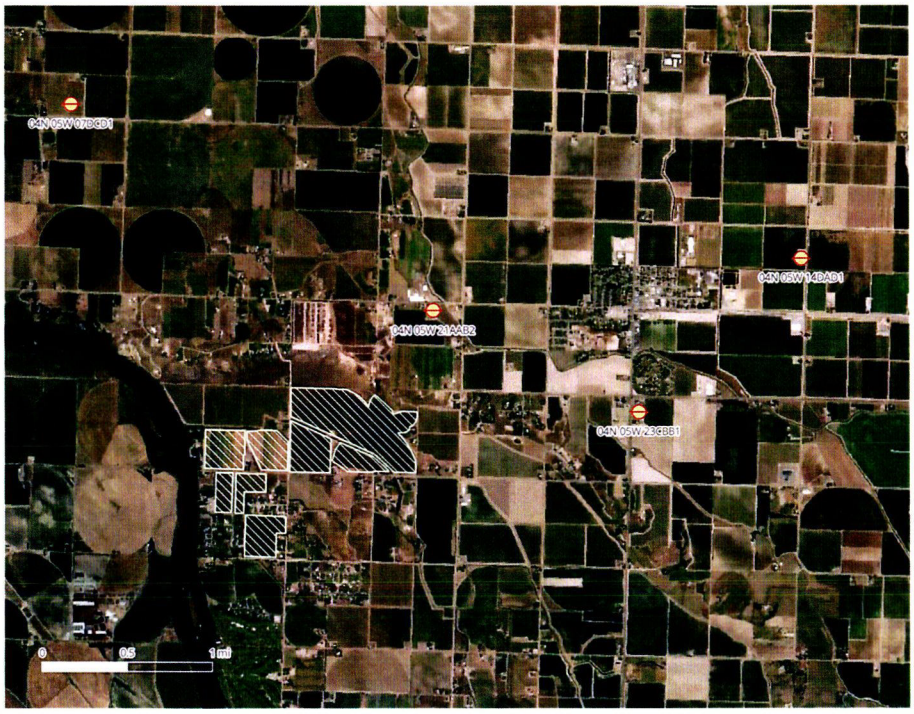
T&T CATTLE
30540 SABIN RD
PARMA ID 83660-6787

PROCESSING CENTER
P.O. BOX 5381
CAROL STREAM IL 60197-5381

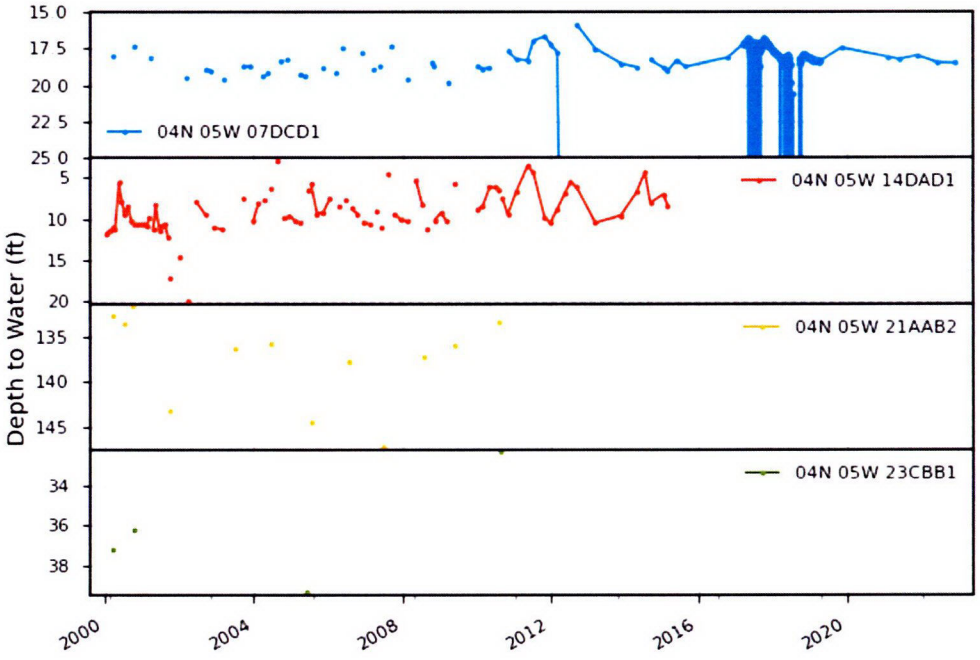
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Hydrographs



Map of wells from IDWRs groundwater database near 63-33895



Groundwater level hydrographs of mapped wells near 63-33895.

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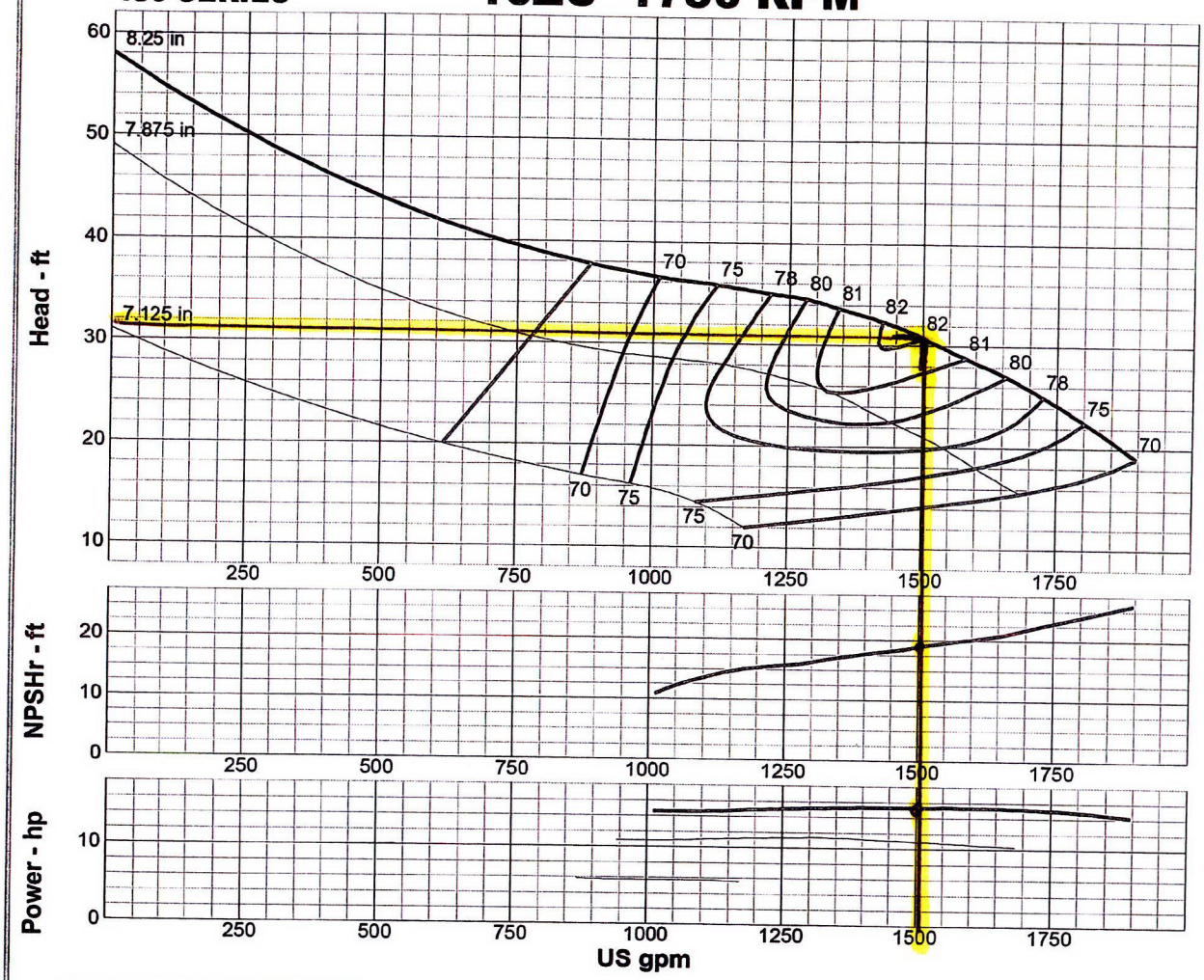
Greg Troost 12 516 1500 GPM @ 353 TDH

AMERICAN-MARSH PUMPS

TURBINE PUMP CURVE

SINGLE STAGE PERFORMANCE JANUARY 2010

480 SERIES 10ZC 1750 RPM



IMPELLER DATA		
IMPELLER NUMBER	3862	Minimum submergence above eye of bottom impeller: 30 IN.
TYPE	ENCLOSED	
THRUST FACTOR	K=13.60	
EYE AREA	26.7 SQ. IN.	
WEIGHT	9.75 LB.	

FLANGED BOWL DATA	
BOWL NUMBER	3864
BOWL MAX. DIAMETER	9.875 IN.
BOWL MIN. DIAMETER	9.500 IN.
MAX. NO. STAGES	26
ONE STAGE WEIGHT	250 LB.
ADD STAGE WEIGHT	60 LB.
STD. SHAFT DIA.	1.688 IN.
STD. LATERAL	0.500 IN.
DISCHARGE SIZE	6 - 8 IN.
DISCHARGE CONNECTION	THD - FLG
SUCTION SIZE	6 - 8 IN.
SUCTION CONNECTION	THD
MAX. SPHERE SIZE	1.438 IN.
MAX. OPERATIONAL P.S.I.	455 (SPECIAL)

EFFICIENCY CORRECTION					
NUMBER OF BOWLS:	1	2	3	4	5
CHANGE AS FOLLOWS:	-6	-5	-3	-1	0

CHANGE IN EFFICIENCY MAY AFFECT BOTH HEAD AND HORSEPOWER.

PUMP MATERIAL EFFICIENCY CORRECTION				
	DUCTILE	BRONZE	NI-R	STAINLESS
IMPELLER MATERIAL:	-1	0	-1	-2
BOWL MATERIAL:	-2	-2	-1	-3

Performance based on pumping clear, fresh water at a temperature not over 85° F., free of gas, air or abrasives and with bowls properly adjusted and submerged. Performance curve reflects Hydraulic Institute tolerances and guidelines.

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Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

03

1. WELL TAG NO. D 0069044
Drilling Permit No. 968921-874978
Water right or injection well # 63-33895

2. OWNER: Greg Troost
Name Trustee The Troost Gamily Living Trust
Address 30540 Sabin
City Parma State ID Zip 83660

3.WELL LOCATION:
Twp. 04 North ☒ or South ☐ Rge. 05 East ☐ or West ☒
Sec. 21 1/4 (10 acres) SE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County Canyon
Lat. 43 ° 39.885 (Deg and Decimal minutes)
Long. 116 °53.813 (Deg and Decimal minutes)
Address of Well Site 1833' Northeast of Fish Rd & Lower Ridge Rd
(Give at least name of road + Distance to Road or Landmark) City Wilder
Lot ____ Blk. ____ Sub. Name ____

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

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	147	25,000 lbs	Dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
12	+2	175	.375	Steel	☒	☐	☐	☒
12	205	209	.375	Steel	☒	☐	☐	☒
12	219	440	.375	Steel	☒	☐	☐	☒
12	450	463	.375	Steel	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method ____
Manufactured 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
175	205	.030		12	Stainless	
209	219	.030		12	Stainess	
440	450	.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
#8-16 Sand	147	223	15,000 lbs	Dry pour
#10-20 Sand	223	278	9,000 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) 10' Static water level (ft) 9' 10"
Water temp (°F) 72.2° Bottom hole temp (°F) 74.7°
Describe access port 2" pipe on side

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
183	1500	690

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
24	0	5	Brown sandy loam		x
24	5	47	Fine-coarse blue sand,river cobbles		x
24	47	68	Sandy blue clay,sm blue sand seam		x
24	68	74	Medium-coarse blue sand		x
24	74	117	Blue sandy clay		x
24	117	119	Medium-coarse blue sand	x	
24	119	136	Blue clay		x
24	136	139	Sand, blue clay in streaks	x	x
24	139	152	Med-coarse blue sand,bl clay streak	x	
24	152	175	Blue clay,sm blue sand streaks	x	x
24	175	195	Med-coarse blue sand	x	
24	195	209	Blue clay,small blue sand streak	x	x
24	209	218	Med-coarse blue sand	x	
24	218	295	Blue clay,sm blue sand streaks	x	x
24	295	300	Fine-coarse blue sand	x	
24	300	426	Blue clay, grey sandstone streaks		x
24	426	428	Grey sandstone		x
24	428	440	White ash, blue clay in streaks		x
24	440	465	Blue clay,grey sandstone streaks		x
24	465	471	Fine-medium blue sand	x	
24	471	487	Blue clay		x
24	487	503	Fine-medium sand,sm clay streak	x	
24	503	600	Blue flaky clay,grey sandstone		x

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WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 510'
Date Started May 4, 2015 Date Completed Jul 21, 2015

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 8-6-15
*Driller ____ Date 8/6/15
*Operator II ____ Date ____
Operator I ____ Date ____

* Signature of Principal Driller and rig operator are required

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AUG 29 2023

Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0069044
Drilling Permit No. 968921-874978
Water right or injection well # 63-33895

2. OWNER: Greg Troost
Name Trustee The Troost Gamily Living Trust
Address 30540 Sabin
City Parma State ID Zip 83660

3.WELL LOCATION:
Twp. 04 North ☒ or South ☐ Rge. 05 East ☐ or West ☒
Sec. 21 ____ 10 acres 1/4 SE 40 acres 1/4 SW 160 acres 1/4
Gov't Lot ____ County Canyon
Lat. 43 ° 39.885 (Deg. and Decimal minutes)
Long. 116 ° 53.813 (Deg. and Decimal minutes)
Address of Well Site 1833' Northeast of Fish Rd & Lower Ridge Rd
(Give at least name of road + Distance to Road or Landmark) City Wilder
Lot. ____ Blk. ____ Sub Name ____

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

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	147	25,000 lbs	Dry pour

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
12	473	485	.375	Steel	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method ____
Manufactured 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
463	473	.030		12	Stainless	
485	505	.030		12	Stainess	

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
3/8" Gravel	278	401	27,000 lbs	Dry pour
#8-16 Sand	401	517	21,000 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) ____
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

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AUG 14 2015
WATER RESOURCES
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*Driller ____ Date ____
*Operator II ____ Date ____
Operator I ____ Date ____

* Signature of Principal Driller and rig operator are required.

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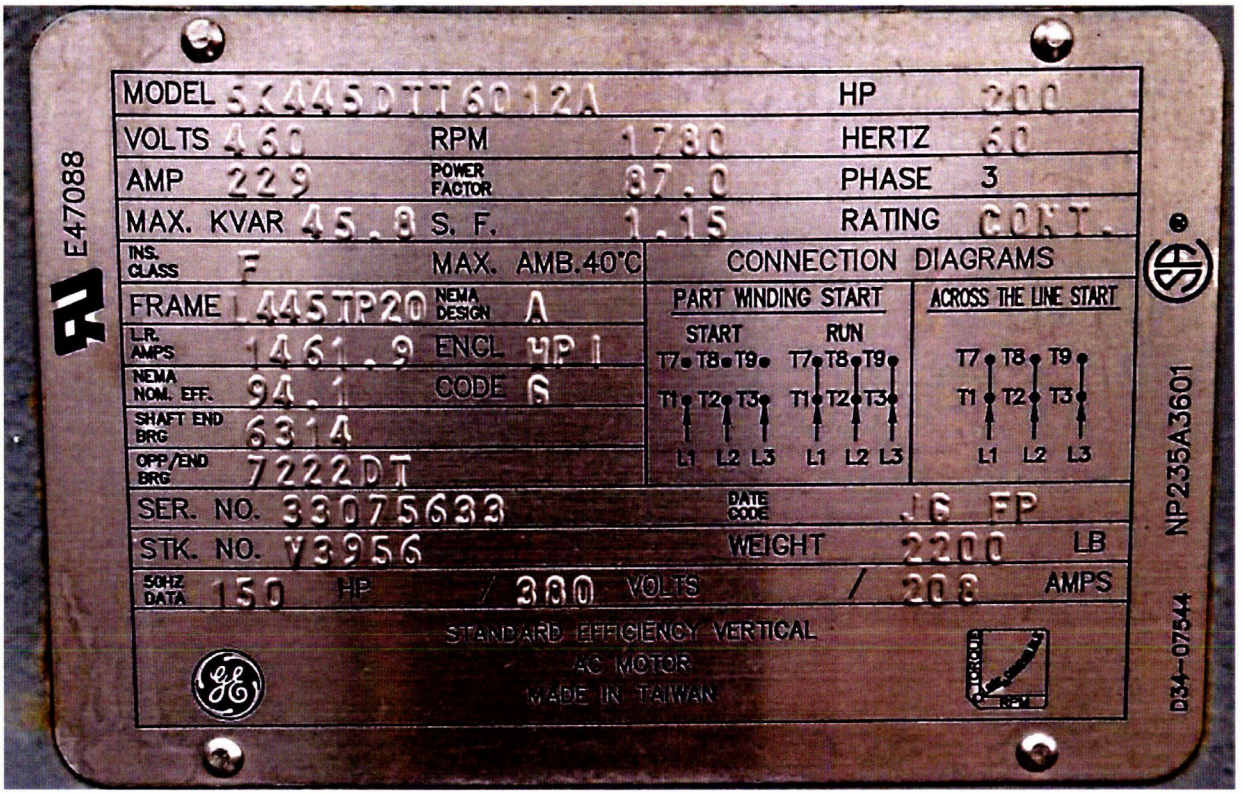


Point of diversion

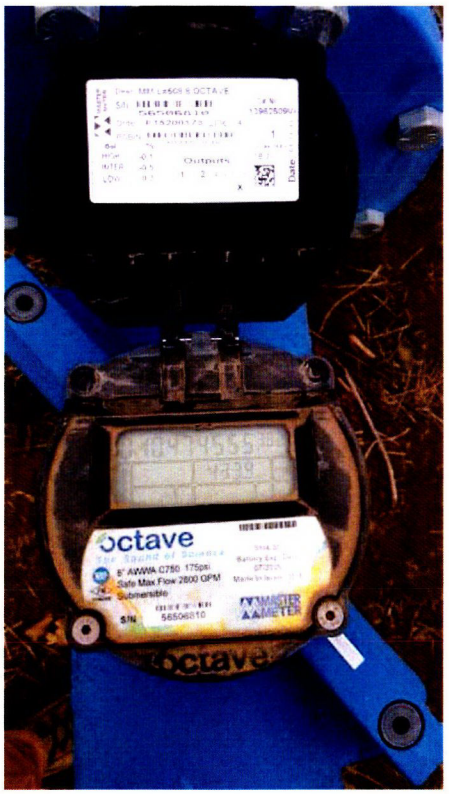


Point of diversion and filtration system for drip irrigation

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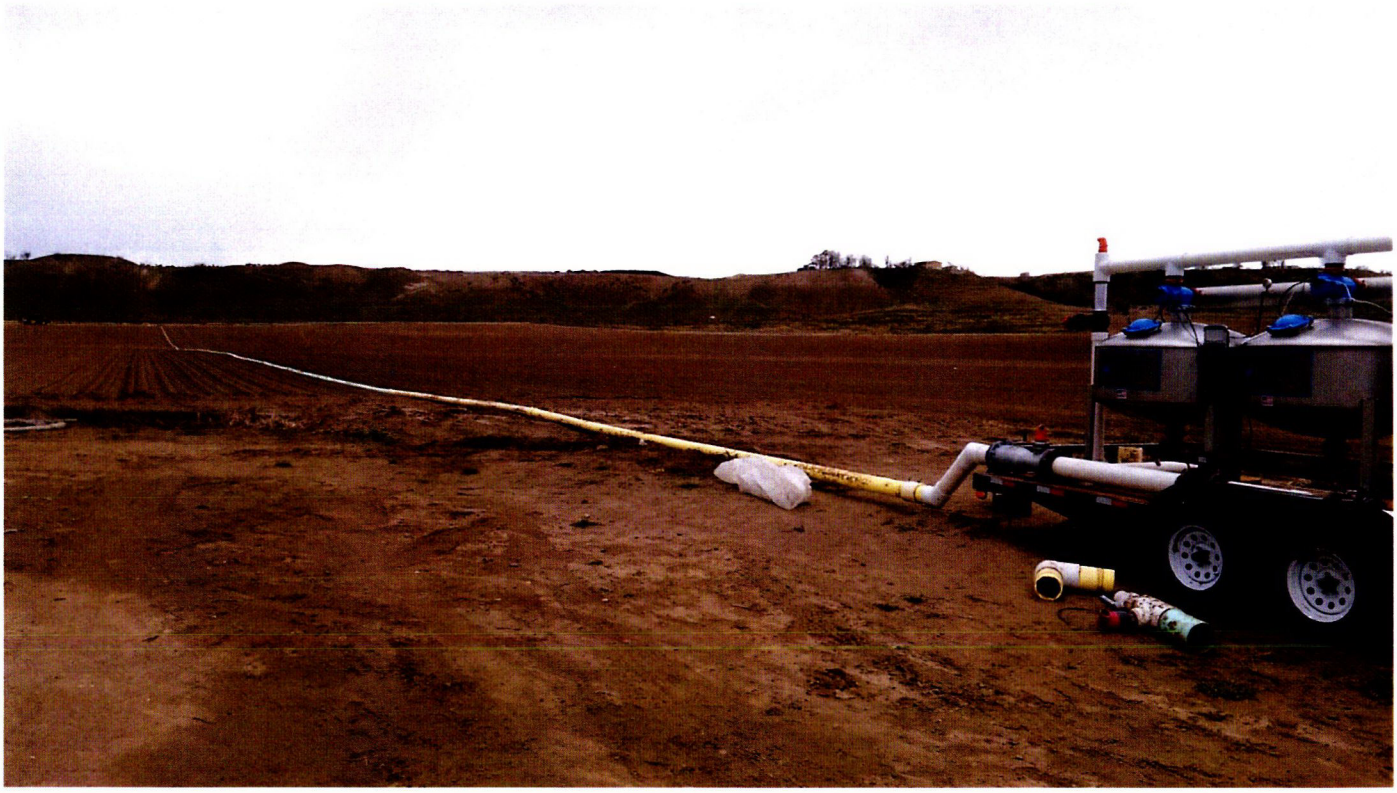


Motor specifications



In-line flow meter.jpg

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Drip irrigation mainline for adjacent place of use



Split from pump

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Power box. Sticker reads "Red-E-VFD".



Place of use showing drip tape. Fargo Low Line Canal runs along top of field.

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From: Wes Freeman
To: Moody, Alex
Subject: Greg Troost Well
Date: Tuesday, June 30, 2020 2:48:55 PM

Good afternoon Alex,

We ran the well for a total of 16 days this spring.

Thank you
Wes

Get Outlook for iOS

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From: Rory Walund
To: Terry Daugherty
Cc: Moody, Alex
Subject: Re: [website contact] Pump information needed for water right
Date: Wednesday, April 22, 2020 2:01:41 PM
Attachments: DOC042220-008.pdf

Alex,

See attached. This is a 200 HP System designed for 1500 GPM @ 353 TDH. Pump setting is 260'.

Thanks again,
Rory Walund
Riverside Inc.

On Apr 22, 2020, at 12:42 PM, Terry Daugherty <terry@rsicorp.net> wrote:

Alex, I just talked with Rory, and his in the field when he gets back he'll get you something

On Wed, Apr 22, 2020 at 11:33 AM Moody, Alex <Alex.Moody@idwr.idaho.gov> wrote:

Terry,

Thanks for the reply. If you all have a pump curve for the well or just a range of operating flows and pressures, that would be very helpful.

Cheers,

Alex

From: Terry Daugherty [mailto:terry@rsicorp.net]
Sent: Monday, April 20, 2020 12:06 PM
To: Moody, Alex <Alex.Moody@idwr.idaho.gov>; Rory Walund <rory@rsicorp.net>
Subject: Re: [website contact] Pump information needed for water right

Alex, I forwarded to Rory also. He'll be the one getting this for you.

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Terry

On Mon, Apr 20, 2020 at 11:58 AM Riverside, Inc. <rsiwebform@nerdydragon.com> wrote:

> Alex Moody sent a message using the contact form at http://www.rsicorp.net/contact.
>
> Hello - I'm looking for some information on a pump you installed for Greg Troost
> in Wilder back in 2015. The information will help in licensing the water right
> for that well. Mr. Troost suggested I contact RSI for the specifications.
>
> Thanks,
> Alex Moody
> Staff Hydrogeologist
> IDWR
> 208-287-4849

--

Thanks

Terry Daugherty

Riverside Inc.

Parma Idaho

208-722-6731

--
Thanks
Terry Daugherty

Riverside Inc.
Parma Idaho
208-722-6731

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