

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34097

Exam Date: 08/21/2024

1. Current Owner:
MOONSTRUCK HOMEOWNERS ASSOCIATION INC 15617 MOONBEAM WAY CALDWELL ID 83607-5362
2. Accompanied by: Darin Mooso (HOA President)
Phone No: (208) 724-7445
Address: 15358 Cupid Dr. Caldwell, ID
Relationship to permit Holder: HOA President

3. SOURCE:

GROUND WATER

Method of Determination: Garmin GPS, GIS, and Canyon County GIS Imagery.**B. OVERLAP REVIEW**

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

Water Right No.	Source	Purpose of Use	Basis
63-136, 137b,33253, et al.	Various Surface Water	Irrigation-Wilder Irrigation District	Decrees
63-2761A	Groundwater	Irrigation	Decreed
63-26313	Groundwater	Domestic	Decreed

Comments: Several rights held by the Wilder Irrigation District have places of use (POU) describing service areas for the irrigation entity. However, in the attachment for section 11 of the application the permit holder stated that there is no surface water used for irrigation within the POU. Right 63-2761A completely overlaps the permitted POU and is also held by the permit holder. Condition X35 on the permit describes the right used in concert with the permit for the irrigation of the POU. Right 63-26313 is for a groundwater diversion for domestic use. The domestic POU is the entire NESW quarter/quarter and the domestic well is in lot 5, block 6, a parcel listed as currently owned by John & Susan Lucas. At the time of the field examination the HOA president stated that there is no irrigation in the POU outside of the shared system. Any domestic well is for in home use only.

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

Water Right No.	Source	Purpose of Use	Basis
63-2761A	Groundwater (Well#1)	Irrigation	Decreed

Comments: Right 63-2761A point of diversion (POD) identified as "Well #1" located in SENW is one of two wells diverting for a system shared with the permitted use for the irrigation of the overlapping POUs.

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

GROUND WATER SE¼ NW¼, Sec. 16, Twp 03N, Rge 03W, B.M. CANYON County

GPS COORDs **N43.596851, W116.705401**

GROUND WATER SE¼ NW¼, Sec. 16, Twp 03N, Rge 03W, B.M. CANYON County

GPS COORDs **N43.597759, W116.702977**Method of Determination: Garmin GPS, GIS, and Canyon County GIS Imagery.**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	
03N	03W	16								25.0	18.1								43.1

Total Acres: 43.1

Method of Determination: GIS, Canyon County GIS Imagery, and Canyon County Tax Parcel Maps.

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 or Diversion ID No.*	Motor Make	Hp	Motor Model No.	Pump Make	Pump Serial No. or Discharge Size
363824 (WELL 1)	UNKNOWN	Unknown	Unknown	Unknown	UNKNOWN
364632 (WELL 2)	UNKNOWN	20	20HP460V3PH	UNKNOWN	250 GPM (0.56cfs)

Comments: Pump information provided by escort. The pump at well 2 was replaced in 2019 and the specifications from the invoice issued by Burgess Pump was emailed after the field examination to provide additional details. The invoice also provided a set depth of 126ft at Well 2. Due to past flooding in the pump house for Well #1 no details are available for the submersible pump currently installed in Well #1. However, the system has the same make and model VFD controller as Well #2.

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE	NA	NA	NA	NA	NA	NA

2. Measurements: There was not an adequate length of unobstructed pipe for measurement, and the system is supplied by both wells on demand making measuring a peak rate unreasonably complicated. The Well 2 pump specifications provided by the permit holder indicate that it can provide all but 0.04cfs of the permitted rate. The wells use identical VFD systems and each well tested with an output more than 2x the rate needed to provide the full permitted rate when combined.

E. FLOW CALCULATIONS

Measured Method:

Additional Computation Sheets Attached

Well #2 Output specifications:

The invoice from Burgess Pump supply states that the 20Hp pump installed at 126ft has a 250 GPM discharge limit.

250 GPM / 448.83 GPM per 1cfs= **0.56cfs**

Well #1 Theoretical Calculation:

Well #1 TD = 204ft

PSI observed= 68psi

$Q = (2Hp)(8.8)(0.80 \text{ efficiency}) / (204 \text{ ft maximum lift}) + (2.31) * (68 \text{ psi}) = 0.04\text{cfs}$

Max Discharge Rate= 0.56cfs

Permit allowed = 0.60 cfs

Percent of Permitted Rate = 93% (7% error)

Recommendation= 0.60cfs

Comments / Recommendation: The system specifications provided by the permit holder indicate that Well #2 alone is capable of delivering a rate within 7% (0.04cfs) of the full permitted rate. If a pump is set at maximum depth in Well #1 only a 2Hp pump would be necessary for the system to divert the full permitted rate. It is reasonable to assume that Well #1 would, at minimum, provide the additional rate necessary to reach the full permitted rate. The permit carries condition X35 stating that when combined with right 63-2761A the use is limited to a maximum rate of 1.21cfs and 360 AF annually. However, the permit does not add rate or volume to right 63-2761A, it only adds an addition POD.

I am recommending that the license be issued for the full permitted rate of 0.60cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 43.1 \text{ acres} \times 4.5 \text{ AF} = 194 \text{ AF annually}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.60\text{cfs} \times 260 \text{ Days} \times 1.9835 = 309 \text{ AF annually}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 194 \text{ AF annually}$

2. Volume Calculations for Other Uses: NA

Comments / Recommendation: Based on field observations and GIS imagery the irrigated areas combine for total of 43.1 acres. Based on the field headgate calculation I recommend the license be issued with an annual volume of 194 AF.

G. NARRATIVE/REMARKS/COMMENTS

On August 21, 2024, a field examination was conducted escorted by Darin Mooso, President of the Moonstruck HOA. During the examination we visited 2 well sites (Photos 1-4), reviewed, and documented as-built prints for the HOA irrigation system layout (Photos 8 & 9). The system delivers water via a 4" steel pipeline that loops and bisects the POU. Individually controlled inground sprinkler systems irrigate each privately owned parcel (Photos 12-14). The Burgess Pump invoice for the pump installation at Well #2 provided specifications for the 20Hp submersible pump installed (Figure 1). The pump information for Well #1 was destroyed when a blowout flooded the pumphouse where the documents were stored, and Darin is unable to find any pump information. However, the peak discharge for the system installed in Well #2 is approximately 0.56cfs (250GPM), and the similar VFD controllers are installed at both wells. The system is designed to maintain a pressure >50psi. The pressure observed at the well VFD controllers during the examination were 68psi and 58.5psi (Photos 5-7). A conservative theoretical calculation determined that even a 2Hp pump installed in Well #1 would allow the system to provide the full permitted rate. I recommend the license be issued with the full permitted rate of 0.60cfs. The permit was conditioned that rights 63-34097 and 63-2761A when combined are limited to a maximum rate of 1.21cfs and an annual volume of 360 AF for the irrigation of 80 acres. However, permit for right 63-34097 does not increase the rate or volume of right 63-2761A, it only adds Well #2 as a second POD for the integrated system irrigating the shared POU.

Darin explained that the HOA members use a watering schedule (Figure 2), dividing the HOA into 4 watering groups operating in rotation. The only exception is Sunday, when anyone can water. The HOA President, Darin Mooso, owns the largest parcel within the HOA. Darin's parcel is irrigated using an 18-zone sprinkler system with 4-6 rotary sprinkler heads in the largest zones irrigating the lawn, and driplines in the landscaped beds (Photos 12-14). Mr. Mooso's irrigation system is typical of those observed within the POU (Photos 1, 10 & 11).

Field observations and GIS imagery were used to measure the total irrigated area within the permitted POU. The total irrigated area is approximately 43.1 acres. I recommend that the license is issued with an annual volume of 194 AF, per the headgate calculation in section F of this report, and with conditions X35, R65, 01M, 004, 103, X59, and X60. Conditions 26A and 046 should be removed before licensing, per current guidance. Finally, condition 121 should be replaced with condition 103 on the license, per current guidance.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/01 to 11/15	0.60 CFS	194.0 AF

Totals: 0.60 CFS 194.0 AF

2. Recommended Amendments

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

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

I. AUTHENTICATION

Bob Howe - Water Resource Agent

Field Examiner's Name _____ Date _____

Reviewer Cody Parker Date 12/4/24



Photo1 (Left)- Well #1 Pump house, wellhead, riser, and VFD controller inside. **Photo 2 (Right)-** Well# #2, well head on the left and VFD controller on power pole to the right of image.

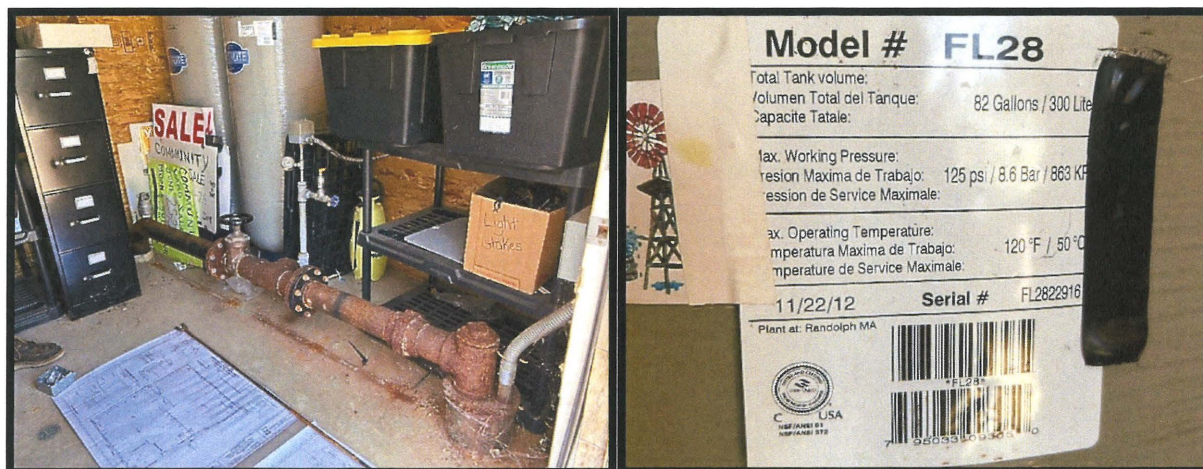


Photo 3 (left)- Interior of Well #1 pump house, 4" steel riser and 2 pressure tanks in the left of the image. Paperwork for the pump stored in the bottom of the filing cabinet was ruined when the pumphouse was flooded. **Photo 4 (right)-** Spec. label on one of the two 82-gallon pressure tanks.



Photo 5 (Left)- VFD controller for Well #1 pump running. Photo 6 (Right)- VFD Controller for Well #2, the pump operates under increased system demand.

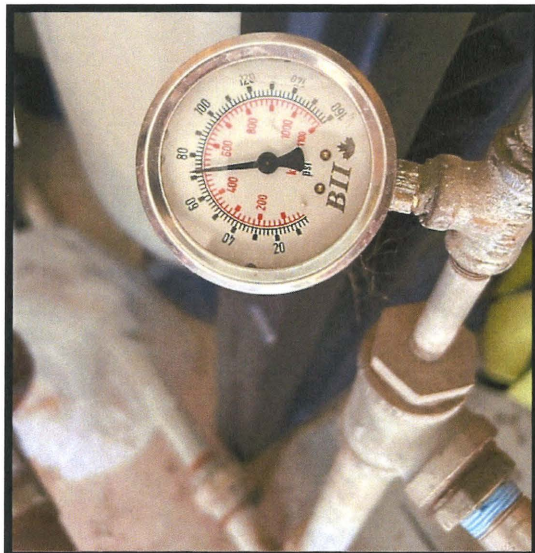


Photo 7- Pressure gauge in the pump house at Well #1.

Photo 9- As-built print for Phase I of the subdivision. A continuation of the 4" steel water line running the perimeter and bisecting the subdivision in the southern extent. Well #1 is circled near the center of the print.

**Burgess Pump & Supply, LLC**706 East Main Street
Middleton, ID 83644

PH: (208) 585-6202

EMAIL: service@burgesspump.com • WEB: www.burgesspump.com

INVOICE**9296**

3/28/2019

BILL TO Moonstruck HOA
15617 Moonbeam Way
Caldwell ID 83607

SHIP TO

BURGESS WO#	TECH	CUSTOMER PO#	TERMS	PROJECT	
14029	BP	EST# 1211	50% Down / 50%...	IRRIGATION INSTALLATION	
QTY	DESCRIPTION			RATE	AMOUNT
	Per Estimate: Irrigation System Installation			13,859.92	13,859.92
	20HP460V3PH Motor w/ 250 gpm pump end on a 20HP ABB ACS550 Drive Controller, pump set @ 126' (3" galv pipe, 125" 10/3 sub cable), 3" VFD check valve, PRV, Air vent, bolts/nuts/gaskets/flanges, gate valve, hose bibb, stainless steel plumbing, galvanized plumbing and shop supplies				
	5% Material Discount			-693.00	-693.00
1	SERVICE LABOR			1,650.00	1,650.00
1	SUB-CONTRACTOR CHARGES - Electrical work completed (1) 25ft wood pole, gear stand for mounting of equipment, 100 amp. 480volt meter-base with overhead service mast, grounding electrode system, 100 amp, 480volt, Nema 3R fusible disconnect switch & 20HP VFD enclosure as detailed: 20HP ABB ACS 550VFD, 20HP, 480volt Harmonic Filter (to meet IEEE), Cooling fans, Strike Sorb surge protection, pressure transducer, 20HP Load Reactor & WeatherFlow enclosure			11,500.00	11,500.00
ALL INVOICES ARE DUE PER TERMS ABOVE. PAST DUE INVOICES ARE SUBJECT TO FINANCE CHARGES OF 1.5% PER MONTH AND LIEN FEES.				TOTAL	\$26,316.92
PLEASE MAKE CHECKS PAYABLE TO: "BURGESS PUMP AND SUPPLY" 706 E. MAIN STREET • MIDDLETON, ID 83644				BALANCE	\$26,316.92
				   	

Figure 1- Well #2 pump invoice citing the set depth of 126 ft and a max. discharge of 250GPM (0.56cfs).

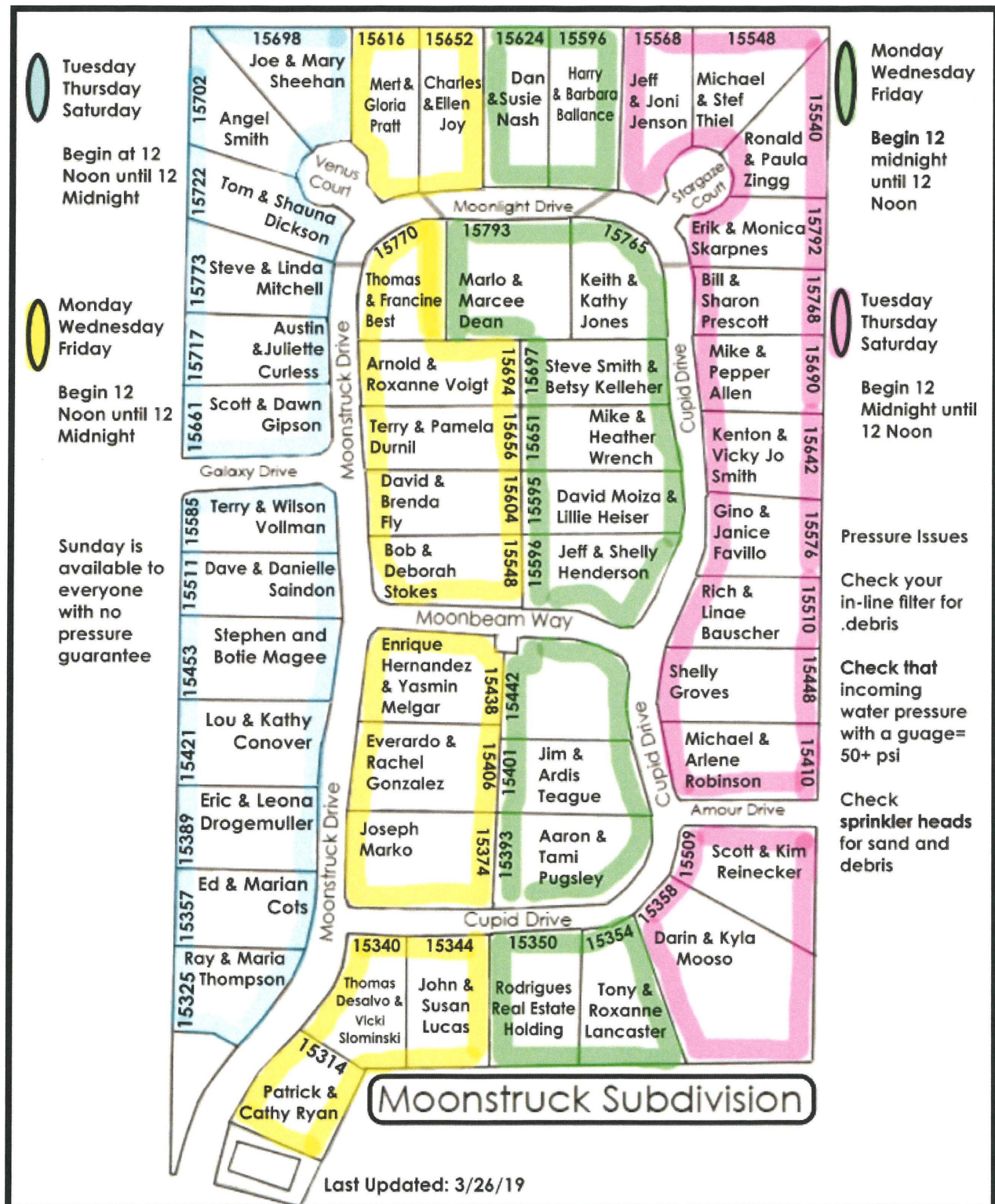


Figure 2- Watering schedule for members of the HOA. The parcel owners and addresses are listed in each parcel. Water is done in rotation Monday through Saturday. Sunday is open to all users.



Photo 10 (above)- Irrigated area surrounding Well #2, Photo 11 (below)- Irrigated area in front of Well #2 at 15642 Cupid Dr and 15576 Cupid Dr, the parcels adjacent to the well site.





Photo 12 (above) -Irrigation controller in the garage of Darin Mooso's home (15358 Cupid Dr). Photo 13 (below)-Facing northeast in the backyard of Darin Mooso's home. Six rotary sprinklers irrigating the lawn area near the back of the house.





Photo 14- Standing near the shop behind Darin Mooso's home facing northwest. A zone of 6 rotary sprinkler heads are irrigating the lawn nearest the home.

STATE OF IDAHO
DEPARTMENT OF RECLAMATION
BOISE, IDAHO
REPORT OF ENGINEER

Permit No. 20251This proof is for Beneficial use

In Water District No. _____

1. Name of applicant C. V. Kay, Route 4, Caldwell, Idaho2. Source of water supply: Subterranean from a well3. Location of point of diversion: Is in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 16T. 3 N. R. 3 W. County of Canyon

4. Describe works as they exist, giving dimensions and capacities of same: Well is 100 ft. deep by 10 in. diameter, gravel packed. Amount of casing is unknown. Well was drilled by Schmidt of Caldwell. Static is 60 ft. drawdown is 12 ft. line 6 inch bowls and 6 in. column. Delivery is to the east into a 1000 gal. steel tank used as a sandtrap. From there, the water is conducted to the fields through a sprinkler system. There are 660 ft. of 6 in. aluminum pipe, 660 ft. of 5 in. aluminum pipe, 1280 ft. of 6 in. steel pipe, 2580 ft. of 3 in. aluminum pipe laterals, 480 ft. of additional pipe, part aluminum and part steel, size 4 to 5 in. All is aluminum except a portion that goes under the roadway. Protection for the pump and motor consists of an open slot type sand, approximately 6 ft. by 8 ft. by 6 ft. high. Pump is a Loyne Bowler No. 15194. Motor is 30 h.p. 220 V. 74 amps, 1800 r.p.m. Serial No. 819116. Switches and controls are AB and Square D. Meter and switches are mounted on a pole approximately 8 ft. southeast from the well. At present there are 66 sprinkler heads size 5. Water is used for irrigation and domestic purposes.

6. State whether or not water has been turned into works of diversion: Yes

7. List legal subdivisions of lands to be irrigated. If proof is for beneficial use, give exact number of acres under cultivation in each forty-acre tract. (Describe manner and place of use if other than irrigation):

SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16, Twp. 3 North, Range 3 West, B. M.See Dep.

4. winbire. Co. 40, 3/28 by 11/84. Pump and motor are mounted on casing, supported by two ties.

(Submit map on attached plat, showing location and details of above description.)

8. What large stream would the water here appropriated finally reach? _____

Remarks: _____

Mr. Kay is thinking of putting down another well to get more water.

The USBR engineers report for the original irrigation system found in adjudication backfile for right 63-7261/7261a. The pump motor is described as a Loyne Bowler pump with a 30Hp motor.

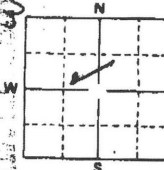
USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

RECEIVED

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well. MAR 16 1976

1. WELL OWNER Name <u>WILLIAM CREPPS</u> Address <u>CALDWELL, IDAHO</u> Owner's Permit No. _____		7. WATER LEVEL Department of Water Resources Static water level <u>50</u> feet below land surface Flowing? ☐ Yes ☐ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																			
2. NATURE OF WORK ☒ New well ☐ Deepened ☒ Replacement ☐ Abandoned (describe method of abandoning) _____		8. WELL TEST DATA ☒ Pump ☐ Bailer ☐ Other <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Draw Down</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>100 gpm</u></td><td><u>45 FT</u></td><td><u>4 Hours</u></td></tr></tbody></table>		Discharge G.P.M.	Draw Down	Hours Pumped	<u>100 gpm</u>	<u>45 FT</u>	<u>4 Hours</u>																																																																												
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3. PROPOSED USE ☒ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG <u>028885</u> <table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>10</td><td>0</td><td>4</td><td>TAP SAIL</td><td></td><td></td></tr><tr><td>10</td><td>4</td><td>7</td><td>HARD PAN</td><td></td><td></td></tr><tr><td>10</td><td>7</td><td>8</td><td>SANDY CLAY</td><td></td><td></td></tr><tr><td>10</td><td>8</td><td>25</td><td>GRAVEL CEMENTED</td><td></td><td></td></tr><tr><td>8</td><td>25</td><td>45</td><td>CEMENTED GRAVEL</td><td></td><td></td></tr><tr><td>8</td><td>45</td><td>95</td><td>SANDY CLAY</td><td></td><td></td></tr><tr><td>8</td><td>95</td><td>105</td><td>YELLOW CLAY</td><td></td><td></td></tr><tr><td>8</td><td>105</td><td>155</td><td>CLAY YELLOW SANDY</td><td></td><td></td></tr><tr><td>8</td><td>155</td><td>160</td><td>SANDY FINE</td><td></td><td></td></tr><tr><td>8</td><td>160</td><td>188</td><td>SANDY CLAY</td><td></td><td></td></tr><tr><td>8</td><td>188</td><td>202</td><td>SAND FINE (CLEAN)</td><td></td><td></td></tr><tr><td>8</td><td>202</td><td>205</td><td>CLAY STICKY</td><td></td><td></td></tr></tbody></table>		Hole Diam.	Depth		Material	Water		From	To	Yes	No	10	0	4	TAP SAIL			10	4	7	HARD PAN			10	7	8	SANDY CLAY			10	8	25	GRAVEL CEMENTED			8	25	45	CEMENTED GRAVEL			8	45	95	SANDY CLAY			8	95	105	YELLOW CLAY			8	105	155	CLAY YELLOW SANDY			8	155	160	SANDY FINE			8	160	188	SANDY CLAY			8	188	202	SAND FINE (CLEAN)			8	202	205	CLAY STICKY		
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5. WELL CONSTRUCTION Diameter of hole <u>8</u> inches Total depth <u>204</u> feet Casing schedule: ☒ Steel ☐ Concrete <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>250</u> inches</td><td><u>8</u> inches</td><td><u>1'8"</u> feet</td><td><u>188</u> feet</td></tr><tr><td><u>250</u> inches</td><td><u>5</u> inches</td><td><u>173</u> feet</td><td><u>189</u> feet</td></tr><tr><td><u>250</u> inches</td><td><u>5</u> inches</td><td><u>199</u> feet</td><td><u>204</u> feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☒ Yes ☐ No Perforated? ☐ Yes ☐ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>JOHNSON</u> Type <u>STAINLESS</u> Model No. <u>405</u> Diameter <u>5</u> Slot size <u>30</u> Set from <u>189</u> feet to <u>199</u> feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>20</u> Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings Sealing procedure used ☐ Shurry pit ☐ Temporary surface casing ☐ Overbore to seal depth		Thickness	Diameter	From	To	<u>250</u> inches	<u>8</u> inches	<u>1'8"</u> feet	<u>188</u> feet	<u>250</u> inches	<u>5</u> inches	<u>173</u> feet	<u>189</u> feet	<u>250</u> inches	<u>5</u> inches	<u>199</u> feet	<u>204</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet																																																
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>CANYON</u> <u>SE 1/4 NW 1/4 Sec. 16, T. 3, N. 3, R. 3, W. 4</u>		10. Work started <u>1/28/76</u> finished <u>3/5/76</u>																																																																																			
		11. DRILLERS CERTIFICATION Firm Name <u>WILL DRILLING</u> Firm No. _____ Address <u>CALDWELL, IDAHO</u> Date <u>3/6/76</u> Signed by (Firm Official) <u>Kenneth Witt</u> and (Operator) <u>Claude DuFoe</u>																																																																																			

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

**WELL LOG AND REPORT TO THE
STATE RECLAMATION ENGINEER OF IDAHO**

027702

RECEIVED	
Log No.	APR 28 1960
Re Department of	19
Well No.	
Permit No.	

(DO NOT FILL IN)

Owner Louis Besch Address Route 4, Caldwell
 Driller Cutler Drilling Co Address RT 1 Box 1-082 Nampa Lic. No. 113
 Location of Well: SE 1/4 NW 1/4 Sec. 16, T. 3 N. 3 E. Canyon County,
 and 350 feet N. 10 feet E. from SE Corner of SE 1/4 NW 1/4 Sec. 16
 Size of Drilled Hole 22 inch Total depth of Well 154 ft.
 Give depth of standing water from surface 78 ft. Water Temp. 68 °Fahrenheit
 On pumping test delivery was 550 g.p.m. or c.f.s. Drawdown was 48 feet.
 Size of pump and motor used to make the test 10" Bowls 2.75 H.P. Diesel
 Length of time pumped during check was 6 hr., 15 minutes.
 If flowing well, give flow in c.f.s. or g.p.m. and shut in pressure
 If flowing well, describe control works
 (TYPE AND SIZE OF VALVE, ETC.)
 Water will be used for Irrigation Weight of casing per linear foot 24.3 lbs.
 Thickness of casing .188 inch Casing material Bare Steel Pipe
 E.G., PIPE, CONCRETE, WOOD.
 Diameter, length and location of casing 11 5/8" I.D. 155 ft. Located in center of hole.
 (CASING 12" IN DIAMETER AND UNDER GIVE INSIDE DIAMETER;
 CASING OVER 12" IN DIAMETER GIVE OUTSIDE DIAMETER.)
 Number and size of perforations 432 5/32" X 6" located 75 feet to 155 feet
 from surface of ground.
 Other perforations None
 Date of commencement of well March 29, 1960 Date of completion of well April 16, 1960
 Type of well rig Rotary

CASING RECORD

DIAM. CASING	FROM FEET	TO FEET	LENGTH	REMARKS -- SEALS, GROUTING, ETC.
12" O.D.	0	155	155	Packed with 5/8" pea gravel. Bullnosed on bottom

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

Testing done by H.J. Wood Co. Boise. Data furnished by Wood Co.
SE NW S. 16 3 N 3 W

027703

WELL LOG

From Foot	To Foot	Type of Material	Drilling Time		Water-bearing Formation Ans. Yes or No	Casing Perforated Ans. Yes or No
			Hrs.	Min.		
0	3	Soil	↑			No
3	4	Hardpan				"
4	5	Sand				"
5	9	Hardpan	4	15		"
9	15	Red Brown Sand				"
15	25	Cobblestones	↑		↓	"
25	35	"	12	0		"
35	45	"			↓	"
45	55	"	↑			"
55	60	"	13	0		"
60	64	Clay			↓	"
64	74	Sand	↑			"
74	78	"	2	45		Yes
78	81	Clay				"
81	90	Sand w/clay streaks	↑		↓	"
90	100	Sandy clay	5	5		"
100	110	Clay			↓	"
110	120	Cemented sand	↑			"
If more space is required use Sheet No. 2						

WELL DRILLERS STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed Cecil Drilling Co.
By Kenneth R. Cecil

Dated April 18, 1960

License No. 113

Well Location 3737 N 16 St NW

WELL LOG

[illegible]