

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33803
Exam Date: 8/14/2019

1. Current Owner:
JAMES KRAMER 377 W HEIKES LN EAGLE ID 83616 AND
SHELLI KRAMER 377 W HEIKES LN EAGLE ID 83616
2. Accompanied by: James Kramer
Phone No: (425) 238-7266
Address: 377 W Heikes Ln Eagle ID 83616
Relationship to permit Holder: Same

3. SOURCE:
GROUND WATER

Method of Determination: Permit application, ArcMap, aerial imagery, USGS topography, and field examination

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
63-33804	Groundwater	Irrigation, Stockwater, Domestic	Permit

Comments: 63-33804 partially overlaps the 0.9 acres in 05N01E 32 NWNE this is probably due to an inaccurate drawing of the original POU's on the application by CCI Construction Inc. These overlaps can be corrected at licensing to match property boundaries. Other overlap detections are simply adjacent properties in the sam QQ's.

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

Water Right No.	Source	Purpose of Use	Basis
N/A	N/A	N/A	N/A

Comments: None

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE¼ NE¼, Sec. 32, Twp 05N, Rge 01E, B.M. ADA County

Method of Determination: Field examination and ArcMap Public Land Survey System layer with aerial imagery and USGS topography.

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	01E	32	X																

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	01E	32	X	X															

Method of Determination: Field examination and ArcMap Public Land Survey System layer with aerial imagery and USGS topography.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
Y Indicate weir size/pipe as applicable.
 Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be
- 1:24,000 or greater.
Y Aerial Photo Attached (required for irrigation of 10+ acres).
Y 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
D0070326	Franklin	3.0		Franklin	1.5 hp pump 25 gpm

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

E. FLOW CALCULATIONS x Additional Computation Sheets Attached

Measured Method: Sprinkler system discharge by nozzle count.

8 sprinkler heads/line X 8 gpm/head = 24 gpm/line or 0.05 cfs/line

Theoretical Pump Calculation:

 $(8.8) \times (3.0 \text{ hp}) \times 0.70 / [(220) + (60 \times 2.31)] = 0.05 \text{ cfs or } 23.13 \text{ gpm}$

According to the manufacturers pump curve the Franklin 3.0 hp motor with a 1.5 hp pump produces 25 gpm or 0.055 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

 $V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.5 \text{ ac} \times 4.5 \text{ af/ac} = 20.3 \text{ af}$ $V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 27.58 \text{ af}$ $V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 20.3 \text{ af}$

2. Volume Calculations for Other Uses:

Domestic use is for 1 home or 0.6 afa for in-home use per Administrative Memo #22.

Water Requirements for Stock water: Goats

According to NRCS Conservation Practice Standard 614 the daily water requirement for a goat is 3 gallons/day under intensive grazing conditions. The property owner has approximately 40 goats including a number of lactating females for operation of a small goat dairy.

40 head goats x 3.0 gallons/day/head = 120 gallons/day

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted on August 14, 2019 by water resource agents Aaron Skinner and Allen Bradbury. James Kramer, the permit holder, accompanied the agents on the field exam. Current Ada County tax parcel data confirms James Lloyd Kramer to be the current owner of the property pertinent to the place of use (POU) and points of diversion (POD), otherwise called De Luna Acres. The property boundary for parcel #R9412690040 Lot 4, Block 1, Willow Creek Subdivision overlaps the shapefile for an adjacent water permit to the west. Permit #63-33804 belongs to parcel # R9412690055 Lot 5, Block 1, Willow Creek Subdivision, however 63-33803 overlaps it by 0.30 acres and the POU should be corrected at licensing to match the parcel which is expected to happen after the proof of beneficial use period sometime after 11/1/2023. Aerial imagery and ArcMap GIS tools were used to measure acreage, the POU is 4.5 acres. The POU acreage remains the same however, the POU shape for 63-33803 was modified to reflect the actual property boundary. No ownership change is required.

The permit describes two points of diversion from groundwater, however the property owner confirms that only a single well was drilled at NENE T05N R01E Sec. 32. The other POD point, at NWNE T05N R01E Sec. 32, was for flexibility in drilling location and the additional point has been deleted to reflect actual conditions. The well (tag # D0070326) is 294 feet deep with a submersible pump that irrigates the lawn around the house, a pasture, spigots to provide stockwater, and domestic use. Aaron Skinner reached out to Adamson Pump and Drilling for pump specifications as the property owner did not have this information. The motor is a model #25SDQP 3.0 hp motor with a SD30 25 gpm 1.5 hp pump end set at 220 feet. The Franklin Electric SubDrive 30 submersible pump controller was operating between 66 and 73 Hz which is within the recommended operating range. Pump curves downloaded from the Franklin website indicate that with a total head of 220 operating in the 70 Hz range the pump should produce at a rate of about 25 gpm or 0.055 cfs. The well head connects into a two-inch diameter line with a manual shutoff valve for irrigation. The irrigation system is split between two different controllers the north half of the property is composed of lawn, garden, flower beds, and trees while the south half of the property is pasture. Two separate Franklin control boxes divide the north from the south half. The north half has 33 zones with two drip lines, 11 Rainbird 1800 pop-up sprinklers, and 20 PGP Ultra Hunter rotors with 3 gpm blue nozzles. The south half has 26 zones with three drip lines and 23 PGP Ultra Hunter rotors with 3 gpm blue nozzles, each zone is comprised of 7 to 8 rotors. There was insufficient space to attach a flow meter to the exposed section of pipe from the well. In order to estimate the production rate of the system the property owner ran a zone with eight PGP Ultra Hunter rotors with 3 gpm blue nozzles. The rate was estimated at (8 nozzles x 3 gpm = 24 gpm/zone or 0.05 cfs). The property owner stated that he only runs one zone at a time and cannot run two zones and maintain pressure. Stockwater use was observed in the form of spigots and troughs near barns and out buildings. The property owner stated that he currently runs about 40 goats comprising adults and kids. A number of the goats are lactating females. According to NRCS Conservation Practice Standard 614 the daily water requirement for a goat is 3 gallons/day under intensive grazing conditions. This water right was originally permitted for 10 head of mixed stock which carries a standard value of 0.2 afa. The developed stock use is less than the permit authorized and should be fully considered for license.

The start card permit, issued on 11/24/2015 for drilling the well and the well log completed 12/14/2015, confirm only a permit for a domestic well. The well inspection notes (12/10/2015) state that a seal inspection was not performed, but the well log reports that a ¾" bentonite seal was placed from 0 to 99 feet. The water right permit includes three beneficial uses stockwater, domestic and irrigation, however condition 165 of the permit requires that the new well be sealed into the first significant confining layer located 200 feet or more below ground surface. This condition was not met. The permit holder was initially given a year and a half to comply with condition either by drilling a new well or completing the seal on the existing well. The end of the grace period was March 1, 2021. The permit holder has chosen to drill a new well, but to date has not completed the well. I am recommending that the irrigation use be dropped from the license and the license should be issued for domestic and stockwater purposes.

Domestic use is for 1 home as per Administrative Memo #22 domestic use for 1 home is 0.6 afa. The theoretical rate based on the pump equation was calculated at 0.05 cfs, the estimated rate based on nozzle size was 0.05 cfs and the pump curve was 0.055 rounded to 0.06 cfs. Therefore, I am recommending the estimated rate of the system with 0.02 cfs for stockwater, and 0.04 for domestic use for a total of 0.06 cfs.

Overlap review found POU overlap but no POD overlap (see spreadsheet and description above). There are no surface water deliveries to this area, therefore groundwater is the primary water source.

Condition 004 was removed because the POD is within the property boundary. Condition 26A was removed as per licensing standards. Condition 121 was replaced with condition 103 as per department standards. Condition 046 was removed as per licensing standards, since the well is drilled. Condition 073 is removed since the well temperature was recorded as 56°F in the Well Drillers Report. Condition X02 concerning stockwater is removed at licensing as per department standards. Condition 01M is removed because the rate is not greater than 0.24 cfs or 5 acres. Condition R69 is removed since irrigation is not included. Condition 165 is removed since irrigation is not included and therefore a 200 foot well seal is not required. Condition 165 would be cause to void the water permit, however, the owner can drill a well for domestic use under 42-111, therefore the license may be issued to recognize such a use.

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>	
DOMESTIC	01/01 to 12/31	0.04 CFS	
STOCKWATER	01/01 to 12/31	0.02 CFS	

Totals: 0.06 CFS

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

Allen Bradbury - Water Resource Agent, Senior

Field Examiner's Name Allen Bradbury Date 3/11/21

Reviewer _____ Date _____

Beneficial Use Field Report

System Design



BENEFICIAL USE FIELD REPORT CALCULATIONS

Permit #: 63-33803
 Owner: Jim Kramer

Proof Due: 11/1/2018
 Priority Date: 7/2/2013

Proof Subm: 9/10/2018
 Exam Date: 8/14/2019

Flow Rate 0.00 to 0.20
 Fee Rate 0.20
 Exam Fee \$50.00

Permit Approved: 10/30/2013

0.00 to 0.20	\$50.00	2.01 to 3.00	\$150.00
0.21 to 1.00	\$100.00	3.01 to 4.00	\$175.00
1.01 to 2.00	\$125.00	4.01 to 5.00	\$200.00

Proposed Well Use: Domestic Drill Date: 12/14/2015 Well Depth: 294 Pump Set: 220 ft
 Permit Uses: Irrigation Stockwater Domestic

	cfs	gpm
Proposed Rate	0.20	89.77
Permit Rate	0.20	89.77
Proof Report	0.20	89.77
Irrig. Only	0.14	62.84
Stockwater	0.02	8.98
Domestic	0.04	17.95

Acres Proposed:	4.5
Acres Permitted:	4.5
Acres Developed:	4.5

FLOW CALCULATIONS

Meter Type: n/a
 Meter Reading:

Pump Curve: 25.00 gpm
 0.056 cfs

Nozzle Size	Blue 3 gpm
Input # heads:	8
Input gpm/head	3.0
gpm/line	24.0
cfs/line	0.05

Theoretical Method

$$Q = \frac{(8.8) \times (HP) \times E}{TDH}$$

Est. Pump Set	220 minus 10' =	210			
HP =	E =	H =	PSI =	Q =	Q =
3.0	70.0%	220	60	0.05	23.13
				cfs	gpm

$$TDH = [(LIFT) + (PSI \times 2.31)]$$

TDH =	Lift =	PSI =	2.31
358.6	220	60	2.31

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

Q = rate of flow in cubic feet per second,

Consumptive Use	4.5	Headgate Requirement	4.5	
Season of Use	3/1	11/15	=	260 days
Volume (VIR)	4.5	X	4.5	= 20.3 af
Volume (DR)	0.053	x	260	x 1.9835 = 27.58 af
BU Standard Rate	4.5	X	0.03	= 0.14 cfs
Rate/acre	0.053	/	4.5	= 0.012 cfs/ac

V I.R. = (Acres Irrigated) x (Irrigation Requirement)

V D.R. = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835

V = Smaller of V I.R. and V D.R

Recommendation Standards for diversion rate (choose most restrictive)

0.20 Permit Rate – the rate applied for

0.20 Fee Rate – the maximum rated paid for on the fee schedule.

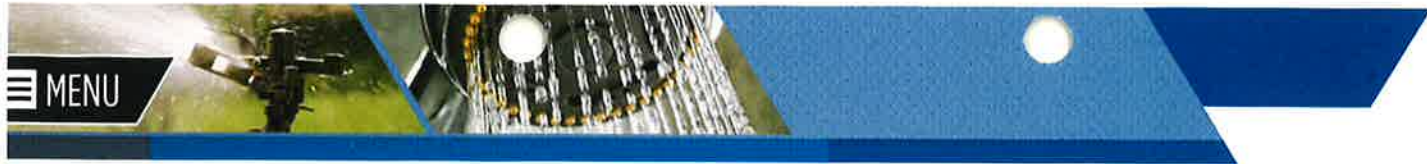
0.14 Beneficial Use (BU) standard = x.x ac * 0.020 cfs/acre

0.05 Measured Value – the value measured in the field

0.05 Theoretical Rate - the rate calculated

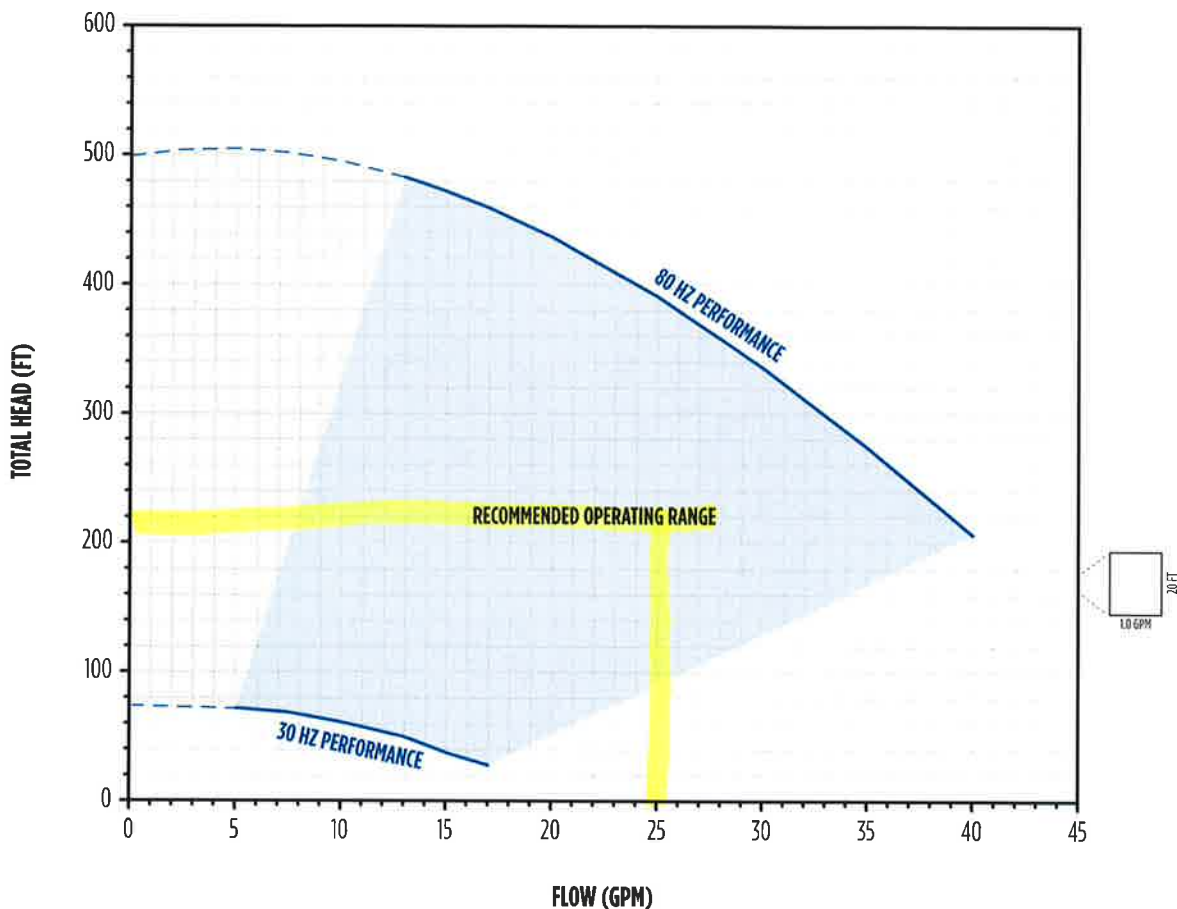
Process	Basin Sequence	Draft	Owner	POD	Use	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SESW	NESW	NWSW	SWSW	SESE	Total Acres
Water Right	63-34735	N	CYNTHIA SMITH	POU	IRRIGATION												5	5
Water Right	63-34743	N	RYAN HEUSER	POU	IRRIGATION												5	5
Water Right	63-34754	N	SARA LUNA, OSCAR LUNA	POU	IRRIGATION												5	5
Water Permit	63-33803	N	CCI CONSTRUCTION INC; KRAMER, JAMES; KRAMER, SHELLEY	POU	IRRIGATION	4	0.5										4.5	4.5
Water Permit	63-33804	N	CCI CONSTRUCTION INC; ISHII, JAN; SFP WATER ENGINEERING LLC	POU	IRRIGATION												4.5	4.5
Water Permit	63-33805	N	CCI CONSTRUCTION INC; OLSON, SARAH; OLSON, STEVEN; RUZICKA, BRANDT; RUZICKA, DAVID C	POU	IRRIGATION	4.5											4.5	4.5
Water Permit	63-33806	N	CCI CONSTRUCTION INC; HORN, ALISON; HORN, KEITH	POU	IRRIGATION												4.5	4.5
Water Permit	63-33807	N	CCI CONSTRUCTION INC; PERRY-SHAFFER, LINDA M; SHAFFER, DAVID C	POU	IRRIGATION	1	3.5										4.5	4.5
Water Permit	63-33808	N	CCI CONSTRUCTION INC; GUTH, SHYANNE; GUTH, WILLIAM	POU	IRRIGATION	4.5											4.5	4.5
Water Permit	63-34248	N	HEIKES, GARY W; HEIKES, LINDA; KOSS, GEORGE PETER	POU	IRRIGATION	5											4.5	4.5
Water Permit	63-34314	N	HEIKES, GARY W; HEIKES, LINDA; HOLLEY, KOZETTE; THACKER, PATRICK; WAITE, ALAN ELV	POU	IRRIGATION												5	5
Water Permit	63-34315	N	ALLEN, CHAD; ALLEN, GINGER; HEIKES, GARY W; HEIKES, LINDA; HOLLEY, KOZETTE	POU	IRRIGATION												5	5
Water Permit	63-34316	N	HEIKES, GARY W; HEIKES, LINDA; HOLLEY, KOZETTE; THE GARY SINISE FOUNDATION; WOIL	POU	IRRIGATION					5							5	5
Water Permit	63-34317	N	CARMODY, JOHN; CARMODY, SARA; HEIKES, GARY W; HEIKES, LINDA; HOLLEY, KOZETTE;	POU	IRRIGATION					5							5	5
Water Permit	63-34421	N	WHELAN, AMELIA; WHELAN, WILLIAM	POU	IRRIGATION												4.5	4.5
Water Permit	63-34618	N	KINNEE, BRENDA; KINNEE, MICHAEL	POU	IRRIGATION			4.5									3.5	1.5
Water Permit	63-34647	N	HEUSER, RYAN	POU	IRRIGATION												5	5
Water Permit	63-34735	Y	SMITH, CYNTHIA	POU	IRRIGATION												5	5
Water Permit	63-34743	Y	HEUSER, RYAN	POU	IRRIGATION												5	5
Water Right	63-10567	N	MEYER, CARROLL J	POU	IRRIGATION									4.9			5	5
Water Right	63-10781	N	BENEAR, RICHARD; CUSHMAN, TUDOR; DAUBENBERGER, ROBERT; MC KINNEY, GARY D; J	POU	IRRIGATION									4			4.9	4.9
Water Right	63-10891	N	SERRA, JOHN R; SERRA, NOJIA R	POU	IRRIGATION				4								4	4
Water Right	63-10931	N	DESPAIN, MICHELLE K; DESPAIN, RON J; KOPPEL, SHELLEY; KOPPEL, STEVE; LAWSON, BEVE	POU	IRRIGATION				4.8								4.8	4.8
Water Right	63-10965	N	SASSO, LYNNE; SASSO, RAY V	POU	IRRIGATION									3.8			3.8	3.8
Water Right	63-10997	N	FRY, IRENE; FRY, KENNETH; POPE, JUDY; POPE, LYLE H	POU	IRRIGATION									4.5			4.5	4.5
Water Right	63-11318	N	COOK, DEBORAH; COOK, JAMES; MABE, BRAD L; WABE, ELLEN M	POU	IRRIGATION				5								5	5
Water Right	63-11397	N	SMITH, ANTOINETTE; SMITH, WILLIAM JEFF	POU	IRRIGATION	2											2	2
Water Right	63-12021	N	SMITH, ANTOINETTE; SMITH, WILLIAM JEFF	POU	IRRIGATION	3.5											3.5	3.5
Water Right	63-1206	N	ANDERSON, SCOTT W; DAVIS, THOMAS; FARMERS UNION DITCH CO LTD; KISER, JERRY A	POU	IRRIGATION									X	X	X	X	4
Water Right	63-12183	N	BENEAR, RICHARD; CUSHMAN, TUDOR; DAUBENBERGER, ROBERT; MC KINNEY, GARY D; J	POU	IRRIGATION									4				4
Water Right	63-12193	N	FARMERS UNION DITCH CO LTD; JACOBS CANAL CO; KISER, JERRY A	POU	IRRIGATION										X	X	X	4
Water Right	63-1232	N	CAPTOL VIEW IRRIGATION INC	POU	IRRIGATION										X	X	X	4
Water Right	63-124Q	N	CHASE, RUSH; FARMERS UNION DITCH CO LTD; KISER, JERRY A; MIDDLETON MILL DITCH C	POU	IRRIGATION										X	X	X	4
Water Right	63-1251	N	CHASE, RUSH; FARMERS UNION DITCH CO LTD; KISER, JERRY A; MIDDLETON MILL DITCH C	POU	IRRIGATION										X	X	X	4
Water Right	63-126F	N	BOEWERMAN, ALBERT C; FARMERS UNION DITCH CO LTD; KISER, JERRY A; MIDDLETON MI	POU	IRRIGATION										X	X	X	4
Water Right	63-165M	N	BOISE CITY CANAL CO; FARMERS UNION DITCH CO LTD; KISER, JERRY A	POU	IRRIGATION										X	X	X	4
Water Right	63-18700	N	CAPTOL VIEW IRRIGATION INC	POU	IRRIGATION										X	X	X	4
Water Right	63-198AG	N	FARMERS UNION DITCH CO LTD; KISER, JERRY A; MIDDLETON WATER CO	POU	IRRIGATION										X	X	X	4
Water Right	63-21729	N	FARMERS UNION DITCH CO LTD; KISER, JERRY A	POU	IRRIGATION										X	X	X	4
Water Right	63-248	N	FARMERS UNION DITCH CO LTD; KISER, JERRY A	POU	IRRIGATION										X	X	X	4
Water Right	63-297	N	FARMERS UNION DITCH CO LTD; KISER, JERRY A	POU	IRRIGATION										X	X	X	4
Water Right	63-3017	N	JORGENSEN, ROBERT C; JORGENSEN, SUSAN; JORGENSEN, TIM C; WESTRIDGE OWNERS A	POU	IRRIGATION										X	X	X	4
Water Right	63-3018	N	EAGLE PINE SUBDIVISION WATER USERS ASSOC; FISHER, MABLE B; FISHER, ORIE	POU	IRRIGATION										X	X	X	4
Water Right	63-3034B	N	CATLOTH, JOEL; KOHLER, JILL; PUCKETT, LOYAL V; WALLACE, JAMES D	POU	IRRIGATION										X	X	X	4
Water Right	63-3034C	N	LAMB, MYRNA A; LAMB, ROGER E; PUCKETT, LOYAL V; WALLACE, JAMES D	POU	IRRIGATION										X	X	X	4
Water Right	63-31141	N	SMITH, LEO ALLEN; SPENCER, KATHRYN	POU	IRRIGATION										X	X	X	4
Water Right	63-31495	N	JOHNSON, DENISE R; JOHNSON, TUCKER M; POST, CARLOS L	POU	IRRIGATION										X	X	X	4
Water Right	63-34214	N	PRESTON, TOM; STEPHEN K FORD REVOCABLE TRUST	POU	IRRIGATION										X	X	X	4
Water Right	63-34402	N	DELAY, EVERETT P; DELAY, HOLLY; JOHNSON, DENISE R; JOHNSON, TUCKER M; POST, CAR	POU	IRRIGATION										X	X	X	4
Water Right	63-34740	N	JEPPSON, DAVID A; JEPPSON, TONYA R; JOHNSON, DENISE R; JOHNSON, TUCKER M; POST	POU	IRRIGATION										X	X	X	4
Water Right	63-3489	N	JORGENSEN, ROBERT C; JORGENSEN, SUSAN; JORGENSEN, TIM C; WESTRIDGE OWNERS A	POU	IRRIGATION										X	X	X	4
Water Right	63-3586	N	KIRK, S DUANE; SMITH, ANTOINETTE; SMITH, WILLIAM JEFF; SPRAGUE, EMMA LOU; SPR	POU	IRRIGATION	7									X	X	X	4
Water Right	63-7017	N	MOFFAT, CHAD; PETERSON, OSCAR D	POU	IRRIGATION										X	X	X	4
Water Right	63-7143	N	BRUNER, ERMA L; BRUNER, HAROLD E; LAWSON, MARY; LAWSON, MOREY; MC CULLOUGH	POU	IRRIGATION										X	X	X	4
Water Right	63-7649	N	HARMON, JENNIFER; HARMON, JOSHUA; MEYER, SANDRA; MEYER, WILLIAM; STIRM, RO	POU	IRRIGATION										X	X	X	4
Water Right	63-7966	N	ELLIS, EVA L; ELLIS, ROBERT M; HARRISON, PARRY D	POU	IRRIGATION										X	X	X	4
Water Right	63-8258	N	SMITH, L ALAN	POU	IRRIGATION										X	X	X	4
Water Right	63-8267	N	CLAGG, LISA M; PICKEL JR, WILLIAM HOWARD; STIRM, ROSIE L; STIRM, W JOHN	POU	IRRIGATION										X	X	X	4

adjacent property with unintentional overlap
adjacent property
different property
Irrigation Company



SD30 25 GPM (1.5 HP PUMP END, 3 HP MOTOR)

25SDQP-3.0HP-3R



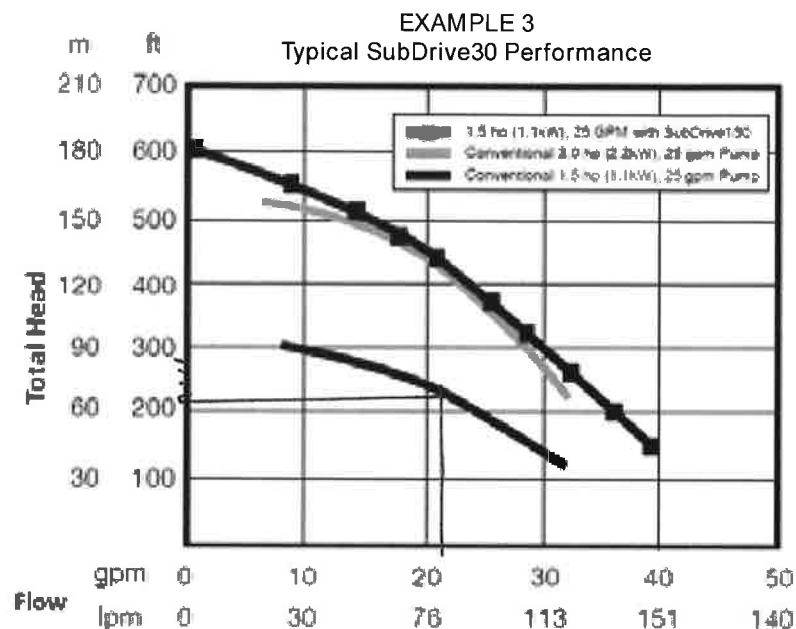
HP	PSI	Depth to Pumping Water Level, or Lift (in feet)														
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450
3	0											36	33	29	24	19
	10										38	35	31	26	22	15
	20									38	36	34	29	24	19	
	30							40	37	36	35	32	27	22	16	
	40						39	37	36	35	34	30	24	20		
	50					39	37	36	35	34	32	27	22	16		
	60				38	37	36	35	33	32	30	25	20			
	70			38	37	36	35	33	32	30	28	23	17			
	80		38	36	35	34	33	31	29	27	25	21				
	90	37	36	35	34	33	31	29	27	25	23	18				
	100	36	35	34	33	31	29	27	25	23	21					
	110	35	34	32	30	28	26	24	23	21	18					
	120	34	32	30	28	26	24	22	20	18	14					
	130	32	30	28	26	24	22	20	17							
	140	29	27	25	23	22	20	17								
	150	27	25	23	21	19	16									
160	20	18	14													
Shut-off psi		210	201	193	184	175	167	158	149	141	132	110	89	67	46	24

NOTE: Running outside of 'Recommended Operating Range' for short periods of time is permissible. Actual maximum performance of the SubDrive QuickPAK system is power limited by the SubDrive unit. This limit is based on the maximum allowable AMP load of the submersible motor. The result is that in some installations an 80 Hz speed may not be attained.

SubDrive30

The SubDrive30 is capable of use with 1.5 hp (1.1 kW) pumps that are mounted to 3.0 hp (2.2 kW) Franklin Electric three-phase motors. In general, the SubDrive30 will enhance the performance of a 1.5 hp (1.1 kW) pump to a similar or better performance than a conventional 3.0 hp (2.2 kW) pump of the same flow rating (pump series).

To select the proper 1.5 hp (1.1 kW) pump, first choose a 3.0 hp (2.2 kW) curve that meets the application's head and flow requirements. Use the 1.5 hp (1.1 kW) pump in the same pump series (flow rating). The SubDrive30 will adjust the speed of this pump to produce the performance of the 3.0 hp (2.2 kW) curve. An EXAMPLE of this is illustrated in the graph at right. Please consult the pump manufacturer's pump curve for your specific application.



The SubDrive30 can also be set up to run a 2.0 hp (1.5 kW) or 3.0 hp (2.2 kW) pump if desired, but larger pumps will still produce to the 3.0 hp (2.2 kW) curve and may only be operated with a 3.0 hp (2.2 kW) motor. To operate a different pump size, a DIP switch must be positioned to select the correct pump rating. Otherwise, the SubDrive30 may trigger erroneous faults.

WARNING

Serious or fatal electrical shock may result from contact with internal electrical components. DO NOT, under any circumstances, attempt to modify DIP switch settings until power has been removed and 5 minutes have passed for internal voltages to discharge! Power must be removed for DIP switch setting to take effect.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. 0070326
Drilling Permit No. 911413-877470
Water right or injection well # _____
2. OWNER:
Name Tradewinds General Contracting
Address 9165 W. State St.
City Boise State ID Zip 83714

3. WELL LOCATION:
Twp. 5 North ☒ or South ☐ Rge. 1 East ☒ or West ☐
Sec. 32 1/4 NE 1/4 NE 1/4
Gov't Lot _____ County Ada
Lat. 43 44.029 (Deg. and Decimal minutes)
Long. 116 21.530 (Deg. and Decimal minutes)
Address of Well Site 377 W. Heikes Ln.
City Eagle

Lot. 4 Blk. 1 Sub. Name Willow Creek Sub.

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 _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure
3/4 Benl	0'	99'	51 bags	10" Overbore

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
6"	+2	276'	.250	Steel	☒	☐	☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 276'

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____
Manufactured screen ☒ Y ☐ N Type Allow
Method of installation Wash in

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
279'	294'	.020		5"	SS	N/A

Length of Headpipe 10' Length of Tailpipe _____

Packer ☒ Y ☐ N Type Swedge Packer

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) 174' Static water level (ft) 156'

Water temp. (°F) 56° Bottom hole temp. (°F) _____

Describe access port Well Cap

Well test:

Dreddown (feet)	Discharge or yield (gpm)	Test duration (minutes)
100'	60+ GPM	60 minutes

Test method:

Pump	Bailer	Air	Flowing artesian
☐	☐	☒	☐

Water quality test or comments: Iron 1, PH 8, Hardness 14

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
10"	0'	2'	Topsoli		X
10"	2'	7'	Brown Clay		X
10"	7'	15'	Coarse Sand		X
10"	15'	25'	Sandy Clay		X
10"	25'	34'	Coarse Sand		X
10"	34'	52'	Sandy Clay		X
10"	52'	68'	Tan Clay		X
10"	68'	91'	Sandy Clay		X
10"	91'	96'	Tan Clay		X
10"	96'	112'	Sandy Clay		X
10"	112'	120'	Coarse Sand		X
6"	120'	128'	Coarse Sand		X
6"	128'	144'	Tan Clay		X
6"	144'	152'	Sand & Gravel		X
6"	152'	163'	Sand		X
6"	163'	169'	Sandy Clay		X
6"	169'	172'	Tan Clay		X
6"	172'	181'	Sand	X	
6"	181'	184'	Tan Clay		X
6"	184'	190'	Sand	X	
6"	190'	205'	Sandy Clay		X
6"	205'	233'	Coarse Sand	X	
6"	233'	271'	Tan Sand	X	
6"	271'	282'	Cemented Sand	X	
6"	282'	294'	Tan Sand	X	

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DEC 29 2015

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 294'

Date Started: Nov 24, 2015

Date Completed: Dec 14, 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 Adamson Pump & Drilling Co. No. 457

*Principal Driller Sam Navarro Date Dec 18, 2015

*Driller Sam Navarro Date _____

*Operator II _____ Date Dec 18, 2015

Operator I Fosh Young Date Dec 18, 2015

* Signature of Principal Driller and rig operator are required.

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DEC 21 2015

WATER RESOURCES
WESTERN REGION



Figure 1. Well tag #D0070326 is the only well on the property.



Figure 2. The well is located near the house and in the middle of the lawn.

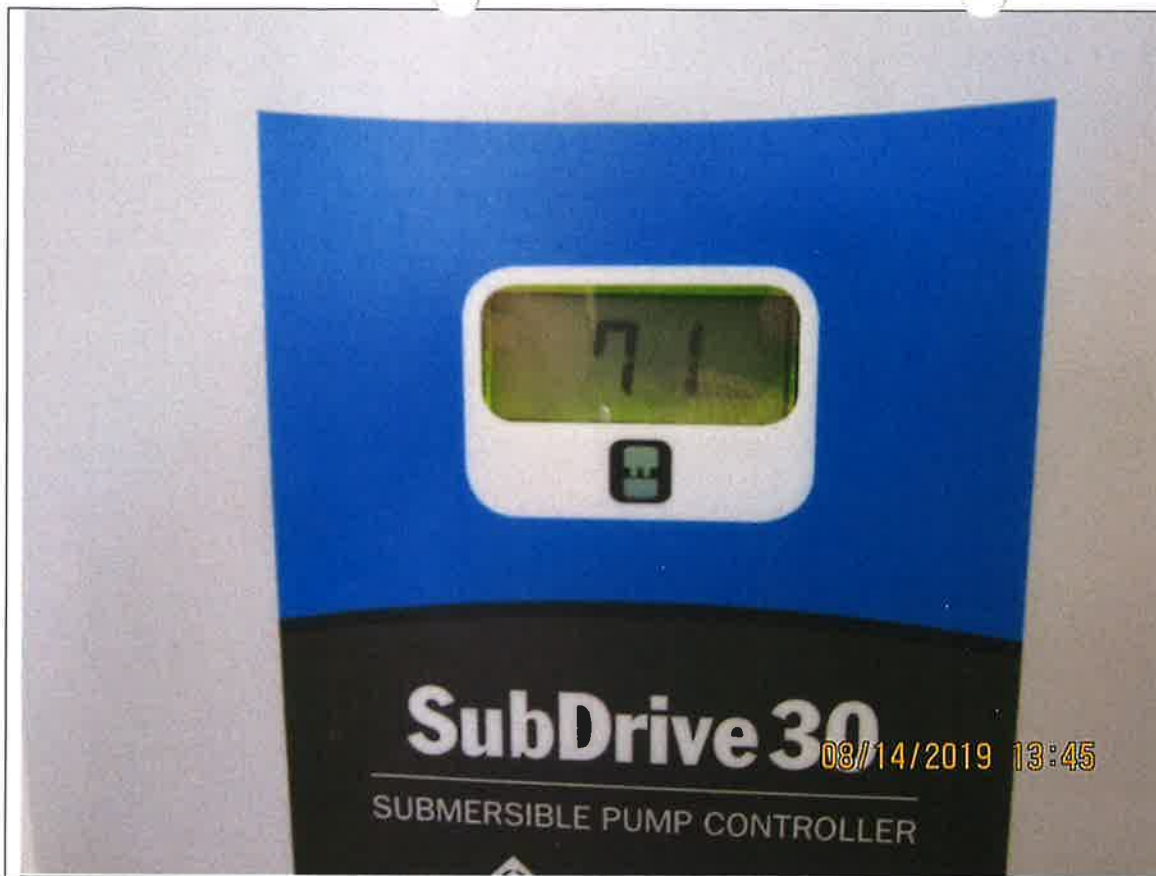


Figure 3. The Franklin Electric SubDrive 30 submersible pump controller operating at 71 hertz.



Figure 4. The dual Rainbird programmable zone controllers manage 33 zones for the lawn/residential area and 23 zones for the pastures.



Figure 5. Lawn area irrigation.



Figure 6. Rainbird 1800 pop up sprinklers used to water the lawn area.



Figure 7. Lawn area includes lawn and treeline outside of white fence.



Figure 8. Stockwater development is composed of spigots near barns and corrals.



Figure 9. Pasture irrigation by a single zone composed of 8 rotors.



Figure 10. Pasture rotors were PGP Ultra Hunters with blue 3.0 gpm nozzles.

FEB 16 2021

WATER RESOURCES
WESTERN REGION**February 10, 2021****ALLEN BRADBURY**

IDAHO DEPARTMENT OF WATER RESOURCES
WESTERN REGION
2735 AIRPORT WAY
BOISE, IDAHO 83705-5082

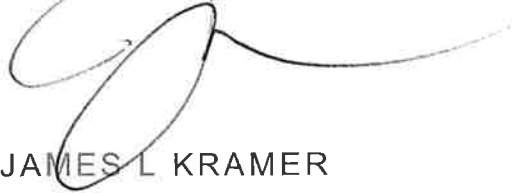
Dear Mr. Bradbury,

Attached please find a letter sent directly from Coonse Drilling to IDWR confirming that I am on their schedule for the drilling of an irrigation well. Originally Coonse was unable to drill until August 2021. After several discussions with them to explain my deadline issues with IDWR, they agreed to add me to an earlier drill timeline.

Per our telephone discussions a few weeks back, I am requesting that IDWR extend my deadline to install an irrigation from the March 1, 2021 date to accommodate the drilling timeframe Coonse is providing.

Thank you for your time. I look forward to your reply.

SINCERELY,



JAMES L KRAMER

COONSE WELL DRILLING & PUMP CO., INC
15851 Gunfire Road
Caldwell, ID 83607
P (208) 454-0190

office@CoonseDrillingPump.com

RE: 377 W Heikes Ln, Eagle- Jim Kramer water right extension

To: IDWR

Jim Kramer has contacted us for a new irrigation well and is on our list for drilling in or around May 1, 2021. This is not a guaranteed date of drilling.

Thank you,

Andy Clark

Manager of Drilling Operations

Coonse Well Drilling & Pump Co., Inc.

208-941-3731



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

BRAD LITTLE
Governor

GARY SPACKMAN
Director

January 11, 2021

JAMES KRAMER
377 W HEIKES LN
EAGLE, ID 83616

RE: **DENIED:** Request for Extension of Time to Comply with Well Seal Conditions - Permit 63-33803

Dear Mr. Kramer,

On December 7, 2020, the Idaho Department of Water Resources (Department) received your request for a 1.5 year extension of the March 1, 2021 deadline to comply with the conditions of the above referenced permit to appropriate water. In particular, a condition of the permit stated:

"To prevent injury to prior water rights appropriating water from the Boise River and/or the underlying shallow aquifer tributary to the Boise River, the new well used as a point of diversion for this water right located within the NENE & NWNE, Section 32, Township 05N, Range 01E shall be constructed and maintained with unperforated casing and sealed into the first significant confining layer located 200 feet or more below ground surface."

The proof of beneficial use has already been submitted and further extension will not be granted. This is notice that your request for an extension has been denied by the Department. You may modify the well to comply with the permit by March 1, 2021. If action has not been taken to comply with the condition by this date, the license may be issued for Domestic and Stockwater only. If the well is not modified, I may assist you in completing the Application for Permit to authorize the irrigation use. A new permit may grant you up to 5 years to develop beneficial use from the appropriate water bearing zone.

If you have any questions regarding this matter, please contact me at 208-334-2190. Thank you for your attention to this matter.

Respectfully,

Allen Bradbury
Water Resource Agent, Sr.
Idaho Dept. of Water Resources – Western

DEC 07 2020

WATER RESOURCES
WESTERN REGION**December 4, 2020****ALLEN BRADBURY**

IDAHO DEPARTMENT OF WATER RESOURCES
WESTERN REGION
2735 AIRPORT WAY
BOISE, IDAHO 83705-5082

Dear Mr. Bradbury,

You and I spoke last fall regarding an irrigation well on my property in Eagle. Please see attached letter for additional details. You granted me a one-year extension to get the well drilled and operational, thank you. I was able to discuss a fully sealed replacement well with both Adamson and Coonse at a fully installed cost of approximately \$40k.

Due to the significant downturn in the economy this past year, it is very difficult to afford the cost of installing a new well in the specified timeframe. I am retired and live solely on social security income and retirement savings. My retirement savings investments have taken a significant reduction due to the impact the pandemic has caused. I am writing to request an extension on the timeframe to install a new irrigation well with hopes the economy will turn around in the coming year. I would like to request an additional 1.5 year extension with an install date in the Fall of 2022. Please let me know at your earliest convenience if that can be accommodated.

Thank you for your time. I look forward to your reply.

SINCERELY,



JAMES L KRAMER



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

BRAD LITTLE
Governor

GARY SPACKMAN
Director

November 25, 2019

JAMES KRAMER
377 W HEIKES LN
EAGLE, ID 83616

RE: Permit 63-33803 Extension Request

Dear Mr. Kramer,

On November 21, 2019, Idaho Department of Water Resources (IDWR) received your request for a one year extension of time to comply with the well seal conditions on permit 63-33803.

This is notice that your request for an extension has been accepted by IDWR. You have until March 1, 2021 to either modify or drill an irrigation well which will meet the permit conditions for irrigation from groundwater. Please contact me at 208-334-2190 with any questions you might have. Thank you for your attention to these matters.

Respectfully,

Allen Bradbury
Water Resource Agent, Sr.
Idaho Dept. of Water Resources – Western

CC: Dana L. Hofstetter, Hawley Troxell



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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

BRAD LITTLE
Governor

GARY SPACKMAN
Director

November 25, 2019

JAMES KRAMER
377 W HEIKES LN
EAGLE, ID 83616

RE: Permit 63-33803 Extension Request

Dear Mr. Kramer,

On November 21, 2019, Idaho Department of Water Resources (IDWR) received your request for a one year extension of time to comply with the well seal conditions on permit 63-33803.

This is notice that your request for an extension has been accepted by IDWR. You have until March 1, 2021 to either modify or drill an irrigation well which will meet the permit conditions for irrigation from groundwater. Please contact me at 208-334-2190 with any questions you might have. Thank you for your attention to these matters.

Respectfully,

Allen Bradbury
Water Resource Agent, Sr.
Idaho Dept. of Water Resources – Western

CC: Dana L. Hofstetter, Hawley Troxell



ATTORNEYS AND COUNSELORS

Hawley Troxell Ennis & Hawley LLP
877 Main Street, Suite 1000
P.O. Box 1617
Boise, Idaho 83701-1617
208.344.6000
www.hawleytroxell.com

DANA L. HOFSTETTER
MAIL: DHOFSTETTER@HAWLEYTROXELL.COM
DIRECT DIAL: 208-388-4867
DIRECT FAX: 208-954-4867

November 20, 2019

RECEIVED

NOV 21 2019

WATER RESOURCES
WESTERN REGION

VIA U.S. MAIL AND EMAIL (ALLEN.BRADBURY@IDWR.IDAHO.GOV)

Allen Bradbury
Water Resource Agent, Sr.
Western Region
Idaho Department of Water Resources
2735 Airport Way
Boise, Idaho 83705

Re: *Permit No. 63-33803*

Dear Mr. Bradbury:

I write on behalf of James Kramer in response to your October 23, 2019, letter regarding Permit No. 63-33803. He was previously unaware that the well may have been constructed improperly. He intends to drill a new well for irrigation, but anticipates difficulty in having this done by March 1, 2020. Accordingly, Mr. Kramer requests just one year additional time, until March 1, 2021, to install the new well. Please let me know if this would be acceptable. Thank you.

Sincerely,

HAWLEY TROXELL ENNIS & HAWLEY LLP

Dana L. Hofstetter

DH:
cc: James Kramer

Skinner, Aaron

From: Deirdre Ford <deirdre@adamsonpumpanddrilling.com>
Sent: Wednesday, August 14, 2019 10:53 AM
To: Skinner, Aaron
Subject: Pump Information - 377 W. Heikes Ln., Eagle

Aaron,

We installed a Franklin Electric 25SDQP-3.0HP QuickPAK. This includes a 3HP 3-Wire 230v Motor, a 1.5HP 25GPM Pump End and a 3PH 3-Wire Subdrive30. The pump is set 220' on 1-1/4" Schedule 120 drop pipe. The pump produced 25+ GPM at the time Jeremy installed it.

Please tell me if you need any additional information regarding this system.

Thank you,

Deirdre Ford
Office Manager
Adamson Pump & Drilling, Inc.
1320 Smith Ave.
Nampa, ID 83651
Ph: 208-466-6439
Fax: 208-466-0008

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