

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 63-35037Exam Date: 9/14/2022

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y N
- a. Irrigation of 5 acres or less
 - b. Storage of up to 14.6 AF for stockwater purposes only
 - c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - d. Other < >
2. Current Owner: Name: Shelli and James Kramer
Owner of Record Correct? X Y N
Address of Record Correct? Y N
If No: Address

The Department's parcel data shows James Lloyd Kramer as the owner of the property. I don't foresee any issues with the ownership of this property.

3. Beneficial Use Fees have been paid: X Y N Receipt No: W050695

4. SOURCE**TRIBUTARY**

Ground Water

Method of Determination: GIS, Well Driller's Report, and Tax Parcel DataChange in Source: Y X N**B. OVERLAP REVIEW**

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

Water Right No.	Source	Purpose of Use	Basis
63-33803	Ground Water	Domestic and Stockwater	License
63-33804	Ground water	Domestic, Irrigation, and Stockwater.	Permit.
City of Eagle Municipal Water Rights	Ground Water	Municipal	Licenses and Permits.

Comments: Water right 63-33803 is the domestic right for this parcel. The irrigation use was removed from 63-33803 because the well didn't have the proper well sealing. The irrigation system was removed from the domestic well system and placed totally on the shown on this permit. The two systems are not interlinked per a telephone conversation with the permit holder. Permit 63-33804 is for the neighbor to the west, and it doesn't appear to actually overlap the place of use for this permit. This property is within the proposed service area for the City of Eagle, but it doesn't appear as though the City of Eagle provides any water to this property.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: Water right 63-33803 is the domestic right for this parcel. The irrigation use was removed from 63-33803 because the well didn't have the proper well sealing. The irrigation system was removed from the domestic well system and placed totally on the shown on this permit. The two systems are not interlinked per a telephone conversation with the permit holder.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Well Tag # D0089151			NE	NE	32	5N	1E	B.M.	Ada
								B.M.	
								B.M.	

Method of Determination: GIS, Well Driller's Report, and Tax Parcel Data.

Please Note: The permit was filed with two points of diversion to ensure the legal description would be correct depending on the location of the well. Per a telephone conversation with the permit holder, the irrigation system only comes out of the single well described above. The well location was based on the well drilling report's GPS'ed well location.

Change in POD? X N Amendment Required? X N**2. PLACE OF USE:** Use: Domestic and stockwater

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
5N	1E	32	3.0	0.9															3.9
Total Acres =																			3.9

Method of Determination: GIS and Tax Parcel DataChange in POU? X N Amendment Required? X N Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

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

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well Pump	Unknown	5 Hp			

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

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

2. Measurements: Theoretical Calculation and sprinkler test used on water right 63-33803

E. FLOW CALCULATIONSYES Additional Computation Sheets Attached

Measured Method:

Please see attached spreadsheet for flow rate calculations.

I am recommending 0.10 cfs for this permit based on the attached analysis.**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.9 \times 4.5 \text{ af/ac} = 17.6 \text{ acre-feet}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.10 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 54.6 \text{ acre-feet}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 17.6 \text{ acre-feet}$$

2. Volume Calculations for Other Uses:

G. PURPOSE OF USEIrrigation X Y N # Stock Domestic # of Homes

Other: < >

Change in Purpose of Use? Y NMethod of Determination: Tax Parcel data and conversations with owner.If Yes: From Use To Use Amount CFS AFA **H. NARRATIVE/REMARKS/COMMENTS**

This permit qualifies for an in-house examination. This permit was filed to cover the irrigation use disallowed under water right license 63-33803. The irrigation was removed because the seal in the well did not comply with the Basin 63 Ground Water Restricted Area criteria. The permit holder then drilled this well with a proper seal and disconnected the domestic well from the irrigation system.

On September 13, 2022, I called the permit holder to confirm that the irrigation well and the domestic well was not interconnected. He confirmed that the two wells were not connected together. The permit holder also stated that the 5 Hp pump installed in the irrigation well allowed him to run 2 zones at a time of 16 sprinklers with 3 gpm nozzles. The permit holder also confirmed that there were fruit trees planted between the garden and the goat pen, and this area should be included in the irrigation place of use. He also confirmed that there are loafing sheds in the fields. Finally, the permit holder confirmed that the strip between the fence and the main road is irrigated by the subdivision.

Based on the information available from the permit holder and the field report done for water right license 63-33803, the diversion rate should be limited to 0.10 cfs. This should be more than adequate for this system.

The well was sealed down to 240 feet, so the water bearing zone should be between 240 feet and 280 feet. The total well depth is 280 feet.

Conditions R69, 073, and 165 should be carried forward to licensing. Condition 930 should be changed to the current water bearing zone shown on the Well Driller's Report of 240 feet to 280 feet. Condition 121 should be changed to condition 103 as is standard. No further conditions are required for the licensing of this permit.

Have conditions of permit approval been met? X Yes No**I. RECOMMENDATIONS**

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Irrigation	03/01 to 11/15	0.10 CFS	17.6 AFA
	<u>Totals:</u>	0.10 CFS	17.6 AFA

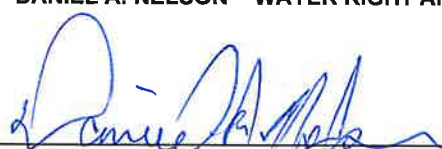
2. Recommended Amendments

___ 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

Other: < >

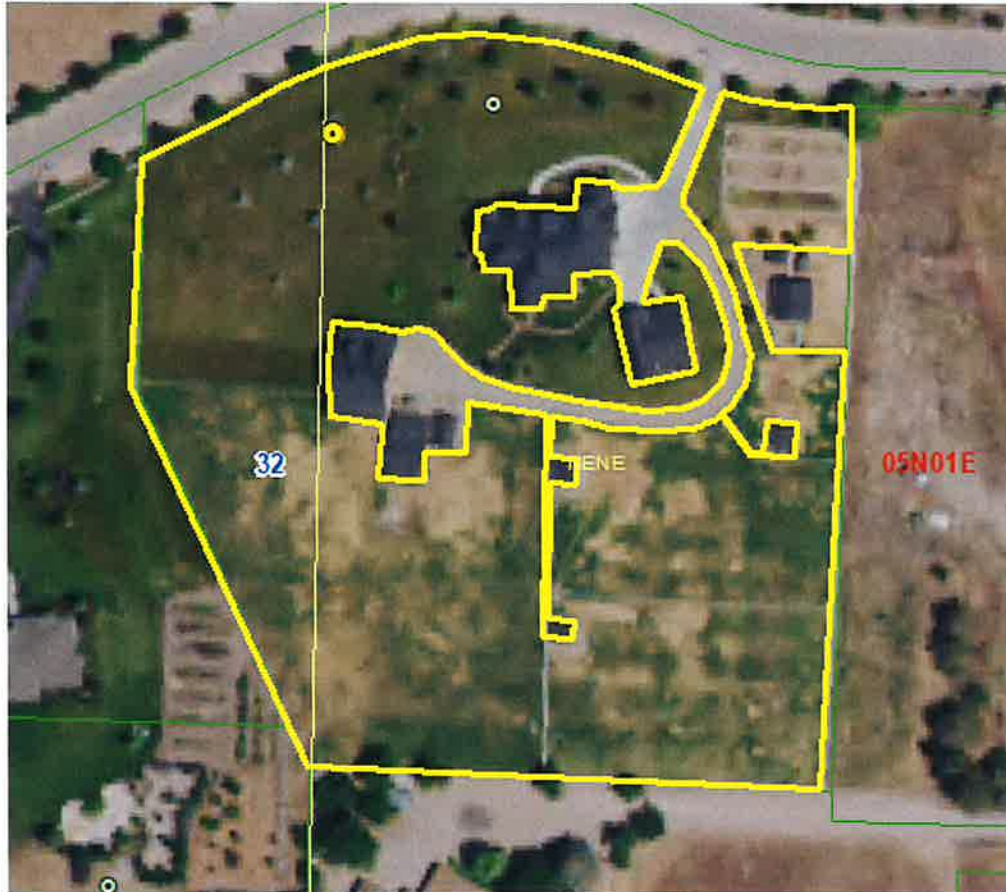
J. AUTHENTICATION – DANIEL A. NELSON – WATER RIGHT ANALYST 3

Field Examiner's Name  Date 9-14-22

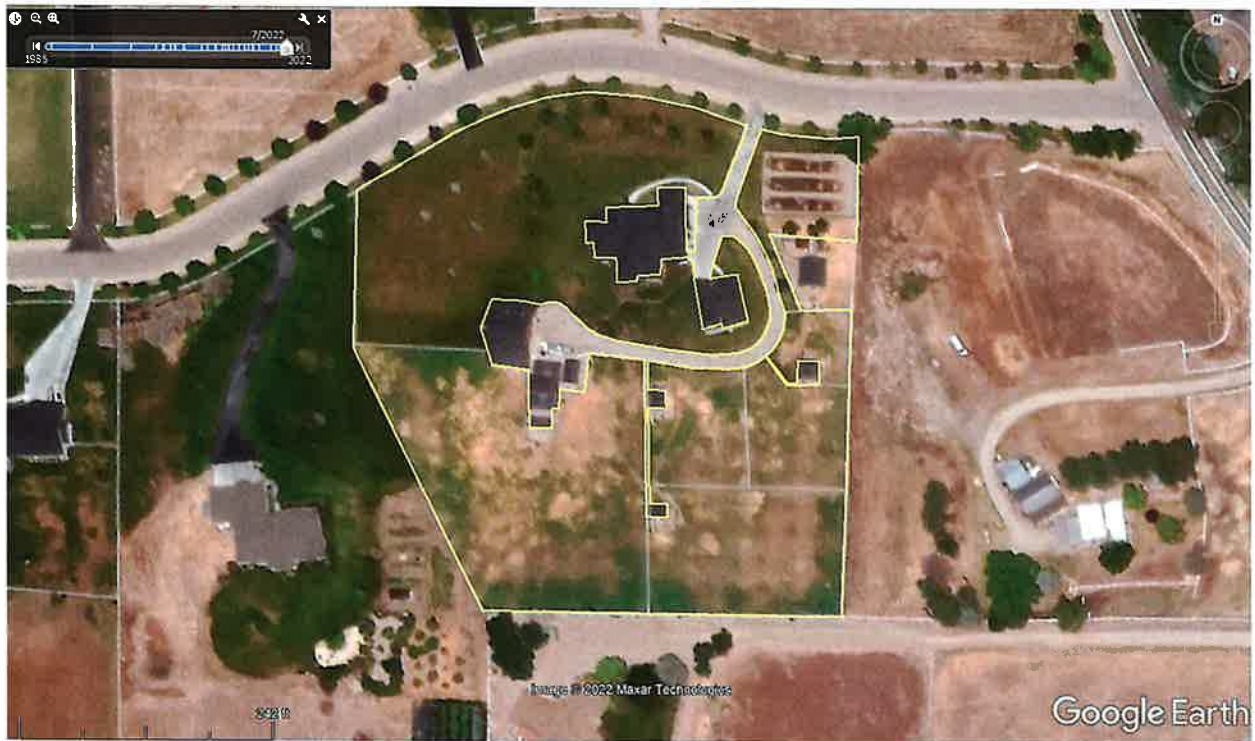
Reviewer  Date 9/15/22

Field Exam Map:

The yellow border shows the place of use for the irrigation use. The yellow point shows the point of diversion. The Green point shows the domestic point of diversion association with water right license 63-33803. The parcel boundaries are shown in green.



Google Earth aerial imagery.



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

6

Water Right No.: 63-35037
 Examiner: Dan Nelson
 Date of Field Exam: 9/13/2022

Option 1

P/D No.:

PUMP HORSEPOWER
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

FRICTION

RATE OF FLOW (cfs)
 (gpm)

5
0
222
35
8
0.10
44.5

Sprinkler Calculations	
Number of Sprinklers	16
Flow Per Sprinkler	2.7
Total Flow in GPM	43.2
Total Flow in CFS	0.10

Maximum Acre Limit	
Acres =	3.9
CFS/Ac	0.03
Total CFS	0.12
Total GPM	53

The above calculates the formula =

Q =

$$\frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

Examiners Notes:

This property was field examined 2019 for water right 63-33803. Please see the field examination in 63-33803 for reference. In that field examination, the field examiner found the domestic well was also being used for the irrigation use. Due to improper sealing, the permit holder was required to file a new permit and drill a new well for their irrigation use. During the field examination for 63-33803 the field examiner found the domestic well could run one zone of 8 - 3 gpm sprinklers¹. A pressure was used of 60 psi in calculations for 63-33803. The irrigation well has a slightly larger pump, and the permit holder told me in a telephone call he could now run 2 zones of 16 - 3 gpm sprinklers. It is assumed the new well would have the same pumping water level as the domestic well. Taking all of this information into account, I used both sprinkler nozzle table and the theoretical calculation table to determine the flow rate. the sprinkler nozzle table says that the nozzles being used will divert 2.7 gpm at 35 psi or 43.2 gpm total for 2 zones. Using a standard friction loss factor of 8 feet of head, I determined that the well would supply approximately 44.5 gpm at 35 psi. At these diversion rates, the flow rate is under the 0.03 cfs or inch and half rate per acre. I am recommending 0.10 cfs of this permit.

1.) The chart shows that 3gpm spinkler would operate at approximately 3.gpm at 45 psi not 60 psi. If you use this flow rate with a friction loss factor of 8 feet it comes out almost the same overall diversion rate of 24 gpm . I am assuming the irrigation system was operated at 24 gpm when it used the domestic well.

PGP ULTRA INSTALLATION:

The PGP Ultra pop-up sprinkler should be installed at finished grade as shown in the illustration (Fig. 1).

Arc Adjustments:

Adjustable heads are preset to approximately 180°. Sprinklers may be adjusted with water on or off. It is recommended that initial adjustments be made before installation.

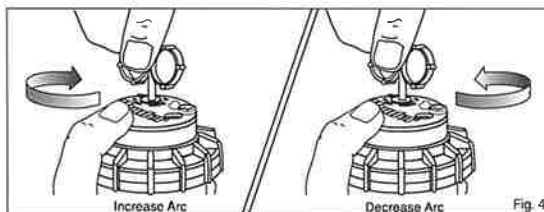
- Using the palm of your hand, rotate the nozzle turret counterclockwise to the left stop to complete any interrupted rotation cycle (Fig. 2).
- Rotate the nozzle turret clockwise to the right stop. This is the fixed side of the arc. The nozzle turret must be held in this position for arc adjustments. The right stop does not change.

To Increase the Arc:

- Insert the plastic key end of the Hunter wrench into the adjustment socket (Fig. 3 & 4).
- While holding the nozzle turret at the right stop, turn the wrench clockwise. Each full 360° turn of the wrench will increase the arc 90°.
- Adjust to any arc between 50° and 360° (Fig. 5).
- The wrench will stop turning, or there will be a ratcheting noise, when the maximum arc of 360° (full circle) has been reached.
- When set to 360, the sprinkler will rotate continually counterclockwise.

To Decrease the Arc:

- Insert the plastic key end of the Hunter wrench into the adjustment socket (Fig. 3 & 4).
- While holding the nozzle turret at the right stop, turn the wrench counterclockwise. Each full 360° turn of the wrench will decrease the arc 90°.
- Adjust to any arc between 50° and 360° (Fig. 5).
- The wrench will stop turning, or there will be a ratcheting noise, when the minimum arc of 50° has been reached.



Note: It is not necessary to disassemble the sprinkler to make adjustments.

RADIUS / DISTANCE OF THROW

Insert the steel hex end of the Hunter wrench into the radius adjustment screw (Fig. 6). Turn the screw clockwise (into the stream of water) to decrease the radius, or counterclockwise to increase the radius. Radius can be reduced up to 25%.

PRECIPITATION RATE ADJUSTMENT

If you have excessively wet or dry areas, you can change the nozzle in the sprinkler to increase or decrease the precipitation rate. For dry areas, install a larger nozzle. For wet areas, install a smaller nozzle.

DRAIN CHECK VALVE

All Hunter sprinklers are available with a factory-installed drain check valve. The drain check valve prevents low-head drainage with elevation changes up to 10'. To order, specify PGP-00-CV or PGP-04-CV. All PGP-12 sprinklers come standard with a drain check valve. If a check valve is added to the standard PGP-04 in the field, the elevation check height will be approximately 4'.

RECLAIMED ID

All Hunter rotors are available with a purple rubber cover permanently attached. The purple cover shows that reclaimed water is being used for the project, which promotes safety on the job site.

NOZZLE INSTALLATION

- Insert the plastic key end of the Hunter wrench into the lifting socket of the sprinkler and turn 90°. Pull the riser up to gain access to the nozzle socket (Fig. 8).
- Using the hex key of the Hunter wrench, turn the radius adjustment screw (Fig. 6) counterclockwise to be sure it is not blocking the nozzle socket opening. If a nozzle is already installed, it can



Fig. 1



Fig. 2

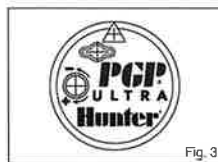


Fig. 3

be removed by backing out the adjustment screw and turning on the water, or by pulling outward on the nozzle "ears" with a pair of needle-nosed pliers.

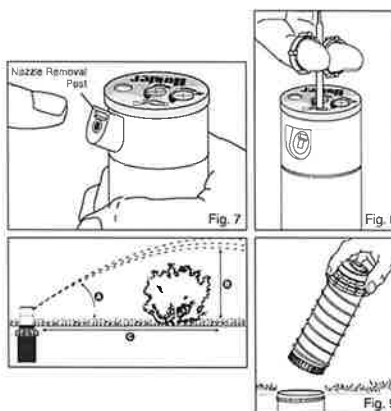
- Slip the desired nozzle into the nozzle socket (Fig. 7). Note that the socket is angled up 25°. The "ears" should be adjusted so that the nozzle range screw threads directly down between them. Then tighten the nozzle range screw. The raised bump with an arrow on the rubber cover will always indicate the location of the nozzle and direction of water flow when the sprinkler is retracted.

ALIGNING THE RIGHT (FIXED) SIDE OF ARC

If the right side of the arc is not properly aligned, the results may be a wet walkway or a dry turf area. The right side arc can easily be realigned. One way to realign the right stop is to turn the whole sprinkler body assembly and the fitting below it, left or right to the desired position. This may require temporary removal of the soil around the sprinkler to allow you to grip the sprinkler housing.

Another way to reset the right arc is to unscrew the body cap counterclockwise and remove the internal assembly from the body. Once removed, rotate the nozzle turret to the right stop, screw the internal assembly back into the body with the nozzle aligned to the right side of the area you want irrigated (Fig. 9). At this point you have realigned the right arc stop, and you can adjust the left arc to an appropriate setting.

Note: It is not necessary to dig up and remove the whole sprinkler to realign the right arc.



Model	Nozzle Size	Pressure in PSI	Degree of Trajectory	Max Height of Spray	Distance from head to Max Height
PGP Ultra Blue	1.5	45	25	8"	23"
	2.0	45	25	8"	23"
	2.5	45	25	9"	26"
	3.0	45	25	10"	28"
	4.0	45	25	11"	30"
	5.0	45	25	11"	30"
PGP Ultra Low Angle	6.0	55	25	12"	32"
	8.0	55	25	13"	32"
	2.0 LA	50	13	3"	22"
	2.5 LA	50	13	4"	22"
	3.5 LA	50	13	4"	22"
	4.5 LA	50	13	4"	22"
PGP Ultra Short Radius	5.0	50	15	5"	8"
	1.0	50	14	0"	9"
	2.0	50	3	1"	4"
PGP Ultra Short Radius	7.5	50	22	7"	13"
	1.5	50	18	7"	13"
	2.0	50	8	1"	6"

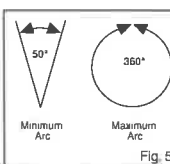


Fig. 5

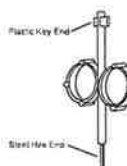


Fig. 6



NON-REVERSING 360

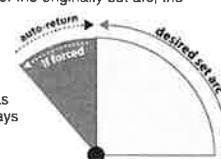
This PGP Ultra sprinkler is designed as a part- and full-circle in one model. When the sprinkler is adjusted to the full-circle position, the sprinkler will rotate in a continuous counterclockwise direction. This saves everyone from stocking additional full-circle only models while efficiently irrigating the landscapes.

NON-STRIPPABLE BACKDRIVE

This PGP Ultra sprinkler is designed with an internal device that prevents damage to the internal gear drive if it should be turned by vandals. This important feature works when the nozzle turret is turning in either direction. This makes the sprinkler very durable in all applications.

AUTO ARC RETURN

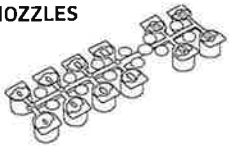
This PGP Ultra sprinkler is designed with an internal device that re-aligns the arc if it is turned by vandals. This important feature works when the nozzle turret is turning in either direction. When forced outside of the originally set arc, the sprinkler takes the shortest path back to the pattern without going completely around. This saves the non-irrigated areas from getting wet! Always a good thing!



PGP® ULTRA/I-20 PERFORMANCE CHARTS

Hunter®

BLUE/GREY NOZZLES P/N 782900



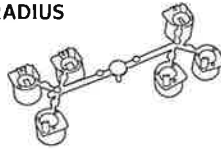
PGP® ULTRA / I-20 BLUE STANDARD NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
1.5 Blue	25	29	1.2	0.27 0.32
	35	31	1.4	0.38 0.37
	45	31	1.5	0.30 0.35
	55	32	1.6	0.34 0.29
	65	32	1.9	0.36 0.41
2.0 Blue	25	33	1.4	0.25 0.28
	35	23	1.7	0.30 0.35
	45	34	2.0	0.33 0.38
	55	34	2.1	0.25 0.40
	65	37	2.3	0.43 0.50
2.5 Blue	25	33	1.7	0.30 0.35
	35	35	3.1	0.32 0.38
	45	35	2.5	0.39 0.45
	55	35	2.6	0.41 0.47
	65	35	2.9	0.45 0.53
3.0 Blue	25	35	2.2	0.34 0.40
	35	36	2.7	0.40 0.46
	45	38	3.0	0.40 0.46
	55	39	3.4	0.43 0.50
	65	39	3.7	0.47 0.54
4.0 Blue	25	37	3.0	0.42 0.49
	35	39	3.5	0.44 0.51
	45	40	4.0	0.48 0.56
	55	41	4.5	0.52 0.60
	65	41	4.8	0.55 0.63
5.0 Blue	25	39	3.2	0.52 0.60
	35	39	4.5	0.57 0.66
	45	42	5.0	0.55 0.63
	55	42	5.7	0.67 0.77
	65	43	6.2	0.66 0.76
6.0 Blue	25	38	4.3	0.57 0.66
	35	40	5.6	0.67 0.78
	45	43	6.0	0.62 0.72
	55	44	6.7	0.67 0.77
	65	44	7.3	0.73 0.84
8.0 Blue	25	47	6.0	0.64 0.87
	35	41	7.0	0.80 0.93
	45	44	8.0	0.80 0.92
	55	44	9.0	0.82 0.95
	65	45	9.5	0.89 1.03

PGP ULTRA / I-20 GRAY LOW ANGLE NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
2.0 LA Gray	30	25	1.6	0.49 0.57
	40	27	1.9	0.50 0.58
	50	28	2.1	0.52 0.60
	60	30	2.3	0.49 0.57
2.5 LA Gray	30	27	2.1	0.55 0.64
	40	30	2.5	0.53 0.62
	50	33	2.8	0.49 0.57
	60	35	3.0	0.47 0.54
3.5 LA Gray	30	29	2.3	0.64 0.74
	40	32	3.1	0.58 0.67
	50	35	3.5	0.55 0.64
	60	37	3.8	0.53 0.62
4.5 LA Gray	30	30	3.4	0.72 0.90
	40	33	3.9	0.73 0.85
	50	35	4.4	0.69 0.80
	60	37	4.7	0.66 0.76

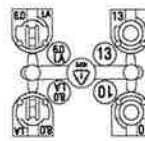
BLACK SHORT RADIUS NOZZLES P/N 466100



PGP ULTRA / I-20 BLACK SHORT RADIUS NOZZLE PERFORMANCE DATA (18"/25")

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
.50 SR Black	50	17	0.36	0.24 0.28
	40	17	0.43	0.29 0.23
	50	18	0.50	0.30 0.34
	60	19	0.57	0.30 0.35
1.0 SR Black	50	17	0.78	0.52 0.60
	40	17	0.96	0.60 0.69
	50	18	1.00	0.59 0.69
	60	19	1.10	0.59 0.69
2.0 SR Black	50	17	1.40	0.93 1.08
	40	17	1.70	1.13 1.31
	50	18	2.00	1.19 1.37
	60	19	2.20	1.17 1.45
.75 SR Black	50	22	0.73	0.51 0.64
	40	24	0.65	0.23 0.39
	50	25	0.75	0.23 0.27
	60	26	0.83	0.34 0.37
1.5 SR Black	50	22	1.10	0.40 0.46
	40	24	1.30	0.43 0.50
	50	25	1.50	0.46 0.53
	60	26	1.60	0.46 0.53
3.0 SR Black	50	24	2.70	0.91 1.05
	40	24	2.70	0.91 1.04
	50	25	3.00	0.92 1.07
	60	26	3.10	0.94 1.02

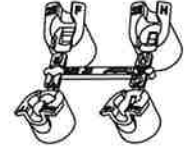
GREEN HIGH FLOW NOZZLES P/N 44800



PGP ULTRA / I-20 GREEN HIGH FLOW NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
10 Lt. Green	40	42	8.4	0.92 1.06
	50	43	9.5	0.90 1.14
	60	45	10.5	1.00 1.15
	70	47	11.4	0.99 1.15
13 Lt. Green	40	43	10.9	1.13 1.31
	50	44	12.3	1.22 1.44
	60	45	13.6	1.29 1.49
	70	47	14.8	1.29 1.49
6.0 LA Lt. Green	30	31	4.2	0.84 0.97
	40	35	5.0	0.79 0.91
	50	37	5.8	0.82 0.94
	60	39	6.3	0.80 0.92
8.0 LA Lt. Green	40	37	6.7	0.94 1.09
	50	39	7.7	0.97 1.12
	60	41	8.5	0.97 1.12
	70	41	9.2	1.05 1.22

MPR MATCHED PRECIPITATION RATE NOZZLES



PGP® ULTRA / I-20 MPR-25 RED NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
90° Red	25	23	0.74	0.54 0.62
	35	24	0.88	0.59 0.68
	45	25	1.00	0.62 0.71
	55	25	1.11	0.68 0.79
	65	25	1.21	0.75 0.86
120° Red	25	23	1.00	0.55 0.63
	35	24	1.21	0.61 0.70
	45	25	1.35	0.64 0.74
	55	25	1.52	0.71 0.82
	65	25	1.67	0.77 0.89
180° Red	25	23	1.44	0.52 0.61
	35	24	1.73	0.58 0.67
	45	25	1.98	0.61 0.70
	55	25	2.21	0.68 0.79
	65	25	2.41	0.74 0.86
360° Red	25	23	2.78	0.51 0.58
	35	24	3.34	0.56 0.64
	45	25	3.82	0.59 0.65
	55	25	4.25	0.65 0.76
	65	25	4.62	0.71 0.82

PGP ULTRA / I-20 MPR-30 LT. GREEN NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
90° Lt. Green	25	29	1.03	0.47 0.54
	35	30	1.23	0.53 0.61
	45	30	1.40	0.60 0.69
	55	30	1.56	0.67 0.77
	65	30	1.69	0.72 0.83
120° Lt. Green	25	29	1.34	0.46 0.53
	35	30	1.62	0.52 0.60
	45	30	1.85	0.59 0.69
	55	30	2.06	0.66 0.76
	65	30	2.24	0.72 0.83
180° Lt. Green	25	29	2.15	0.49 0.57
	35	30	2.59	0.55 0.64
	45	30	2.96	0.63 0.73
	55	30	3.30	0.71 0.82
	65	30	3.60	0.77 0.89
360° Lt. Green	25	29	4.24	0.45 0.56
	35	30	5.08	0.54 0.63
	45	30	5.78	0.62 0.71
	55	30	6.39	0.68 0.79
	65	30	6.92	0.74 0.85

PGP ULTRA / I-20 MPR-35 BEIGE NOZZLE PERFORMANCE DATA

Nozzle	Pressure PSI	Radius ft	Flow GPM	Precip in/hr ■ ▲
90° Beige	25	32	1.40	0.53 0.61
	35	34	1.67	0.56 0.64
	45	35	1.92	0.60 0.70
	55	35	2.13	0.67 0.77
	65	35	2.31	0.73 0.84
120° Beige	25	32	1.77	0.50 0.58
	35	34	2.15	0.54 0.62
	45	35	2.46	0.58 0.67
	55	35	2.74	0.65 0.75
	65	35	2.99	0.70 0.81
180° Beige	25	32	2.75	0.52 0.60
	35	34	3.33	0.55 0.64
	45	35	3.81	0.60 0.69
	55	35	4.23	0.66 0.77
	65	35	4.62	0.73 0.84
360° Beige	25	32	5.36	0.50 0.58
	35	34	6.62	0.55 0.64
	45	35	7.58	0.60 0.69
	55	35	8.43	0.66 0.76
	65	35	9.18	0.72 0.83

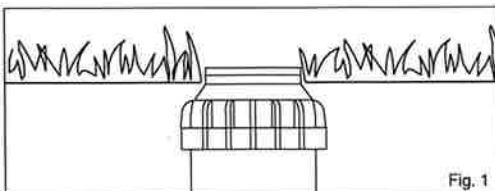


Fig. 1

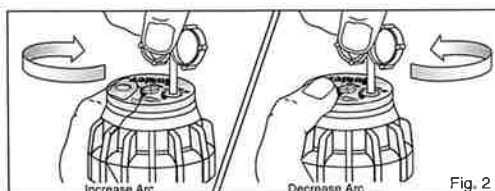


Fig. 2

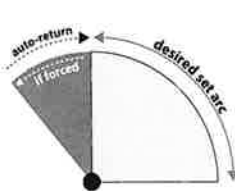


Fig. 3

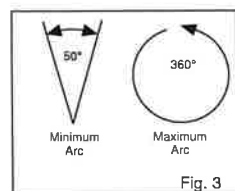


Fig. 4

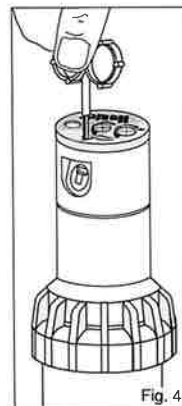


Fig. 4

1. WELL TAG NO. D 0089151

2. OWNER:

3.WELL LOCATION:

4. USE:

5. TYPE OF WORK:

7. SEALING PROCEDURES:

8. CASING/LINER:

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____

Manufactured screen ☒ Y ☐ N Type allow machine

Method of installation placed

Length of Headpipe _____ Length of Tailpipe _____Packer ☐ Y ☒ N Type _____

10.FILTER PACK:

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) 164 Static water level (ft) 164

Water temp. (°F) **56degF** Bottom hole temp. (°F)

Describe access port well cap

Well test:

Test method:

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 280

Date Started: Jun 15, 2021 Date Completed: Jun 18, 2021

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 Coonse Well Drilling Co. No. 409

*Principal Driver James E. Crane Date Jun 22, 2021

*Driller  Date Jun 22, 202

*Operator || W3 Date _____

Operator | _____ Date _____

* Signature of Principal Driller and rig operator are required.