

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 78-12406
Exam Date: 4/19/2018

1. Current Owner:
MEADOWS VALLEY SCHOOL DISTRICT #11 PO DRAWER F NEW MEADOWS ID 83654 (208) 347-2411
2. Accompanied by: Brett Carpenter
Phone No: (208) 347-2411
Address: PO BOX F, New Meadows, ID 83654
Relationship to Permit Holder: Maintenance Supervisor

TRIBUTARY:

3. **SOURCE:**
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 78-12424 and 78-12426
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW¼NW¼ Sec. 24, Twp 19N, Rge 01E, B.M. ADAMS County

Method of Determination: Aerial imagery, field exam, and ArcMap PLSS layer information.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
19N	01E	24					2.9	4.7											7.6

Total Acres: 7.6

Method of Determination: Aerial imagery, field exam, and ArcMap PLSS layer information.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

☒ 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.

☒

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

☒ Photo of Diversion and System Attached

4.

Well ID No.	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
441476	UNKOWN	UNKOWN	UNKOWN	UNKOWN	UNKOWN

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No physical flow measurements were done during the field exam. Sprinkler information was described and was used to estimate a developed instantaneous flow.

E. FLOW CALCULATIONS

Measured Method:

Additional Computation Sheets Attached

20 sprinklers (11 hand lines + 9 garden hose) with 9/64" nozzle at 55 psi => 20 sprinklers X 4.37 gpm/sprinkler = 84.4 gpm or 0.18 cfs. The Beneficial Use Standard is 0.02 cfs per acre => 0.02 cfs X 7.6 = 0.15 cfs maximum allowance. Therefore, the recommended flow rate is **0.15 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 7.6 \text{ acres} \times 3.0 \text{ H.G.R.} = \mathbf{22.8 \text{ AF}}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \text{ cfs} \times 214 \text{ days} \times 1.9835 = \mathbf{63.7 \text{ AF}}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{22.8 \text{ AF}}$

G. NARRATIVE/REMARKS/COMMENTS

Permit No. 78-12406 authorizes a diversion rate of 0.24 cfs for Irrigation purposes. A field exam was conducted by WRA Aaron Skinner on April 19, 2018, who was accompanied by Brent Carpenter, the Maintenance Supervisor for the school.

BACKGROUND:

The purpose of this right is to provide ground water irrigation to the Meadow Valley School's football field, baseball/softball fields, common areas, and play ground.

System Description:

Ground water is pumped from the well to a pressure tank and various 2" risers throughout the school property as shown on the attached cartoon Mr. Carpenter created. 11 hand lines and 9 garden hose sprinklers are moved around to irrigate the developed 7.6 acres of grass. The system pressure runs at 55 psi with 9/64" sprinkler nozzles. The garden hose sprinklers are used in the front of the school and playground to the west of the building.

Diversion Rate and Volume:

The permitted rate of 0.24 cfs will be adjusted to the recommended Irrigation rate of 0.15 cfs. This rate was derived from the development of 7.6 acres instead of the proposed 12 acres. Volume recommendations are established relative to the head gate value for the area. These calculations are described in Section E and F of this report.

Ownership:

Current Adams County taxlot data was used to verify land ownership. The Meadow Valley School District #11 is identified as the owner, which matches the permit.

Overlap:

The POD and POU analysis identified WR Nos 78-12424 and 78-12426 overlapping with the north section of the POU or 0.20 acres of this right according to the POU shape boundary. However, no surface water is used to irrigate this 7.6 acres. Condition R62 will be forwarded to licensing. There is no POD overlap.

Conditions:

Conditions 004 and 046 were removed and not forwarded to licensing. Condition 01M, and R62 were forwarded to licensing. Condition 121 was updated to 103 and forwarded to licensing. Condition 165 was updated by removing "new" and forwarded to licensing.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE
IRRIGATION

PERIOD OF USE
04/01 to 10/31
Totals:

DIVERSION RATE
0.15 CFS
0.150 CFS

ANNUAL VOLUME
22.8 AF
22.80 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

Field Examiner's Name Aaron Skinner Date 5/2/2018

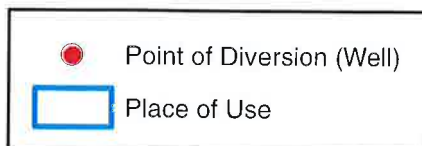
Reviewer Angela M. Quinn Date 5/8/18

State of Idaho
Department of Water Resources
Point of Diversion and Place of Use
Water Right Permit No. 78-12406

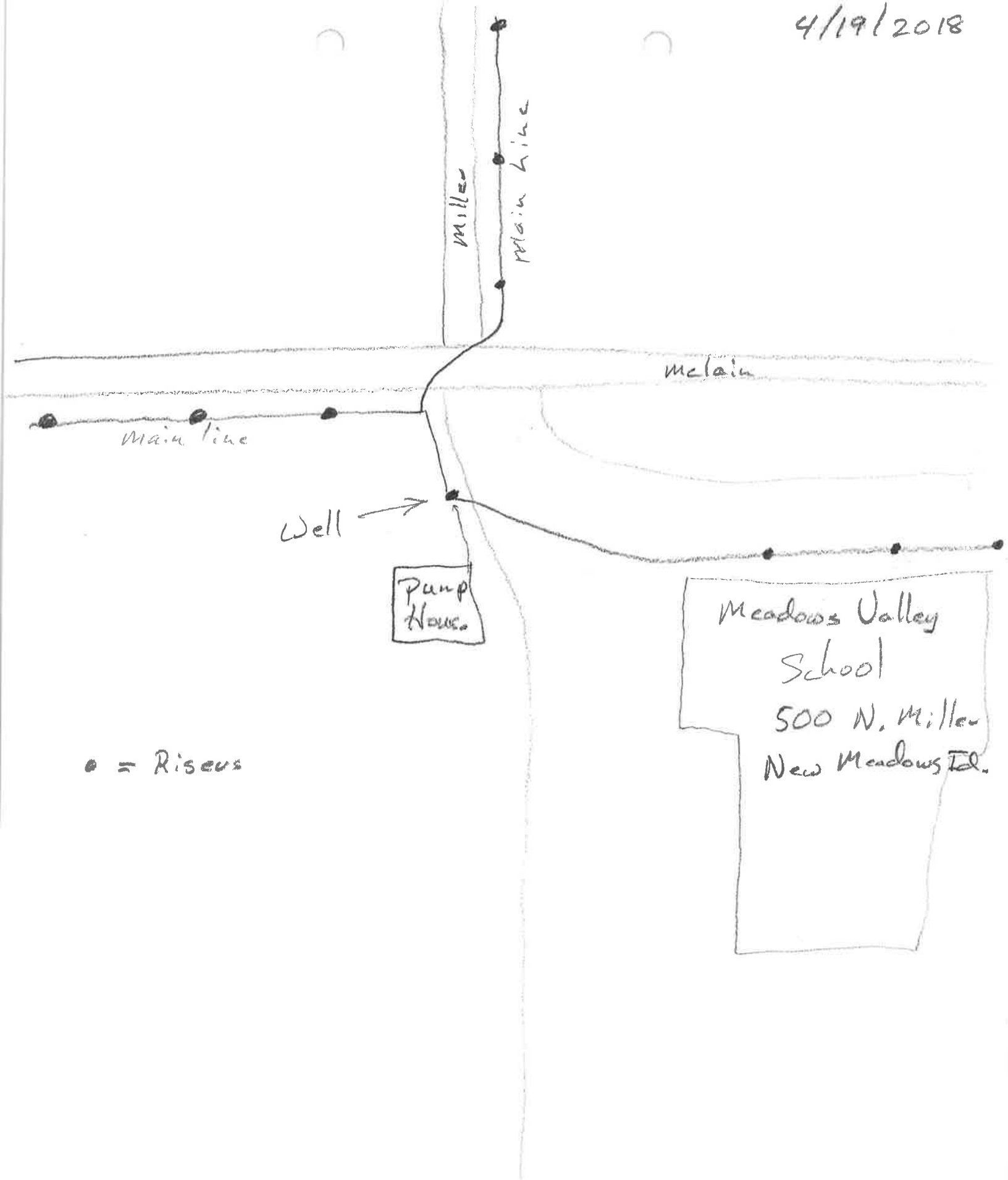
This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.03 0.06 0.12 Miles



4/19/2018



• = Risers

Skinner, Aaron

From: Skinner, Aaron
Sent: Thursday, April 12, 2018 11:51 AM
To: 'bcarpenter@mvsd11.org'
Subject: Water Right Permit No. 78-12406 Field Exam Info
Attachments: ProofReport.pdf; Irrigation Map.pdf; Well Log.pdf

Hi Brett,

It was great speaking with you yesterday and look forward to the field exam next Thursday at 8:30 am (4/19/2018). Please see the attached Proof Report that outlines the water use, associated maps, and well log for permit no. 78-12406. Below is a list of questions I will ask during the exam that help in the verification process:

- Well
 - Well pump size and location in casing *315-320' pump depth.*
 - Pump make, model, and horse power
 - Operating psi *55 psi*
 - Any discharge readings; daily or monthly (if available)
 - Schematic or as built (well to main lines) *7.6 acres.*
- Irrigation
 - How many sets are on the system *20 max*
 - How many sprinklers per set (hand lines and ground) *11 hand lines + 9 hose sprinklers*
 - Flow rating per sprinkler type (gallon per minute) *9/64"*
 - How many sets run at a time
 - How often and long each set runs (day and week) *M-F 8-4pm Jun 15th - Sept 30th*
 - Rough system diagram of supply lines

Thanks for gathering this information. As explained, I will prepare information relative to the neighboring water rights. Please let me know if you any questions.

Regards,

Aaron Skinner
Idaho Department of Water Resources
Water Resource Agent
(208) 334-2190
aaron.skinner@idwr.idaho.gov

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Well Number	Reference	Draft	Name	Source	Use
Water Right 79-1206	X	MEDONS VALLEY SCHOOL DISTRICT #11	GROUND WATER		NENE IWAVE SWNE NEWW SNWW SSWW NWSW SWSW NESSE NWSE IWASSE SWDE SESE TODEADERE
Water Right 79-1002	X	COLE LOUISE COLE RICHARD WANKER, MARNEY WANKER TAMMY	GROUND WATER		
Water Right 79-1008	X	CARR JR THOMAS BROWN WHITE CLAUSS WHITE DARLENE	WASTE WATER		
Water Right 79-1015	N	FOSTER RICHARD JR FOSTER SUSAN	GROUND WATER		
Water Right 79-1019	N	FAUSSET CARMY FAUSSET DANUNA MAE	WASTE WATER	X	
Water Right 79-1009	N	I J MORGAN INC	GROUND WATER		
Water Right 79-1225	N	CARR JR THOMAS BROWN CITY OF NEW MEDONS WHITE CLAUSS WHITE DARLENE	GROUND WATER		
Water Right 79-1226	N	CARR JR THOMAS BROWN MEDONS VALLEY SCHOOL DISTRICT #11 WHITE CLAUSS WHITE DARLENE	WASTE WATER	X	
Water Right 79-1203	N	CITY OF NEW MEDONS	GROUND WATER		
Water Right 79-1012	N	CITY OF NEW MEDONS	GROUND WATER		

[illegible]

No overlap; same POU, but different use and source

No overlap

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0069094
Drilling Permit No. 969598-875655
Water right or injection well # 78-12406

2. OWNER:
Name Meadows Valley School Dist. #11
Address P.O. DRAWER F
City New Meadows State Id. Zip 83654

3. WELL LOCATION:
Twp. 19 North ☒ or South ☐ Rge. 1 East ☒ or West ☐
Sec. 24 SE 1/4 NW 1/4 NW 1/4

Gov't Lot _____ County Adams
Lat. 44 ° 58.503 (Deg. and Decimal minutes)
Long. 116 ° 17.167 (Deg. and Decimal minutes)
Address of Well Site 500 N. Miller
City New Meadows
(Give at least name of road + distance to road or landmark)

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 _____

7. SEALING PROCEDURES:
Seal material From (ft) To (ft) Quantity (lbs or ft³) Placement method/procedure
1/2 Bentonite chip 0 11 550 lbs. TEMP CASING - PUMPED
Bentonite 11 39 198 gals TEMP CASING - PUMPED
CLAY SEAL 39 68 DRIVEN CLAY SEAL

8. CASING/LINER:
Diameter (nominal) From (ft) To (ft) Gauge/Schedule Material Casing Liner Threaded Welded
8 +2 303 .250 STEEL ☒ ☐ ☐ ☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) AT 303

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method _____
Manufactured screen ☐ Y ☒ N Type _____
Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule

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

10. FILTER PACK:
Filter Material From (ft) To (ft) Quantity (lbs or ft³) Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 40 Static water level (ft) 17
Water temp. (°F) 50 Bottom hole temp. (°F) _____
Describe access port SANITARY WELL SEAL

Well test:			Test method:			
Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
<u>286</u>	<u>100</u>	<u>120</u>	☐	☐	☒	☐

Water quality test or comments: good

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
<u>12</u>	<u>0</u>	<u>2</u>	<u>TOP SOIL</u>		☒
<u>12</u>	<u>2</u>	<u>5</u>	<u>BROWN SAND + GRAVEL</u>		☒
<u>12</u>	<u>5</u>	<u>7</u>	<u>BLUE GRAY MUDDY SAND</u>		☒
<u>12</u>	<u>7</u>	<u>32</u>	<u>BROWN SANDY CLAY</u>		☒
<u>12</u>	<u>32</u>	<u>39</u>	<u>BASALT SAND + GRAVEL</u>	☒	☒ static 11'
<u>9</u>	<u>39</u>	<u>51</u>	<u>BASALT SAND + GRAVEL</u>	☒	
<u>73/8</u>	<u>51</u>	<u>68</u>	<u>BROWN CLAY</u>		☒
<u>9</u>	<u>68</u>	<u>72</u>	<u>BROWN CLAY + BROKEN BASALT</u>		☒
<u>9</u>	<u>72</u>	<u>86</u>	<u>Reddish BROWN WEATHERED BASALT</u>	☒	☒ 49PM
<u>9</u>	<u>86</u>	<u>105</u>	<u>Reddish BROWN + GRAY FRACT. BASALT</u>	☒	
<u>9</u>	<u>105</u>	<u>116</u>	<u>Red cinders</u>	☒	☒ 109PM
<u>9</u>	<u>116</u>	<u>126</u>	<u>Red weathered BASALT</u>	☒	☒
<u>9</u>	<u>126</u>	<u>144</u>	<u>GRAY + BROWN cinders</u>	☒	☒ 109PM
<u>9</u>	<u>144</u>	<u>155</u>	<u>Blue + BROWN weathered BASALT</u>	☒	☒
<u>9</u>	<u>155</u>	<u>160</u>	<u>BROWN cinders</u>	☒	☒ 109PM static 17'
<u>9</u>	<u>160</u>	<u>177</u>	<u>Blue + BROWN weathered BASALT</u>	☒	☒
<u>9</u>	<u>177</u>	<u>183</u>	<u>Reddish BROWN weathered BASALT</u>	☒	☒
<u>9</u>	<u>183</u>	<u>193</u>	<u>Blue + BROWN weathered BASALT</u>	☒	☒
<u>9</u>	<u>193</u>	<u>253</u>	<u>HARDER BLUE + BROWN BASALT</u>	☒	☒
<u>9</u>	<u>253</u>	<u>258</u>	<u>Red CLAY + CLAYSTONE</u>	☒	☒
<u>9</u>	<u>258</u>	<u>270</u>	<u>BROWN weathered BASALT</u>	☒	☒ 109PM static 17'
<u>9</u>	<u>270</u>	<u>275</u>	<u>HARDER BROWN BASALT</u>	☒	☒
<u>9</u>	<u>275</u>	<u>304</u>	<u>BROWN weathered BASALT</u>	☒	☒ 509PM
<u>6</u>	<u>304</u>	<u>315</u>	<u>HARDER BROWN BASALT</u>	☒	☒
<u>6</u>	<u>315</u>	<u>320</u>	<u>Blue, BROWN + Red cinders</u>	☒	☒ 1009PM static 17'
<u>6</u>	<u>320</u>	<u>325</u>	<u>HARDER BROWN BASALT</u>	☒	☒

RECEIVED

JUL 30 2015

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable): 325'
Date Started: 6-16-15 Date Completed: 6-29-15

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 GASTRIN WELL DRILLING Co. No. 408

*Principal Driller Rufus W. Gaston Date 7-4-15

*Driller Rufus W. Gaston Date 7-4-15

*Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.



8" diameter well drilled 6/29/2015. Well is 325 feet deep with a static level of 17 feet. TDH equals ~787 feet.



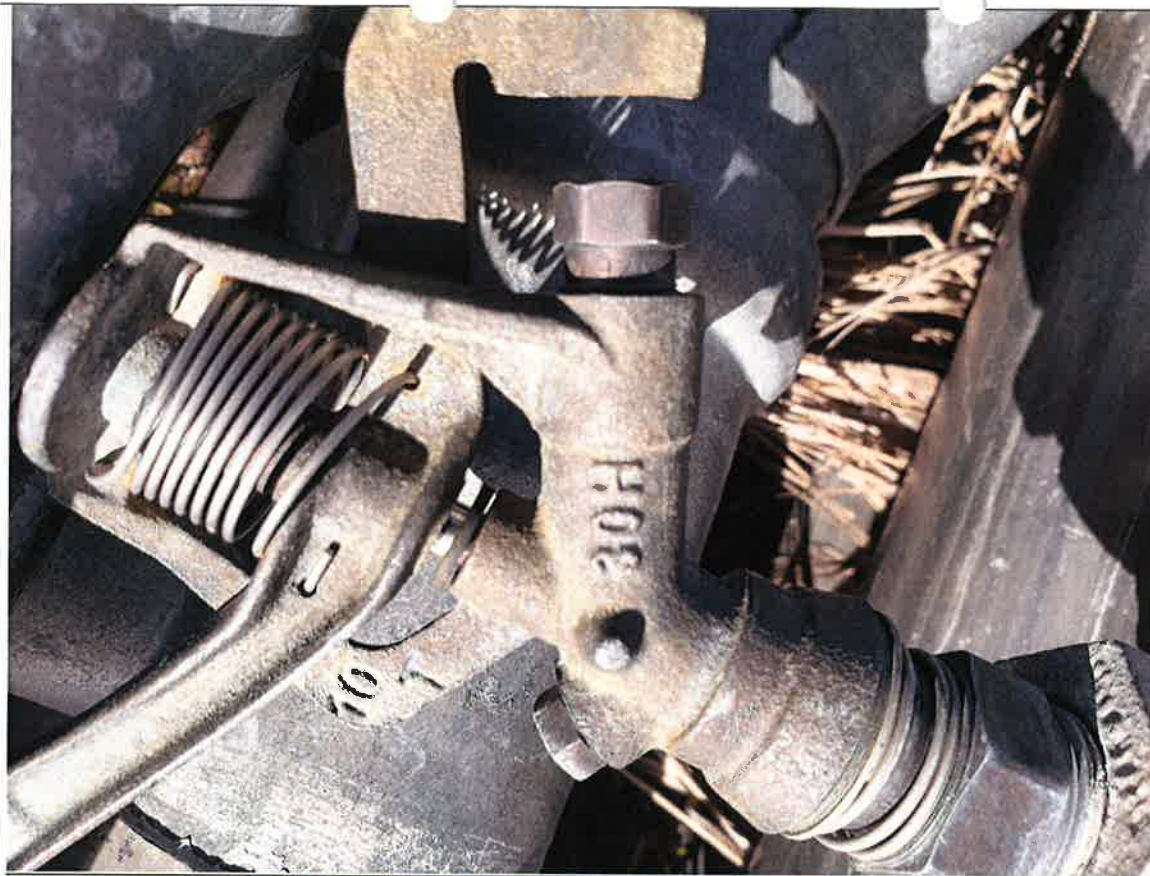
Well Tag Number D0069094



Pressure tank and delivery system that is ran at no more than 55 psi.



2" hand lines with 9/64" nozzles. Up to 11 hand lines are used to irrigate plus 9 garden hose sprinklers.



9/64" nozzle on
the hand lines.



Football field east
of the school. The
school generally
irrigates from June
15th through
September 30th
each year.



Front of the school where an area on each side of the entrance way is irrigated by garden hose sprinklers.



West side of the school where garden hose sprinklers are used to irrigate the grass.



Hose bid used to connect the garden hoses to irrigate.



South of the school. This area is irrigated with hand lines.



South of school where irrigation is also developed.



Raised flower/garden area irrigated by ½" funny pipe controlled by a hand valve.



Up close view of the hand valve attached to the funny pipe.



Riser and 2" hand lines used to irrigate the grass field south of the school and around the white house in the background.