

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 21-12855

Exam Date: 7/15/2014

1. Current Owner: FREMONT JOINT SCHOOL DISTRICT #215
945 W 1ST N
ST ANTHONY ID 83445
(208)624-7542
2. Accompanied by: Gary Parker (Superintendent); Lothar Eidinger (maintenance); Craig Summers (Business Manager)
Phone No: Same as above
Address: Same as above

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: North Fremont Canal System INC water rights 21-73B, 21-48, 21-49, 21-50, 21-73D, 21-73J, 21-75, 21-73F
2. Other water rights with the same point of diversion: None

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

GROUND WATER

SE1/4SE1/4

Sec. 25, Twp 09N, Rge 42E, B.M.

FREMONT County

Method of Determination: GPS and Aerial Photography

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	
09N	42E	25																10.0	10.0

Total Acres: 10

Method of Determination: Aerial photography and map.

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.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
		60			

D. FLOW MEASUREMENTS

Measurements: Unable to make a measurement. Theoretical calculation used.

E. FLOW CALCULATIONS

___X___ Additional Computation Sheets Attached

Measured Method:
Theoretical calculation.

According to Well Driller's Report the completed well depth is 1,000 feet.
Submersible pump horse power is 60.
Q= 0.33 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 10 \text{ acres} \times 3.5 \text{ af/acre} = 35 \text{ acre-feet}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.20 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 84.9 \text{ acre-feet}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 35.0 \text{ acre-feet}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

60 hp submersible pump to underground sprinkler irrigation system. According to Gary Parker who is the superintendant for Fremont County School District # 215 the ground water well was developed and used for a short period of time to irrigate the 10.0 acre field east of North Fremont High School. Well was drilled to approximately 1,000 feet. Due to high pumping costs and an insufficient supply of ground water Fremont County School District # 215 discontinued using their well and currently uses canal shares from the North Fremont Canal Systems INC to irrigate a 10 acre field located east of the North Fremont High School. According to Lothar Eidinger who maintains the school grounds indicates that the ground water well produced enough water to operate approximately 18 pop up sprinklers (Hunter 45's and 25's) at the same time. The sprinkler irrigation system consisted of 500 sprinklers with 32 zones. Even though the school district currently uses canal shares to irrigate their field, they do raise interest in using this water right to irrigate the 10.0 acres east of the high school. The school district continues to control 25.0 acre-feet of storage water in the Fremont-Madison Irrigation District.

Have conditions of permit approval been met? ___x___ Yes ___ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/01 to 10/31	0.200 CFS	35.00 AF
<u>Totals:</u>		0.200 CFS	35.00 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Blake Jordan Date 7/15/2014

Reviewer _____ Date _____

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 21-12855

Reviewer: Blake Jordan

Date of Review: 7/15/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	60	0	0
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	1000	0	0
DISCHARGE PRESSURE	50	0	0
RATE OF FLOW (cfs)	0.33	#DIV/0! 	#DIV/0!

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.
No Friction

Examiners Notes:

Form 238-7
6/92

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

1. WELL TAG NO. **D** 32736
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:
Name Fremont School
Address 147 N 2nd W.
City St Anthony State Id Zip 83445

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 9 North ☒ or South ☐
Rge. 42 East ☒ or West ☐
Sec. 25 1/4 SE 1/4 SE 1/4
Gov't Lot _____ County Fremont
Lat: _____ Long: _____
Address of Well Site 1/4 East of Ashton
town City Ashton
(Give at least name of road - Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

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

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Concrete	0	90	5 yds	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12	12	92	375	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

35 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

well cap

Office Use Only
Well ID No. _____
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat: _____ : _____ : _____ Long: _____ : _____ : _____

21

12. WELL TESTS:

☒ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
100	200	235	8 hrs

Water Temp. 59° Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter 35

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
16	0	8	clay		X
16	8	52	black lava	X	
16	52	60	black lava	X	
16	60	92	clay		X
12	92	212	black solid lava		X
12	212	232	broken lava	X	
12	232	312	black lava		X
12	312	320	broken lava	X	
8	320	580	solid black lava		X
8	580	689	black lava		X
8	689	727	black lava		X
8	727	787	white sylvite	X	
8	787	827	hard white sylvite		X
8	827	846	black lava		X
8	846	866	black sand lava		X
8	866	886	gravel & lava	X	
8	886	906	gravel & fish bowl		
			gravel	X	
8	906	926	black lava		X
8	926	946	fish bowl gravel	X	
8	946	966	black sylvite		X
8	966	986	small gravel	X	
8	986	1002	black lava		X

RECEIVED

OCT 12 2004

Department of Water Resources
Eastern Region

Completed Depth 1000' (Measurable)

Date: Started 5-17-04 Completed 8-28-04

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 High Plains Firm No 299

Principal Driller Marcus Frank Date 10-1-04

and
Driller or Operator II _____ Date _____

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

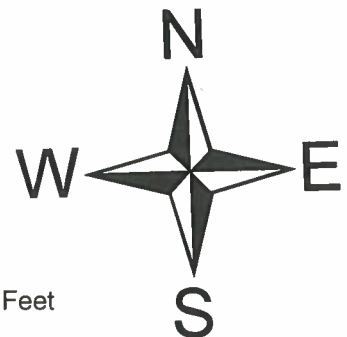
FORWARD WHITE COPY TO WATER RESOURCES

21-12855



Legend

- Point of Diversion
- Place of Use
- Township/Range
- Sections
- QQ



0 145 290 580 Feet

1 inch = 260 feet



