

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-22751

Exam Date: 4/29/2014

1. Current Owner: CITY OF DIETRICH
35 W FIRST ST
DIETRICH ID 83324
(208)544-2102
2. Accompanied by: Benny Walker (IDWR) and Tom Young
Phone No: 208-316-9243
Address: City Hall
Dietrich, ID
Relationship to Permit Holder: City operator

3. **SOURCE**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-20729
2. Other water rights with the same point of diversion: 37-20729

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

GROUND WATER	NE1/4SE1/4NW1/4	Sec. 23, Twp 06S, Rge 18E, B.M.
LINCOLN County		
GROUND WATER	NE1/4SE1/4NW1/4	Sec. 23, Twp 06S, Rge 18E, B.M.
LINCOLN County		

Method of Determination: Garmin GPS at time of field exam.

2.

PLACE OF USE: MUNICIPAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06S	18E	12			X					X	X	X	X	X		X	X		
06S	18E	13					X	X											
06S	18E	14	X																

Method of Determination: Place of use is described from a service area map for the city submitted by Tom Young.

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 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 Size</u>
D0062262	US Motors	50	H50V2BLC		4 inch line
A0004224	US Motors	30	F286TPA		6 inch line

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Calib. Date</u>
Panametrics	polysonic	PT878		277960	3/21/2014

2. Measurements:

Measurements for Well 1 and 2 were recorded on 4/29/14. (see attached calibration sheets)**Well 1 ten minute average = 137.2 gpm or 0.31 cfs.****Well 2 ten minute average = 219.2 gpm or 0.49 cfs****Maximum capacity of the system = 356.4 or 0.80 cfs****E. FLOW CALCULATIONS**

_____ Additional Computation Sheets Attached

Measured Method: **N/A****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses:

N/A**No volume for Municipal use.**

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 37-22751 was filed on June 1, 2012 for the appropriation of 0.2 cfs for municipal use in the city of Dietrich. Permit 37-22751 was approved on September 9, 2012 and proof was filed on July 10, 2014.

The system consists of two wells, a 30 HP pump, a 50 HP pump and a storage tank. The water is piped up to the storage tank and then is gravity fed back down to the city by a six inch mainline. The two wells are identified as well # 1 and well # 2. On 4/29/2014 Benny Walker and I conducted flow measurements for both wells. The first measurement indicated that well # 1 has a capacity of 137.2 gpm, or 0.31 cfs. The second measurement indicated that well # 2 has a capacity of 219.2 gpm, or 0.49 cfs. The total combined capacity of the two wells is 0.80 cfs. The city's existing municipal water right 37-20729 allows for the diversion of up to 0.37 cfs from well # 1 and well # 2. Allowing for the decreed flow of 0.37 cfs from well # 1 and # 2, there should be 0.43 cfs of water available to potentially be licensed ($0.80 - 0.37 = 0.43$). However, since permit 37-20729 only authorizes the diversion of up to 0.2 cfs from the two wells, only 0.2 cfs can be licensed under this permit. Recommend 0.2 cfs for municipal use for the City of Dietrich.

Note, the new well will serve as the primary well and the existing well will be a back up.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	01/01 to 12/31	0.200 CFS	N/A
<u>Totals:</u>		0.200 CFS	N/A

2. Recommended Amendments

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

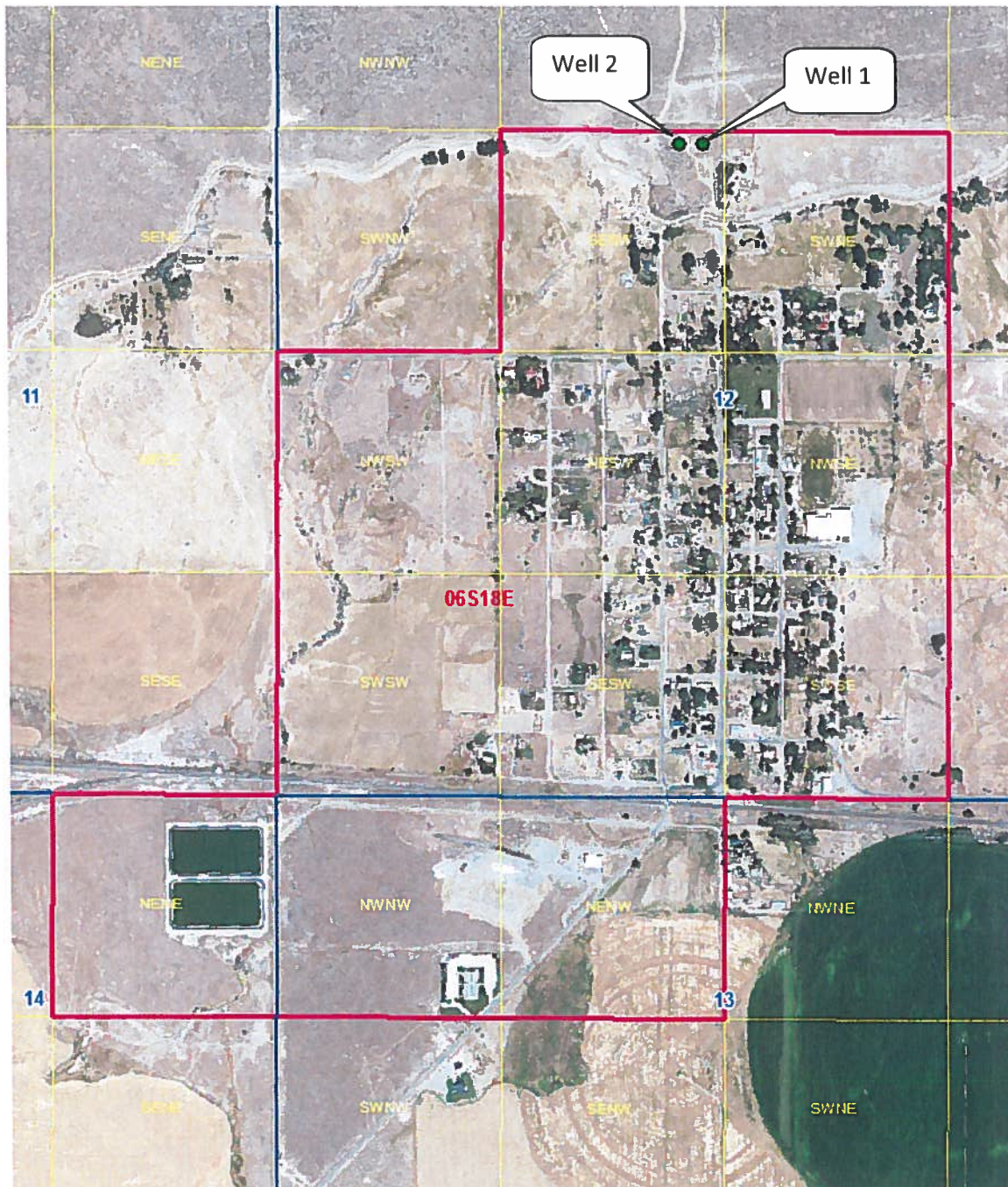
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name *Dana Reed* Date 9/11/14

Reviewer *Ben Walker* Date 9/18/14

37-22751 Points of Diversion and Large POU Map



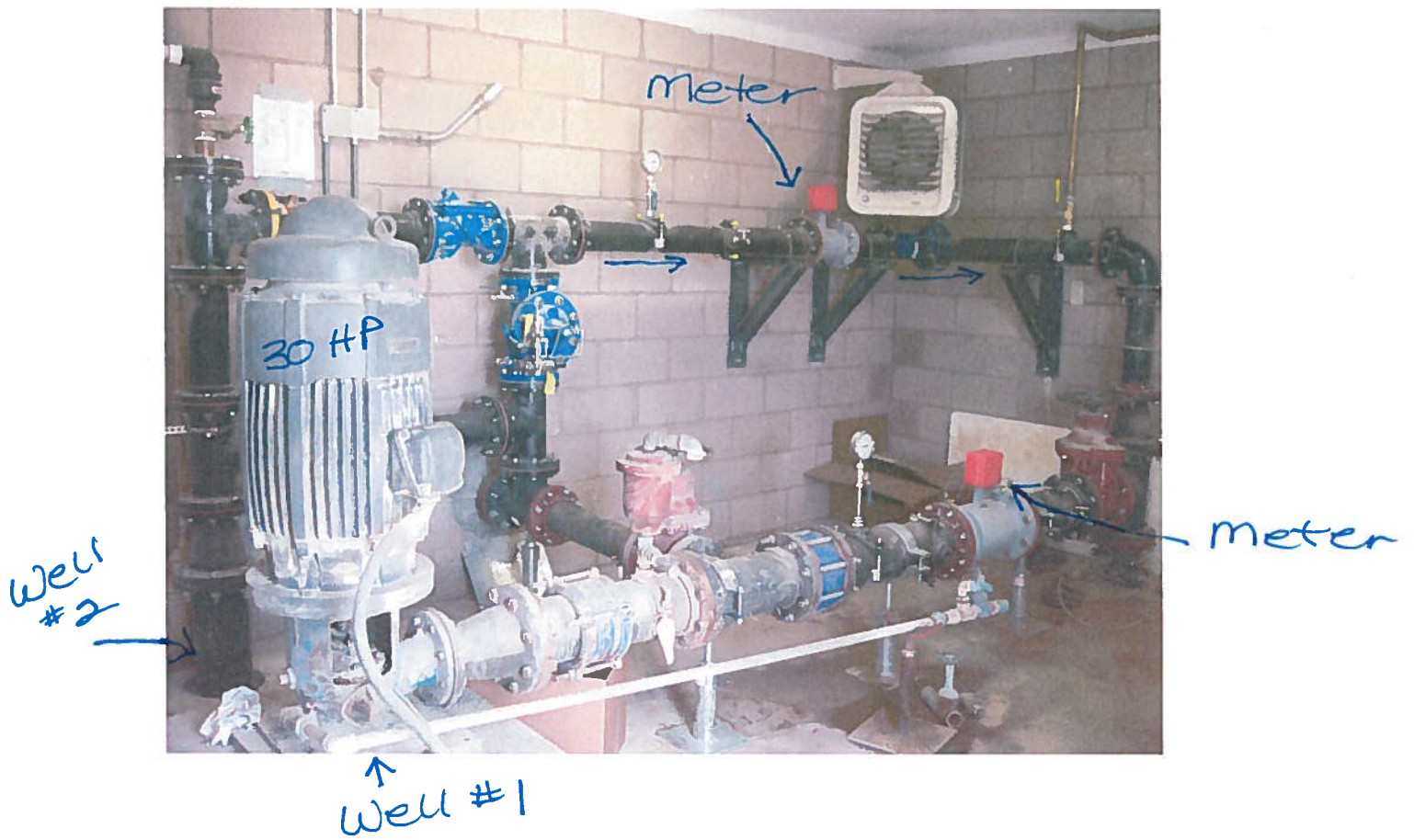
Log Name Well 2
 Log Title F:\LOG01.LOG
 Start Time 4/29/2014 10:58
 End Time 4/29/2014 11:09
 Records 3
 Interval 60
 Error Flags 8208
 Cyclic Flags 2

Item #	Label	Symbol	UnitType	Channel	Comport	Computer
0	Velocity	ft/s	578	0	0	PT878
1	Volume	gal/m	846	0	0	PT878
2	(+)Total	gal	1160	0	0	PT878

Date/Time	Velocity (ft/s)	Volume (gal/m)	(+)Total (gal)	Error #
4/29/2014 10:58:48	6.073781171	218.1057349	3260.156978	0
4/29/2014 10:59:47	6.029339516	216.5098625	3472.022259	0
4/29/2014 11:00:48	6.096250802	218.9126054	3699.987817	0
4/29/2014 11:01:48	6.09018682	218.6948516	3915.304319	0
4/29/2014 11:02:49	6.140785089	220.5118042	4140.336182	0
4/29/2014 11:03:47	6.071043578	218.0074296	4346.012042	0
4/29/2014 11:04:47	6.123975035	219.9081655	4570.14468	0
4/29/2014 11:05:47	6.081879684	218.3965475	4785.744568	0
4/29/2014 11:06:48	6.040378556	216.9062676	5010.002369	0
4/29/2014 11:07:47	5.996453781	215.328956	5224.455229	0
4/29/2014 11:08:49	6.081859889	218.3958366	5451.885371	0

219.1728393

219.2 gpm or
0.49 cfs



meter Display North wall

