

MEMORANDUM

Date: January 16, 2014
To: Water Right File 63-31318
From: shemenway
Re: 63-31318 Field Report Narrative and Licensing Review

The 12/22/2011 beneficial use field examination was conducted by Ed Squires (208)342-8369. The common name for this well is well #24. It is located within a pumphouse located off of N. Linder Rd, at W. Tumblecreek Dr. and N. Blue Springs Avenue. Well #24 (ID Tag # D0019265) has an 18 inch casing, is 560 ft deep, 0 static (artesian well), with an 8 inch screen at around 408 ft deep, and cased to 431 ft. It has a 150 Hp US Electrical Motor model AA63 turbine pump with a 10 inch discharge through a 10 inch McCrometer Flowmeter serial # 04-06591-10. It then discharges through 10 inch ductile iron pipe out to the integrated distribution system for the service area of the City of Meridian. At the time of the field exam, the system ran at 75 psi (records show the average over 1 year is 69 - 76 psi ranging from winter to summer). Well #24 is the primary lead well in this distribution system pressure zone. At the time of the field exam, the system was running at 850 gpm (1.89 cfs, at 75 psi, and then was manually increased to simulate higher demand (summer) conditions for 1/2 hour with a discharge of 1800 gpm (4.01 cfs) at 76 psi. A performance curve for well #24 showed that the pump would produce 1930 gpm (4.3 cfs) at an operating pressure of 69 psi after correcting for the additional drawdown that would occur at that pumping rate. **Operator flow records manually recorded for the month of June 2004 indicated an average of 1500 gpm (3.35 cfs) for the 30 days, with peak demand on both June 24th and 25th being 2000 gpm (4.46 cfs).**

IDEQ has a spatial data point located northwest of the pumphouse for well #24, with an ID Tag # E0008449. After talking to Nick Miller about whether I should link the POD PLS with this spatial data point or not, Nick stated that I should use the PLS for the actual location that was determined by Ed Squires during the 12/22/2011 field examination, and use the actual ID Tag # D0019265 that was found welded to the well shaft.

The permit for this water right was approved prior to the 10/19/2009 Administrative Memo: Licensing No. 1, which states that a license may be issued limiting the diversion rate in combination with other rights in the municipal system to the existing capacity of the municipal system. **For this reason, the diversion rate for well #24 will be licensed at the peak demand rate that was shown for June 2004 (2000 gpm; 4.46 cfs), and no combined limits will be added to the license.**

RECOMMEND: Municipal 4.46 cfs (to meet historical peak demand shown on June 24 – 25, 2004)

POD Overlap: None. Each well was filed under a separate water right number. On 1/16/2014, an email was sent to Ed Squires suggesting that they file a transfer for the water rights connected with wells that are no longer in service, and to be able to show the system as it is currently constructed. (See attached Well #/Water Right # spreadsheet).

POU Overlap: The Municipal Service Area for the City of Meridian. (An updated shapefile for the City of Meridian will be submitted, since there was nothing linked to an Existing Large POU for this water right or to any other water rights for the City of Meridian. The shapefile in the Adjudication files is outdated and does not match the pdf shape submitted with the application for 63-31318. (See attached Well#/Water Right # spreadsheet).

On the 12/22/2011 beneficial use field examination report, page 5, under #3. Recommended Amendments, two boxes were marked: (1) Change P.D (POD) as reflected above, and (2) Remove one POD on the same lot. Reviewing the permit and was found at the time of the field examination the above issues will be handled in this manner:

- (1) The P.D (POD) on the license will be reflected as L1NENE, Sec 2, T3N R1W, instead of the QQQ designation. No amendment is required.
- (2) On the permit, there was only one groundwater source designated, and only well #24 was found at the time of the field examination, so there is nothing to remove. No amendment is required.

Date: 1/15/2014

	Shared POU (Los Alimitos Park Subdivision); not shared POD
	Abandoned wells
	Backup wells
	Water Rights
63-31630	#25 and #28, on the same water right number
63-31677	#20A and #20B, on the same water right number

1. WELL TAG NO. D 19265

DRILLING PERMIT NO.

Other IDWR No. 871697-777926

2. OWNER:

Name CITY of MERIDIAN WELL #24
Address 33 EAST IDAHO
City MERIDIAN State IN Zip 46362

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.


 Twp. 3 North ☒ or South ☐
 Rge. 1 East ☐ or West ☒
 Sec. 2 SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$
10 acres 10 acres 160 acres
 Gov't Lot _____ County ADA
 Lat: : : Long: : :

Address of Well Site 1100' South of Ustick Rd
ON WESTSIDE UNDER Rd City MERIDIAN
 (Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. _____ Name **RECEIVED**

4. USE:

☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD

☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other *REVERSE*

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or ~~Feet~~	
5/8" BENTONITE	0	432	56,000	OVER BOREHOLE POUR
* 8-76 AND 10-20 FILTER SAND	440	560	12,200	

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
17.4	+2	432	1"	PVC SDR17	☒	☒	☒	☒
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS SEE ATTACHED SHEET

Perforations

Method

Screen Type JOHNSON WIRE WRAP
S. S.

From	To	Slot Size	Number	Diameter	Material	Casing	Linear
410	435	.010		8"	S.S	X	☐
435	450	.040		8"	S.S.	X	☐
450	470	.030		8"	S.S	X	☐
470	480	.020		8"	S.S	X	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

ft. below ground Artesian pressure 2 lb.

Depth flow encountered _____ ft. Describe access port or control devices: FLANGED FOR ARTESIAN CONTROL

11. WELL TESTS:

☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
~~2000~~		~~95'~~	~~6 hrs~~
2000		95'	6 hrs

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments:

Depth first Water Encounter

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
2 1/2"	0	5	TOP SOIL		
	5	31	SAND, GRAVEL, RIVER ROCK		
	31	50	BR CLAY, SM SAND LAYER		
	50	65	YELLOW BROWN SAND		
	65	69	BRN CLAY		
	69	75	FINE BR. SAND		
	75	81	BRN CLAY		
	81	114	MED SAND, SOME CLAY		
	114	125	BRN STICKY CLAY		
	125	131	FINE-MED SAND		
	131	143	BRN SAND		
	143	145	FINE SAND		
	145	148	TAN CLAY		
	148	164	FINE-MED SAND		
	164	170	DARK BRN-BLACK CLAY		
	170	185	BRN CLAY		
	185	214	FINE SAND		
	214	225	BRN CLAY w/ SAND LAYERS		
	225	285	FINE-MED SAND		
	285	303	BRN CLAY		
	303	311	FINE-MED SAND		
	311	369	FINE-COARSE SAND w/ CLAY STREAKS		
	369	385	BRN-BLUE CLAY LAYERS		
	385	401	FINE-MED SAND		
	401	435	BLUE CLAY w/ SAND STREAKS		
	435	484	FINE-MED SAND		
	484	490	BRN CLAY		
	490	530	FINE-COARSE SAND, SOME DGA GRAVEL		
	530	535	GRAY CLAY		
↓	535	560	FINE-MED SAND w/ GRAY CLAY STREAKS		

Completed Depth 558' (Measurable)
Date: Started 3/6/02 Completed 9/25/02

13. DRILLER'S CERTIFICATION

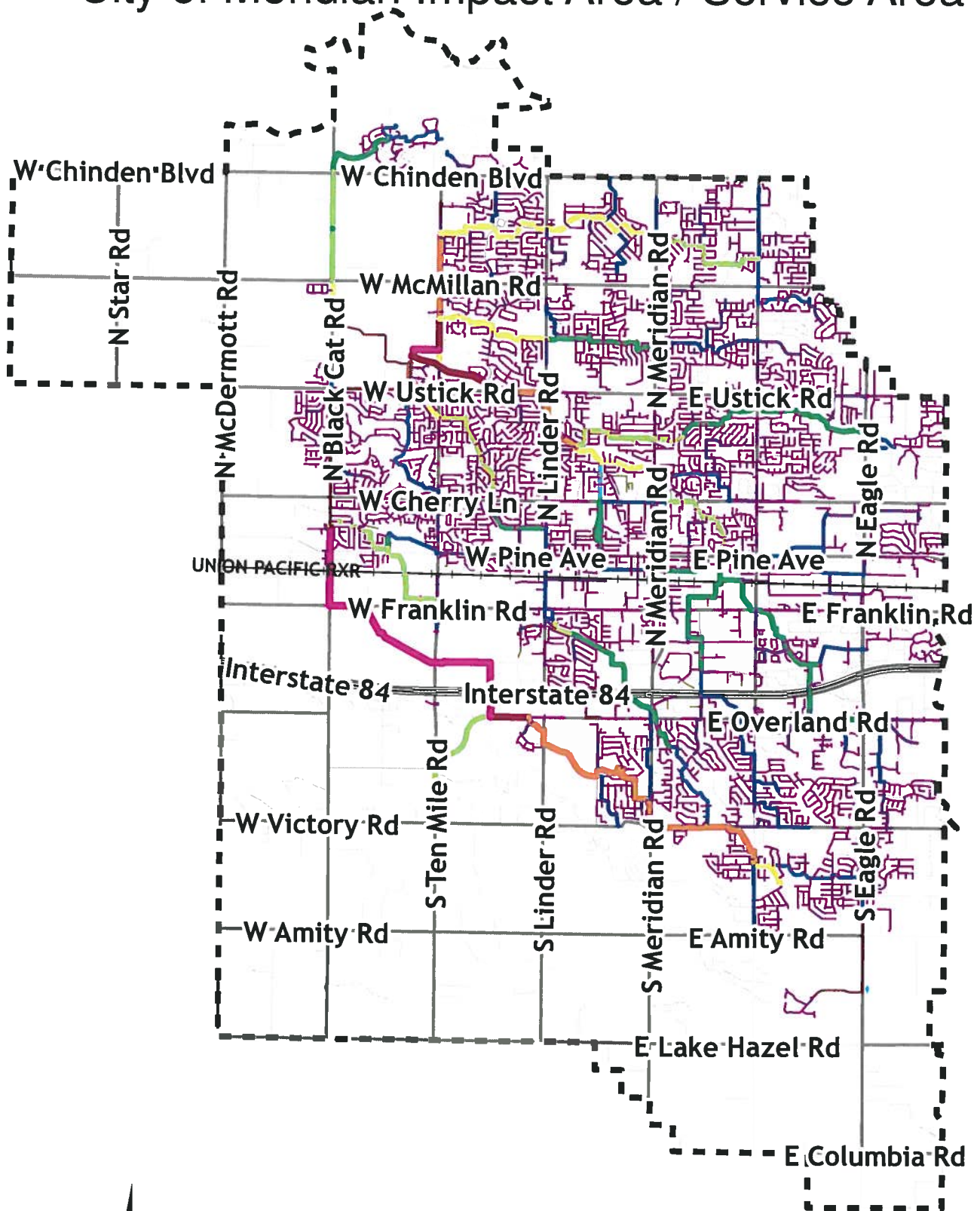
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name RIVERSIDE INC Firm No 333

Firm Official _____ Date _____
and _____
Driller or Operator _____ Date 10/23/02
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

City of Meridian Impact Area / Service Area



The Meridian water system has 21 water supply wells that are currently online or under construction. Table 3-3 provides the basic descriptions and performance of each of the wells. Permanent standby power or generator tops for potable generator sets are provided at Wells 14, 15, 16, 20, 21, 22, 23, 24, and 25, allowing the City to pump up to 14,800 gpm (21.2 mgd) of groundwater in the event of a system-wide power outage.

Wells

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TABLE 3-3
Meridian Well Data

Well No.	Location	Pressure Zone	Pump Type*	Nominal Well Capacity (gpm)	Well Status	Backup Power?
7	Crestmont Dr & NW 8th St	Zone 2	CS	950	Backup	No
8	Franklin Rd & 1st St	Zone 2	CS	500	Backup	No
9	Franklin Rd & SW 7th St	Zone 2	CS	900	Active	No
10	Jericho Rd & Willowbrook Dr	Zone 2	VS	1,100	Active	No
11	Lanark St & Locust Grove	Zone 3	VS	750	Active	No
12	Ten Mile Rd & Cherry Ln	Zone 2	CS	1,675	Backup	No
14	SE 5th St & Overland Rd	Zone 4	VS	1,000	Active	Yes
15	Sunnyslope Dr & Linder Rd	Zone 2	VS	1,550	Active	Yes
16	Eagle Rd & Rosario	Zone 3	VS	1,500	Active	Yes
17	Locust Grove & Time Zone	Zone 4	VS	1,500	Active	No
18	Summerfield & Summercove	Zone 3	VS	1,500	Active	No
19	Ten Mile Rd & Ustick	Zone 2	VS	1,700	Active	No
20	Ustick & Meridian Rd (w/ Booster)	Zone 2	VS	1,800	Active	Yes
20B	Ustick & Meridian Rd	Zone 3	VS	2,000	Under Constr.	No
21	Water Tower Lane & 1st St	Zone 2	VS	1,500	Active	Yes
22	Stoddard (Bear Creek Park)	Zone 4 (Zone 3)	VS	1,500	Active	Yes
23	Silverstone Way & Overland Rd	Zone 4	VS	2,000	Emergency Backup	Yes (Aurantium well)
24	Tumble Creek & Blue Springs	Zone 2	VS	1,800	Active	Yes
25	Victory Rd & Brandysjewel	Zone 4	VS	2,100	Active	Yes
26	Locust Grove & Dunwoody	Zone 3	VS	1,800	Under Constr.	No
27	Ten Mile Rd & Franklin Rd	Zone 2	VS	1,800	Under Constr.	No

*Pump Types: CS = Constant Speed; VS = Variable Speed

28

*FE for 63-31677 (20B): shows 20(test), 20A + 20B inside same pump house.

BO1060030007 DOC/KM

34

See Z:\Municipal-Master Water Plans\City of Meridian
for entire 2006 Water Master Plan Update