

Hydro Logic, Inc.

C068643

1002 W. Franklin Street, Boise, ID 83702 (208) 342-8369, (Fax) 342-3100, hydrologic@qwest.net

RECEIVED

APR 17 2003

April 17, 2003

Mr. Shelley W. Keen
Water Rights Supervisor
Idaho Department of Water Resources
Water Allocation Bureau
1301 North Orchard Street
Boise, Idaho 83720

Department of Water Resources

Re: Water right Amendment to Permit No. 63-31138 in the name of the City of Meridian

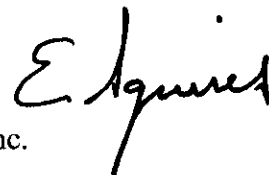
Dear Shelley:

With this letter I submit the \$50.00 fee for the City's Amendment to Permit No. 63-31138 filed with your office. As you have requested, I also include the State of Idaho Well Driller's Report for the City's existing Well #22-A on the same site. A composite as-built diagram of this well is attached to my previous letter of April 9, 2003.

Please confer with Gary Spackman at your earliest possible time because the City remains hopeful that this well can be brought on line, yet, for this peak pumping season.

Respectfully,

Ed Squires
Hydro Logic, Inc.



c: Gary D. Smith, P.E., Public Works Director City of Meridian
Gary Spackman, Western Regional Manager, IDWR

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April 9, 2003

Mr. Shelley W. Keen
Water Rights Supervisor
Idaho Department of Water Resources
Water Allocation Bureau
1301 North Orchard Street
Boise, Idaho 83720

Re: Water right Permit No. 63-31138 in the name of the City of Meridian

Dear Shelley:

Thank you for your quick response to my March 15, 2003 letter concerning proposed changes to the water-bearing zone to be appropriated by this water right. Under cover of this letter, I submit the Application to Amend a Permit and the well construction documentation for the City's existing well on the site that you requested in your March 21, 2003 letter. The following narrative is intended to clarify a possible misconception, and to address the two aspects of the Water Appropriation Rules cited by you as necessary to IDWR consideration of the City's request.

Existing data for Meridian Well #22.

The attached Figure 1 is a compilation of the geological, geophysical, groundwater quality, well construction, and hydraulic testing data for the existing Meridian #22 municipal supply well. I first direct your attention to the lithologic log and geophysical strip charts of this diagram which show the existing #22-A well is completed into sand and gravel aquifers between 545-to-667 feet below land surface. Also apparent, is the thick monotonous mudstone geologic section we drilled below 645-feet. Recall that the City's intention was to complete two deep wells (deeper than 300 feet) at this location as reflected in the water right Permit No. 63-31138. After discovering the absence of deeper aquifer units, the City would now like to complete a supply well into the aquifer zone from 185-to-300 feet below land surface. You had referenced 150-to-300 feet in your letter and I wanted to point out the difference which is an important one. The geophysical logs and geologist's lithologic log clearly document the existence of a significant clay stratum at 161-to-182 feet below land surface (bls). The precise thickness of the unit is most easily determined from the point-resistance geophysical log which is best at delimiting the exact top and bottom of individual geologic layers. The City seeks to complete a second well below this confining layer and to a depth of 300 feet (Figure 2).

Evaluation of other adjacent wells:

Figure 3 is a map showing locations of all 440 recorded existing wells within 1½ miles of the proposed Meridian #22-B well. Plotting of well-density maps are standard operating procedure for the City of Meridian as it develops new groundwater sources for its growing community. This map was developed before filing of the water right for the #22 wells to enable the City to assess well interference effects prior to purchasing the well lot. Another reason for investigating local area wells is to evaluate for nearby wells that could be tested for water quality to give the City advance notice of groundwater chemistry. To derive the attached well map, the IDWR Western Regional Office's Driller's Report files were reviewed. Every well record, for the 9 square mile area was copied and plotted.

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State of Idaho Driller's Reports for Sections 13, 14, 23, 24, 25, and 26 of T3N, R1W and Sections 18, 19, and 30 of T3N, R1E were obtained and reviewed. Driller's logs from these nine sections generally represent all wells within about 1½ miles of the proposed site. Relevant information has been distilled from all of the logs within the nine surrounding sections and tabulated in Appendix A. No wells exist within 1300 feet of the proposed #22 City well. Records for over 440 wells were on-file at the IDWR's Western Regional Office Driller's Report files. An aerial distribution, located to the nearest ¼, ¼ section is shown on Figure 4 and the deepest wells for each ¼, ¼ section are located on Figure 3 by name and depth. Although the well locations are plotted to the nearest ¼ ¼, the actual locations are mostly along the major roads in the area so that the wells are farther from the Well #22 site than they appear on the map. The rural density of the area, prior to development, is shown on Figures 5 and 6. Of the 440 wells, only 23 are deeper than 300 feet (and most of these are drilled on the 50-to-65-foot terrace south of the #22 well site) and only 20 are larger than 6-inch diameter. Of the 440 wells, only 16 are classified as other than "domestic" or monitoring wells. The distribution of the "non-domestic" wells is as follows: Three are City of Meridian municipal supply wells, two are City of Meridian monitoring wells, three are subdivision water supply wells, eleven are very shallow monitoring wells (<30 feet deep), and six are small diameter irrigation wells. One grouping of 51 wells is comprised of individual domestic supply wells for the Primrose subdivision (Section 14) averaging about 70 feet deep. Within ½ mile of the proposed well, 9 wells are recorded with IDWR that may reach the upper most portion of the target aquifer. Of these, at least one (Wright well) is mis-located, three have been abandoned by development, and the remaining five wells are a half mile away. Of the 9 wells, five are located within ½ mile of the previously advertised, and unprotected, amendment to Permit No. 63-31138 adding a point of diversion for a 150 foot well. It is typical for the City to locate this number of wells within 1½ miles of proposed well sites and in the last ten years, no well interference disputes have arisen in conjunction with new City supply wells being drilled and produced.

Based upon previous experience with drilling, hydraulic testing, and water quality sampling of deep wells in the Meridian area, it is considered unlikely that the proposed #22 City well would cause significant water-level interference effects to any existing wells.

Specific well evaluations:

The three closest wells to the proposed Meridian #22-B supply well were measured and evaluated with the permission of the individual well owners. The City had hoped to find at least one nearby well completed into the target aquifer so that it could determine groundwater chemistry parameters prior to drilling. No such wells could be located.

Critell Well. The City did find one well (Critell domestic well) completed to a total depth of 185 feet bls and located at 2875 Stoddard Road (approximately 2000 feet north of the #22 well). Wilford and Carolyn Critell were approached by the City about measuring their well. They were helpful to our study and the City provided them with all of the documented testing results. The correspondence and field notes provided to the Critell's are included as Appendix B. The Critell Well Driller's Report was not found in the IDWR file but, rather, was obtained from the well owner. Appendix C.

Wright Well. According to the Driller's Report file, there exists a 335-foot deep well in the adjoining ¼ ¼ Section (Appendix C). The Wright well is supposed to be located in SE¼, NW ¼ of Section 24. The closest possible distance to the new well is 1300 feet. Although we searched this rural area thoroughly, and contacted all local residences, the Wright well could not be located.

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A final possibility existed in a well owned by Greg Johnson. The well casing (well head) of this well was obscured from view under a line-shaft turbine discharge head. The owner, who had not had the well drilled, was unaware of a driller's log or of any particulars of depth or diameter. In hopes of finding and sampling the Wright well, the City contracted with Layne of Idaho to remove the pump motor, discharge head, and pump from the well to allow us to measure the depth and confirm it as the well in question. It was the City's intension to inspect the well with a down hole video camera to confirm the details of well construction and completion interval prior to sampling the groundwater. Upon removing the pump, it was discovered that this well had a 12-inch diameter well casing and was only 106-feet deep. Correspondence and field notes associated with the Johnson well evaluation are included as Appendix D.

The upshot is that the City thoroughly investigated nearby area wells actually looking for a well that may be completed into the target aquifer section between 185 and 300 feet bls. Finding none, the City is faced with drilling a test well to determine advance water quality or to simply drill the well and accept the resultant groundwater quality. The Critell well water chemistry has provided a glimpse of the overlying aquifer quality; which is excellent. The two wells closer than the Critell well (both owned by Greg Johnson) are very shallow with their water levels dominated by the surface water canals and drains coursing through the area. The closest well (Johnson well) is at least a quarter mile away and completed into the shallow aquifer.

The City's proposed Well #22-B continues a ten-year history of casing and sealing its wells from land surface to the top of the appropriated aquifer. The proposed well construction (Figure 2) indicates the 183-foot thick, full-depth surface seal planned for this well. This detail of construction affords the best possible means of isolating the shallower aquifers from the new well.

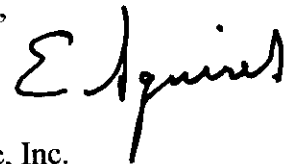
The City intends to continue to work with the Critell's and to seek their permission to monitor their well during the pump-testing of the new well. We do not expect to measure an influence over relatively short-term pumping tests, but additional water level measurements in domestic wells allow for better determinations of longer term drawdown effects and/or in the event of an interference question after the supply well comes on line.

I hope this has provided the Department with the information necessary to determine the best way to proceed with the City's water right application.

Please contact me at 342-8369 at your earliest convenience. Thank you.

Respectfully,

Ed Squires
Hydro Logic, Inc.



c: Gary D. Smith, P.E., Public Works Director, City of Meridian
Gary Spackman, Western Regional Manager, Idaho Department of Water Resources

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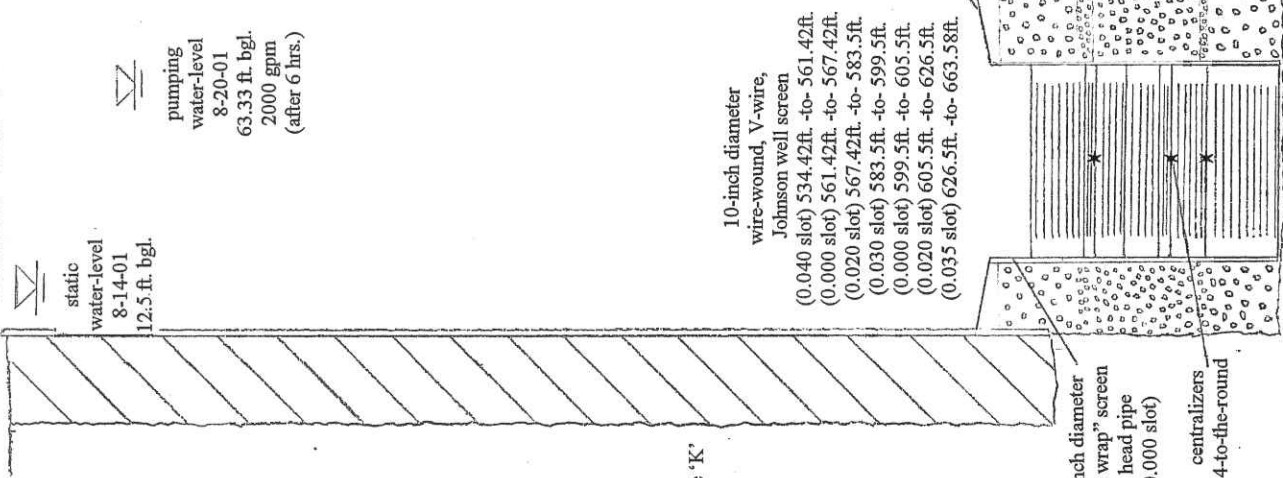
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Water Chemistry

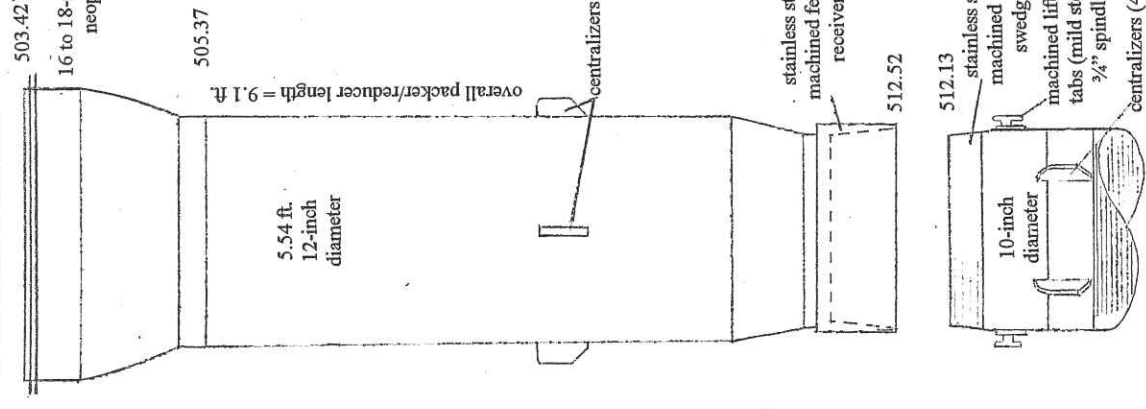
Parameter (mg/l)	Alchem Laboratories
Alkalinity Direct	99
Ammonia as N	0.88
Arsenic	<0.005
Cadmium Hardness(CuCO3)	122
Chloride	22.2
Chlorine Demand	0.17
Conductivity (umhos/cm)	418
Corrosivity	0.12
Fluoride	0.39
Hardness	151.0
Iron (diss.)	0.01
Magnesium	6.95
Manganese	0.29
Nitrate as N	<0.10
Potassium	1.90
Silica	34.7
Sodium	23.6
Sulfate	74.0
Sulfide	<0.05
Total Dissolved Solids	293.0
Total Phosphorus P	0.040
Laboratory pH (SU)	7.98
Field pH (SU)	8.10
Field Temperature °F	68.6
Total Organic Carbon	<1.0

Well Construction

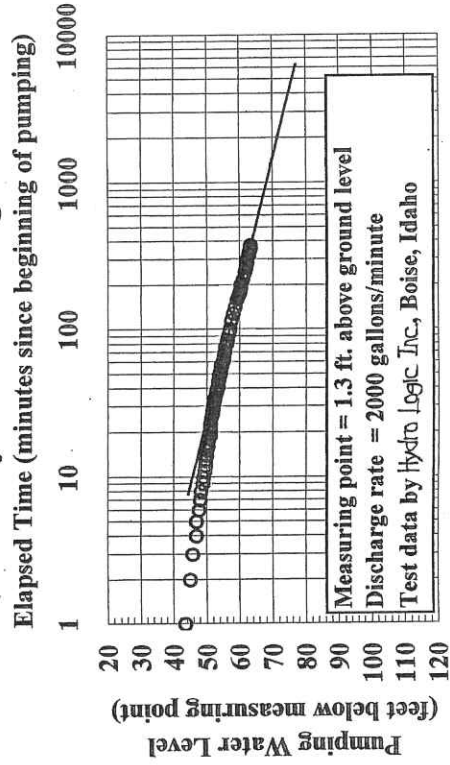
well construction scale;
horizontal scale = 0.01-inches = 1-inch
vertical scale = 1-inch = 100-feet



Detail of Removable Packer/Reducer



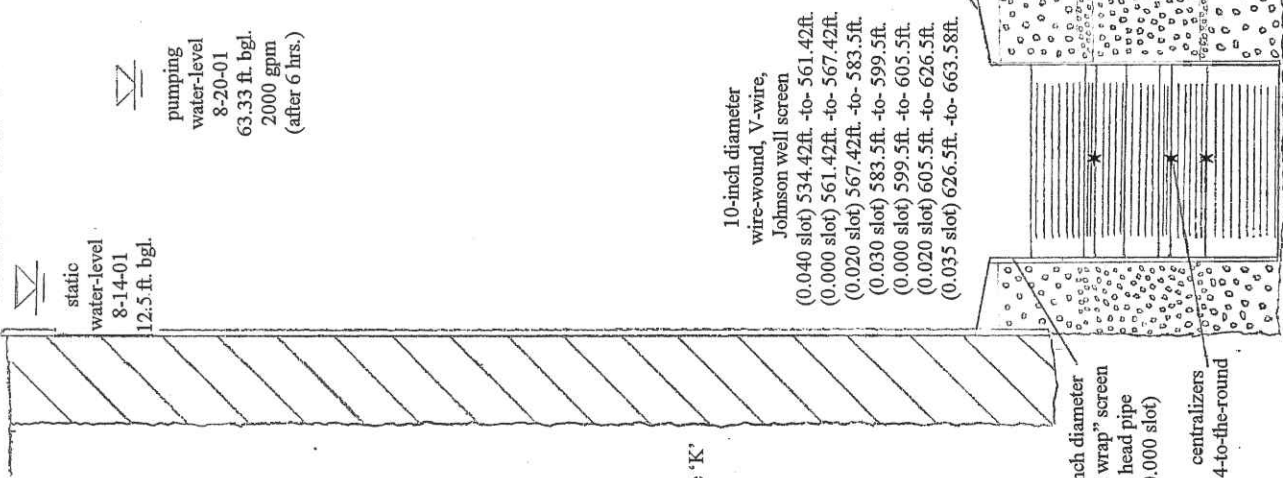
Hydraulic Testing



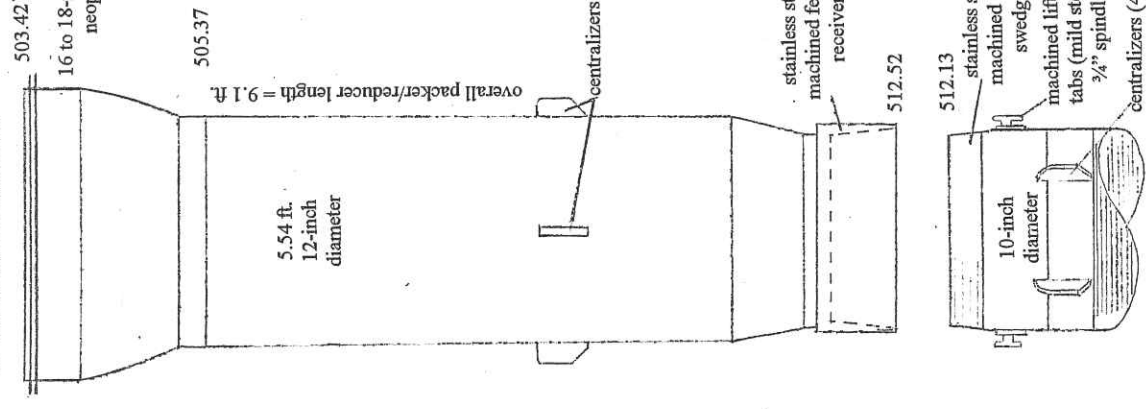
Well design and borehole geophysics by Hydro Logic Inc., Boise, Idaho.
Test Well Drilling by Stevens and Son's drilling, Boise, Idaho.
Supply well drilling and well construction by Riverside Inc. Parma, Idaho.

Well Construction

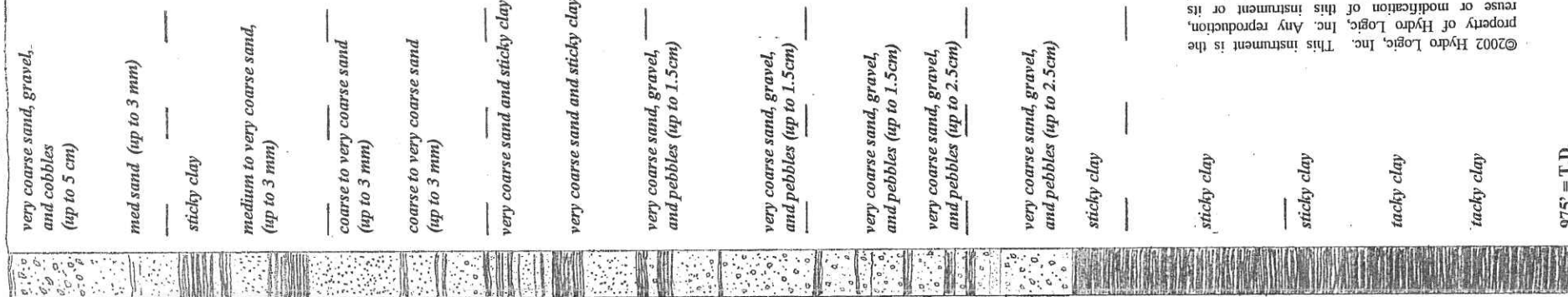
well construction scale;
horizontal scale = 0.01-inches = 1-inch
vertical scale = 1-inch = 100-feet



Detail of Removable Packer/Reducer



Lithology



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



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Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



Depth (feet below ground level)



CITY OF MERIDIAN WELL #22B

PROPOSED CONSTRUCTION

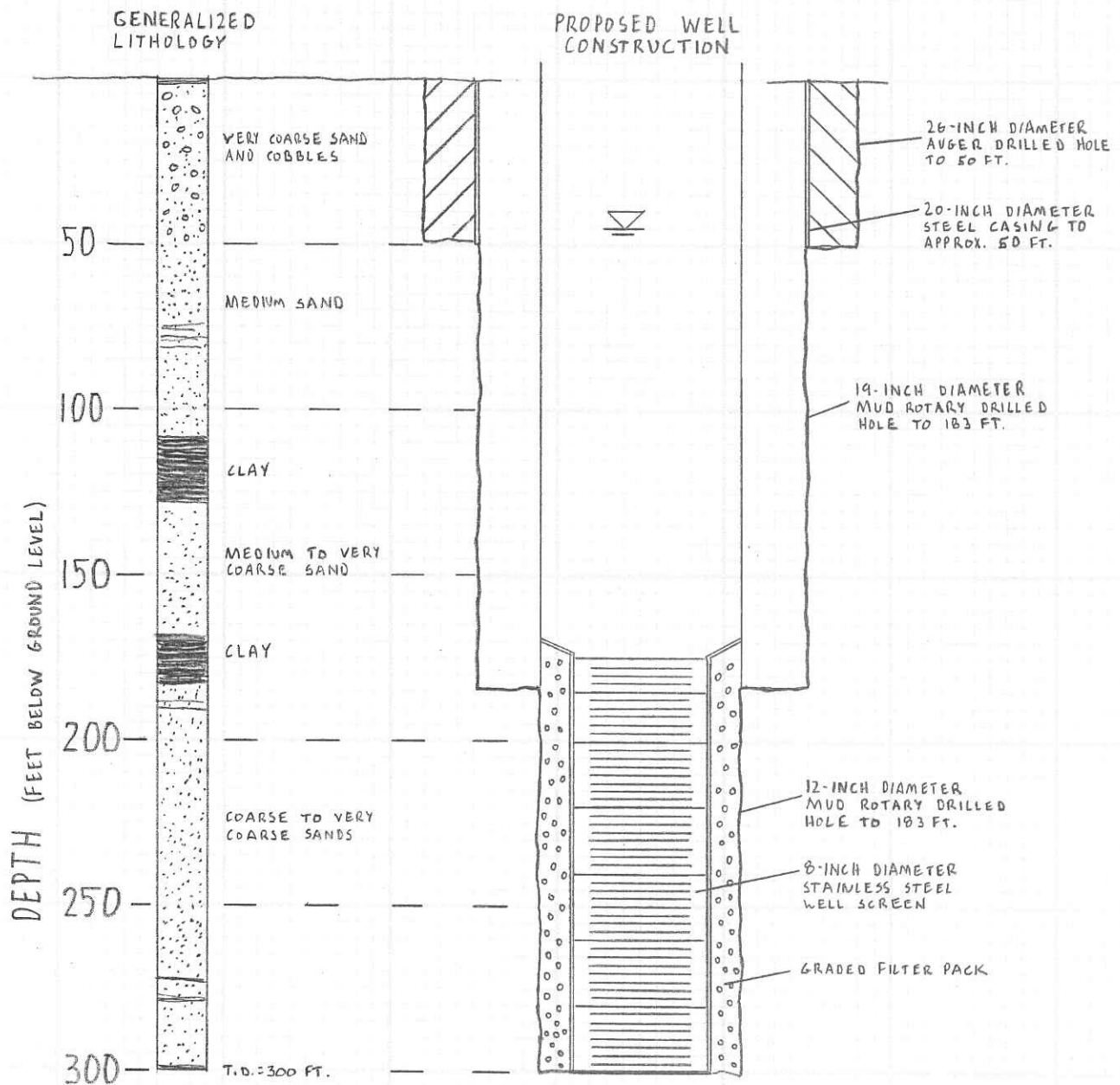
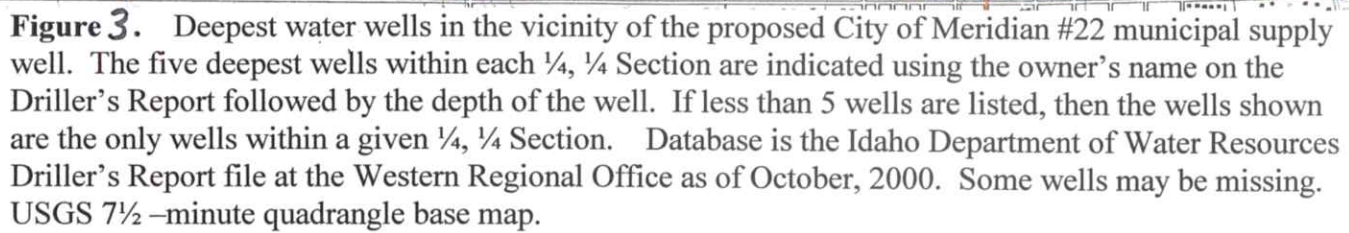


Figure 2.



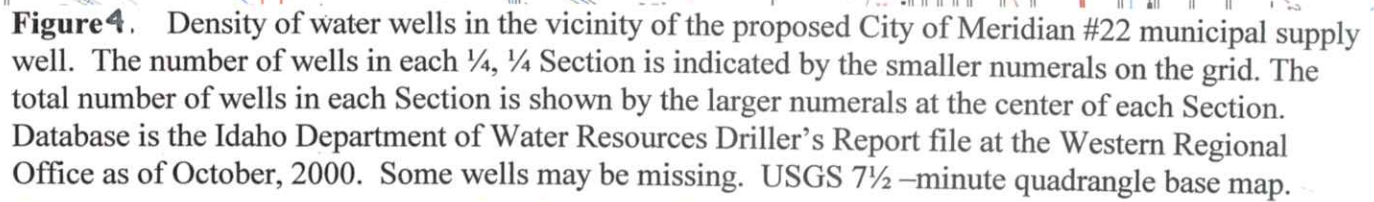


Figure 4.



Figure 5. Photographs of the proposed City of Meridian #22 well site and adjacent property. Upper photo is looking north, across the proposed property, to houses and businesses along Overland Road. White truck is parked along Stoddard Road at the Hardin Drain. Lower picture is looking southeasterly from the Hardin Drain and across the future well site. Farm buildings over truck have been removed.

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Figure 6. Upper photograph looks east, directly across the proposed City of Meridian #22 well site, from Stoddard Road (foreground). Lower view is looking west across the well site with Stoddard Road in the background. Abandoned dairy buildings visible in upper right of photo.

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Appendix A.

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CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanagh

DATE 10-30-00

SUBJECT

T3N RIW Sec 23

SHEET 1 OF 2

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	Use	Yield/dd	1/4	1/4	Diameter	Casing depth	Opening	
Weast	98	207	110	AR	SOS	18	B	D	100/5	NW	NW	6	208	SS 208	
Weast	92	249	105	R	Can-Ada	30	B	D	150/- P.L. 242	NW	NW	6	239	SS 249	
Kehoe	93	241	109	RLC	Coonse	18	B	D	34/- P.L. 120	SE	NW	6	239	SS 239	
Chaney	69	250	110	C	Cowe	18	PC	D	25/-	SW	NW	6 1/5	250	perfs 250	
McKinzie	75	300	100	C	Gailey	18	PC	D	-	SW	NW	6	270.5	OH	
Majors	94	221	68	AR	Phipps	18	B	D	30/30	SW	NW	6	221	SS 221	
Amend	98	92	6	AR	Adamson	18	B	D	60/-	NW	NE	6	84	SS 92	
Shearer	98	125	12	AR	Adamson	18	B	D	100/-	NE	NE	6	125	SS 125	
Burks	85	101	65	AR	Davis	20	B	D	-	SE	NE	6	98.5	OH	
Olson	70	145	66	C	Hunsperger	?	PC	S	20/-	SW	NE	6	137	OH	
Hickey	90	166	78	AR	Adamson	20	B/PC	D	60/-	NW	SE	6 1/5	160	SS 166	
Irish Quality Builders	93	238	?	RLC	Coonse	18	B	D	35/- P.L. 130	NW	SE	6 1/5	230	SS 236	
Whitmire Const.	93	304	88	AR	Adamson	30	B	D	125/- P.L. 294	NW	SE	6 1/5	283	SS 296	
Whitmire	93	297	88	AR	Adamson	30	B	D	100/- P.L. 295	NW	SE	6 1/5	297	SS 297	
Diggs	93	153	104	AR	Davis	20	B	D	-	NW	SE	6 1/5	153	SS 153	
Hardward	76	166	100	C	H2O Well drilling	20	PC/WC	D	25/10	NW	SE	6	158	OH	
Testar	80	305	120	C	Johnston	30	PC	D	30/- P.L. 1140	NW	SE	6	300	OH	
Whitney Homes	98	257	90	AR/PC	Phipps	20	B	D	30/-	NE	SE	6 1/5	247	SS 235-	
Smith	98	214	86	AR	S.O.S.	18	B	D	40/- P.L. 180	NE	SE	6 1/5	214	SS 204	
Murgento	73	150	37	C	Engleman	45	PC	D	40/-	NE	SE	6 1/5	163	SS 160-	
Daly	84	197	105	C	Coonse	18	PC	D	20/- P.L. 105	NE	SE	6 1/5	197	SS 192	
Schallkopf	94	172	81	AR	Adamson	30	B	D	75/-	NE	SE	6 1/5	172	SS 167	
Mandola	96	274	83	AR	Can-Ada	18	B	D	100/- P.L. 269	SE	SE	6 1/5	274	SS 269	
Jewett	93	215	75	RLC	Phipps	18	B/PC	D	35/-	SE	SE	6 1/5	214	SS 202	
Jewett	93	252	90	RLC	Phipps	18	B/PC	D	35/-	SE	SE	6 1/5	252	SS 245	
Whitmire	98	280	180	AR	TV Drilling	18	B	D	100/240	SE	SE	6 1/5	280	SS 265	
Elliot Const	95	186	90	C	Basie Valley	20	B	D	100/- P.L. 180	SE	SE	6 1/5	186	SS 179	
Exchange Ent	76	103	20	C	Middleton	20	PC	D	-	SE	SE	6 1/5 1/8	103	SS 98	
Matherly	76	155	20	C	Middleton	21	PC	D	-	SE	SE	6	155	SS 150	
J & J Const.	93	200	160	AR	Cope	20	B	D	30/- P.L. 190	SE	SE	6	200	OH	
Estop Const.	94	217	90	C	Phipps	20	B	D	40/-	SE	SE	6 1/5	212	SS 204	
Bastian	94	226	105	AR	Coonse	20	B	D	40/- P.L. 210	SE	SE	6 1/5	228	SS 221	
Christensen	93	219	90	RLC	Phipps	18	PC	D	65/-	SE	SE	6 1/5	219	SS 212	
Lorkin	93	270	113	AR	SOS	46	B	D	100/- P.L. 130	SE	SE	6 1/5	270	SS 260	
Jewett	93	206	90	C	Phipps	18	B/PC	D	55/-	SW	SE	6 1/5	205	SS 199	
Moorehouse	93	305	90	RLC	Phipps	18	B/PC	D	27/-	SW	SE	6 1/5	305	SS 298	
Sunrise Homes	00	243	102	AR	Precision	18	B	D	150/-	SW	SE	6	243	SS 238	
Olson	99	185	96	AR	Treasure Valley	18	B	D	50/170	SW	SE	6 1/5	177	SS 176	
Hardee Const.	95	239	90	AR	Phipps	18	B	D	30/30	NW	SW	6 1/5	238	SS 233	
Testar ?	?	240	100	C	?	20	?	I	-	NW	SW	8	240	?	
McKinzie	72	325	97	C	Broomfield	18	PC	C	17/-	NW	SW	6	322	OH	
Haws	93	262	105	AR	Cope	18	B	D	40/- P.L. 140	NW	SW	6	162	OH	
Sawett	93	218	110	AR	Can-Ada	18	B	D	50/- P.L. 213	NW	SW	6	218	SS 213	
Haws	92	210	105	AR	Cono	18	B	D	60/-	NW	SW	6	208	OH	

T=55°F Iron 1 grain 1/2 pH

166 gravel 265-290 gravel

235-245 sand 204 sand & gravel 210

T=56°F pea gravel 169-

pea gravel 208-21

CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanagh

SUBJECT

DATE 10-30-00

T3N RIW Sec 23

SHEET 2 OF 2

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	USE	Yield/d	1/4	1/4	Diameter	Casing Depth	Opening	
Zillner	93	313	180	AR	S.O.S.	-	-	D	50/20	NE	SW	6 1/4	313	293	deepened from 180
Hunt	93	226	100	R/C	Phipps	18	B/PC	D	35/-	NE	SW	6 1/5	226	SS 219	
Henry	95	267	90	AR/C	Phipps	20	B	D	50/-	NE	SW	6 1/5	267	SS 260	
Hickey	92	160	21	AR	Adamson	20	B	D	150/-	NE	SW	6	?	?	Iron: 10+
Gifford	70	190	90	C	Randall	-	-	D	10/-	NE	SW	6	190	SS 187	PH: 7.5 Gr.: 10
Larsen	79	182	80	C	O'Leary	19	PC	D	38/- RL: 97	SE	SW	6	179	SS 173	178-182 sand & g.
Lewis	94	241	95	AR/C	Phipps	20	B	D	40/-	SE	SW	6 1/5	241	SS 229	
Freutel	95	178	105	AR	Can-Ada	18	B	D	60/20	SE	SW	6	176	OH	
Leavell	96	222	85	AR	Can-Ada	18	B	D	200/- RL: 215	SE	SW	6 1/5	222	SS	SS = 201-211, 215-
McGreer	92	197	100	R/C	Phipps	?	B/PC	D	20/-	SE	SW	6 1/5	197	SS 195	
Bills	87	269	110	C	Boise Valley	18	PC	D	50/- RL: 250	SE	SW	6 1/5	269	SS 262	pygravel 255-21
Morton	92	251	110	R/C	Phipps	18	B/PC	D	70/-	SE	SW	6 1/5	251	SS 249	
Viking	68	181	181	C	Clayville	22	B	D	40/-	SW	SW	4 1/3	181	SS 178	
Smartt	92	183	75	AR	Hiddeston	52	B	I	75/-	SW	SW	6 5/8	183	SS 183	
Przybos	96	255	108	AR	Doty	18	B	D	20/- RL: 240	NE	SW	6	152?	OH?	
Carlson	77	402	89	C	O'Leary	22	PC	D	14 / ?	NW	SE	6 3/8	400	SS	SS = 168-173
Wendell	77	201	100	C	H2O	40	PC/WL	D	30/103	NW	SE	6	201	SS	SS = 197-201
Schapeacher	76	178	117	C	Hudson	30	WL	D	30/118.5	NW	SE	6	164	SS	SS = 167-172
Hardward	76	145	110	C	H2O	18	PC/WL	D	15/120	NW	SE	6	145	OH	
Hardward	76	107	50	C	H2O	18	PC/WL	D	25/58	SW	NE	6	104	OH	
Griat	73	267	90	C	Engleman	69	PC	D	60/?	NE	SE	8 1/5	267	SS	SS = 257-267
Salomonsen	74	155	105	C	Hunsperger	38	WL	D	-	NE	SW	6	153	OH	
Cook	74	220	90	C	"	30	WL	D	20/?	SW	NE	6 1/5	215	SS	SS = 215-27
Roark	75	130	90	C	"	34	WL	D	20/95	NE	SE	6 1/5	125	SS	SS = 125-13
Cook	75	230	115	C	"	30	WL	D	20/127	SE	NE	6 1/5	225	SS	225-230
Ross	75	200	110	C	"	48	WL	D	20/112	NW	NW	6 1/5	200	SS	SS = 192-19
Jones	75	132	100	C	H2O	30	WL/PC	D	14/110	NW	SE	6	132	OH	
Fuller	75	80	60	C	H2O	18	PC/WL	D	15/64	SW	NE	6	80	OH	
Ham	75	204	110	C	Hunsperger	48	WL	D	30/?	NW	NW	6 1/5	199	SS	SS = 199-204 sand/gravel
Graves	75	140	85	R	S.O.S.	115	WL	D	10/95	NW	SE	6	121	OH	
Lacey	67	185	97?	C	Witt	-	-	D	20/105?	SW	SW	6	?	OH	
Manze	68	220?	10?	C	?	-	-	D	-	SW	NW	6	?	OH	
Weast	62	232	80	?	Veatch	-	-	D	15/85	NW	NW	4	223	Screen	
Clancy	65	105	?	?	Witt	-	-	IR	60/?	NW	NW	6	97		
Reed	68	217	75	R	B+M	-	-	D	-	SW	NW	6	207	perf	P = 167-207
Spriet	76	138	100	C	H2O	18	PC/WL	D	15/110	SW	NE	6	138	OH	

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JUN 02 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanagh

SUBJECT

DATE 4-19-00

Sec 24 T3N R1W

SHEET 1 OF 2

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	use	Yield (gpm) d	1/4	1/4	Dia- meter	casing depth	opening	
Smith	73	278	12	C	Crescent	35	PC	D	60/16	NW	NW	6	274	OH	sand-gravel 275-27
Hedrick Const.	71	206	2	C	Hudson	39	PC	D	100, 35/-	NW	NW	4'	196	OH	
Hedrick Const.	70	165+	14	C	Hudson	?	PC	D	40/-	NW	NW	6	160	OH	
Taylor	79	128	20	C	Gen State	25	WC	S	50/10	NW	NW	6	127'9"	OH	
Penfield	98	144	17	AR	S.O.S	18	B	D	40/- ^{ALL 40}	NW	NW	6	139	OH	
Stewart	66	115	23	C	Baker	?	concrete	I	5850?/45	SE	NW	12/10	115	peas 75 114	111-115 sand gravel
King	91	175	?	AR	Adams	20	B	D	258/?	NE	NW	6	158	OH	
Streib	80	60	13	C	Bonn	18	WC	D	20/1.8	NE	NW	6	60	SS 55 60	
Kingston	95	84	15	AR	Davis	20	B	D	-	NE	NW	6	78	OH	
Lieghton	77	815	30	R	H2O	30	WC/PC	D	75/50	SW	NW	6	205	OH	
Adams	75	358	70	C	Phipps	18	WC	D	-	SW	NW?	6	340	OH	deepened from 295
Adams	75	295	140	C	Phipps	18	WC	D	-	SW	NW?	6	295	SS 295 324	sand & gravel 165-168, 283-295
Wright	72	335	62	C	Engleman	20	PC	D	12 35 40 106	SE	NW	6	335	SS 332 147.5	
Beal	71	155	83	C	Engleman	20	PC	D	20/?	SE	NW	6/5	155.5	SS 152.5	
Hagete	73	81	50	C	Davis	46	PC	D	-	NW	NE	6	81	OH	
Scott	67	212	17	C	Clayville	12	clay	D	150/-	NW	NE	6/5	312	peas 202 212	gravel 195-212
Ratcliff	85	92	62	RA	Davis	20	B	D	-	NE	NE	6	92	OH	Red cinders, 69-149
Warren	85	80	55	RA	Davis	20	B	D	-	NE	NE	6	78.5	OH	" 7-46
Wethman	81	93	63	RA	Davis	20	PC/WC	D	-	NE	NE	6	94.5	OH	" 6-63
Davenport	63	197	7	-	Verch	-	-	D	20/7	NE	NE	4	194	-	7-51
Levy	82	205	75	C	Phipps	18	WC	D	50/-	NW	SW	6/5	205	SS 205 150	sand & gravel 177-205
Moffat	96	155	77	AR	Adams	18	B	D	60/-	NW	SW	6/5	155	SS 155	7-60 Fe 1.0, pH 7.5, 11 grains
Rushold	75	145	60	C	Randall	18	WC	D	-	NW	SW	6	139	OH	
Slathave	70	160	90	C	Broomfield	30	PC	D	15/-	SW	SW	6	151'9"	OH	
Nelson	76	238	79?	C	Broomfield	18	PC	D	?	SW	SW	6	?	?	
Fidgott	70	154	79	C	Broomfield	24	PC	D	?	SW	SW	6	157?	?	
Eggers	71	105	70	C	Boise River	27	PC	D	22/7	SW	SW	6	97	OH	103-105 per gravel
Lloyd	79	145	110	RA	H2O	20	PC/WC	D	45/-	SW	SW	6	140	OH	
Worshing	?	126	82	C	Prow?	?	PC	D	15/-	SW	SW	6	?	?	
Snyder	89	135	14	RA	Davis	20	B	D	-	SW	SW	6	128.5	OH	
Caufield	87	270	73	C	Boise Valley	-	-	D	30/126	SW	SW	6/5	272	SS 265 270	sand & gravel 254-270
Ware	72	150	78	C	Broomfield	18	PC	D	15/-	SW	SW	6	147	OH	
Adkins	93	149	35	R/C	Phipps	18	B/PC	D	35	SW	SW	6/5	149	SS 147	
Plott	97	172	45	AR	Treasure Valley	18	B	D	60/140?	SW	SW	6	167	OH	
Kosh	70	145	88?	C	Prow	26	B	D	15/-	SW	SW	6	145	OH	
ending? Inc.	70	132	?	C	Prow	?	B	?	90 gph	SW	SW	?	132	OH	
Seese?	68	199	100	C	Rodell	30	clay	?	-	SW	SW	6	189	OH	
Schoen?	64	168	100	?	Doty	?	?	D	-	SW	SW	4	158	OH?	
Brown	89	130	24	AR	Davis	20	B	D	-	SW	SW	6	124	OH	
Snyder	89	135	14	AR	Davis	20	B	D	-	SW	SW	6	128.5	OH	
DonFas	80	350?	76?	C	Prow	18	PC	D	20/-	SE	SW	6	314	OH	
Petty	84	207	70	C	Coarse	18	PC	D	22/PL-85	SE	SW	6	203	SS 203	
Scott	78	355	45	RA	H2O	25	PC/WC	D	150/?	SE	SW	6	246	OH	

MICROFILMED
JUN 02 2003

		CALCULATIONS AND DESIGN DATA		PREPARED BY B. Cavanagh	
SUBJECT				DATE 5-9-00	
Sec. 24, T3N, R1W				SHEET 2 OF 2	

name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	use	Yield dd	1/4	1/4	Dia-meter	casing depth	opening	
Repe	90	138	75	R	Can-Ada	18	PC	D	45/P.L.=130	SE	SW	6	137	OH	
Critell	89	185	42	C	Boise Valley	20	PC	D	35/P.L.=90	SE	SW	6	180	OH	
Moore	87	295	95	C	Coonse	20	PC	D	20/P.L.=110	SE	SW	6 1/5	282	SS 288 293	
Chapman	89	284	65	C	Phipps	18	PC	D	40/P.L.=90	SE	SW	6 1/5	270	SS 271 281	sand & gravel 271-281
Spencer	90	126	64	R	Can-Ada	20	PC	D	60/P.L.=119	SE	SW	6	125	OH	
Rosenbaum	89	259	90	C	Phipps	18	B	D	25/P.L.=120	SE	SW	6 1/5	251	SS 254 259	
Titmans	89	284	78	C	Boise Valley	20	PC	D	40/P.L.=280	SE	SW	6	278	OH	
Lovan	76	119	62	C	Holbert	20	PC	D	15/0	N 1/2	SW	6	119	OH	
Thumble	80	234	80	C	Phipps	18	WC	D	20/-	NW	SE	6 1/5	234	SS 234	
Wilson	79	180	70	R	Davis	20	PC	D	-	NW	SE	6	164.5	OH	
Lacy	90	235	40	C	Phipps	18	B/PC	D	60/-	NW	SE	6 1/5	233	SS 223 233	
Pryor	86	241	72	R	Can-Ada	18	PC	D	60/P.L.=220	NE	SE	6	239.3	OH	sand & gravel 239-24
Tamlin	80	145	20	C	Phipps	18	B/PC	D	25/-	NE	SE	6 1/5	144	SS 139 144	
Rose	69	155	75	C	Doty	20	PC	D	125/20	SW	SE	6	138	OH	
Emmerson	92	162	82	R	S.O.S.	18	B	D	75/P.L.=92	SW	SE	6	142	OH	sand & gravel 142-162
Deffries	95	273	85	AR	Treasure Valley	20	B	D	100/160	SW	SE	6	270	OH	
Chine	79	60	18	C	Hunsperger	27	WC	D	30/12	SE	SE	6	60	OH	
Painter	72	225	30	C	Broomfield	24	PC	D	20/4	SE	SE	6	220.5	SS 200 225	sand & pea gravel 215-2
Fobes	81	160	76	R	Davis	20	PC	D	-	NE	SE	6	153.5	OH	
Hepper	76	99	35	C	Randall	18	PC/WC	D	?	SE	SE	6	99	SS 92 99	
FOX	71	93	22	C	Boise River	33	PC	D	22/9	SW	SW	6	92	OH	

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1994 0 2 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY
B. CAVANAGH

SUBJECT

DATE
10-24-00

Sec 30 T3N R1E

SHEET 1 OF 2

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal type	Use	Yield/dd	1/4	1/4	Diameter	Casing depth	Opening	
Carter	81	141	78	C	Boise Valley	18	?	D	40/3 P.L. 120	NW	NW	6	141	OH	
Sorenson	71?	97	40	C	Phipps & Son	18	PC	D	-	NW	NW	6	97	OH	
Sorenson	70	124	41	C	Phipps	18	PC	D	-	NW	NW	6	124	OH	
Sorenson	70	141	35	C	Phipps	18	PC	D	-	NW	NW	6	141	OH	
Sorenson	70	150	65	C	Phipps	18	PC	D	-	NW	NW	6	150	OH	
Sorenson	70	120	40	C	Phipps	18	PC	D	-	NW	NW	6	120	OH	
Sorenson	70	118	42	C	Phipps	18	PC	D	-	NW	NW	6	118	OH	
Sorenson	70	125	40	C	Phipps	18	PC	D	-	NW	NW	6	125	OH	
Sorenson	70	140	65	C	Phipps	?	PC	D	-	NW	NW	6	140	OH	135 perfs 140
Gleason	70	141	60	C	Phipps	18	PC	D	-	NW	NW	6	141	OH	
Sorenson	70	154	64	C	Phipps	18	PC	D	-	NE	NW	6	154	OH	
Pooler	82	143	61	C	Boise Valley	18	PC	D	20/- P.L. 130	NE	NW	6/5	143	OH	133 perfs 142
Fryler	77	102	60	C	B&D	18	PC	D	18/0	NE	NW	6	89'6.5"	OH	
Sorenson	71	136	60	C	Phipps	20	PC	D	-	SE	NW	7	136	OH	
Sorenson	71	115	60	C	Phipps	20	PC	D	-	SE	NW	7	115	OH	
Sorenson	71	131	60	C	Phipps	20	PC	D	-	SE	NW	7	131	OH	130
Russell	77	150	85	R	S.O.S.	20	WC	D	40/35	SE	NW	8	150	OH	150 PVC 150 deepened from 150
States Inv.	77	282	70	R	S.O.S.	20	WC	D	100/50	SE	NW	8	272	OH?	
States Inv.	78	340?	90	C	Can-Ada	18	PC	1rr.	75/- P.L. 95	SE	NW	8	330	OH	
Baskold	77	137	70	C	Randall	18	WC	D	-	SE	NW	6	137	OH	
Walker	71	145	60	C	Phipps	20	PC	D	-	SW	NW	6	139	OH	
Sperlin	70	146	54	C	Phipps	18	PC	D	-	SW	NW	6	146	OH	140
Knight	84	147	30	C	Boise Valley	20	PC	D	60/- P.L. 140	NW	NE	6	138	OH	SS 145
Spencer	84	82	15	AR	Skinner	52	PC	D	20/- P.L. 30	NE	NE	6	79	OH	
Miller	72	110	70	C	Randall	-	-	D	25?/92	SW	NE	6	101	OH	
Hadly (McPersons)	70	145	35	C	Randall	18	PC	D	-	SE	SE		149	OH	SS 144-149
Meridian School	86	280	110	AR	Doty	20	B	school	250/- P.L. 220	SE	SE	8/5	260	OH	SS 260-269 24 perfs 260
Lewis	68	132	31	C	S&H	18	B	D	100/?	SE	SE	6	132	OH	
Lewis	68	104	31	C	S&H	18	B	D	70/-	SE	SE	6	104	OH	
Interwest	88	89	45	C	Hunsperger	30	PC	D	20/17	SE	SE	6/5	94	OH	SS 89-94
Interwest	87	75	42	C	Hunsperger	24	PC	D	-	SE	SE	6	75	OH	
Baker	90	53	15	R	Can-Ada	20	B	D	50/- P.L. 47	SE	SE	6	53?	OH	13 perfs 53-59
Machard	88	270	125	C	Phipps	18	B/PC	D	25/-	SW	SE	6/5	262	OH	SS 267-269 80 perfs 265
Estep	77	85	47	C	Hunsperger	22	WC	D	25/17	NW	SW	6/5	85	OH	
Micklis	71	85	26?	C	Boise River	27	PC	D	22/6	SW	SW	6	83	OH	
Micklis	71	84.5	28	C	Boise River	25	?	D	20/22	SW	SW	6	84	OH	
Hepper	70	86	8	C	Boise River	20	?	D	20/1	SW	SW	6	85	OH	55- ship made screen
McFall	70	147	-	C	Phipps	18	PC	D	-	?		6	147	OH	
Rock Const.	79	290	103	C	O'Leary	18	PC	D	35/10	S		6	289	OH	SS 284-289
Beshold?	77?	137	70	C	Randall	18	WC	D	?	S?	NW?	6	137	OH	
IDaho Power	00	21	12	HSA	Haz-Tech	9	B	Mon.	-	NE	NE	2	11	OH	PVC 11-21

MICROFILMED

FINAL FILE 00000

SUBJECT		CALCULATIONS AND DESIGN DATA		PREPARED BY L. Huter		DATE 1-9-01	
Sec 30 T3N R1E						SHEET 2 OF 2	

Name	Year	Depth	SwL	Method	Driller	Seal Dish	Seal Type	USE	Yield/DO	1/4	1/4	Diameter	Casing Depth	Opening	
Agnew	93	99	55	RA	Hiddleston	50	B	D	30/ ?	SW	SW	6/5	94	SS	SS = 94-99
Amx	92	224	53	C	Boise Valley	20	PC	D	40/PL 225	SW	SE	6/5	234	SS	SS = 227-232
Amx	93	221	80	C	Boise Valley	20	B	D	50/PL 200	SE	SE	6/5	221	SS	SS = 214-219
Buttons	95	179	25	RA	Phipps	18	B	D	30/35	NE	NW	6	168	SS	SS = 171-176
Compton	97	178	115	C	Phipps	-	-	D	30/145	SE	SE	6	167	SS	SS = 168-178 Deepened
Cherry Lane	94	140	60	RA	Knize	18	B	D	50/65	SE	SE	6	120	SS	SS = 130-140
Culligan Con.	95	231	47	RA	Hiddleston	60	B	D	60/ ?	SW	SW	6/5	226	SS	SS = 226-231
Flynn	75	99	45	C	Phipps	18	WC	D	-	SE	SE	6	99	OH	
Hepper	93	171	12	C	Boise Valley	20	B	D	75/PL 165	SE	SE	6/5	171	SS	SS = 164-169
Interwest	88	78	44	C	Hunsperger	28	B	D	20/PL 53	SE	SE	6	73	OH	
Lewis	69	100	31	C	S + H	19 ?	B/C	D	75/ ?	SE	SE	6	95	OH	
Majors	92	233	45	C	Phipps	18	B	D	30/PL 90	NW	SE	6	227	SS	SS = 222-227
Majors	92	258	45	C	Phipps	18	B	D	30/PL 90	SW	SE	6	253	SS	SS = 253-258
Marcum	93	145	92	RA	Hiddleston	40	B	D	35+/ ?	SW	SW	6	137	SS	SS = 137-141
Merit	94	210	30	RA	Phipps	18	B	D	35/ 31	SW	SE	6	302	SS	SS = 303-308
Mondt	93	302	52	RA	Hiddleston	40	B	D	50+/ ?	SW	SW	6	295	SS	SS = 295-300
Olsen	91	78	30	C	Boise Valley	18	PC	D	60/PL 55	NE	SW	6	73	OH	
Perry	76	105	55	C	Hunsperger	20	WC	D	22/ 65	SW	NW	6	105	OH	
Sanchez	62	45	52	-	Clayville	-	-	D	-	SE	SE	-	-	OH	
Sturgis	93	295	37	RA	Anderson	30	B	D	150/PL 278	SE	SE	6	276	SS	SS = 280-295

MICROFILMED
JUN 2 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanagh

SUBJECT

DATE 10-7-99

SEC. 19 T3N R1E

SHEET OF

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	use	Yield	1/4	1/4	Dia.	casing depth	opening	
Fawcett	90	141	20	C	Phipps	18	PC/B	D	70/-	NW	NW	6	139	SS 134	
City of Merid.	92	515	23	C	Stevens	40+	B	M	?	NE	NW	12-16-10	515	SS	SS to 272-500 gravel - 420'
Border	70	125	75	C	Phipps	18	PC	D	?	NE	NW	6	125	OH	
City of Merid.	92	620	?	MR	Stevens	20	B	Mon.	-	NE	NW	6/3	510	SS 490 510	
Dunton	71	252	13	C	Kelsey	150	PC	D	120/-	SW	NW	6	252	SS 246 252	
Henke	71	93	45	C	Phipps	18	PC	D	-	SW	NW	6	93	OH	
Edmonds	75	80	20	R	Treasure Vally.	20	PC	D	-	SW	NW	6	80	OH	
Hedrick Const.	72	105	15	C	Hudson?	32	PC	D	50/-	SW	NW	5/4.5	105	SS 90 105	
Edmonds	75	80	33	R	Treasure Vally.	20	PC	D	-	SW	NW	6	80	OH	
Lusk	81	123	60	C	Phipps	18	WC	D	40/40	NW	NE	6	121	OH	
Kastner	78	71	60	C	O'Leary	44	LWC	D	50/-	SE	NE	6	71	OH	
Burch	96	134	85	AR	Treasure Vally.	18	B	D	60/120	SE	NE	6	132	OH	lava 18-50 red cinders 50-70
Wait	72?	135	15	C	Randall	18	PC	D	-	SW	NE	6	124	OB 124 135	
Woodington	86	213	20	R	Can-Ada	19	PC	D	40/20 150/180	NE	SE	6	209.5	OB 209.5 213	
Peterson	69	155	44	C	Clayville	36	PC	D	35/-	NE	SE	6/5	150	SS 150 155	
Overton	87	96	27	R	Can-Ada	18	PC	D	38/63	SE	SE	6	90	OB 99- 96	
Embury	72	96	19	C	Randall	18	PC	D	-	SW	SE	6	89	OB 89- 96	
Glenn	94	195	25	AR	Phipps	30	B	D	65/-	SE	SE	8/5	195	SS 182 193	red sand & gravel 11'
Marlow	94	151	35	C/AR	Phipps	20	B	D	22/-	NW	SW	6/5	151	SS 146 151	red sand 112-120 sand & gravel 5-101'
Terrel	77	101	58	C	BVPAD	18	PC	D	44/?	NE	SW	8	100	OH	
Heaton	77	65	5	C	Hunsperger	30	WC	D	40/10	NE	SW	6	62	OH	
Gray	73	187	80	C	Randall	18	PC	D	-	SE	SW	6	178	SS 162- 178	
Mussel	44	148	30	C/AR	Loansee	18	B	D	50/5	SW	SW	8/6	125	SS 113- 123	
Edmonds	75	80	20	R	Treasure Valley	20	PC	D	-	?		6	80	OH	
Edmonds	75	80	33	R	Treasure Valley	20	PC	D	-	NW	SW	6	80	OH	
Schultz	76	254	20	C	Phipps	18	PC	D	-	NW	SE	6	254	OH	
Aronbarri	62	50	16	-	Clayville	?	?	D	-	NE	SE	4	?	OH	
Harris	63	99	45	-	"	?	?	D	-	SE	SE	4	?	OH	
Taylor	?	133	65	C	Stone	?	?	D	-	SE	SE	4	?	OH	
Edmonds	75	75	20	R	Treasure Valley	20	PC	D	-	?		6	75	OH	
Edmonds	75	76	20	R	"	21	PC	D	-	?		6	75	OH	
Edmonds	75	66	18	R	"	20	PC	D	-	?		6	65	OH	
Lee	61	167	49	-	Clayville	?	?	D	-	NE	NE	?	?	OH	
Martin	57	63	11	-	Clayville	-	-	D	-	NE	NE	?	?	OH	
Whiting	67	92	64	C	Davis	-	-	D	-	?		6	92	OH	

MICROFILMED

JUN 02 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY
L. Huter

DATE
1-5-01

SUBJECT

Sec 25 3N 1W

SHEET

OF

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	USE	Yield/OD	1/4	1/4	Diameter	Casing Depth	Opening	
Ault	88	253	95	C	Phipps	18	B/PC	D	45/?	NW	NW	6	247	SS	SS = 247-252
Ault	91	197	80	C	Phipps	18	B/PC	D	40/?	NW	NW	6/5	190	SS	SS = 190-195
Cafferty	95	203	129	RA	Can-Ada	18	B	D	57/PL=196	NW	NE	6	200	OH	
Cafferty	94	257	127	RA	Can-Ada	19	B	D	150/?	NW	NE	6	255	DH	
Centers	92	235	106	R	Can-Ada	20	B	D	100/PL230	SE	SW	6	225	SS	
Dixon	94	245	118	RA	Doty	21	B	D	60/PL200	SW	SE	6	244	OH	
G+S Development	92	295	57	C	Stevens	50	B	D/I	859/PL 109	NE	NE	12/8	295	SS	SS = 195-236, 273-28
Hanson	81	236	60	C	Phipps	18	WC	D	—	NW	NE	6	229	Screen	S = 130-135
Howell	99	25	17	HSA	HazTech	4	C/B	Monitor	—	NE	NE	2	5	Screen	PVC = 5-25
"	99	25	17	HSA	"	4	C/B	"	—	NE	NE	2	5	"	"
"	99	18	17	HSA	"	2	C/B	"	—	NE	NE	2	3	"	PVC = 3-18
"	99	24	17	HSA	"	3	C/B	"	—	NE	NE	2	4	"	PVC = 4-24
Johnson	84	188	75	C	Phipps	18	PC	D	50/?	NW	SW	6	186	Screen	S = 187-192
Mashonka	95	183	99	RA	S.O.S.	18	B	D	100/?	SW	SW	6	174	Screen	telescoping = 173-181
Petty	89	193	102	C	Coarse	18	B/PC	D	20/PL=126	NE	NW	6	186	SS	SS = 188-193
Sabala	?	220	—	—	—	—	—	—	—	NE	NW	—	—	—	—
Shekinah	95	285	87.5	C	Stevens	52	B	Mun.	304/PL 143	NE	NW	8/6	285	SS	SS = 260-280
Trowbridge	00	231	109	C	Boise Valley	2	B	D	21/10 PL=168	SW	NW	6/5	231	SS	SS = 224-229
Whipple	79	326	100	RA	S.O.S.	18	WC	D	50/PL 160	NE	SE	6	317.5	OH	
Whipple	81	630	90	C	Smitty	—	WC	D	—	NE	SE	6	620	SS	SS = 619-629 Deepened
Bruce?	81	225	120	C	Boise Valley	20	WC	D	20/PL=200	SW	SE	6	220	OH	Gravel-340
Buschoff	70	224	49	RR	Cope	20	CG	M	—	SE	SE	30/27/12	224	SS	SS = 189-219
Christianson	87	265	110	C	Boise Valley	20	PC	D	40/PL 220	SW	NW	6	239	OH	
Felt	56	311	—	C	Veach	—	—	—	18/?	NE	NE	4	311	OH	
Frost	65	330	95	—	Veach	—	—	D	13/?	SE	SE	6	327	OH	
Lunstrum	76	266	115	C	Engleman	110	PC	D	25/?	SE	SW	6/5	266	SS	SS = 258-263
Sundell	66	216	90	—	Veach	—	—	D	13/?	NE	NW	6	210	OH	
Trowbridge	67	202	100	C	Clayville	26	clay	D	25/?	NW	SW	4	196	OH	
Fox	71	93	22	C	Boise River	33	PC	D	22/102	SW	SW	6	92	OH	

MICROFILMED
JUN 12 2003

BY Cavanagh DATE 1-21-99 PROJECT CONTACT
DESCRIPTION sec. 14 T3N R1W IWO#

Name	Year	Depth	Swk	Method	Driller	Seal Depth	Seal Type	Use	Yield 8d	1/4	1/4	Diameter	Casing depth	Opening	
Kirk	79	263	59pm	C	Skinner	46	WC	D	—	NW	NW	6	257	OH	
Mars	73	147	30	C	Hudson	20	PC	D	55/20	SE	NW	5	142.5	OH	
Roberts	77	100	15	R	S.O.S.	18	WC	D	30/25	NW	NW	6	86	P.C. inner 75 95	
Olympus	95	101	15	Auger	Hiddleston	101	Ben- seal	M	—	SW	NW	?	?	?	
Warren	71	65	12?	C	Daniel?	?	PC	D	20/?	NE	NE	6	65	OH	
Ambrose	90	55	7	R/A	Can-Ada	18	PC	D	150/? P.L. = 50	SW	NE	6	54	OH	
Burch	91	74	15	R/A	S.O.S.	20	PC	D	40/?	SW	NE	6	73	OH	
Calnon	93	252	3	R/A	Domestic	25	B	D	100/? P.L. = 100	NW	NE	6	252	OH	T = 59°F
Treasure Vall. Const.	72	150	8	C	Skinner	25	PC	D	25/12	N 1/2	SE	6	150	OH	
Reeves	77	150	4	R	S.O.S.	32	WC	D	40/30	N 1/2	SE	6	148'2"	OH	
asure Vall. Const.	72	64	9	C	Skinner	20	PC	D	24/10	N 1/2	SE	6	62	OH	
Jatson	72	69	3	C	Skinner	21	PC	D	25/6	E 1/2	SE	6	69	OH	
asure Vall. Const.	73	90	6	C	Skinner	18	PC	D	20/20	N 1/2	SE	6	84	OH	
"	72	72	10	C	Skinner	18	PC	D	25/10	N 1/2	SE	6	72	OH	
"	72	58	6	C	Skinner	18	PC	D	30/15	N 1/2	SE	6	58	OH	
"	72	56	8	C	Skinner	18	PC	D	24/10	N 1/2	SE	6	51	OH	
"	72	95	8	C	Skinner	23	PC	D	30/14	N 1/2	SE	6	90	OH	
"	72	72	3	C	Skinner	20	?	D	30/14	N 1/2	SE	6	67'3"	OH	
"	72	96	6	C	Skinner	18	PC	D	30/15	N 1/2	SE	6	92	OH	
"	72	74	5	C	Skinner	24	PC	D	25/10	N 1/2	SE	6	71	OH	
"	72	72	6	C	Skinner	18	PC	D	25/22	N 1/2	SE	6	65	OH	
"	72	62	7	C	Skinner	20	PC	D	24/17	N 1/2	SE	6	61.5	OH	
"	72	41	9	C	Skinner	18	PC	D	24/15	N 1/2	SE	6	88'8"	OH	
"	72	80	6	C	Skinner	18	PC	D	24/14	N 1/2	SE	6	76'5"	OH	
"	72	69	8	C	Skinner	18	PC	P	24/10	N 1/2	SE	6	67 1/2	OH	
"	72	58	8	C	Skinner	20	PC	D	25/10	N 1/2	SE	6	55	OH	
"	72	44	5	C	Skinner	21	PC	P	30/10	N 1/2	SE	6	39.5	OH	
"	72	61	4	C	Skinner	20	PC	D	30/16	N 1/2	SE	6	52	OH	
"	72	97	8	C	Skinner	20	PC	D	30/15	N 1/2	SE	6	92	OH	
"	72	89	11	C	Skinner	20	PC	D	30/10	N 1/2	SE	6	86	OH	
"	73	94	8	C	Skinner	23	PC	D	25/12	E 1/2	SE	6	94	OH	
"	72	51	6	C	Skinner	18	PC	D	20/15	N 1/2	SE	6	49?	OH	
Valley Const	71	68	4	C	Skinner	25?	PC	D	36/11	N 1/2	SE	6	68	OH	
"	71	69	4	C	Skinner	25	PC	D	26/9	N 1/2	SE	6	69	OH	
"	71	83	8	C	Skinner	26	PC	D	24/30	N 1/2	SE	6	75.5	OH	
"	71	83	8	C	Skinner	20	PC	D	36/12	N 1/2	SE	6	79	OH	Black sand 65-74
"	71	50	4	C	Skinner	18	PC	D	20/13	N 1/2	SE	6	47	OH	
"	72	87	9	C	Skinner	24	PC	D	24/30	N 1/2	SE	6	87	OH	
"	72	63	8	C	Skinner	23	PC	D	36/10	N 1/2	SE	6	62	OH	
"	71	58	6	C	Skinner	23	PC	D	24/10	N 1/2	SE	6	58	OH	
Sittser	72	87	6	C	Skinner	30	PC	D	30/20	N 1/2	SE	6	70	OH	
Sittser	72	75	8	C	Skinner	18	PC	D	24/12	N 1/2	SE	6	70	OH	

MICROFILMED

JUN 02 2003

BY Cavanagh DATE 1-29-99 PROJECT CONTACT

DESCRIPTION sec 14 T3N RIW IWO#

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	Use	Yield dd	1/4	1/4	Diameter	Casing Depth	Opening
asure Vall. Const.	72	66	6	C	Skinner	22	PC	D	25/6	E 1/2	SE	6	66	OH
"	72	150	8	C	Skinner	25	PC	D	25/12	N 1/2	SE	6	150	OH
"	72	96	10	C	Skinner	21	PC	D	25/10	N 1/2	SE	6	95	OH
"	72	74	9	C	Skinner	28	PC	D	25/8	N 1/2	SE	6	74	OH
"	72	61	7	C	Skinner	20	PC	D	25/3	N 1/2	SE	6	61	OH
"	72	79	8	C	Skinner	20	PC	D	30/15	N 1/2	SE	6	75	OH
"	72	64	7	C	Skinner	22	PC	D	30/10	N 1/2	SE	6	56	OH
"	72	48	8	C	Skinner	20	PC	D	30/15	N 1/2	SE	6	44	OH
"	73	90	6	C	Skinner	20	PC	D	20/10	N 1/2	SE	6	87	OH
"	73	61	8	C	Skinner	20	PC	D	20/8	N 1/2	SE	6	61	OH
"	72	99	12	C	Skinner	28	PC	D	30/12	N 1/2	SE	6	89	OH
asure Vall. Const.	73	81	6	C	Skinner	18	PC	D	25/7	N 1/2	SE	6	81	OH
"	73	81	8	C	Skinner	19	PC	D	30/6	N 1/2	SE	6	80	OH
"	73	58	3	C	Skinner	23	PC	D	35/8	N 1/2	SE	6	58	OH
"	72	99	12	C	Skinner	28	PC	D	30/12	N 1/2	SE	6	89	OH
"	72	79	8	C	Skinner	20	PC	D	30/15	N 1/2	SE	6	75	OH
"	72	64	7	C	Skinner	22	PC	D	30/10	N 1/2	SE	6	56	OH
chellborn	93	131	40	C	Knice	20	B	D	20/10	SW	SE	6/4.5	131	perf.
Scott	93	158	41	C	Boise Valley	18	PC	D	60/? P.L.=140	NW	SE	6/5	158	SS 151 156
Lee	94	108	16.5	AR	Adamson	30	B	D	100/-	SE	SE	6	100	OH
Chapman	74	165	93	C	Hudson	20	WC	D	20/3	NW	SW	6	128	SS 125 138 202
Anderson	75	209	100	C	Hudson	30	PC	D	32/?	NW	SW	6	204	SS 209 170 182
Britain	91	181	40	R/A	Gem State	60	B	D	50/- P.L.=179	NE	SW	6/5	180?	SS 182
Walker	75	95	15	R	Treasure Valley	20	PC	D	-	N	SW	6	95	OH
Taylor	69	100	11	C	Doty	20	PC	D	75/-	NW	SW	6	96	OH
Kirk	63	348	150gpm	C	W.H.	?	?	?	?	?	?	6	342	OH?
Behrman Bros.	76	125	51	C	Stevens	60	PC/WC	D	30/60	NE	NW	6	120	SS SS=120-125
Olympus	99	65	12	Auger	Hidalgeston	57	B	Mon.	-	SE	NW	2	60	PVL PVL=60-65
Roam	99	58	14	C	Driscoll	19	B	D	40/26/P.L.50	NE	NE	6	57	OH
Jennings	69	120	0	C	Broomfield	36	C	D	7/3	NE	NE	?	109	OH
Walker	75	50	21	R	Treasure Valley	25	PC	D	-	SW	SW	6	45	OH
Walker	75	45	20	R	Treasure Valley	25	PC	D	-	SW	SW	6	40	OH
ames/Wilson	60	157	62		W.H.			D	46/30	SW	SW	4	151	OH

T=54 grains=19
iron=1.5 pH=8

79 grains

MICROFILMED
JUN 02 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanagh

DATE 10-30-00

SUBJECT meridian 22

Sec. 26 T3N R1W

SHEET 1 OF 1

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	Use	Yield / dd	1/4	1/4	Diameter	Casing depth	opening	
Russell	90	168	109	AR	Davis	20	B	D	-	NW	NW	6	158	OH	
Paredes	92	180	110' 7"	R	Doty	20	B	D	30/- P.L. = 160	NE	NW	6	176	OH	
Bruno	00	226	109	AR	SOS	18	B	D	70/- P.L. = 200	NE	NW	6 1/5	224	SS 224	214
Hope	00	311	119	R	Can. Ada	18	B	D	100/- P.L. = 300	NE	NW	6 1/5	311	SS 301	311
Miller	93	100	62	C	Boise Valley	18	B	D	30/- P.L. = 84	SE	NW	6	88	OH	
Lloyd/Farms	89	225	78	C	Scott	20	PC	I/S	360/- P.L. = 170	SE	NW	12 1/10	220	SS 220	215
Roberts	00	223	114	AR	Can. Ada	18	B	D	56/- P.L. = 213	SE	NW	6 1/5	223	SS 223	216
Jackson	98	191	102	AR	Adamson	20	B	D	75/-	NW	NE	6 1/5	192	SS 192	233
Seibold	00	245	106	AR	SOS	20	B	D	100/- P.L. = 220	NE	NE	6 1/5	243	SS 243	243
Holsten Farms	93	163	90	C	Boise River	30	PC/B	D	27/- P.L. = 90?	NE	NE	6	161	OH	
Gibson	94	224	90	C	Phippis	18	B	D	50/-	NE	NE	6 1/5	224	PVC 224	modified orrison from 163-224
Gibbons	99	242	98	R	Can. Ada	18	B	D	70/- P.L. = 220	NE	NE	6	241	SS 241	236
Wood	70	161	85	C	Boise River	30	PC	D	40/27	NE	NE	6	159	OH	
Girrich	71	216	90	C	Witt	18	PC/CB	D	20/0	NE	NE	6	209	SS 209	204
Plum	70	223	80	C	Boise River	27	PC	D	40/25	NE	NE	6 1/5	223	SS 223	215
Young	97	205	105	AR	SOS	18	B	D	75/5	NE	NE	6 1/5	203	SS 193	203
Taylor	70	153	95	C	Davis	18	PC	D	-	NE	NE	6	150	OH	
Sutton	99	263	106	AR	Coonse	20	B	D	45/-	SE	NE	6 1/5	263	SS 257	263
Bailey	00	217	113	AR	Coonse	18	B	D	90/- P.L. = 207	SE	NE	6 1/5	217	SS 212	217
Walker	95	250	99	AR	S.O.S.	18	B	D	100/-	SE	NE	6 1/5	239	SS 229	239
Barley	93	155	85	C	Phippis	18	B	D	20/-	SW	NE	6 1/5	155	SS 148	153
Robinson	77	328	80	C	Engelman	40	PC	D	30/-	NE	NE	6 1/5	328	SS 319	324
Larson	70	213	82	C	K&E?	18	PC	D	18/15	SE	SE	6	202	OH	
Gray	73	292	15	C	Witt and sons	28	PC	D	40/95	SW	SE	6 1/5	269	SS	SS = 187-191 259-264
Harris	72	58	44	C	Skinner	20	PC	D	15/4	NW	SW	6	57	OH	
Jeka	93	250	80	C	Boise Valley	18	PC	D	100/- P.L. = 230	NE	SW	6	248	OH	gravel 2250
Vanek	87	215	120	AR	Holder	50	B	D	25/- P.L. = 160	NE	SW	6 1/5	211	SS 207	211
Haynes	98	241	116	AR	Adamson	57	B	D	80/-	SW	SW	6 1/5	241	SS 236	241
Lien	84	182	63	C	Boise Valley	?	WC	D	20/- P.L. = 84	?	?	6	182	SS 170-	182
Creech	69	192	93	C	Doty	20	Clay	D	30/?	SE	SE	6	188	OH	
Jackson	68	153	100	C	Kinney	22	B	-	25/?	NE	NE	6	149	Screen	S = 148-15:
Mangle	76	387	0	C	Witt	18	PC	D	150/7	NW	NW	8	378	OH	
McDowell	59	165	98	C	Clayville	-	-	D	-	NE	SE	-	-	OH	
Pence	69	170	110	C	Broomfield	-	-	D	10	SE	SW	-	-	SS	SS = 162-167
Reynolds	74	182	110	C	Hunsperger	50	WC	D	50/?	SW	SE	6 1/5	172	SS	SS = 172-18:
Waite	75	275	115	R	SOS	50	WC	D	20/135	SW	SW	6	239	OH	

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JUN 02 2003

BY Cavanagh DATE 1-20-99 PROJECT _____ CONTACT _____DESCRIPTION sec. 13 T3N RIW IWO# _____

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	Use	Yield (gpm) dd (ft)	1/4	1/4	Dia- meter	casing depth	opening	
Cyline	92	200	5	C	Phipps	18	B/PC	I	900/-	NW	NW	8/6	200	SS	SS-169-179, 181-196
Tors	92	73	10	R/A	S.O.S.	20	B	D	100/- P.L. = 20	SW	NW	6	72	OH	
e. Vall. Subdr.	78	107	30	C	S.O.S.	18	WC	D	-	NE	NW	6	106	OH	
Watson	92	217	50	C	Clearwater	22	B	D	-	NW	NW	8/6	198	SS 207- 217	
Archen	88	63	12	C	Phipps	18	B/PC	D	50/-	SW	NE	6	61	SS 51- 61	
Watson	86	66	4	R/A	Doty	20	B/PC	D	100/-	NE	NE	6	58'6"	OH	
Bowley	98	90	10	AR	Domestic	18	B	D	60/- P.L. = 60	SW	NE	6	76	SS 80- 90	T=59°F
Miller	78	57	Flow's 24 gpm	C	Bunn	25	PC	D	15/10	NW	SE	6	60	OH	
Edwards	73	68	10	C	Randall	18	PC	D	-	NE	SE	6	37	OH	
View Equip.	78	163	19	C	Stevens	20	PC/WC	D	70/- P.L. = 32	SW	SE	8/5	163	SS 145- 161	
Walker	73	110	7?	C	Brewer	40	PC	D	30?/3?	SE	SE	6	107	OH	
Acree	84	101	68	R	can-Ada	61	PC	D	30/- P.L. = 98	NW	SE	6	100	OH	
ant	71	126	15	C	Broomfield	18	PC	D	15/8	SE	SW	6	126	OH	
ohr	90	124	19	R/A	Adamsen	20	B	D	50/-	SW	SW	6	122	OH	
ittle	79	70	12	R/A	Davis	20	PC	D	-	SW	SW	6	69	OH	
Dan	66	40?	?	C	?	?	?	D	?	NW	SW	4"	35?	OH	
Abbrich	68	77	surface	C	Broomfield	27	concrete	D	15/?	NE	SE	4	73	OH	
?	?	~100	?	?	Veach	61	clay	?	?	?	?	16/12/8	?	?	surface 16" to 61 lead packer
Madley	61?	136	12	C	Clayville	?	?	D	?	SE	NE	4	?	?	
mountain vet.	75	185	21	C	Broomfield	25	PC	D	17/?	SW	SE	6	176	OH	
Gregory	?	59	12	C	Cowe	18	WC	D	12/10	NW	SE	6	56	OH	
Draper	76	58	7	C	Daniel	20	WC	D	60/?	NE	SE	6 5/8	55	OH	

MICROFILMED

JUN 02 2003

BY Cavanagh DATE 2-25-99 PROJECT _____ CONTACT _____DESCRIPTION Sec 18 T3N R1E IWO# _____

Name	Year	Depth	SWL	Method	Driller	Seal Depth	Seal Type	Use	Yield dd	1/4	1/4	Diameter	Casing depth	Opening	
rid. Ford	90	26.5	12.42	Auger	Hiddleston	9	B	Test	-	SW	NW	2.375	26	PVC 11- 2.6	
rid. Ford	90	30	12.08	Auger	Hiddleston	13	B	Test	-	SW	NW	2.375	30	PVC 13- 3.0	
Jahag	89	80	20	C	Phipps	18	B/PC	I	70/?	SW	NW	6/5	78	SS 2.8 7.8	
ty of Merid.	75	485	17	C	Witt	30	CG	M	1266/187 4.8	NW	NW	20/16/10	479	SS	SS = 398-418 435-465
werdole cemetery	71	310	20	R	?	18	CG	I	-	NW	NW	6?	310	perf.	perf. = 100-120 290-310
angston	70	244	68	C	Phipps	28	PC	D	21/-	SW	NW	6	?	?	
rracon consult.	95	28	23	Auger	Haz Tech	12	Con/B	M	-	SW	NW	2	28	PVC	
idian Ford mws	94	30	19	Auger	Hiddleston	7	B/lem	M	-	SW	NW	2	29	PVC	
mws	94	30	16	Auger	Hiddleston	7	B	M	-	SW	NW	2	29	PVC	
mws	94	30	16	Auger	Hiddleston	7	B	M	-	SW	NW	2	29	PVC	
adaway	73	100	50	R	Snellings	18	PC	D	20/-	NW	NE	6	100	OH	
Norberg	68	81	20	C	Clayville?	18	B	D	30/-	SE	NE	4/3	81	perf. 76 81	
Barnes	98	130	20	AR	Phipps	20	B	D	50/-	NW	NE	6/5	130	SS 117- 127	
Id. Div. Pub. Wks.	93	105	20	C	Stevens	30	B	D	115/44?	NW	NE	8/5	104	SS 83- 98	
rid. Cem.	93	131	25	C	Phipps	18	PC/B	D	45/-	NW	NE	6/5	131	SS 124- 129	
Eventt	92	147	30	C	Phipps	18	B/PC	D	40/-	NE	SE	6/5	147	SS 140- 145	
Olson	90	130	60	R/A	Doty	18	B	D	30/- P.L. = 100	NW	SE	6	127.5	OH	
Miners	79	142	30	C	Phipps	18	WC	D	40/- P.L. = 48	NE	SE	6	142	SS 137- 142	
I Paso Gas	71	118	17	C	Cowc	25	PC	D	40/-	SE	SE	6	102	OH	Brown & yellow sand
Cope	87	193	12	C	Phipps	18	B	D	40/- P.L. = 80	SW	SW	6/5	193	SS 188- 193	red sand 119-150
Rainey	78	232	50	R/A	H2O	25	PC/WC	D	300/-	SW	SW	6	232	OH	
Barnett	72	140	18	C	Dullery	18	PC	D	-	SE	SW	6/5	135	perf 130- 135?	
Turner	71	116	18	C	Dullery	18	PC	D	-	SE	SW	6	105	OH	
West. St. Equip.	88	175	20	R/A	Scott	20	B/PC	?	-	SW	SW	8/6	171	SS 161- 171	
McKinney	98	47	20	AR	Phipps	20	B	D	50/-	SW	SW	6/5	47	SS 90- 95	
Eastern States	98	115	20	AR	Hiddleston	18	B	D	40/-	SE	SW	6 5/8 - 5 9/16	115	SS 105- 115	
Meridian City	99	905	10	MR	Stevens	810	B	Test	-	NW	NW	2	897	PVC 897	
Hepper	74	130	20	R	SOS	46	WC	D	100/45		SE	6	109	OH	
Sloan	65	182	3	-	Veach	-	-	D	12/?	SW	SE	4	177		
Bott	57	164	26	C	Clayville?	-	-	D	-	NE	SE				
Ryker	65	90	16	-	Veach	-	-	D	15/?	NE	NE	4	85	Screen	
of ID Dist High	65	145	22	-	Doty	-	-	D	70/?	SE	SE	4	143.5		
Marz	67	72	17	C	Clayville	20	chy	D	-	NE	NE	4	68	OH	
Schoen	68	67	17	C	Clayville	20	chy	D	-	NE	NE	4	65	OH	
Shuck	66	110	35	C	Davis?	-	-	D	-			6	103.5	Screen	
Hoff	69	93	24	C	StH	23	B	D	125	NW	NE	6	88	OH	
Hutchings	68	103	27	-	Veach	-	-	D	15/?	NE	NE	6	97	OH	

MICRO
2003

Appendix B.

**Correspondence and Field Notes From the Investigation and Sampling
of the Critell Domestic Well at 2578 Stoddard Road, Meridian**

MICROFILMED
JUN 02 2003

Hydro Logic, Inc.

1002 W. Franklin Street, Boise, ID 83702 (208) 342-8369, (Fax) 342-3100, hydrologic@qwest.net

March 10, 2003

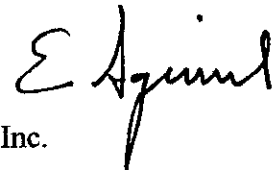
Wiford and Carolyn Critell
2875 S. Stoddard Road
Meridian, Idaho 83642

Dear Mr. and Mrs. Critell:

I am writing on behalf of the City of Meridian, Idaho to thank you for allowing us to sample the groundwater chemistry of your domestic supply well on February 4, 2003. Attached, please find the laboratory analyses the City had run on your well water along with a copy of the Well Driller's Report for your well. As you can see, your well's water quality is excellent for all culinary purposes. We appreciate your assistance in helping us to understand the subsurface groundwater chemistry in south Meridian.

Sincerely,

Ed Squires
Hydro Logic, Inc.



c: Mr. Gary D. Smith, P.E., City of Meridian Public Works Director

MICROFILMED

JUN 9 2 2003

Subject: City of Meridian Groundwater Chemistry Evaluation

2/03

Name: ^{yearly} Willard Critell
Address: 2875 ~~WALKER~~ Stoddard Rd Meridian 83642
Phone: 208-883-1670 63-04778 .06 .02

Is this your well? If so, is the driller's log under your name, or is it under the name of the people you bought the house from? This is their well, they have two. The older one is ~30 yrs old and a new one drilled ~2 yrs ago.

Do you know when the well was drilled and by who?

~2 yrs ago

Do you know how deep the well is, and the diameter of the well?

~100 ft

well is 185 ft deep
w/ 6" casing & 1/2 hp pump
& static water at 42'

Do you know how much water the well puts out (gpm)?

1/2 hp pump ~15-16 gpm

A63-04778

How do you like your water (taste and aesthetics)? Have you ever seen sand, scale, or discolored water? Water is fine, tested recently

Does the well supply water to the house or another part of the property?

supplies house & trailer, irrigation water is taken from canal south of house

Have you ever had any well problems (i.e. has the pump been pulled)?

no

Has the well ever been tested/sampled before?

recently

Does your neighbor have a well?

Would you let someone measure the water level and sample your well?

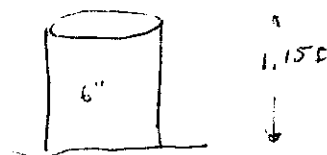
nitrate & bacteria - fine

Basin Valley Pump & well drilling

old well 134

March

pump = 85 ft deep



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Appendix C.

State of Idaho Well Driller's Reports for the Critell and Wright Domestic Supply Wells

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State of Idaho
Department of Water Administration
WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer
within 30 days after completion or abandonment of the well.

WELL OWNER

Name Tracy Wright
Address 5044 mtn. View Dr.
Owner's Permit No. Boise

7. WATER LEVEL

Static water level 62 feet below land surface.
Flowing? ☐ Yes ☐ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

8. WELL TEST DATA

☒ Pump ☐ Bailor ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>12 at 105'</u>	<u>33</u>	<u>2</u>
<u>30 at 147'</u>	<u>85</u>	<u>2</u>
<u>40 at 168'</u>	<u>106</u>	<u>14</u>

PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test
☐ Municipal ☐ Industrial ☐ Stock

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
<u>6</u>	<u>0</u>	<u>2</u>	<u>topsoil</u>		
	<u>2</u>	<u>20</u>	<u>gravel</u>		
	<u>20</u>	<u>28</u>	<u>sand</u>		
	<u>28</u>	<u>48</u>	<u>sandy clay</u>		
	<u>48</u>	<u>80</u>	<u>clay</u>		
	<u>80</u>	<u>91</u>	<u>sandy clay</u>		
	<u>91</u>	<u>103</u>	<u>coarse sand</u>		X
	<u>103</u>	<u>115</u>	<u>sandy clay</u>		
	<u>115</u>	<u>120</u>	<u>red sand</u>	X	
	<u>120</u>	<u>125</u>	<u>sandy clay</u>	X	
	<u>125</u>	<u>136</u>	<u>clay</u>		X
	<u>136</u>	<u>140</u>	<u>sand</u>	X	
	<u>140</u>	<u>182</u>	<u>clay</u>		X
	<u>182</u>	<u>187</u>	<u>red sand</u>	X	
	<u>187</u>	<u>197</u>	<u>white clay</u>		X
	<u>197</u>	<u>200</u>	<u>white sand</u>	X	
	<u>200</u>	<u>205</u>	<u>sandy clay</u>		X
	<u>205</u>	<u>227</u>	<u>very fine sand</u>		X
	<u>227</u>	<u>265</u>	<u>very fine sand</u>	X	
	<u>265</u>	<u>285</u>	<u>stiff clay</u>		X
	<u>285</u>	<u>290</u>	<u>stiff clay</u>		X
	<u>290</u>	<u>307</u>	<u>clay</u>		X
	<u>307</u>	<u>308</u>	<u>red sand</u>	X	
	<u>308</u>	<u>309</u>	<u>clay</u>		X
	<u>309</u>	<u>315</u>	<u>red sand</u>	X	
	<u>315</u>	<u>335</u>	<u>sand</u>	X	

METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 335 feet
Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>.250</u> inches	<u>6</u> inches	<u>1</u> feet	<u>323</u> feet
<u>.188</u> inches	<u>5</u> inches	<u>312</u> feet	<u>324</u> feet
<u>.188</u> inches	<u>5</u> inches	<u>332</u> feet	<u>335</u> feet

Was a packer or seal used? ☒ Yes ☐ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches
Number _____ From _____ To _____
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet

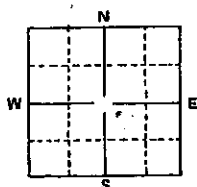
Well screen installed? ☒ Yes ☐ No
Manufacturer's name Johnson
Type slotted Model No. _____
Diameter 6 Slot size 20 Set from 324 feet to 332 feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal? ☒ Yes ☐ No To what depth 20 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

LOCATION OF WELL

Sketch map location must agree with written location.



County Ada
SE 1/4 NW 1/4 Sec. 24, T. 3 N/S, R. 1 E/W

10. Work started June 19, 72 finished July 27, 72

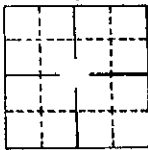
11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is
true to the best of my knowledge.

Driller's or Firm's Name Boise Number _____
Address 1509 Sand
Signed By Boise Date 9/2/72

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JUN 02 2003

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE PEWITTER OR
BALLPOINT PENState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>Mr. J. Crittall</u> Address <u>2075 Stockport Boise</u> Owner's Permit No. <u>63-89-2-018</u>	7. WATER LEVEL Static water level <u>42</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ OF. Quality _____ Describe artesian or temperature zones below.																																																																																																										
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☒ Pump ☒ Bailer ☒ Air ☐ Other _____ <table border="1" style="width:100%"><tr><td>Discharge G.P.M.</td><td>Pumping Level</td><td>Hours Pumped</td></tr><tr><td><u>35 GPM</u></td><td><u>90 ft</u></td><td><u>6 hrs</u></td></tr></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>35 GPM</u>	<u>90 ft</u>	<u>6 hrs</u>																																																																																																				
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<u>35 GPM</u>	<u>90 ft</u>	<u>6 hrs</u>																																																																																																									
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG 103563 <table border="1" style="width:100%"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>6</td><td>0</td><td>3</td><td>Top Soil</td><td></td><td>✓</td></tr><tr><td></td><td>3</td><td>8</td><td>Hard Pan</td><td></td><td>✓</td></tr><tr><td></td><td>8</td><td>33</td><td>Sand + Gravel</td><td></td><td>✓</td></tr><tr><td></td><td>33</td><td>51</td><td>Sandy Brown Clay</td><td></td><td>✓</td></tr><tr><td></td><td>51</td><td>90</td><td>Broken Sand</td><td>✓</td><td></td></tr><tr><td></td><td>90</td><td>99</td><td>Sandy Brown Clay</td><td></td><td>✓</td></tr><tr><td></td><td>99</td><td>116</td><td>Sand</td><td>✓</td><td></td></tr><tr><td></td><td>116</td><td>118</td><td>Sandy Brown Clay</td><td></td><td>✓</td></tr><tr><td></td><td>118</td><td>124</td><td>Fine Brown sand</td><td>✓</td><td></td></tr><tr><td></td><td>124</td><td>145</td><td>Sand + Clay layers</td><td>✓</td><td></td></tr><tr><td></td><td>145</td><td>152</td><td>Heavy sand</td><td>✓</td><td></td></tr><tr><td></td><td>152</td><td>155</td><td>Sandy Clay</td><td></td><td>✓</td></tr><tr><td></td><td>155</td><td>165</td><td>Sand</td><td>✓</td><td></td></tr><tr><td></td><td>165</td><td>174</td><td>Sand + Clay layers</td><td>✓</td><td></td></tr><tr><td></td><td>174</td><td>185</td><td>Light Brown Clay</td><td></td><td>✓</td></tr><tr><td>6</td><td>185</td><td></td><td>Sand some gravel</td><td>✓</td><td></td></tr></tbody></table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	6	0	3	Top Soil		✓		3	8	Hard Pan		✓		8	33	Sand + Gravel		✓		33	51	Sandy Brown Clay		✓		51	90	Broken Sand	✓			90	99	Sandy Brown Clay		✓		99	116	Sand	✓			116	118	Sandy Brown Clay		✓		118	124	Fine Brown sand	✓			124	145	Sand + Clay layers	✓			145	152	Heavy sand	✓			152	155	Sandy Clay		✓		155	165	Sand	✓			165	174	Sand + Clay layers	✓			174	185	Light Brown Clay		✓	6	185		Sand some gravel	✓	
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6	185		Sand some gravel	✓																																																																																																							
4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____	10. Work started <u>4/24/89</u> finished <u>5/16/89</u>																																																																																																										
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width:100%"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.250</u> inches</td><td><u>6</u> inches</td><td><u>1</u> feet</td><td><u>100</u> feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>20</u> Material used in seal: ☐ Cement grout ☐ Bentonite ☒ Pudding clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port _____	Thickness	Diameter	From	To	<u>.250</u> inches	<u>6</u> inches	<u>1</u> feet	<u>100</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	11. DRILLERS CERTIFICATION DL I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Boise Valley Pump & Drilling</u> Firm No. <u>207</u> Address <u>2950 S. Garden</u> Date <u>4/16/89</u> Signed by (Firm Official) <u>Ron R. Muzzey</u> and (Operator) <u>Gary R. Fulton</u>																																																																																						
Thickness	Diameter	From	To																																																																																																								
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_____ inches	_____ inches	_____ feet	_____ feet																																																																																																								
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name <u>_____</u> Lot No. _____ Block No. _____ County <u>Oda</u> <u>SE</u> 1/4 <u>SW</u> 1/4 Sec. <u>24</u> , T. <u>3</u> N., R. <u>1</u> E/W.	12. ADDITIONAL INFORMATION <u>NO RECORD</u> <u>JUN 21 1991</u>																																																																																																										

USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT

Appendix D.

**Correspondence and Field Notes From the Investigation of the Greg Johnson
Domestic and Irrigation Wells at 2035 and 2045 Stoddard Road, Meridian**

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JUN 02 2003

MAYOR
ROBERT D. CORRIE

COUNCIL MEMBERS
WILLIAM L. M. NARY
KEITH BIRD
TAMMY DEWEED
CHERIE MCCANDLESS



GARY D. SMITH, P.E.
PUBLIC WORKS DIRECTOR

BRAD R. WATSON, P.E.
CITY ENGINEER

LEN GRADY
STAFF ENGINEER

Public Works Department Engineering Division

February 24, 2003

Mr. Greg Johnson
The Westpark Company
P.O. Box 344
Meridian, Idaho 83680

Re: Access and sampling of groundwater quality from Johnson irrigation well on Stoddard Road across from Bear Creek Subdivision.

Dear Greg:

As Ed Squires has discussed with you by phone, the City of Meridian (City) is conducting a study of groundwater chemistry, with respect to depth, in the southwest Meridian area. Other than the City's own deep wells, there are very few existing wells of intermediate depth (200 to 300 feet) because most domestic "house" wells are very shallow (<150 feet).

From our research, we believe we have found a Driller's Report in the file that corresponds to your irrigation well. This information suggests that your well is 335 feet deep (the zone from which we are hopeful of sampling for groundwater chemistry). Unfortunately, the installed line-shaft turbine pump's discharge head on your well completely obscures access to the wellhead for measurement purposes. In other words, we can't verify that the well is indeed the well we think it is or that the well is 335 feet deep. Without knowledge of the well's construction, simply sampling the water-quality is not meaningful to our study.

Therefore, we request permission to have the pump removed from the well for measurement and inspection of the well. Provided you are willing to permit us access, the following conditions would apply:

- 1) The City will hire Layne of Idaho to remove/reinstall the pump in your well this week.
 - a. The pump will be removed and several measurements will be taken in the well.
 - b. Provided the well is as deep as we assume, the well's water quality will be sampled.
 - c. The City will share any information it obtains with you.
- 2) The City assumes responsibility for damage caused to the property as a consequence of this work.
 - a. Care will be taken to not cause damage to the access road.
 - b. Care will be taken to not damage the winter wheat crop, which has been planted. Inspection of the site has been done with Layne and it is anticipated that all work can be accomplished from the access road.
- 3) The City assumes responsibility for damage to the well and/or pump as a consequence of the work.
 - a. You have represented that the well and irrigation pump is in good working order.
 - b. We will activate the pump prior to removal to demonstrate the same.

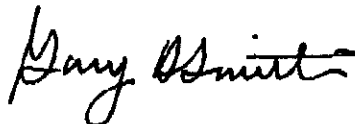
MICROFILMED

MAR 02 2003

- c. The pump will be placed back into service the same day and reactivated to ensure good working order.

The City appreciates your willingness to cooperate in our water quality studies by allowing access to and sampling of your water well. Please feel free to call on me with questions or you may direct questions to Mr. Ed Squires, who is scheduling this work for the City. Thank you Greg.

Sincerely,



Gary D. Smith, P.E.
Public Works Director

c: Ed Squires 342-8369

MICROFILMED
JAN 10 2004

March 14, 2003

Mr. Greg Johnson
The Westpark Co. Inc.
660 E. Franklin Rd.
Meridian, Idaho 83642

Re. Irrigation Well Groundwater Sampling Near Bear Creek Subdivision

Dear Greg:

This letter is to thank you for your assistance and to inform you of the results of our removal of your irrigation well pump on your property across from Bear Creek subdivision. As discussed, we were attempting to find and identify a well listed for that location that was reportedly 335 feet deep so that we could obtain groundwater chemistry data for that depth of the aquifer.

On February 28th, 2003, Loren Pearson of our office met with your pump contractor (Layne of Idaho) to remove the line shaft turbine pump from the well. Upon raising the motor and discharge head, we were able to ascertain immediately that this was not the well we were looking for because of its 12-inch diameter casing. We measured a bottom hole depth of 106.5 feet below land surface and a non-pumping water-level of 24.15 feet below land surface. This may correlate to a Well Driller's report for the "Stewart" well drilled in 1966 to 115 feet?? (attached).

Your pump was re-installed by Layne immediately after the soundings were taken. The pump (bowls set approximately 20 feet below ground) was re-installed in better condition than when removed as a new gasket was installed on the discharge and the upper wellhead was cleared of wasp nests and accumulated dirt.

The domestic well by the house on the same property was sounded at 82 feet total depth with a non-pumping water level of 22 feet below land surface.

On behalf of the City of Meridian, I would like to reaffirm our appreciation of your willingness to help us with our sub-surface research.

With sincere thanks,

Ed Squires
Hydro Logic, Inc.
342-8369

c: Gary D. Smith, P.E.
City of Meridian
Public Works Director

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JUN 02 2003

RECEIVED

FEB 1 1967

REPORT OF WELL DRILLER State of Idaho

Department of Reclamation

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:
Name Harold Stewart

Address Meridian Idaho

Rt. 3

Owner's Permit No. 11111

NATURE OF WORK (check): Replacement well ☐
New well ☒ Deepened ☐ Abandoned ☐

Water is to be used for: Irrigation

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other ☐ (explain)

CASING SCHEDULE: Threaded ☐ Welded ☒

12" "Diam. from 0 ft. to 90 ft.

10" "Diam. from 70 ft. to 115 ft.

" "Diam. from ft. to ft.

" "Diam. from ft. to ft.

Thickness of casing: 250 Material:

Steel ☒ concrete ☐ wood ☐ other ☐

46' of 10" casing used for screen

(explain)
PERFORATED? Yes ☒ No ☐ Type of
perforator used: Done in shop with raw

Size of perforations: 1/8" by 4" Pr.
20 perforations from ft. to ft.

Rows perforations from 70' ft. to 115' ft.

perforations from ft. to ft.

perforations from ft. to ft.

WAS SCREEN INSTALLED? Yes ☒ No ☐

Manufacturer's name Southwest Pipe Co

Type Above Model No.

Diam. Slot size Set from ft. to ft.

Diam. Slot size Set from ft. to ft.

CONSTRUCTION: Well gravel packed? Yes ☐

No. ☒ size of gravel Gravel

placed from ft. to ft. Surface seal

provided? Yes ☒ No ☐ To what depth?

ft. Material used in seal: Concret

by contractor

Did any strata contain unusable water? Yes ☒

No. ☐ Type of water: Rust Sand

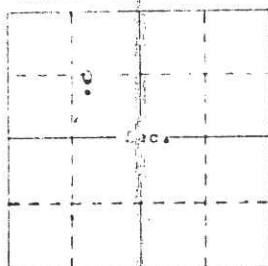
Depth of strata 12' ft. Method of sealing

strata off: Cased out

Surface casing used? Yes ☒ No ☐

Cemented in place? Yes ☐ No ☐

Locate well in section



LOCATION OF WELL: County Ada

SW 1/4 Sec. 21 T. 12 N. R. 11 E.

Use other side for additional remarks

Size of drilled hole: 12" Total
depth of well: 115' Standing water
level below ground: 23' Temp.

Fahr. 55 Test delivery: 525 gpm

or cfs Pump? ☒ Bail ☐

Size of pump and motor used to make test:

Diesel Power 8"Boles

Length of time of test: 6 Hrs. Min.

Drawdown: 45 ft. Artesian pressure: ft.

above land surface Give flow cfs

or gpm. Shutoff pressure:

Controlled by: Valve ☐ Cap ☐ Plug ☐

No control ☐ Does well leak around casing?

Yes ☐ No ☒

DEPTH FROM	TO	MATERIAL	WATER YES OR NO
0	5	top soil	no
5	62	Gravel Sand Clay	no
62	66	Fine Sand	no Yes
66	84	F Sand Sand In Layers of Clay	Yes
84	92	Clay	no
92	98	sand clay	yes
98	111	clay	no
111	115	sand gravel	yes

FEET FEET

0 5 top soil no

5 62 Gravel Sand Clay no

62 66 Fine Sand no Yes

66 84 F Sand Sand In Layers of Clay Yes

84 92 Clay no

92 98 sand clay yes

98 111 clay no

111 115 sand gravel yes

USGS

MICROFILMED

JUN 12 2003

Subject: City of Meridian Groundwater Chemistry Evaluation

2/03

Name: Luis Hernandez ^{Rentee} Greg Johnson ^{owner} DATE: 2/4/03
Address: 2035 Stoddard, Meridian ^{1 year in premises} 989-9505
2049
Phone: _____

Is this your well? If so, is the driller's log under your name, or is it under the name of the people you bought the house from?

Luis rents here and has been on the property less than a year

Do you know when the well was drilled and by who?

Luis does not know

Do you know how deep the well is, and the diameter of the well?

no diameter is 6 inch

Do you know how much water the well puts out (gpm)?

750/40 sec measured today with bucket

How do you like your water (taste and aesthetics)? Have you ever seen sand, scale, or discolored water?

likes the water, no problem with it

Does the well supply water to the house or another part of the property?

well supplies two houses here on the property

Have you ever had any well problems (i.e. has the pump been pulled)?

not to his knowledge

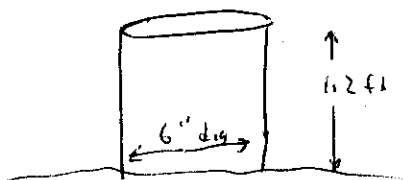
Has the well ever been tested/sampled before?

does not know

Does your neighbor have a well?

Would you let someone measure the water level and sample your well?

yes



measured parameters as:

*T=5 RMC
C=5.5 S
JUN 02 2003*

Stoddard Rd

CALCULATIONS AND DESIGN DATA

PREPARED BY

B.C.

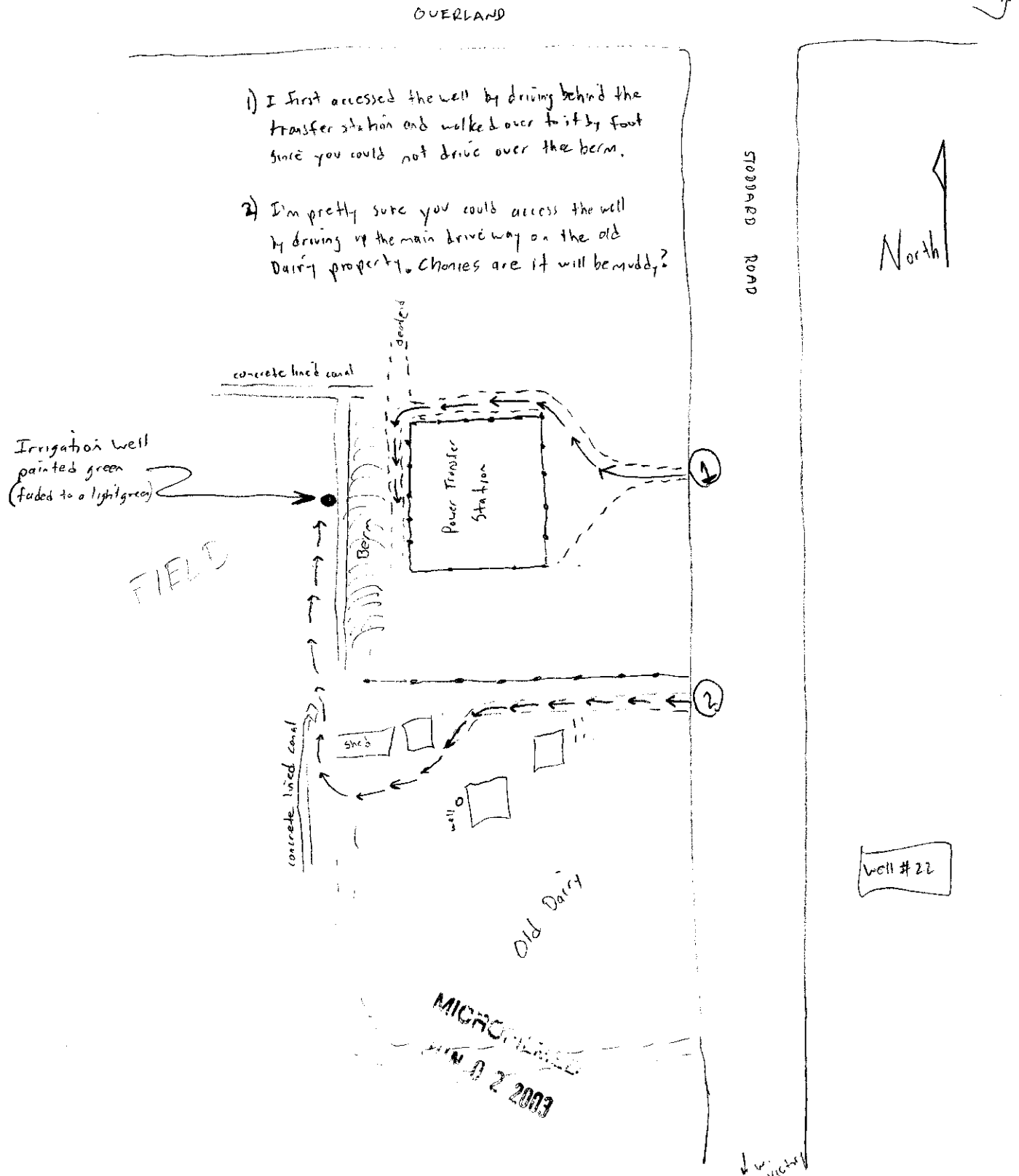
SUBJECT

DATE 2-4-03

Meridian #22 - Old Dairy across the Street - Irrigation Well

SHEET OF

(Directions to Find Well)



CALCULATIONS AND DESIGN DATA		PREPARED BY <u>B. Cavanaugh</u>
SUBJECT	DATE <u>2-4-03</u>	
<u>Mendota #22 water chemistry</u>		SHEET <u>1</u> OF <u>1</u>

Drive to Stoddard Local initiative to find wells to sample ~2000 ft.

old diary

9:50 meet with Luis Hernandez, Renter of house across from well #22. Six inch domestic

House well

10:10 SWL = $30.00 - 7.33 = 22.67$ ft btlc = 1.2 ft above ground
 attempt to tag bottom of well in 34 places but bottom appears to be 80 ft. with pump water level ~25-26 ft
 @ 7 gal / 40 sec $T = 55.4^{\circ}F$ CS = 55545

10:50 hose still in clearing up from side knocked off from tagging bottom

11:00 water clear

Don Filkins
 Filkins
 location

is this your well
 how long have you used
 water drilled?
 how deep
 evaluating groundwater
 chemistry. The city does
 not have many deep wells
 so we are going to drill
 down as deep as possible
 to get water from the bottom

Critic Residence

11:14 2875 "Critic"

11:30 Discussing well w/ Carolyn Critic
 she has a file w/ pump information & water
 papers i.e. A63-04778
 priority date January 1, 1951
 3rd 1W Sec 24 SE, SW.

we'll send you copies
 how do you like pump water

air, sand
 cloudy white
 pump & pipe
 with problems

sterilize tape measure
 bacteria sample

12:00 begin hose - find new well - no well tag on it

12:30 entrained gas dissipated ~ 20 sec @ 41 sec / 7 gal
 CS = 602 m T = $56.6^{\circ}F$

12:35 CS = 602 T = $56.6^{\circ}F$ ORP = 86 + mV pH = 7.35 D.O. = 7.8 mg/l
 entrained gas visible at lower 0.5 mm bubbles & 6 mm bubbles from hose
 into chemistry chamber

12:44 CS = 595 T = 56.6 ORP = 131 + mV pH = 7.32 D.O. = 8.0 mg/l

12:57 CS = 605 T = 56.6 ORP = 147 pH = 7.33 D.O. = 8.1 mg/l
 13:05 pump off sampled at 13:05 filter has "red" on it

13:15 50 - 4.10 = 45.4 btlc = 1.15 ft agl

tagged bottom ~ 185 ft steel tape

MICROFILMED
 JUN 02 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY B. Cavanaugh

SUBJECT

DATE

2-4-03

Mendota # 22

SHEET 2 OF 2

"Adkins"

900 Stoddard 6"
3114 Stoddard 6" or 8"
1/00 W. Victory, where here

3179 cobble 6"
3180 cobble 6"
2083 cobble 6"
2873 6" ? weight 100 lbs

2:00 pm

check out dairy again
See a power pole behind a new power station
Appears to be an old well

Irrigation discharge to atmosphere into
a concrete lined ditch. It is an oil lubed
7.5 hp motor - single phase w/ 6 inch
discharge head. Attempted to turn it
on with the knob on the side of panel
but no luck. There was no access inside
the well through the port holes. The
discharge is possibly sitting on the concrete.
Casing size could not be observed.

An Idaho Power meter is on the pole
but appears as though little to no power
has been used since was installed (the digital
Idaho Power meter)

Holloshaft motor

HP 7.5 PH 1 Gles 60
Frame 258 VP volts 230 Amps 30.5

Type HUG

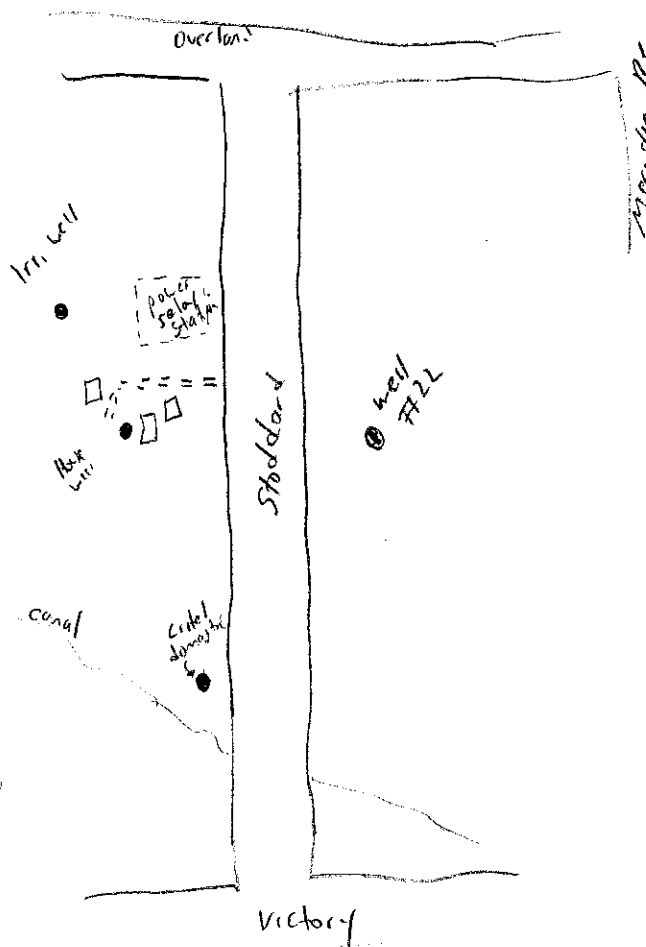
Design M Code D 30% upthrust

upper bearing: 1-620 TJ RPM 1800

lower bearing 1-731 OBY rpm 40°C

Model SF 1.1J serial 3968674

Johnston Vertical Pump
6" discharge head



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FEB 2 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY

L. Pearson

SUBJECT

Meridian #22 Staining

DATE 2/28/03

Private well verification Northwest of Meridian #22

SHEET 1 OF 1

On-site 0954h Mel and James already on site from Layne of Idaho

• started by operating electrical power switch

1006h Power not available for motor

- tried operating switches / breakers

- check for power with two different volt meters

• 16.2 V AC on one line 12.4 V AC on second line

- No other way found to turn power on

1008h called Ed

- said to go ahead and pull pump to verify well construction

note: field adjacent to well appears undamaged along access to well (along concrete ditch)

1016h Mel and James have to remove motor to pull pump because motor assembly obscures access to well

1043h finished unwinding pump motor and removing discharge line

note: corrugates of adjacent field did not go all the way to concrete ditch allowing access to well

1055h Pump pulled until bowls are about 20 feet below ground

- Well is 12" casing

- Depth is 106.5 feet bgl

- SWL = 24.15' bgl

} Most Likely Stewart 1966 115 ft

11:00 Tried calling Ed

11:32 " " "

11:33 Mel & James start putting pump back together

12:19 Pump reinstalled

- better condition than when we first took it apart

• now has gasket on discharge (no gasket prior to disassembly)

• upper portion cleaned of dirt and wasp nests

1220h Layne off site

1233h Remasured 6" well by house on same property

SWL = 22' bgl bottom = 82 ft bgl

1235h off site

Kuna

120 @ 1800

260 pump set

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JUN 02 2003

CALCULATIONS AND DESIGN DATA

PREPARED BY

B. Cavanagh

SUBJECT

DATE

2-24-03

Meridian # 22 Supply - Water Chemistry

SHEET

OF

24 miles round trip

13:10 leave office

13:30 meet Bynum & drive to Old Dairy to show him the irrigation well

Showed Bynum the well location which appears easily accessible by truck could probably get there Thursday morning. Will leave motor there.

Assuming 100 ft of pump column $\rightarrow$ 8 hrs to pull & set plus crane time $\sim$ 840\$ ^{at 105\$/hr}

Bynum doesn't foresee any problems if we just want to look at the well

14:10 return to office



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JUN 9 2 2003

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

_____ 1/4 _____ 1/4 _____ 1/4

Lat: _____ Long: _____

WELL TAG NO. D 18519
 DRILLING PERMIT NO. - - - - - 18519
 Other IDWR No.

2. OWNER:
Name CITY of MERIDIAN #22
Address 33 EAST IDAHO AVE
City MERIDIAN State ID Zip 83642

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
 Twp. 3 North ☒ or South ☐
 Rge. 1 East ☐ or West ☒
 Sec. 24 SW 1/4 SW 1/4 NE 1/4
10 acres 40 acres 160 acres
 Gov't Lot _____ County ADA
 Lat. : : Long. : :
 Address of Well Site _____
 City _____

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 CONT. FROM PAGE #1

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
#10-20 SAND	567	626	TOTAL	
#8-16 SAND	626	626.5	24.030 #	
#1-12 SAND	128	566.7		

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
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations

Method

Screens

Screen Type JOHNSON

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
573	588'	.020		10"	S.S.	☒	☐
588	603	.030		10"	S.S.	☒	☐
603	608	TW		10	S.S.	☒	☐
608	628	.080		10	S.S.	☒	☐

10. ⁶²⁸ ⁶⁶³ ⁰³⁵ ⁷⁰ ⁵² ¹ STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☒ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter

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

[illegible]

Completed Depth (Measurable)

Date: Started _____ Completed _____

13. DRILLER'S CERTIFICATION

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

Company Name RIVERSIDE INC Firm No. 332

Firm Official _____ Date _____

and
Driller or Operator _____ Date 9-10-61

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

