

80390

9-22-15
AMENDEDAMENDED
Form 201-07-2011 (Print Form as a 2 page single sided document)
RECEIVED

SEP 22 2015

WATER RESOURCES
WESTERN REGIONSTATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR AMENDMENT OF A PERMIT

Fee is \$100 per § 42-221C, Idaho Code

ORIGINAL
RECEIVED
AUG 18 2015
WATER RESOURCES
WESTERN REGIONApplicant(s) City of Boise, Department of Parks & Recreation Phone 208.608.7614
Name connector (check one) ☐ and ☐ or ☐ and/orMailing address 1104 Royal Blvd City BoiseState ID Zip 83706 Email: bpr@cityofboise.orgI am the owner of Water Appropriation Permit No. 63-33845 and request that the permit be amended as follows:

- ☐ Change point of diversion ☐ Add point of diversion ☐ Change period of use
☐ Change nature of use ☐ Change place of use ☒ Other Amend water-bearing zone

1. Point of diversion: ☒ No changes to point(s) of diversion. Skip item #1 and proceed to #2.
☐ Attach Eastern Snake Plain Aquifer analysis if this proposes to change a point of diversion affecting the ESPA.

Twp	Rge	Sec	Govt Lot	1/4	1/2	3/4	County	Source	Local name or tag #

2. Period and nature of use: ☒ No changes to period and/or nature of use. Skip item #2 and proceed to #3.
- Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year) (water use) (month/day) (month/day)
- Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year) (water use) (month/day) (month/day)
- Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year) (water use) (month/day) (month/day)
- Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
 (cfs or acre-feet per year) (water use) (month/day) (month/day)

3. Place of use or land to be irrigated: ☒ No changes to place of use. Skip item #3 and proceed to #4.

Twp	Rge	Sec	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Total number of acres to be irrigated _____

4. Property ownership:

☒ No changes to point of diversion and/or place of use. Skip item #4 and proceed to #5.

a. Who owns the property at the point of diversion? _____

b. Who owns the land to be irrigated or place of use? _____

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing:

5. Describe the proposed change in narrative form:

200 ft for Doug Holloway 9/22/2015
The Department seeks to change the water-bearing zone to 210-400 feet. Please see attached analysis of geothermal potential of this site.

6. Map:

☒ The point(s) of diversion and/or the place of use are not amended, therefore a map is not attached.

Attach a map showing the proposed point(s) of diversion and/or place(s) of use. Clearly label the map with township, range, section, and ¼ ¼ of section information. A photocopy of a USGS 7.5 minute topographic quadrangle is commonly used, or the *Map Tool* available on the Department website provides a satisfactory template for creating the required map (<http://maps.idwr.idaho.gov/TransferApplicationLayouts/Map>).

7. Signature:

The information in this application is true to the best of my knowledge. I understand that any willful misrepresentations in this application may result in rejection of the application or cancellation of an approval.

Signature of applicant or authorized agent

Doug Holloway
Print name (and title, if applicable)

8-18-15
Date

Signature of applicant or authorized agent

Print name (and title, if applicable)

Date

FOR DEPARTMENT USE ONLY

Received by

Date

8/18/15

Received by

Date

8/18/15

Reviewed by

Date

Receipt No. *W043416*



RECEIVED

AUG 18 2015

WATER RESOURCES
WESTERN REGION



MEMORANDUM

DATE: August 13, 2015
TO: Maria Minicucci and Wendy Larimore
FROM: Terry Scanlan, P.E., P.G.
RE: Geothermal Potential at Boise Hills Park

At your request, SPF Water Engineering has briefly investigated the potential for encountering low-temperature geothermal groundwater during drilling of the proposed cold-water irrigation well to serve Boise Hills Park.

A. Background

Water right permit 63-33845 authorizes the City of Boise to divert up to 0.14 cfs (63 gpm) of groundwater for irrigation of up to 7 acres at Boise Hills Park. The park is located on East Club View Drive in the Boise Foothills at an approximate elevation of 2980 feet.

The proposed well site is located within the Boise Front Low-Temperature Geothermal Resource Ground Water Management Area. The area was established to protect existing water rights that tap the low-temperature geothermal aquifer for heating purposes. Within the Management Area, the Idaho Department of Water Resources (IDWR) has strict requirements to prevent wells seeking cold water from tapping low-temperature geothermal resources. This includes requirements for bottom-hole temperature measurements for wells drilled below 300 feet and restrictions on drilling depths. Nonetheless, wells seeking cold-water occasionally encounter warm water, which results in a permitting challenge for well owners, and may result in a requirement to abandon a well.

As currently authorized, the City's permit authorizes a water-bearing zone of 225 to 250 feet. It is possible that adequate water may be found at this depth; however, groundwater occurrence is spotty in the foothills and there is no certainty that an adequate supply can be developed within the limited depth interval currently authorized. At the request of SPF, the City is contemplating amending permit 63-33845 to allow a water-bearing zone of 200 to 400 feet in order to increase the likelihood that a productive cold-water aquifer can be penetrated and developed by the well. The upper limit of this water-bearing zone is determined based on current IDWR policy within the Lower Boise River Basin upstream from Star that prohibits approval of new water rights from aquifers above 200 feet depth for consumptive uses. The proposed lower limit is based on the assumption that water-bearing materials adequate to produce 63 gpm will be encountered between 200 and 400 feet. IDWR has expressed concern that low-temperature geothermal groundwater will be encountered below 300 feet. This memorandum evaluates that potential.

B. Description of Existing Wells

Well driller reports on file with the Idaho Department of Water Resources were reviewed to better understand local hydrogeology and geothermal water occurrence. Well locations are shown on Figure 1. A summary table and copies of well driller reports are provided as Attachment A.

Well site elevation, well depth, depth to water, temperature, and geology are all important parameters to consider. Well elevation can be estimate from topographic maps or Google Earth. Temperatures are listed on 12 of the 28 well reports in Attachment A. Subsurface geology is described on well driller reports, and surface geology is shown on Figure 2. The following well driller report information has been considered.

- Somerset Ridge HOA (Well 1) operates a well located 1000 feet to the west of the Boise Hills Park site at an approximate elevation of 2880 feet. The Somerset Ridge well is 100 feet lower in elevation than the park site, and is screened from 121 to 141 feet with a static water level of 69 feet (approximate water-surface elevation 2810). The well taps a water-bearing zone in coarse blue sand. Reported groundwater temperature was 72°F. Based on ground water elevation in this well, a static water level of approximately 170 feet (+/- 40 feet) at Boise Hills Park might be expected. Anticipated water temperature at a depth of 200 to 250 feet would be approximately 72°F.
- The Charles Wilson well (Well 17) is approximately 1700 feet northwest from the park site. Estimated well site elevation is 3100 feet, approximately 120 feet higher than the park site. The well is 258 feet deep and has a static water level of 212 feet (elevation 2890 feet). The well produced 15 gpm from a coarse sand layer. Based on this information, a static water level at the park of 110 feet might be anticipated. No temperature is provided.
- The Claremont Realty well (Well 5) is 725 feet deep and has a 340-foot static water level. No address is provided; based on the legal description, an approximately well site elevation of 3160 is likely. The 340-foot depth to water would suggest a water surface elevation of approximately 2820 feet. No temperature is provided.
- The United Water Idaho Gambel Well (Well 6) is 781 feet deep with a static water level of 88 feet, and is screened below 700 feet. The borehole penetrated sediments (sand and clay) to 532 feet, and volcanic rock and sediments below 532 feet. Estimated water level elevation is 2720 feet. The well is ¾ mile west of the park site. Water temperature was 86°F. Although the well penetrated more than 600 feet below the water table, it found water only 1 degree above the low-temperature geothermal threshold.

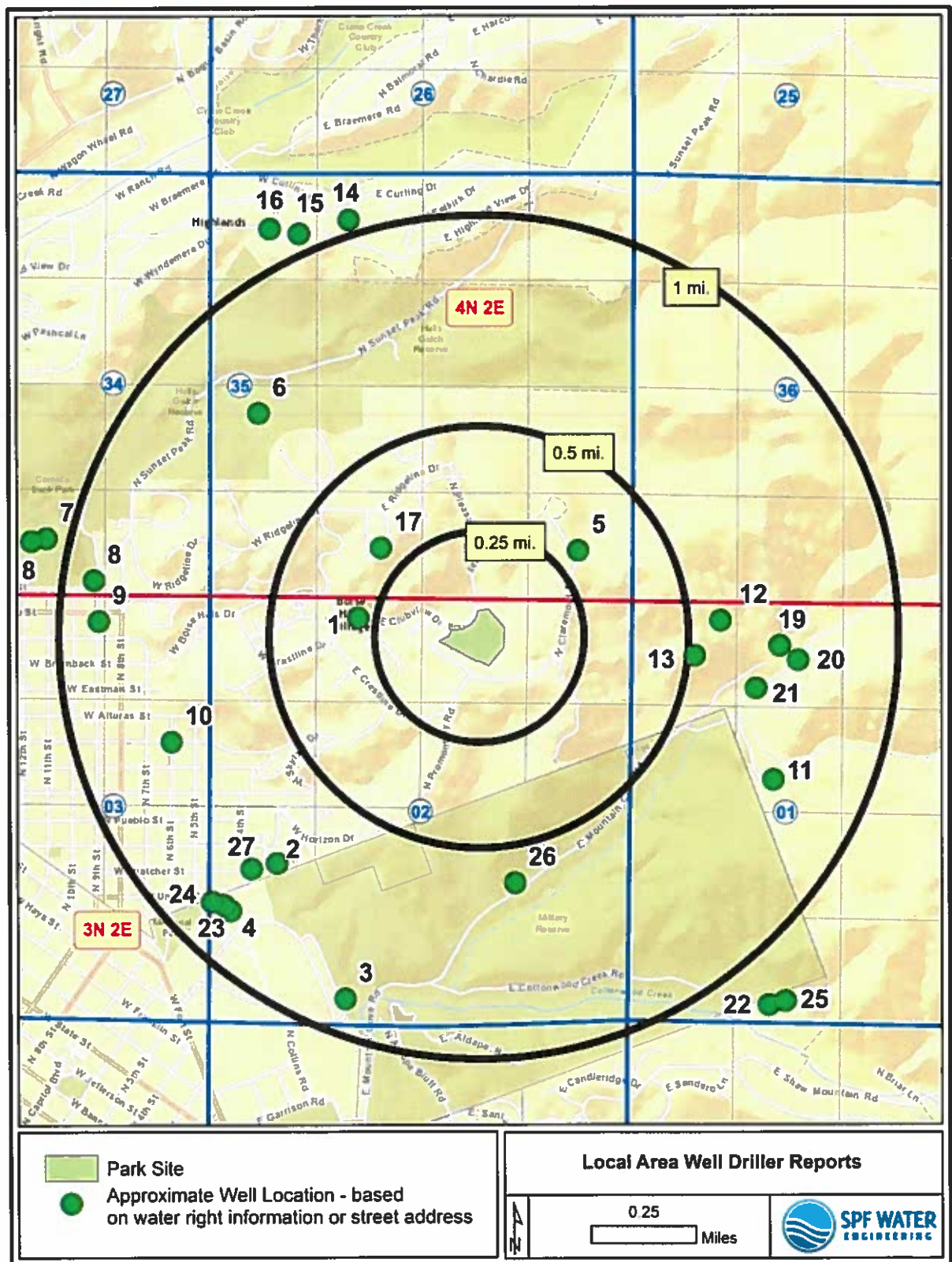


Figure 1. Local Area Well Driller Reports (see Attachment A)

- The City of Boise Police Firearm Training Range well (Well 11) was drilled to 402 feet, cased and sealed to 260 feet, had a static water level of 255 feet, encountered a bottom-hole temperature of 86.5°F, and produced water with a temperature of 89°F. The well penetrated through basalt, clay, and sandstone before encountering a water bearing zone in volcanic rock at 360 feet. Elevation at the well site is approximately 3000 feet, and water elevation is approximately 2740.
- Geothermal wells (Wells 3, 23, and 24) at the Veterans Administration Medical Center penetrate basalt, clay, and rhyolite to depths of more than 1000 feet to tap geothermal water with temperatures of approximately 130 to 160°F. Well elevations are approximately 2750 feet and the wells are slightly artesian, suggesting a water surface elevation of approximately 2760 feet.
- Near the VA geothermal wells, a 474-foot deep supply domestic well for the VA facility (Well 4) reportedly produces 78°F water. The well has a static water level of 31 feet and is screened from 428 to 454 feet. This domestic well taps a cold-water aquifer zone above the basalt, but nearly 300 feet below the water table. Therefore, geothermal water-bearing zones are not found at this location above elevation 2300 feet.

C. Geology

Surface geology at the Boise Hills Park is shown in Figure 2 as Tertiary sediments, described by Othberg and Stanford (1992) as Sand and Mudstone of Stream and Lake Sediments. Locally, these sediments have been mapped as the Terteling Springs Formation. The geothermal aquifer in the Boise area is typically found in rhyolite, basalt, and volcanoclastic sediments that underlie the Terteling Springs Formation. Northwest-trending normal faults cut these sediments, and are found to both the northeast and southwest from the proposed park site. The faults appear to be located between the Park and nearby Wells 1 (Somerset Ridge HOA to the west) and Well 5 (Claremont Realty to the northwest).

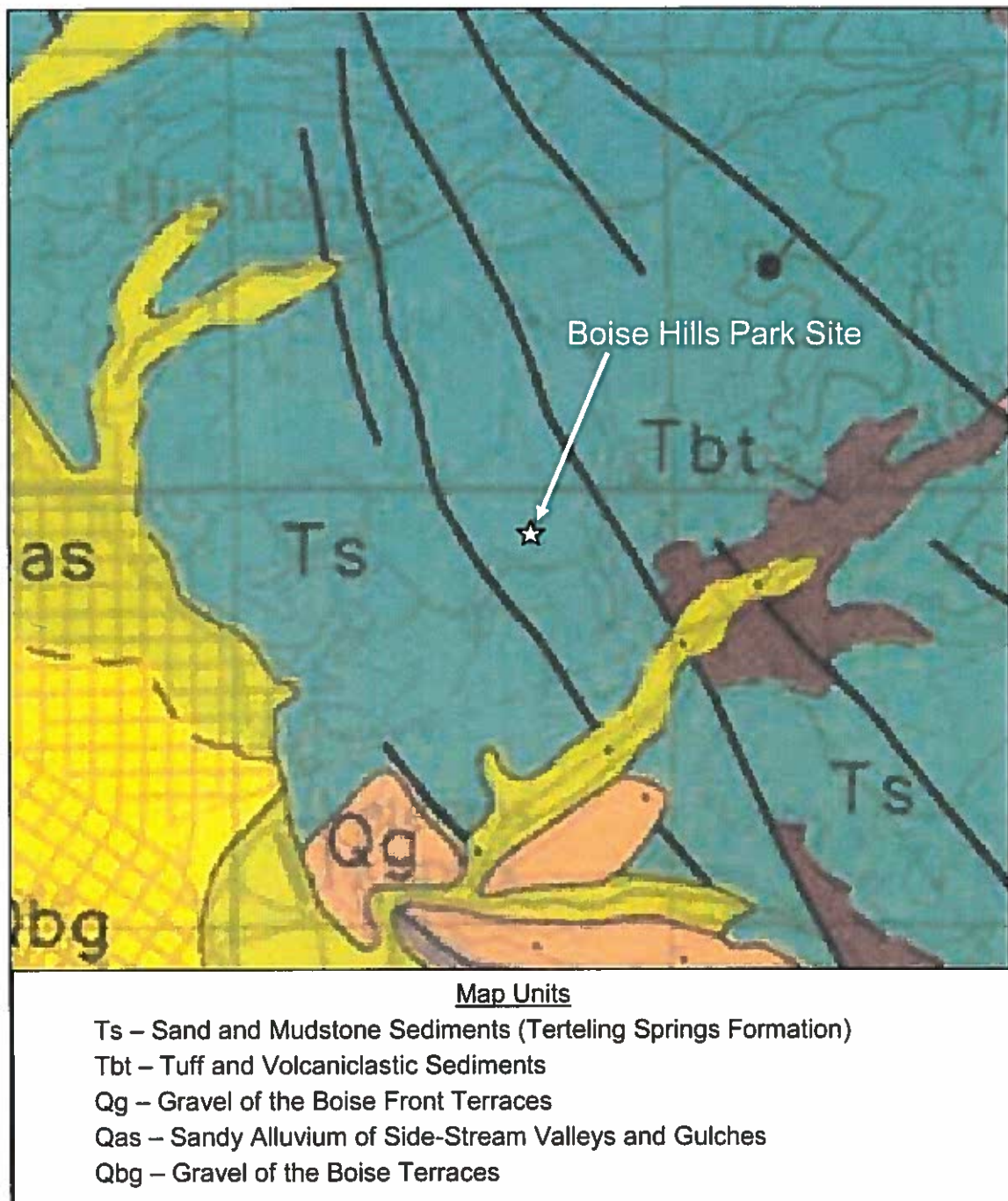


Figure 2. Surface Geology (adapted from Othberg and Stanford, 1992)

D. Discussion

Based on the information detailed above, it is likely that cold groundwater aquifer zones are present beneath the Park in Tertiary-age sediments that overly volcanic rock (rhyolite, basalt, and volcanoclastic sediments). We anticipate that the volcanic materials will be found at depths below 200 feet. Geothermal groundwater is likely to be found within or beneath the volcanic rock units. Depths to the top of the geothermal water-bearing zones will likely range between 300 and 800 feet. Therefore, there is a possibility of encountering warm groundwater within the 200 to 400-foot water-bearing zone proposed for the Boise Hills Park well.

E. Recommendation

A water-bearing zone of 200 to 400 feet is recommended, with the expectation that water-bearing sediments can likely be developed between 200 and 350 feet. Bottom-hole temperatures should be measured at 100-foot intervals beginning at 300 feet. If volcanic rock types are encountered, bottom-hole temperatures should be measured at 50-foot intervals. Drilling should be suspended if a bottom-hole temperature of 85 degrees or more is encountered.

F. Attachments

Attachment A: Well Driller's Reports

Attachment A

Well Driller's Reports

Map	Contact	Const. Date	Total Depth	Address	Drilling Co.	Twp	Rng	Sec	Tract	Use	Csg. Dia.	GPM	Static Water Level	BHT Temp (F)	Water Temp (F)
1	Somerset Ridge Homeowner Assoc	8/26/1988	150		Stevens & Sons Well Drilling	03N	02E	2	NENW	Irrigation	8	165	65		72
2	H F Koch	7/31/1972	635		Russell Cowe	03N	02E	2	NWSW			0	64		84
3	Veterans Administration	9/12/1983	1666		Materi Exploration	03N	02E	2	SESW			700	6		162
4	Veterans Administration	9/30/1974	474		Russell Cowe	03N	02E	2	SWSW			0	31		78
5	Claremont Realty	5/9/1974	725		Witt Drilling	04N	02E	35	SESE			70	340		
6	United Water Idaho Inc	8/1/1979	781	Hulls Gulch	Stevens & Sons Well Drilling	04N	02E	35	NWSW			700	88		86
7	City of Boise - Parks	4/13/1984	270	Camel's Back Park	Stevens & Sons Well Drilling	04N	02E	34	SWSE		12	600	30		
8	City of Boise - Parks	1/25/1958	123	9th & Heron	S & H Drilling & Pump Co	04N	02E	34	SWSE			320	40		
9	Dean Worbois	5/5/2006	86		SOSWell Drilling & Pump Co	04N	02E	3	NWNE	Domestic	6	36	38		
10	Tim O Leary	7/3/1995	63	5th & Sherman	SOSWell Drilling & Pump Co	03N	02E	3	SENE		6	60	40		
11	City of Boise - Police Training Range	7/6/2012	402	1800 Mountain Cove Rd	Adamson Pump & Drilling	03N	02E	1	SENW	Public Water	6	45	255	86.5	
12	S T Hawkins	9/9/1954	302		Witt Drilling	03N	02E	1	NWNW			500	28		
13	Theodore Hawkins	11/28/1975	270		L R Hunsperger Well Drilling	03N	02E	1	NWNW			30	9		
14	Vladimir Davydov	9/24/2007	190	2900 Scheffeld Ct	Robinson Well Drilling	04N	02E	35	NENW	Domestic	6	32	130		
15	Donald Daley	4/22/1961	416		Russell Cowe	04N	02E	35	NW			190	180		
16	Joseph L Parkinson	8/3/1984	285		Stevens & Sons Well Drilling	04N	02E	35	NWNW		8	130	152		
17	Charles H Wilson	5/22/1998	258	Sunview Lane	Hiddleston Drilling & Pump	04N	02E	35	SESW		6	15	212		
18	City of Boise - Parks	3/23/1971	221	Camel's Back Park	Stevens & Sons Well Drilling	04N	02E	34	SWSE			450	51		
19	Don Reiman	5/15/2003	440	2105 Mountain Cove Rd	SOS Well Drilling & Pump Co	03N	02E	1		Domestic	6	25	301	80	
20	Grover J Hawkins	8/22/1968	146		Drake Plumbing	03N	02E	1	NENW			0	0		
21	Roger Michener	10/19/2000	370	2000 Mountain Cove Road	SOS Well Drilling & Pump Co	03N	02E	1	SENW	Irrigation	8	100	235		78
22	Plantation West Builders	2/27/1998	500	2400 E Shaw	Treasure Valley Drilling & Pump	03N	02E	2	SWSE		6	35	40	75	75
23	US Dept of Veterans Affairs	1/8/1987	2300		Holman Drilling Corp	03N	02E	2	SWNW			50	12		140
24	Veterans Administration	9/29/1983	1840		Materi Exploration	03N	02E	2	NWSW			500	0		
25	Joe Gobel	4/10/2002	300	2400 East Shaw Road	Treasure Valley Drilling & Pump	03N	02E	1	SWSE	Domestic	6	30	30	56	56
26	Daniel T Hawkins	7/23/1973	120	Mt. Cove Road	Phipps Pumps & Drilling	03N	02E	2	NWSE				100		
27	Henry Westby	5/31/1962	137	311 Thatcher	Anonymous Driller	03N	02E	2				0	32		

RECEIVED
NOV 15 1988

State 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>Somerset Ridge Homeowners Assn.</u> Address <u>410 S Orchard #136</u> Owner's Permit No. <u>63-88-Z-153 WR 63-10609</u>	Department of Water Resources from top of casing 7. WATER LEVEL Static water level <u>65</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 <u>72</u> °F. Quality <u>good</u> <i>(Describe artesian or temperature zones below.)</i>																								
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 ☐ Bailor ☐ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.F.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td align="center">165</td> <td align="center">69' 8"</td> <td align="center">9</td> </tr> </tbody> </table>	Discharge G.F.M.	Pumping Level	Hours Pumped	165	69' 8"	9																		
Discharge G.F.M.	Pumping Level	Hours Pumped																							
165	69' 8"	9																							
3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	08C255 9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Bore Diam.</th> <th>Depth From To</th> <th>Material</th> <th>Water Yes No</th> </tr> </thead> <tbody> <tr> <td align="center">12</td> <td align="center">0 - 20</td> <td>sandy topsoil</td> <td align="center">X</td> </tr> <tr> <td align="center">10</td> <td align="center">20 - 70</td> <td>brownish sandstone</td> <td align="center">X</td> </tr> <tr> <td></td> <td align="center">70 - 84</td> <td>blue clay</td> <td align="center">X</td> </tr> <tr> <td></td> <td align="center">84 - 92</td> <td>light fine blue sand</td> <td align="center">X</td> </tr> <tr> <td align="center">8</td> <td align="center">92 - 50</td> <td>cemented coarse blue sand</td> <td align="center">X</td> </tr> </tbody> </table> DEPARTMENT OF WATER RESOURCES WESTERN REGIONAL OFFICE	Bore Diam.	Depth From To	Material	Water Yes No	12	0 - 20	sandy topsoil	X	10	20 - 70	brownish sandstone	X		70 - 84	blue clay	X		84 - 92	light fine blue sand	X	8	92 - 50	cemented coarse blue sand	X
Bore Diam.	Depth From To	Material	Water Yes No																						
12	0 - 20	sandy topsoil	X																						
10	20 - 70	brownish sandstone	X																						
	70 - 84	blue clay	X																						
	84 - 92	light fine blue sand	X																						
8	92 - 50	cemented coarse blue sand	X																						
4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____																									
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>.250 inches</td> <td align="center">8</td> <td align="center">Inches + 1 foot</td> <td align="center">119 feet</td> </tr> <tr> <td>.250 inches</td> <td align="center">6</td> <td align="center">Inches 115.5 feet</td> <td align="center">121 feet</td> </tr> <tr> <td>.250 inches</td> <td align="center">6</td> <td align="center">Inches 141 feet</td> <td align="center">150 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 <u>Johnson</u> Type <u>stainless steel</u> Model No. <u>304</u> Diameter <u>6</u> Slot size <u>30</u> Set from <u>121</u> feet to <u>141</u> feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>10</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☒ cuttings Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbores to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port: <u>well cap</u>	Thickness	Diameter	From	To	.250 inches	8	Inches + 1 foot	119 feet	.250 inches	6	Inches 115.5 feet	121 feet	.250 inches	6	Inches 141 feet	150 feet									
Thickness	Diameter	From	To																						
.250 inches	8	Inches + 1 foot	119 feet																						
.250 inches	6	Inches 115.5 feet	121 feet																						
.250 inches	6	Inches 141 feet	150 feet																						
6. LOCATION OF WELL Sketch map location must agree with written location. Subdivision Name <u>Somerset Ridge</u> Lot No. <u>9</u> Block No. _____ County <u>Ada</u> <u>S/E</u> <u>-S/W & S/N</u> Sec. <u>35</u> , T. <u>4</u> N/S., R. <u>3</u> E/W.	10. Work started <u>8/19/88</u> finished <u>8/26/88</u> 11. DRILLERS CERTIFICATION I/we certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>W.E. Stevens & Sons</u> No. <u>153</u> Address <u>3709 Hawthorne Dr</u> Date <u>8/29/88</u> Signed by (Firm Official) <u>Wayne E Stevens</u> and (Operator) <u>Wayne E Stevens</u>																								

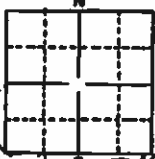
USE TYPEWRITER OR
BALL-POINT PEN

State of Idaho
Department of Water Administration

Well ID: 2

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.

1. WELL OWNER Name <u>H.F. KOCH</u> Address <u>257 Circle Way Drive</u> Owner's Permit No. _____	7. WATER LEVEL <u>64'</u> Static water level <u>116'</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature <u>84°</u> F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																																																																																																								
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☐ Bailor ☒ Other <u>air</u> Discharge G.P.M. <u>80</u> Draw Down _____ Hours Pumped _____																																																																																																																																																																								
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock	9. LITHOLOGIC LOG <u>038440</u>																																																																																																																																																																								
4. METHOD DRILLED ☒ Cable ☐ Rotary ☐ Dug ☐ Other	<table border="1"><thead><tr><th>Hole Diam.</th><th>Depth From</th><th>To</th><th>Material</th><th>Water Yes</th><th>No</th></tr></thead><tbody><tr><td>8</td><td>0</td><td>2</td><td>SOIL - PURPLE</td><td></td><td></td></tr><tr><td>✓</td><td>2</td><td>58</td><td>BROWN SANDSTONE</td><td></td><td>✓</td></tr><tr><td>✓</td><td>58</td><td>63</td><td>HEAVY BROWN CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>63</td><td>69</td><td>HEAVY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>69</td><td>103</td><td>GRAY SHALE</td><td></td><td>✓</td></tr><tr><td>✓</td><td>103</td><td>134</td><td>COARSE SAND & CLAY</td><td>✓</td><td></td></tr><tr><td>✓</td><td>134</td><td>218</td><td>WATER SAND @ 64' 8" EMP</td><td></td><td></td></tr><tr><td>✓</td><td>218</td><td>220</td><td>STICKY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>220</td><td>270</td><td>VERY HARD SHALE</td><td></td><td>✓</td></tr><tr><td>✓</td><td>270</td><td>300</td><td>SANDY CLAY - BLUE</td><td>?</td><td></td></tr><tr><td>✓</td><td>300</td><td>308</td><td>COARSE SAND & CLAY</td><td>?</td><td></td></tr><tr><td>✓</td><td>308</td><td>340</td><td>STICKY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>340</td><td>408</td><td>FINE SANDY CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>408</td><td>412</td><td>COARSE SAND - WHITE TALC?</td><td></td><td>?</td></tr><tr><td>✓</td><td>412</td><td>417</td><td>CLAY STREAKS</td><td></td><td></td></tr><tr><td>✓</td><td>417</td><td>451</td><td>VERY STICKY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>451</td><td>485</td><td>SANDY CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>485</td><td>486</td><td>COARSE WATER SAND</td><td></td><td>✓</td></tr><tr><td>✓</td><td>486</td><td>574</td><td>STICKY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>574</td><td>578</td><td>PEA GRAVEL</td><td></td><td>?</td></tr><tr><td>✓</td><td>578</td><td>598</td><td>STICKY BLUE CLAY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>598</td><td>600</td><td>SANDY</td><td></td><td>✓</td></tr><tr><td>✓</td><td>600</td><td>620</td><td>BLUE SHALE</td><td></td><td>✓</td></tr><tr><td>✓</td><td>620</td><td>635</td><td>HARD BLUE SHALE</td><td></td><td>✓</td></tr><tr><td>✓</td><td>635</td><td>640</td><td>CAVED TO 575</td><td></td><td></td></tr><tr><td>✓</td><td>640</td><td>645</td><td>PIPE 20" @ 624'</td><td></td><td></td></tr><tr><td>✓</td><td>645</td><td>650</td><td>MAGNETITE</td><td></td><td></td></tr></tbody></table>	Hole Diam.	Depth From	To	Material	Water Yes	No	8	0	2	SOIL - PURPLE			✓	2	58	BROWN SANDSTONE		✓	✓	58	63	HEAVY BROWN CLAY		✓	✓	63	69	HEAVY BLUE CLAY		✓	✓	69	103	GRAY SHALE		✓	✓	103	134	COARSE SAND & CLAY	✓		✓	134	218	WATER SAND @ 64' 8" EMP			✓	218	220	STICKY BLUE CLAY		✓	✓	220	270	VERY HARD SHALE		✓	✓	270	300	SANDY CLAY - BLUE	?		✓	300	308	COARSE SAND & CLAY	?		✓	308	340	STICKY BLUE CLAY		✓	✓	340	408	FINE SANDY CLAY		✓	✓	408	412	COARSE SAND - WHITE TALC?		?	✓	412	417	CLAY STREAKS			✓	417	451	VERY STICKY BLUE CLAY		✓	✓	451	485	SANDY CLAY		✓	✓	485	486	COARSE WATER SAND		✓	✓	486	574	STICKY BLUE CLAY		✓	✓	574	578	PEA GRAVEL		?	✓	578	598	STICKY BLUE CLAY		✓	✓	598	600	SANDY		✓	✓	600	620	BLUE SHALE		✓	✓	620	635	HARD BLUE SHALE		✓	✓	635	640	CAVED TO 575			✓	640	645	PIPE 20" @ 624'			✓	645	650	MAGNETITE		
Hole Diam.	Depth From	To	Material	Water Yes	No																																																																																																																																																																				
8	0	2	SOIL - PURPLE																																																																																																																																																																						
✓	2	58	BROWN SANDSTONE		✓																																																																																																																																																																				
✓	58	63	HEAVY BROWN CLAY		✓																																																																																																																																																																				
✓	63	69	HEAVY BLUE CLAY		✓																																																																																																																																																																				
✓	69	103	GRAY SHALE		✓																																																																																																																																																																				
✓	103	134	COARSE SAND & CLAY	✓																																																																																																																																																																					
✓	134	218	WATER SAND @ 64' 8" EMP																																																																																																																																																																						
✓	218	220	STICKY BLUE CLAY		✓																																																																																																																																																																				
✓	220	270	VERY HARD SHALE		✓																																																																																																																																																																				
✓	270	300	SANDY CLAY - BLUE	?																																																																																																																																																																					
✓	300	308	COARSE SAND & CLAY	?																																																																																																																																																																					
✓	308	340	STICKY BLUE CLAY		✓																																																																																																																																																																				
✓	340	408	FINE SANDY CLAY		✓																																																																																																																																																																				
✓	408	412	COARSE SAND - WHITE TALC?		?																																																																																																																																																																				
✓	412	417	CLAY STREAKS																																																																																																																																																																						
✓	417	451	VERY STICKY BLUE CLAY		✓																																																																																																																																																																				
✓	451	485	SANDY CLAY		✓																																																																																																																																																																				
✓	485	486	COARSE WATER SAND		✓																																																																																																																																																																				
✓	486	574	STICKY BLUE CLAY		✓																																																																																																																																																																				
✓	574	578	PEA GRAVEL		?																																																																																																																																																																				
✓	578	598	STICKY BLUE CLAY		✓																																																																																																																																																																				
✓	598	600	SANDY		✓																																																																																																																																																																				
✓	600	620	BLUE SHALE		✓																																																																																																																																																																				
✓	620	635	HARD BLUE SHALE		✓																																																																																																																																																																				
✓	635	640	CAVED TO 575																																																																																																																																																																						
✓	640	645	PIPE 20" @ 624'																																																																																																																																																																						
✓	645	650	MAGNETITE																																																																																																																																																																						
5. WELL CONSTRUCTION Diameter of hole <u>6</u> inches Total depth _____ feet Casing schedule: ☐ Steel ☐ Concrete Thickness _____ inches Diameter _____ inches From _____ feet To _____ feet <u>0.35</u> inches <u>6</u> inches <u>1</u> foot <u>6.32</u> feet _____ inches <u>4</u> inches <u>6.18</u> feet <u>11.43</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☒ Factory ☐ Knife ☐ Torch Size of perforation <u>3</u> inches by <u>18</u> inches Number <u>12</u> slots to <u>10</u> feet _____ perforations <u>100</u> feet <u>109.5</u> feet _____ perforations _____ feet <u>109.5</u> feet _____ perforations <u>106.5</u> feet <u>110.5</u> feet _____ perforations <u>630</u> feet <u>670</u> 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? ☒ Yes ☐ No To what depth <u>135</u> feet Material used in seal ☐ Cement grout ☒ Pudding clay	10. Work started <u>11-17-71</u> finished <u>July 72</u>																																																																																																																																																																								
6. LOCATION OF WELL Sketch map location must agree with written location. <u>63</u> <u>18</u> <u>Page 586</u> <u>100</u>  <u>257 Circle Way Drive</u> County <u>Ada</u> <u>77</u> <u>1/4</u> Sec <u>2</u> T. <u>3</u> N. R. <u>22</u> E. <u>(Name Came Spelled on map)</u>	11. DRILLER'S CERTIFICATION This well was drilled under my supervision and this report is true to the best of my knowledge. <u>Russell Crowe</u> <u>65</u> Driller's or Firm's Name Number Address _____ Signed By _____ Date _____																																																																																																																																																																								

USE ADDITIONAL SHEETS IF NECESSARY

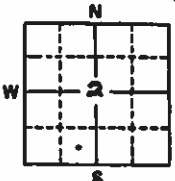
FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER OR
BALLPOINT PEN

WELL DRILLER'S REPORT

State 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.

OCT 1983

1. WELL OWNER Name <u>Veterans Administration</u> Address <u>Boise, Idaho</u> Owner's Permit No. <u>63-9890</u>		7. WATER LEVEL Static water level <u>6</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow <u> </u> Artesian closed-in pressure <u> </u> p.s.i. Controlled by: ☒ Valve ☐ Cap ☐ Plug Temperature <u> </u> °F. Quality <u>Good</u> 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 ☐ Baller ☒ Air ☐ Other <u> </u> <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td>Approx. 700</td><td>540'</td><td>6 1/2</td></tr></tbody></table>		Discharge G.P.M.	Pumping Level	Hours Pumped	Approx. 700	540'	6 1/2																																																																														
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																					
Approx. 700	540'	6 1/2																																																																																					
3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☒ Other <u>Geothermal production</u> (specify type)		9. LITHOLOGIC LOG <table border="1"><thead><tr><th>Bore Diam.</th><th>Depth From To</th><th>Material</th><th>Water Yes No</th></tr></thead><tbody><tr><td>8 1/2</td><td>0 6</td><td>Topsoil</td><td>X</td></tr><tr><td>16</td><td>6 20</td><td>Topsoil</td><td>X</td></tr><tr><td>16</td><td>20 65</td><td>Coarse SS Yellow</td><td>X</td></tr><tr><td>16</td><td>65 140</td><td>Med Grain SS Tan & Yellow</td><td>X</td></tr><tr><td>12</td><td>140 240</td><td>Siltstone - Drk Gray</td><td>X</td></tr><tr><td></td><td>240 255</td><td>Clay Gray</td><td>X</td></tr><tr><td></td><td>255 445</td><td>Med SS Gray Clay Drk Gray</td><td>?</td></tr><tr><td></td><td>445 495</td><td>Siltstone Blue-gray</td><td>X</td></tr><tr><td></td><td>495 510</td><td>Sand Gray</td><td>?</td></tr><tr><td></td><td>510 608</td><td>Altered Basalt Gray</td><td>X</td></tr><tr><td></td><td>608 622</td><td>Claystone Drk Gray</td><td>X</td></tr><tr><td></td><td>622 662</td><td>Basalt Black</td><td>?</td></tr><tr><td></td><td>662 682</td><td>Clay Drk Gray</td><td>X</td></tr><tr><td></td><td>682 720</td><td>Basalt Hard Black</td><td>?</td></tr><tr><td>12</td><td>720 745</td><td>Clay Drk Gray w/sd</td><td>X</td></tr><tr><td>8</td><td>745 820</td><td>Sand Med & Coarse Gray</td><td>?</td></tr><tr><td>8</td><td>820 970</td><td>Rhyolite Gray to lavender</td><td>?</td></tr><tr><td>8</td><td>970 1345</td><td>Rhyolite Tuff White to Gray</td><td>?</td></tr><tr><td>8</td><td>1345 1380</td><td>Rhyolite Tuff White Glassy</td><td>?</td></tr><tr><td>8</td><td>1380 1666</td><td>Rhyolite Tuff Gray</td><td>?</td></tr></tbody></table>		Bore Diam.	Depth From To	Material	Water Yes No	8 1/2	0 6	Topsoil	X	16	6 20	Topsoil	X	16	20 65	Coarse SS Yellow	X	16	65 140	Med Grain SS Tan & Yellow	X	12	140 240	Siltstone - Drk Gray	X		240 255	Clay Gray	X		255 445	Med SS Gray Clay Drk Gray	?		445 495	Siltstone Blue-gray	X		495 510	Sand Gray	?		510 608	Altered Basalt Gray	X		608 622	Claystone Drk Gray	X		622 662	Basalt Black	?		662 682	Clay Drk Gray	X		682 720	Basalt Hard Black	?	12	720 745	Clay Drk Gray w/sd	X	8	745 820	Sand Med & Coarse Gray	?	8	820 970	Rhyolite Gray to lavender	?	8	970 1345	Rhyolite Tuff White to Gray	?	8	1345 1380	Rhyolite Tuff White Glassy	?	8	1380 1666	Rhyolite Tuff Gray	?
Bore Diam.	Depth From To	Material	Water Yes No																																																																																				
8 1/2	0 6	Topsoil	X																																																																																				
16	6 20	Topsoil	X																																																																																				
16	20 65	Coarse SS Yellow	X																																																																																				
16	65 140	Med Grain SS Tan & Yellow	X																																																																																				
12	140 240	Siltstone - Drk Gray	X																																																																																				
	240 255	Clay Gray	X																																																																																				
	255 445	Med SS Gray Clay Drk Gray	?																																																																																				
	445 495	Siltstone Blue-gray	X																																																																																				
	495 510	Sand Gray	?																																																																																				
	510 608	Altered Basalt Gray	X																																																																																				
	608 622	Claystone Drk Gray	X																																																																																				
	622 662	Basalt Black	?																																																																																				
	662 682	Clay Drk Gray	X																																																																																				
	682 720	Basalt Hard Black	?																																																																																				
12	720 745	Clay Drk Gray w/sd	X																																																																																				
8	745 820	Sand Med & Coarse Gray	?																																																																																				
8	820 970	Rhyolite Gray to lavender	?																																																																																				
8	970 1345	Rhyolite Tuff White to Gray	?																																																																																				
8	1345 1380	Rhyolite Tuff White Glassy	?																																																																																				
8	1380 1666	Rhyolite Tuff Gray	?																																																																																				
4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other <u> </u>		10. CONFIDENTIAL ~~CONFIDENTIAL~~ <i>Re-leased by V.A. 10/24/83 JMS</i>																																																																																					
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other <u> </u> <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>.250 inches</td><td>16 inches</td><td>-6 feet</td><td>140 feet</td></tr><tr><td>.337 inches</td><td>12 inches</td><td>+2 feet</td><td>802 feet</td></tr><tr><td>.250 inches</td><td>8 inches</td><td>780 feet</td><td>1500 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 <u>1/8</u> inches by <u>2 1/2</u> inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>6400 perforations</td><td>1100 feet</td><td>1500 feet</td></tr><tr><td> perforations</td><td> feet</td><td> feet</td></tr><tr><td> perforations</td><td> feet</td><td> feet</td></tr></tbody></table> Well screen installed? ☐ Yes ☒ No Manufacturer's name <u> </u> Type <u> </u> Model No. <u> </u> Diameter <u> </u> Slot size <u> </u> Set from <u> </u> feet to <u> </u> feet Diameter <u> </u> Slot size <u> </u> Set from <u> </u> feet to <u> </u> feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel <u> </u> Placed from <u> </u> feet to <u> </u> feet Surface seal depth <u>802</u> Material used in seal: ☒ Cement grout ☐ Bentonite ☐ Pudding clay ☐ <u> </u> Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld <u> </u> ☒ Cemented between strata Describe access port <u>2" coupling</u>		Thickness	Diameter	From	To	.250 inches	16 inches	-6 feet	140 feet	.337 inches	12 inches	+2 feet	802 feet	.250 inches	8 inches	780 feet	1500 feet	Number	From	To	6400 perforations	1100 feet	1500 feet	perforations	feet	feet	perforations	feet	feet	11. DRILLERS CERTIFICATION <u>de</u> <u>de</u> I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Water Exploration, Inc.</u> ID# <u>429</u> Address <u>Box 500</u> <u>Upton, WY 82730</u> Date <u>10-3-83</u> Signed by (Firm Official) <u>[Signature]</u> and (Operator) <u>[Signature]</u>																																																									
Thickness	Diameter	From	To																																																																																				
.250 inches	16 inches	-6 feet	140 feet																																																																																				
.337 inches	12 inches	+2 feet	802 feet																																																																																				
.250 inches	8 inches	780 feet	1500 feet																																																																																				
Number	From	To																																																																																					
6400 perforations	1100 feet	1500 feet																																																																																					
perforations	feet	feet																																																																																					
perforations	feet	feet																																																																																					
6. LOCATION OF WELL Sketch map location must agree with written location  Subdivision Name <u> </u> Lot No. <u> </u> Block No. <u> </u> County <u> </u> SE <u> </u> SW <u> </u> Sec. <u>2</u> T. <u>3N</u> N/S, R. <u>2E</u> E/W.		12. USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT																																																																																					

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

Well ID: 4

1. WELL OWNER Name <u>Veterans Administration</u> Address _____ Owner's Permit No. _____		7. WATER LEVEL Static water level <u>31</u> 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																																																																																																																													
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____		8. WELL TEST DATA ☒ Pump ☐ Baller ☐ Other <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Draw Down</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>550</u></td><td><u>170</u></td><td><u>8</u></td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		Discharge G.P.M.	Draw Down	Hours Pumped	<u>550</u>	<u>170</u>	<u>8</u>																																																																																																																						
Discharge G.P.M.	Draw Down	Hours Pumped																																																																																																																													
<u>550</u>	<u>170</u>	<u>8</u>																																																																																																																													
3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) <u>Septic</u> ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG <u>038439</u> <table border="1"><thead><tr><th rowspan="2">Hole 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><u>16</u></td><td><u>0</u></td><td><u>25</u></td><td><u>Top soil</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>25</u></td><td><u>58</u></td><td><u>gravel & boulders</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>58</u></td><td><u>74</u></td><td><u>sandy blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>74</u></td><td><u>150</u></td><td><u>grout clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>150</u></td><td><u>165</u></td><td><u>sandy blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>165</u></td><td><u>190</u></td><td><u>blue shale</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>190</u></td><td><u>240</u></td><td><u>blue sticky clay</u></td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td><u>16" pipe down to 20 ft.</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>240</u></td><td><u>258</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>258</u></td><td><u>299</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>299</u></td><td><u>324</u></td><td><u>sandy blue</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>324</u></td><td><u>335</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>335</u></td><td><u>345</u></td><td><u>sand stone</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>345</u></td><td><u>354</u></td><td><u>sand stone</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>354</u></td><td><u>395</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>395</u></td><td><u>427</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>427</u></td><td><u>461</u></td><td><u>sand, white bearing</u></td><td> </td><td> </td></tr><tr><td> </td><td><u>461</u></td><td><u>474</u></td><td><u>blue clay</u></td><td> </td><td> </td></tr><tr><td colspan="6">Top of 10" liner 171 from top of well.</td></tr></tbody></table>		Hole Diam.	Depth		Material	Water		From	To	Yes	No	<u>16</u>	<u>0</u>	<u>25</u>	<u>Top soil</u>				<u>25</u>	<u>58</u>	<u>gravel & boulders</u>				<u>58</u>	<u>74</u>	<u>sandy blue clay</u>				<u>74</u>	<u>150</u>	<u>grout clay</u>				<u>150</u>	<u>165</u>	<u>sandy blue clay</u>				<u>165</u>	<u>190</u>	<u>blue shale</u>				<u>190</u>	<u>240</u>	<u>blue sticky clay</u>						<u>16" pipe down to 20 ft.</u>				<u>240</u>	<u>258</u>	<u>blue clay</u>				<u>258</u>	<u>299</u>	<u>blue clay</u>				<u>299</u>	<u>324</u>	<u>sandy blue</u>				<u>324</u>	<u>335</u>	<u>blue clay</u>				<u>335</u>	<u>345</u>	<u>sand stone</u>				<u>345</u>	<u>354</u>	<u>sand stone</u>				<u>354</u>	<u>395</u>	<u>blue clay</u>				<u>395</u>	<u>427</u>	<u>blue clay</u>				<u>427</u>	<u>461</u>	<u>sand, white bearing</u>				<u>461</u>	<u>474</u>	<u>blue clay</u>			Top of 10" liner 171 from top of well.					
Hole Diam.	Depth		Material		Water																																																																																																																										
	From	To		Yes	No																																																																																																																										
<u>16</u>	<u>0</u>	<u>25</u>	<u>Top soil</u>																																																																																																																												
	<u>25</u>	<u>58</u>	<u>gravel & boulders</u>																																																																																																																												
	<u>58</u>	<u>74</u>	<u>sandy blue clay</u>																																																																																																																												
	<u>74</u>	<u>150</u>	<u>grout clay</u>																																																																																																																												
	<u>150</u>	<u>165</u>	<u>sandy blue clay</u>																																																																																																																												
	<u>165</u>	<u>190</u>	<u>blue shale</u>																																																																																																																												
	<u>190</u>	<u>240</u>	<u>blue sticky clay</u>																																																																																																																												
			<u>16" pipe down to 20 ft.</u>																																																																																																																												
	<u>240</u>	<u>258</u>	<u>blue clay</u>																																																																																																																												
	<u>258</u>	<u>299</u>	<u>blue clay</u>																																																																																																																												
	<u>299</u>	<u>324</u>	<u>sandy blue</u>																																																																																																																												
	<u>324</u>	<u>335</u>	<u>blue clay</u>																																																																																																																												
	<u>335</u>	<u>345</u>	<u>sand stone</u>																																																																																																																												
	<u>345</u>	<u>354</u>	<u>sand stone</u>																																																																																																																												
	<u>354</u>	<u>395</u>	<u>blue clay</u>																																																																																																																												
	<u>395</u>	<u>427</u>	<u>blue clay</u>																																																																																																																												
	<u>427</u>	<u>461</u>	<u>sand, white bearing</u>																																																																																																																												
	<u>461</u>	<u>474</u>	<u>blue clay</u>																																																																																																																												
Top of 10" liner 171 from top of well.																																																																																																																															
4. METHOD DRILLED ☒ Cable ☐ Rotary ☐ Dug ☐ Other		5. WELL CONSTRUCTION Diameter of hole <u>16</u> inches Total depth <u>474</u> feet Casing schedule: ☒ Steel ☐ Concrete <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.375</u> inches</td><td><u>16</u> inches</td><td><u>2</u> feet</td><td><u>203</u> feet</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table> 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 <u>Johnson</u> Type <u>slotted steel</u> Model No. _____ Diameter <u>16</u> Slot size <u>3.5</u> Set from <u>428</u> feet to <u>454</u> feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No Size of gravel <u>1/2"</u> Placed from <u>474</u> feet to <u>180</u> feet Surface seal depth <u>24</u> Material used in seal <u>347 MP</u> ☒ Cement grout ☐ Pudding clay ☐ Well cuttings Sealing procedure used ☒ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth		Thickness	Diameter	From	To	<u>.375</u> inches	<u>16</u> inches	<u>2</u> feet	<u>203</u> feet																																																																																																																				
Thickness	Diameter	From	To																																																																																																																												
<u>.375</u> inches	<u>16</u> inches	<u>2</u> feet	<u>203</u> feet																																																																																																																												
6. LOCATION OF WELL Sketch of location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Ada</u> <u>SW 1/4 SW 1/4 Sec. 22 T. 3 N. R. 2 E.</u>		10. Work started <u>April 74</u> finished <u>Sept 74</u> 11. DRILLER'S CERTIFICATION Firm Name <u>Russell Cove Drilling</u> Firm No. <u>65</u> Address <u>Boise, Ida</u> Date _____ Signed by (Firm Official) <u>Russell Cove</u> and _____ (Operator)																																																																																																																													

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER
BALL POINT PEN

State of Idaho
Department of Water Administration

Well ID: 5

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>CLARE MONT REALTY</u> Address <u>BOISE, IDAHO</u> Owner's Permit No. _____	7. WATER LEVEL <u>5/9/74</u> Static water level <u>340</u> 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																																																																																																																																																																												
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA <u>650 FT SETTING ON PUMP</u> ☒ Pump ☐ Bailer ☐ Other <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Draw Down</th> <th>Hours Pumped</th> </tr> <tr> <td><u>70</u></td> <td><u>310 FT</u></td> <td><u>4 HOURS</u></td> </tr> <tr> <td colspan="3" style="text-align: center;"><u>7/9/74</u></td> </tr> </table>	Discharge G.P.M.	Draw Down	Hours Pumped	<u>70</u>	<u>310 FT</u>	<u>4 HOURS</u>	<u>7/9/74</u>																																																																																																																																																																					
Discharge G.P.M.	Draw Down	Hours Pumped																																																																																																																																																																											
<u>70</u>	<u>310 FT</u>	<u>4 HOURS</u>																																																																																																																																																																											
<u>7/9/74</u>																																																																																																																																																																													
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☒ Municipal ☐ Industrial ☐ Stock	9. LITHOLOGIC LOG <u>46623</u> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole 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>24</td><td>0</td><td>35</td><td>SAND STONE</td><td></td><td></td></tr> <tr><td>11</td><td>35</td><td>58</td><td>CLAY AND SAND</td><td></td><td></td></tr> <tr><td>11</td><td>58</td><td>105</td><td>SAND SMALL GRAVEL</td><td></td><td></td></tr> <tr><td>11</td><td>105</td><td>169</td><td>SANDY CLAY</td><td></td><td></td></tr> <tr><td>11</td><td>169</td><td>196</td><td>RED SAND (HARD) PERMANENT</td><td></td><td></td></tr> <tr><td>11</td><td>196</td><td>217</td><td>BROWN SAND GRAVEL</td><td></td><td></td></tr> <tr><td>11</td><td>217</td><td>230</td><td>LAVA GRAVEL</td><td></td><td></td></tr> <tr><td>20</td><td>230</td><td>271</td><td>LAVA ROCK (HARD) BLACK</td><td></td><td></td></tr> <tr><td>20</td><td>271</td><td>289</td><td>LAVA (MEDIUM HARD)</td><td></td><td></td></tr> <tr><td>20</td><td>289</td><td>293</td><td>LAVA GRAVEL CLAY CHUNKS</td><td></td><td></td></tr> <tr><td>20</td><td>293</td><td>360</td><td>BLUE CLAY SAND IMBEDDED</td><td></td><td></td></tr> <tr><td>20</td><td>360</td><td>382</td><td>BLUE CLAY (HARD)</td><td></td><td></td></tr> <tr><td>20</td><td>382</td><td>387</td><td>SANDY CLAY BLUE (CHUNKY)</td><td></td><td></td></tr> <tr><td>20</td><td>387</td><td>446</td><td>CLAY BLUE (STICKY)</td><td></td><td></td></tr> <tr><td>20</td><td>446</td><td>471</td><td>BLUE CLAY SAND IMBEDDED</td><td></td><td></td></tr> <tr><td>20</td><td>471</td><td>508</td><td>CHUNKY BLUE CLAY STICKY</td><td></td><td></td></tr> <tr><td>20</td><td>508</td><td>543</td><td>STICKY CLAY BLUE</td><td></td><td></td></tr> <tr><td>16</td><td>543</td><td>550</td><td>(LIGHT) COLOR CLAY</td><td></td><td></td></tr> <tr><td>16</td><td>550</td><td>585</td><td>BLUE CLAY CHUNKY STICKY</td><td></td><td></td></tr> <tr><td>16</td><td>585</td><td>610</td><td>BROWN CLAY LAVA SAND IMBEDDED</td><td></td><td></td></tr> <tr><td>16</td><td>610</td><td>620</td><td>LIGHT BLUE CHUNKY (HARD)</td><td></td><td></td></tr> <tr><td>12</td><td>620</td><td>639</td><td>BROWN AND BLUE CLAY TOGETHER</td><td></td><td></td></tr> <tr><td>12</td><td>639</td><td>651</td><td>BLUE CLAY STICKY DRY AND</td><td></td><td></td></tr> <tr><td>12</td><td>651</td><td>688</td><td>HARD SANDY CLAY</td><td></td><td></td></tr> <tr><td>12</td><td>688</td><td>690</td><td>CLAY COARSE SAND</td><td></td><td></td></tr> <tr><td>12</td><td>690</td><td>725</td><td>COARSE SAND BLUE RED</td><td></td><td></td></tr> <tr><td>12</td><td>725</td><td></td><td>Bottomed Hole, out</td><td></td><td></td></tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	24	0	35	SAND STONE			11	35	58	CLAY AND SAND			11	58	105	SAND SMALL GRAVEL			11	105	169	SANDY CLAY			11	169	196	RED SAND (HARD) PERMANENT			11	196	217	BROWN SAND GRAVEL			11	217	230	LAVA GRAVEL			20	230	271	LAVA ROCK (HARD) BLACK			20	271	289	LAVA (MEDIUM HARD)			20	289	293	LAVA GRAVEL CLAY CHUNKS			20	293	360	BLUE CLAY SAND IMBEDDED			20	360	382	BLUE CLAY (HARD)			20	382	387	SANDY CLAY BLUE (CHUNKY)			20	387	446	CLAY BLUE (STICKY)			20	446	471	BLUE CLAY SAND IMBEDDED			20	471	508	CHUNKY BLUE CLAY STICKY			20	508	543	STICKY CLAY BLUE			16	543	550	(LIGHT) COLOR CLAY			16	550	585	BLUE CLAY CHUNKY STICKY			16	585	610	BROWN CLAY LAVA SAND IMBEDDED			16	610	620	LIGHT BLUE CHUNKY (HARD)			12	620	639	BROWN AND BLUE CLAY TOGETHER			12	639	651	BLUE CLAY STICKY DRY AND			12	651	688	HARD SANDY CLAY			12	688	690	CLAY COARSE SAND			12	690	725	COARSE SAND BLUE RED			12	725		Bottomed Hole, out		
Hole Diam.	Depth		Material	Water																																																																																																																																																																									
	From	To		Yes	No																																																																																																																																																																								
24	0	35	SAND STONE																																																																																																																																																																										
11	35	58	CLAY AND SAND																																																																																																																																																																										
11	58	105	SAND SMALL GRAVEL																																																																																																																																																																										
11	105	169	SANDY CLAY																																																																																																																																																																										
11	169	196	RED SAND (HARD) PERMANENT																																																																																																																																																																										
11	196	217	BROWN SAND GRAVEL																																																																																																																																																																										
11	217	230	LAVA GRAVEL																																																																																																																																																																										
20	230	271	LAVA ROCK (HARD) BLACK																																																																																																																																																																										
20	271	289	LAVA (MEDIUM HARD)																																																																																																																																																																										
20	289	293	LAVA GRAVEL CLAY CHUNKS																																																																																																																																																																										
20	293	360	BLUE CLAY SAND IMBEDDED																																																																																																																																																																										
20	360	382	BLUE CLAY (HARD)																																																																																																																																																																										
20	382	387	SANDY CLAY BLUE (CHUNKY)																																																																																																																																																																										
20	387	446	CLAY BLUE (STICKY)																																																																																																																																																																										
20	446	471	BLUE CLAY SAND IMBEDDED																																																																																																																																																																										
20	471	508	CHUNKY BLUE CLAY STICKY																																																																																																																																																																										
20	508	543	STICKY CLAY BLUE																																																																																																																																																																										
16	543	550	(LIGHT) COLOR CLAY																																																																																																																																																																										
16	550	585	BLUE CLAY CHUNKY STICKY																																																																																																																																																																										
16	585	610	BROWN CLAY LAVA SAND IMBEDDED																																																																																																																																																																										
16	610	620	LIGHT BLUE CHUNKY (HARD)																																																																																																																																																																										
12	620	639	BROWN AND BLUE CLAY TOGETHER																																																																																																																																																																										
12	639	651	BLUE CLAY STICKY DRY AND																																																																																																																																																																										
12	651	688	HARD SANDY CLAY																																																																																																																																																																										
12	688	690	CLAY COARSE SAND																																																																																																																																																																										
12	690	725	COARSE SAND BLUE RED																																																																																																																																																																										
12	725		Bottomed Hole, out																																																																																																																																																																										
4. METHOD DRILLED ☒ Cable ☐ Rotary ☐ Dug ☐ Other																																																																																																																																																																													
5. WELL CONSTRUCTION Diameter of hole <u>20</u> inches Total depth <u>725</u> feet Casing schedule: ☐ Steel ☐ Concrete <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>375</u> inches</td> <td><u>20</u> inches</td> <td><u>+1</u> feet</td> <td><u>222</u> feet</td> </tr> <tr> <td><u>375</u> inches</td> <td><u>12</u> inches</td> <td><u>+1</u> feet</td> <td><u>636</u> feet</td> </tr> <tr> <td><u>250</u> inches</td> <td><u>10</u> inches</td> <td><u>630</u> feet</td> <td><u>690</u> feet</td> </tr> <tr> <td><u>250</u> inches</td> <td><u>10</u> inches</td> <td><u>720</u> feet</td> <td><u>725</u> feet</td> </tr> </tbody> </table> Was a packer or seal used? ☒ Yes ☐ No Perforated? ☐ Yes ☐ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr> <tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr> <tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr> </tbody> </table> Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>JOHNSON</u> Type <u>308 STAINLESS</u> Model No. _____ <u>PS</u> Diameter <u>10</u> Slot size <u>40</u> Set from <u>690</u> feet to <u>720</u> 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 <u>20</u> feet Material used in seal ☐ Cement grout ☒ Puddling clay	Thickness	Diameter	From	To	<u>375</u> inches	<u>20</u> inches	<u>+1</u> feet	<u>222</u> feet	<u>375</u> inches	<u>12</u> inches	<u>+1</u> feet	<u>636</u> feet	<u>250</u> inches	<u>10</u> inches	<u>630</u> feet	<u>690</u> feet	<u>250</u> inches	<u>10</u> inches	<u>720</u> feet	<u>725</u> feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet																																																																																																																																													
Thickness	Diameter	From	To																																																																																																																																																																										
<u>375</u> inches	<u>20</u> inches	<u>+1</u> feet	<u>222</u> feet																																																																																																																																																																										
<u>375</u> inches	<u>12</u> inches	<u>+1</u> feet	<u>636</u> feet																																																																																																																																																																										
<u>250</u> inches	<u>10</u> inches	<u>630</u> feet	<u>690</u> feet																																																																																																																																																																										
<u>250</u> inches	<u>10</u> inches	<u>720</u> feet	<u>725</u> feet																																																																																																																																																																										
Number	From	To																																																																																																																																																																											
_____ perforations	_____ feet	_____ feet																																																																																																																																																																											
_____ perforations	_____ feet	_____ feet																																																																																																																																																																											
_____ perforations	_____ feet	_____ feet																																																																																																																																																																											
6. LOCATION OF WELL Sketch map location must agree with written location. <u>63</u> County <u>ADA</u> <u>SE 1/4 Sec 35, T. 4 N. R. 2 E</u>	10. Work started <u>9/4/73</u> finished <u>5/9/74</u>																																																																																																																																																																												
	11. DRILLER'S CERTIFICATION This well was drilled under my supervision and this report is true to the best of my knowledge. <u>WILL DRILLING</u> <u>55</u> Driller's or Firm's Name _____ Number _____ <u>Caldwell, IDAHO</u> Address _____ <u>Wanneth Will</u> Signed By _____ Date _____																																																																																																																																																																												

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

Form 238 7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

USE TYPEWRITER OR
BALLPOINT PEN

Well ID: 6

State law requires that this report be filed with the Director, Department of Water Resources
in the event of abandonment of the well.

2838

1. WELL OWNER		WATER LEVEL																																																																																																																																																							
Name <u>Boise Water Corp.</u>	<u>SEP 5 1979</u>	Static water level <u>88</u> feet below land surface.																																																																																																																																																							
Address <u>500 W. Idaho St.</u>	<u>Department of Water Resources</u>	Flowing? ☐ Yes ☒ No	GPM flow _____																																																																																																																																																						
Owner's Permit No. <u>Applied for</u>	<u>Western Regional Office</u>	Artesian closed in pressure <u>p.s.i.</u>																																																																																																																																																							
		Controlled by: ☐ Valve ☐ Cap ☐ Plug																																																																																																																																																							
		Temperature <u>86</u> of Quality <u>good</u>																																																																																																																																																							
2. NATURE OF WORK		3. WELL TEST DATA																																																																																																																																																							
☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandonment) _____		☒ Pump ☐ Bailer ☐ Air ☐ Other _____																																																																																																																																																							
		Discharge G.P.M. <u>700</u> Pumping Level <u>142</u> Hours Pumped <u>2</u>																																																																																																																																																							
3. PROPOSED USE		9. LITHOLOGIC LOG																																																																																																																																																							
☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)		<table border="1"><thead><tr><th>Well Class.</th><th>Depth From</th><th>To</th><th>Material</th><th>Water Yes/No</th></tr></thead><tbody><tr><td>16</td><td>0</td><td>33</td><td>sandy topsoil</td><td>X</td></tr><tr><td></td><td>33</td><td>68</td><td>dirty reddish sand</td><td>X</td></tr><tr><td></td><td>68</td><td>77</td><td>blue gray clay</td><td>X</td></tr><tr><td></td><td>77</td><td>102</td><td>green clay/layers of sand</td><td>X</td></tr><tr><td></td><td>102</td><td>113</td><td>blue clay & cemented sand</td><td>X</td></tr><tr><td></td><td>113</td><td>125</td><td>brown cemented sand</td><td>X</td></tr><tr><td></td><td>125</td><td>189</td><td>cemented blue sand</td><td>X</td></tr><tr><td></td><td>189</td><td>354</td><td>blue clay</td><td>X</td></tr><tr><td></td><td>354</td><td>377</td><td>blue cemented sand</td><td>X</td></tr><tr><td></td><td>377</td><td>427</td><td>blue shaly clay/some sand</td><td>X</td></tr><tr><td></td><td>427</td><td>477</td><td>blue sticky gray clay</td><td>X</td></tr><tr><td>10</td><td>477</td><td>527</td><td>fine sandy blue clay</td><td>X</td></tr><tr><td></td><td>527</td><td>538</td><td>hard light blue sticky clay</td><td>X</td></tr><tr><td></td><td>538</td><td>541</td><td>layer of black hard rock & clay</td><td>X</td></tr><tr><td></td><td>541</td><td>575</td><td>hard solid black rock (lava)</td><td>X</td></tr><tr><td></td><td>575</td><td>614</td><td>hard gray rock</td><td>X</td></tr><tr><td></td><td>614</td><td>618</td><td>red sticky clay</td><td>X</td></tr><tr><td></td><td>618</td><td>660</td><td>blue clay & cemented sand</td><td>X</td></tr><tr><td></td><td>660</td><td>670</td><td>common coarse gravel</td><td>X</td></tr><tr><td></td><td>670</td><td>678</td><td>sticky blue clay</td><td>X</td></tr><tr><td></td><td>678</td><td>682</td><td>blue clay & black rock</td><td>X</td></tr><tr><td></td><td>682</td><td>705</td><td>black rock, greenish blue & white clay, black pebbles</td><td>X</td></tr><tr><td></td><td>705</td><td>720</td><td>scapolite & silica clay</td><td>X</td></tr><tr><td></td><td>720</td><td>720</td><td>hard gray rock</td><td>X</td></tr><tr><td></td><td>720</td><td>732</td><td>black rock & sticky clay</td><td>X</td></tr><tr><td></td><td>732</td><td>738</td><td>hard gray rock</td><td>X</td></tr><tr><td></td><td>738</td><td>771</td><td>marble clean sand</td><td>X</td></tr><tr><td></td><td>771</td><td>781</td><td>dark blue clay</td><td>X</td></tr><tr><td colspan="5">307' remained between 10' & 20' 141' hole was sealed to 130' cased 120' & sealed then deepened to 88'</td></tr></tbody></table>		Well Class.	Depth From	To	Material	Water Yes/No	16	0	33	sandy topsoil	X		33	68	dirty reddish sand	X		68	77	blue gray clay	X		77	102	green clay/layers of sand	X		102	113	blue clay & cemented sand	X		113	125	brown cemented sand	X		125	189	cemented blue sand	X		189	354	blue clay	X		354	377	blue cemented sand	X		377	427	blue shaly clay/some sand	X		427	477	blue sticky gray clay	X	10	477	527	fine sandy blue clay	X		527	538	hard light blue sticky clay	X		538	541	layer of black hard rock & clay	X		541	575	hard solid black rock (lava)	X		575	614	hard gray rock	X		614	618	red sticky clay	X		618	660	blue clay & cemented sand	X		660	670	common coarse gravel	X		670	678	sticky blue clay	X		678	682	blue clay & black rock	X		682	705	black rock, greenish blue & white clay, black pebbles	X		705	720	scapolite & silica clay	X		720	720	hard gray rock	X		720	732	black rock & sticky clay	X		732	738	hard gray rock	X		738	771	marble clean sand	X		771	781	dark blue clay	X	307' remained between 10' & 20' 141' hole was sealed to 130' cased 120' & sealed then deepened to 88'				
Well Class.	Depth From	To	Material	Water Yes/No																																																																																																																																																					
16	0	33	sandy topsoil	X																																																																																																																																																					
	33	68	dirty reddish sand	X																																																																																																																																																					
	68	77	blue gray clay	X																																																																																																																																																					
	77	102	green clay/layers of sand	X																																																																																																																																																					
	102	113	blue clay & cemented sand	X																																																																																																																																																					
	113	125	brown cemented sand	X																																																																																																																																																					
	125	189	cemented blue sand	X																																																																																																																																																					
	189	354	blue clay	X																																																																																																																																																					
	354	377	blue cemented sand	X																																																																																																																																																					
	377	427	blue shaly clay/some sand	X																																																																																																																																																					
	427	477	blue sticky gray clay	X																																																																																																																																																					
10	477	527	fine sandy blue clay	X																																																																																																																																																					
	527	538	hard light blue sticky clay	X																																																																																																																																																					
	538	541	layer of black hard rock & clay	X																																																																																																																																																					
	541	575	hard solid black rock (lava)	X																																																																																																																																																					
	575	614	hard gray rock	X																																																																																																																																																					
	614	618	red sticky clay	X																																																																																																																																																					
	618	660	blue clay & cemented sand	X																																																																																																																																																					
	660	670	common coarse gravel	X																																																																																																																																																					
	670	678	sticky blue clay	X																																																																																																																																																					
	678	682	blue clay & black rock	X																																																																																																																																																					
	682	705	black rock, greenish blue & white clay, black pebbles	X																																																																																																																																																					
	705	720	scapolite & silica clay	X																																																																																																																																																					
	720	720	hard gray rock	X																																																																																																																																																					
	720	732	black rock & sticky clay	X																																																																																																																																																					
	732	738	hard gray rock	X																																																																																																																																																					
	738	771	marble clean sand	X																																																																																																																																																					
	771	781	dark blue clay	X																																																																																																																																																					
307' remained between 10' & 20' 141' hole was sealed to 130' cased 120' & sealed then deepened to 88'																																																																																																																																																									
4. METHOD DRILLED		10. Work started <u>April 20, 79</u> finished <u>Aug. 1, 79</u>																																																																																																																																																							
☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____		11. DRILLER'S CERTIFICATION																																																																																																																																																							
5. WELL CONSTRUCTION		I/We certify that all minimum well construction standards were complied with at the time the rig was removed.																																																																																																																																																							
Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____		Firm Name <u>E. N. Rivers & Sons, Firm No. 353</u>																																																																																																																																																							
Nickers _____ Diameter _____ From _____ To _____		Address <u>3709 Kuykendall Drive</u> Date <u>Jan 28, 1979</u>																																																																																																																																																							
<u>275</u> inches <u>32</u> inches <u>2</u> feet <u>439</u> feet		Signed by (Firm Official) <u>[Signature]</u>																																																																																																																																																							
<u>150</u> inches <u>6</u> inches <u>419</u> feet <u>731</u> feet		and (Operator) <u>[Signature]</u>																																																																																																																																																							
<u>150</u> inches <u>6</u> inches <u>772</u> feet <u>781</u> feet																																																																																																																																																									
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 <u>Johnson</u>																																																																																																																																																									
Type <u>Standard Steel</u> Model No. <u>304</u>																																																																																																																																																									
Diameter <u>6</u> Slot size <u>40</u> Set from <u>131</u> feet to <u>714</u> feet																																																																																																																																																									
Diameter _____ Slot size _____ Set from _____ feet to _____ feet																																																																																																																																																									
Gravel packed? ☒ Yes ☐ No ☐ Size of gravel <u>20</u> sand																																																																																																																																																									
Placed from <u>700</u> feet to <u>731</u> feet																																																																																																																																																									
Surface seal depth <u>20'</u> Material used in seal: ☒ Cement grout																																																																																																																																																									
☐ Fudding clay ☐ Well cuttings																																																																																																																																																									
Sealing procedure used: ☐ Shurry pit ☒ Temp. surface casing																																																																																																																																																									
☒ Overbore to seal depth																																																																																																																																																									
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent																																																																																																																																																									
☐ Weld																																																																																																																																																									
☐ Cemented between struts																																																																																																																																																									
Describe access port <u>stand pipe & esp</u>																																																																																																																																																									
6. LOCATION OF WELL																																																																																																																																																									
Sketch map location must agree with written location																																																																																																																																																									
<u>Boise Well</u>																																																																																																																																																									
Subdivision Name _____																																																																																																																																																									
Lot No. _____ Block No. _____																																																																																																																																																									
County <u>Ada</u>																																																																																																																																																									
N 1/4 S 1/4 E 35 T. 4 S. R. 14 W.																																																																																																																																																									

USE ADDITIONAL SHEETS IF NECESSARY - ATTACH THE SHEETS TO THE DEPARTMENT

Form 9-62 101

**USE TYPEWRITER OR
BALLPOINT PEN**

APR 26 1984 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 IDENTIFICATION OF WATER RESOURCES Name <u>Boise City Parks Dept.</u> Address <u>1104 Royal Blvd.</u> <u>93206</u> Owner's Permit No. <u>63-84-C-0075-200</u>	7. WATER LEVEL Static water level <u>3011.0</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 ☐ Baller ☐ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td>540</td> <td>78'5"</td> <td>1</td> </tr> <tr> <td>600</td> <td>81'10"</td> <td>1</td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	540	78'5"	1	600	81'10"	1																																																																																											
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																			
540	78'5"	1																																																																																																			
600	81'10"	1																																																																																																			
3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG 79091 <table border="1" style="width: 100%; border-collapse: collapse;"> <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>12</td> <td>0</td> <td>12</td> <td>topsoil</td> <td></td> <td>X</td> </tr> <tr> <td>12</td> <td>12</td> <td>41</td> <td>sand</td> <td></td> <td>X</td> </tr> <tr> <td>41</td> <td>41</td> <td>42</td> <td>clay</td> <td></td> <td>X</td> </tr> <tr> <td>42</td> <td>75</td> <td>75</td> <td>sand & gravel</td> <td>X</td> <td></td> </tr> <tr> <td>75</td> <td>85</td> <td>85</td> <td>dirty sand & gravel</td> <td>X</td> <td></td> </tr> <tr> <td>85</td> <td>98</td> <td>98</td> <td>sand</td> <td>X</td> <td></td> </tr> <tr> <td>98</td> <td>103</td> <td>103</td> <td>sandy brown clay with blue clay streaks</td> <td></td> <td>X</td> </tr> <tr> <td>103</td> <td>149</td> <td>149</td> <td>cemented brown sand</td> <td>X</td> <td></td> </tr> <tr> <td>149</td> <td>155</td> <td>155</td> <td>sandy blue clay</td> <td>X</td> <td></td> </tr> <tr> <td>155</td> <td>234</td> <td>234</td> <td>sticky blue clay</td> <td>X</td> <td></td> </tr> <tr> <td>234</td> <td>264</td> <td>264</td> <td>coarse blue sand with cemented layers</td> <td>X</td> <td></td> </tr> <tr> <td>264</td> <td>267</td> <td>267</td> <td>sticky blue clay</td> <td>X</td> <td></td> </tr> <tr> <td>267</td> <td>269</td> <td>269</td> <td>dark brown clay</td> <td>X</td> <td></td> </tr> <tr> <td>269</td> <td>270</td> <td>270</td> <td>sand streak</td> <td>X</td> <td></td> </tr> <tr> <td>270</td> <td></td> <td></td> <td>blue clay</td> <td>X</td> <td></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	12	0	12	topsoil		X	12	12	41	sand		X	41	41	42	clay		X	42	75	75	sand & gravel	X		75	85	85	dirty sand & gravel	X		85	98	98	sand	X		98	103	103	sandy brown clay with blue clay streaks		X	103	149	149	cemented brown sand	X		149	155	155	sandy blue clay	X		155	234	234	sticky blue clay	X		234	264	264	coarse blue sand with cemented layers	X		264	267	267	sticky blue clay	X		267	269	269	dark brown clay	X		269	270	270	sand streak	X		270			blue clay	X	
Bore Diam.	Depth		Material	Water																																																																																																	
	From	To		Yes	No																																																																																																
12	0	12	topsoil		X																																																																																																
12	12	41	sand		X																																																																																																
41	41	42	clay		X																																																																																																
42	75	75	sand & gravel	X																																																																																																	
75	85	85	dirty sand & gravel	X																																																																																																	
85	98	98	sand	X																																																																																																	
98	103	103	sandy brown clay with blue clay streaks		X																																																																																																
103	149	149	cemented brown sand	X																																																																																																	
149	155	155	sandy blue clay	X																																																																																																	
155	234	234	sticky blue clay	X																																																																																																	
234	264	264	coarse blue sand with cemented layers	X																																																																																																	
264	267	267	sticky blue clay	X																																																																																																	
267	269	269	dark brown clay	X																																																																																																	
269	270	270	sand streak	X																																																																																																	
270			blue clay	X																																																																																																	
4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____	10. Work started <u>3/12/84</u> finished <u>4/13/84</u>																																																																																																				
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <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>12</u> inches</td> <td><u>2</u> feet</td> <td><u>57'4"</u> feet</td> </tr> <tr> <td><u>.250</u> inches</td> <td><u>6</u> inches</td> <td><u>150'5"</u> feet</td> <td><u>235'5"</u> feet</td> </tr> <tr> <td><u>.250</u> inches</td> <td><u>6</u> inches</td> <td><u>264'10"</u> feet</td> <td><u>270'0"</u> 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 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>Johnson</u> Type <u>stainless steel</u> Model No. <u>304</u> Diameter <u>6</u> Slot size <u>30</u> Set from <u>235'5"</u> feet to <u>264'</u> feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No ☐ Size of gravel <u>#4</u> sand Placed from <u>150</u> feet to <u>265</u> feet Surface seal depth <u>20</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between struts Describe access port _____	Thickness	Diameter	From	To	<u>.250</u> inches	<u>12</u> inches	<u>2</u> feet	<u>57'4"</u> feet	<u>.250</u> inches	<u>6</u> inches	<u>150'5"</u> feet	<u>235'5"</u> feet	<u>.250</u> inches	<u>6</u> inches	<u>264'10"</u> feet	<u>270'0"</u> feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>W.E. Stevens & Sons</u> Firm No. <u>153</u> Address <u>3709 Hawthorne Dr</u> Date <u>4/22/84</u> Signed by (Firm Official) <u>Wayne E. Stevens</u> and (Operator) <u>Ron Stevens</u>																																																																								
Thickness	Diameter	From	To																																																																																																		
<u>.250</u> inches	<u>12</u> inches	<u>2</u> feet	<u>57'4"</u> feet																																																																																																		
<u>.250</u> inches	<u>6</u> inches	<u>150'5"</u> feet	<u>235'5"</u> feet																																																																																																		
<u>.250</u> inches	<u>6</u> inches	<u>264'10"</u> feet	<u>270'0"</u> feet																																																																																																		
Number	From	To																																																																																																			
_____ perforations	_____ feet	_____ feet																																																																																																			
_____ perforations	_____ feet	_____ feet																																																																																																			
_____ perforations	_____ feet	_____ feet																																																																																																			
6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location. Subdivision Name _____ Lot No. _____ Block No. _____ <u>Camel's Back Park</u> County <u>Ada</u> S/W <u>1/4</u> S/E <u>3/4</u> Sec. <u>34</u> T. <u>4</u> N/R. <u>2</u> E/W: _____																																																																																																					

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

WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

JAN 28 1958
Log No. _____
Department of Reclamation
Rec. 36243

Well No. _____
Permit No. 27148

(DO NOT FILL IN)

Owner CITY OF BOISE PARK DEPT Address CAMEL BACK PARK, 9th & HERON
Driller HENRY L. JOHNSON Address P.O. BOX 5042 Lic. No. 24
Location of Well: 12th & HERON BOISE T. 3 N. 1/4 R. 2 E. 1/4 ADA County,
SW 1/4 34
and _____ feet N/S, and _____ feet E/W from _____ Corner of _____ 1/4 Sec.
Size of Drilled Hole 12 inch Total depth of Well 123
Give depth of standing water from surface 40 FT Water Temp. _____ °Fahrenheit
On pumping test delivery was 320 g.p.m. or _____ c.f.s. Drawdown was 18 feet.
Size of pump and motor used to make the test 315 airlift
Length of time pumped during check was 21 hr., _____ minutes.
If flowing well, give flow in c.f.s. _____ or g.p.m. _____ and shut in pressure _____
If flowing well, describe control works _____
(TYPE AND SIZE OF VALVE, ETC.)
Water will be used for IRIGATION Weight of casing per linear foot 54#
Thickness of casing 3/8" Casing material PIPE
E.G., PIPE, CONCRETE, WOOD.
Diameter, length and location of casing 87'1"
(CASING 12" IN DIAMETER AND UNDER GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER GIVE OUTSIDE DIAMETER.)
Number and size of perforations none located _____ feet to _____ feet
from surface of ground.
Other perforations none
Date of commencement of well JAN. 17, 1958 Date of completion of well JAN 25th 1958
Type of well rig #50 W, KEYSTONE

CASING RECORD

DIAM. CASING	FROM FEET	TO FEET	LENGTH	REMARKS - SEALS, GROUTING, ETC.

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

FIRST WATER FREE WAS FOUND AT 90' TO 103', TEST PUMPED AT 50 GPM

NEXT WATER SAND 110 TO 123' OPEN HOLE FROM 87'1" TO BOTTOM, BOTTOM
WATER SAND LAYS ON TOP OF ANOTHER LAYER OF SHALE

RECOMMEND THAT A TURBINE PUMP BE INSTALLED AT 50' WITH 5' TAIL PIECE
WITH SCREEN OF A 300-GPM CAPACITY OR 320 GPM

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed: Kenny Johnson

By: _____

License No. 24

Dated JAN. 25, 1958 10

Well ID: 9

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat. _____ Long. _____

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
36 gpm	30'	66'	1 Hr

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encountered 44

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Sketch map location must agree with written location

W  E

Twp. 3 North ☒ or South ☐
 Rge. 2 East ☒ or West ☐
 Sec. 3 $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$
 10 acres 40 acres 160 acres

Gov't lot	County ADA
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Lat:43:37:83 Long:116:11:949

Address of Well Site 1809 N 9TH ST

City **BOISE**
(Give at least name of road + Distance to Road or Landmark)

Lt. 6&7 Blk. 7 Sub. Name Hyde Park Addition

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	18	7 Sacks	Overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 83'

Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	1	83	250	51	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☐ Perforations Method _____

☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

Depth flow encountered _____ ft. Describe access port or control devices:

Water

[illegible]

RECEIVED
MAY 11 2005
WATER RESOURCE
WESTERN REGION

Completed Depth: 85 (Measurable)
Date: Started 04/28/06 Completed 05/04/06

13. DRILLER'S CERTIFICATION

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

Firm Name SOS Well Drilling & Pump Co Firm No. 212

Firm Official Frank Schmitt Date 5-5-06

Supervisor or Operator _____ Date _____
(Sign once if Firm Official & Operator)

Date: 5/5/2006 Time: 9:50 AM

Form 238-7
6/07IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

863354

1. WELL TAG NO. D 0060348

Drilling Permit No. 914720-863354

Water right or injection well # _____

2. OWNER: City of Boise - Public Works Department

Name _____

Address P.O. Box 500City Boise State ID Zip 83701

3. WELL LOCATION:

Twp. 3 North ☒ or South ☐ Rge. 2 East ☒ or West ☐Sec. 1 1/4 SE 1/4 NW 1/4Gov't Lot _____ County AdaLat. 43 37.670 (Deg. and Decimal minutes)Long. 116 10.014 (Deg. and Decimal minutes)Address of Well Site 1800 Mountain Cove RoadCity Boise

(Town or Rural Name or Road or Distance to Road or Landmark)

Lot _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
Neat Cement	0	70	1218 gal	Tremie
Neat Cement	0	260	280 gal	Haliburton Method

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
8"	0	70'	Sch40	Steel	☒	☐	☒
6"	+2	260	Sch40	Steel	☒	☐	☒
4.5"	222	342	sdr17	PVC	☐	☒	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 69.5', 8"

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____Manufactured screen ☐ Y ☐ N Type CertanteedMethod of installation Lower on a hook

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
342	402	020	5100	4.5"	SDR17	Plastic

Length of Headpipe 120' Length of Tailpipe _____Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method
None				

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 22' Static water level (ft) 255'Water temp. (°F) _____ Bottom hole temp. (°F) 86.5Describe access port Well Cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
2'	45 GPM	6.5 hrs	☒	☐	☐	☐

Test method:

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0	3'	Sandy Topsoil		X
16"	3'	5'	Rock		X
16"	5'	8'	Sand		X
16"	8'	11'	Rock (Boulder)		X
16"	11'	12'	Sand		X
16"	12'	17'	Rocks (Boulder)		X
16"	17'	24'	Decomposed Granite	X	
16"	24'	29'	Rock (Boulder)	X	
16"	29'	31'	Sand	X	
16"	31'	35'	Rock (Boulder)	X	
12"	35'	57'	Coarse Quartz Sand	X	
12"	57'	65'	Fine to Coarse Sand Mix	X	
12"	65'	67'	Hard Rock - Black (Basalt)	X	
12"	67'	72'	Broken Brown Rock (Basalt)	X	
12"	72'	108'	Solid Basalt	X	
12"	108'	124'	Blue Shale		X
12"	124'	144'	Blue Clay		X
8"	144'	154'	Basalt		X
8"	154'	170'	Blue Sticky Clay		X
8"	170'	257'	Blue Stick Clay w/ some sand		X
8"	257'	265'	Grey Rock		X
8"	265'	270'	Grey Clay w/sand		X
8"	270'	271'	Grey Rock		X
8"	271'	295'	Grey Sandstone or Granite		X
8"	295'	302'	Grey Sandstone		X
8"	302'	314'	Grey Rock w/some Red		X
8"	314'	357'	Grey Sandy Clay		X
8"	357'	380'	Red/Brown Rock	X	
8"	380'	405'	Solid Brown Rock	X	

Completed Depth (Measurable): 402'Date Started: May 1, 2012Date Completed: Jul 6, 2012

14. DRILLER'S CERTIFICATION:

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

Company Name Adamson Pump & Drilling Co. No. 457Principal Driller Adam Adamson Date Jul 17, 2012Driller Mark Steffen Date Jul 17, 2012

Operator If _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

RECEIVED

JUL 24 2012

WATER RESOURCES
WESTERN REGION

047881

WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

Log No. _____

Rec. _____, 19____

Well No. Received
September 14, 1954Permit No. 9-75515

(DO NOT FILL IN)

Owner S. T. Hawkins Driller Witt, Kenneth

Address Boise Address _____ Lic. No. 55

Location of Well: 3 miles NorthEast of Boise

1/4 Sec. 1, T. 3 N, R. 2 E, Ada County.

and _____ feet N/S, and _____ feet E/W from _____ corner of _____ 1/4 Sec.

Water will be used for Domestic Total depth of well 302

Size of drilled hole 8" Weight of casing per linear foot 28 lbs.

Thickness of casing _____ Casing material _____
e.g., pipe, concrete, wood.

Diameter, length and location of casing 0 to 95'
(Casing 12" in diameter and under give inside diameter; casing over 12" in diameter give outside diameter.)

Number and size of perforations 15 located 69 feet to 78 feet
from surface of ground.

Other perforations: _____

If flowing well, give flow in c.f.s. _____ or g.p.m. _____ and shut in pressure _____

If non-flowing well, give depth of standing water from surface 281

If flowing well, describe control works _____
hour (Type and size of valve, etc.)

On pumping test delivery was 500 g.p.m. or _____ c.f.s. Drawdown was _____ feet

Length of time pumped during check was 6 hr. _____ min. Water temp. _____ ° Fahrenheit.

Date of commencement of well Aug. 12, 1954 Date of completion of well Sept. 9, 1954

Type of well rig 71 Star Spudder

CASING RECORD

Diam. Casing	From Foot	To Foot	Length	Remarks — Seals, Grouting, Etc.
✓ 255'5"				

GENERAL INFORMATION — Pumping Test, Quality of Water, Etc.

NE 1/4 NW 1/4 S 13 N 2 E

WELL LOG

From Foot	To Foot	Type of Material	Drilling Time		Water-bearing Formations Ans. Yes or No	Casing Perforated Ans. Yes or No
			Hrs.	Min.		
0	4	Top Soil			Yes	
4	20	Silty Sand			Yes	
20	26	Clay Sand				
26	40	Pea Gravel				
40	45	Yellow Clay				
45	58	(Clay Green) Sandy				
58	64	Clay Chunks Sand			yes	
64	69	Sticky Clay				
69	78	Pea Sya Clay (chunks Hard)			Yes	
78	92	Brown Clay & Sand				
92	140	Blue Shale			Yes	
140	145	Shale Rock				
145	167	Shale				
167	210	Rock				
210	240	Shale				
240	255	Rock				
255	276	Shale				
276	302	Rock				
If more space is required use Sheet No. 2						

WELL DRILLERS STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed KENNETH D. WITT

By _____

License No. _____

Dated _____, 19____

Subscribed and sworn before me this _____ day of _____, 19____

Notary Public

My commission expires _____

Residing at _____

NOTARY PUBLIC

NOTARIZATION NOT NECESSARY
UNDER NEW LAW.

WELL DRILLER'S REPORT

JAN 6 1976

State 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. Department of Water Resources

[illegible]

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

63

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

14

848271

Office Use Only
Well ID No. 418215
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0052330
DRILLING PERMIT NO. 901260 - 848271
Water Right or Injection Well No. _____

2. OWNER:
Name Vladimir Daydyov
Address 2900 Sheffield Ct
City Boise State Id Zip 83702

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 4 North ☒ or South ☐
Rge. 2 East ☒ or West ☐
Sec. 35 NE 1/4 NE 1/4 NW 1/4
Gov't Lot _____ County Ada
Lat: 43 : 38 : 777 Long: 116 : 11 : 113
Address of Well Site 2900 Sheffield Ct
City Boise

(Give at least name of road - Distance to Road or Landmark)
Lt. 453 Blk. 2 Sub. Name The Highlands
Unit # 10

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 _____

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>Bentonite</u>	<u>3</u>	<u>45</u>	<u>1000 #</u>	<u>Pour In</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 155 ft
Was drive shoe seal tested? ☐ Y ☒ N How? _____

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6 3/8 + 2</u>	<u>155</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐	☐

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

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

Filter Material	From	To	Weights / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
128 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices:
remove well seal (cap)

Yield gal./min.	Drawdown	Pumping Level	Time
<u>20</u>	<u>5 ft</u>	<u>133</u>	<u>1 hr</u>

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment) Water
Depth first Water Encounter _____

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>10</u>	<u>0</u>	<u>2</u>	<u>dirt</u>		☒
<u>10</u>	<u>2</u>	<u>36</u>	<u>quartz sand (8" @ 22')</u>	☒	
<u>8</u>	<u>36</u>	<u>42</u>	<u>reddish brown clay</u>	☒	
<u>6</u>	<u>42</u>	<u>47</u>	<u>blue clay</u>	☒	
	<u>47</u>	<u>58</u>	<u>brown clay + quartz sand</u>	☒	
	<u>58</u>	<u>94</u>	<u>light brown clay + quartz sand</u>	☒	
	<u>94</u>	<u>107</u>	<u>dark " " " "</u>	☒	
	<u>107</u>	<u>149</u>	<u>light " " " "</u>	☒	
	<u>149</u>	<u>158</u>	<u>blue clay</u>	☒	
	<u>158</u>	<u>168</u>	<u>thin layer fine sand</u>	☒	
	<u>168</u>	<u>181</u>	<u>blue clay</u>	☒	
	<u>181</u>	<u>190</u>	<u>coarse sand + blue clay</u>	☒	
	<u>190</u>		<u>blue clay</u>	☒	

RECEIVED

OCT 09 2007

WATER RESOURCES
WESTERN REGION

Completed Depth 190 ft (Measurable)
Date: Started 9/11/07 Completed 9/24/07

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Company Name Robinson Well Drilling Firm No. 490
Principal Driller Ralph Robinson Date 9/25/07
and Driller or Operator II Ralph Robinson Date 9/25/07
Operator I _____ Date _____

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

FORWARD WHITE COPY TO WATER RESOURCES

RECEIVED

MAY 19 1961

15

WELL LOG AND REPORT OF THE
STATE RECLAMATION ENGINEER OF IDAHO

Department of Reclamation
36242

Permit No. _____ Well No. _____ County Ada

Owner Don Daley

Address Boise, Idaho

Driller Russel Gove

Address Boise, Idaho

Well location NW 1/4 1/4 Sec 35 T. 4N N/S. R2E RM

Size of drilled hole 10"

Locate well in section

NW 1/4	NE 1/4
SW 1/4	SE 1/4

Total depth of well 418'

Give depth to standing water from the ground 180 Water temp. _____ °Fahr.

On "Pumping Test" delivery was 190 g.p.m. or _____ c.f.s. Drawdown was 7 feet.

Size of pump and motor used to make test 20 horsepower Turbine

Length of time of test 6 hours _____ minutes.

If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____

If flowing well, described control works _____
(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for domestic Weight of casing per lineal foot _____

Thickness of casing 3/8 Casing material Steel
(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 10" 0 to 366'5"
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
10"	0	366'5"	366'5"	drove shale

Number and size of perforations 50 3/8 located 290 feet to 300 feet from ground

Date of commencement of well April 1, 1961 Date of completion of well April 22, 1961

well

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed Charles L. Cook

By _____

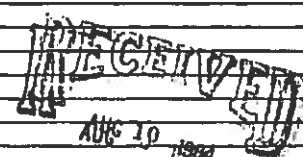
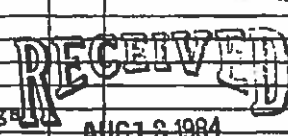
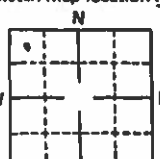
Dated May 19, 1961, 1961

License No. 65

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PEN

16

State 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>Joe Parkinson</u> Address <u>2805 E. Columbia Rd. 83706</u> Owner's Permit No. <u>63-84-C-0056-200</u>		7. WATER LEVEL Static water level <u>152</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 <u>54</u> °F. Quality <u>good</u> 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) cannot get to old well for repairs, <u>very sandy</u>		8. WELL TEST DATA ☒ Pump ☐ Bailor ☐ Air ☐ Other _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>130</u></td><td><u>160</u></td><td><u>15 min</u></td></tr></tbody></table> <u>sand free</u>		Discharge G.P.M.	Pumping Level	Hours Pumped	<u>130</u>	<u>160</u>	<u>15 min</u>																																		
Discharge G.P.M.	Pumping Level	Hours Pumped																																									
<u>130</u>	<u>160</u>	<u>15 min</u>																																									
3. PROPOSED USE ☒ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)		9. LITHOLOGIC LOG <u>79083</u> <table border="1"><thead><tr><th>Bore Diam.</th><th>Depth From</th><th>To</th><th>Material</th><th>Water Yes No</th></tr></thead><tbody><tr><td><u>03/4</u></td><td><u>0</u></td><td><u>90</u></td><td><u>decomposed granite & clay</u></td><td><u>X</u></td></tr><tr><td></td><td><u>90</u></td><td><u>160</u></td><td><u>yellow sand & clay</u></td><td><u>X</u></td></tr><tr><td></td><td><u>160</u></td><td><u>175</u></td><td><u>brown clay</u></td><td><u>X</u></td></tr><tr><td></td><td><u>175</u></td><td><u>190</u></td><td><u>blue clay</u></td><td><u>X</u></td></tr><tr><td></td><td><u>190</u></td><td><u>255</u></td><td><u>cemented blue coarse sand</u></td><td><u>X</u></td></tr><tr><td></td><td><u>255</u></td><td><u>285</u></td><td><u>brown sand, cemented gravel</u></td><td><u>X</u></td></tr><tr><td></td><td><u>285</u></td><td></td><td><u>blue clay</u></td><td><u>X</u></td></tr></tbody></table> <u>belled reducer 6" x 6"</u> <u>from 221-222'</u>		Bore Diam.	Depth From	To	Material	Water Yes No	<u>03/4</u>	<u>0</u>	<u>90</u>	<u>decomposed granite & clay</u>	<u>X</u>		<u>90</u>	<u>160</u>	<u>yellow sand & clay</u>	<u>X</u>		<u>160</u>	<u>175</u>	<u>brown clay</u>	<u>X</u>		<u>175</u>	<u>190</u>	<u>blue clay</u>	<u>X</u>		<u>190</u>	<u>255</u>	<u>cemented blue coarse sand</u>	<u>X</u>		<u>255</u>	<u>285</u>	<u>brown sand, cemented gravel</u>	<u>X</u>		<u>285</u>		<u>blue clay</u>	<u>X</u>
Bore Diam.	Depth From	To	Material	Water Yes No																																							
<u>03/4</u>	<u>0</u>	<u>90</u>	<u>decomposed granite & clay</u>	<u>X</u>																																							
	<u>90</u>	<u>160</u>	<u>yellow sand & clay</u>	<u>X</u>																																							
	<u>160</u>	<u>175</u>	<u>brown clay</u>	<u>X</u>																																							
	<u>175</u>	<u>190</u>	<u>blue clay</u>	<u>X</u>																																							
	<u>190</u>	<u>255</u>	<u>cemented blue coarse sand</u>	<u>X</u>																																							
	<u>255</u>	<u>285</u>	<u>brown sand, cemented gravel</u>	<u>X</u>																																							
	<u>285</u>		<u>blue clay</u>	<u>X</u>																																							
4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____		  Department of Water Resources Western Regional Office																																									
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.260</u> inches</td><td><u>6</u> inches</td><td><u>1</u> feet</td><td><u>221</u> feet</td></tr><tr><td><u>.250</u> inches</td><td><u>6</u> inches</td><td><u>253</u> feet</td><td><u>255</u> 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 <u>Johnson</u> Type <u>stainless steel</u> Model No. <u>304</u> Diameter <u>6</u> Slot size <u>30</u> Set from <u>221</u> feet to <u>253</u> feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No ☐ Size of gravel <u>#8 sand</u> Placed from <u>90</u> feet to <u>255</u> feet Surface seal depth <u>40</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Pudding clay ☒ well cements 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>.260</u> inches	<u>6</u> inches	<u>1</u> feet	<u>221</u> feet	<u>.250</u> inches	<u>6</u> inches	<u>253</u> feet	<u>255</u> feet																												
Thickness	Diameter	From	To																																								
<u>.260</u> inches	<u>6</u> inches	<u>1</u> feet	<u>221</u> feet																																								
<u>.250</u> inches	<u>6</u> inches	<u>253</u> feet	<u>255</u> feet																																								
6. LOCATION OF WELL Sketch map location must agree with written location.  <u>2805 E. Columbia Rd</u> Subdivision Name <u>Hillside</u> Lot No. _____ Block No. _____ County <u>Ada</u> <u>NW 1/4 NW 1/4 Sec. 35, T. 4 N, R. 2 E</u>		11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>W.E. Stevens & Sons</u> Firm No. <u>153</u> Address <u>309 Hawthorne Drive</u> Date <u>8/6/84</u> Signed by (Firm Official) <u>Wayne E. Stevens</u> and (Operator) <u>Wayne E. Stevens</u>																																									

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

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 060629

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat _____ Long _____

1. WELL TAG NO. D 0001866
DRILLING PERMIT NO. 63-98-W-0313-000
Other IDWR No. _____

2. OWNER:

Name Charles Wilson
Address 2305 North Angleview
City Boise State ID Zip 83702

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W E S
Twp. 4 North ☒ or South ☐
Rge. 2 East ☒ or West ☐
Sec. 35 SE 1/4 SW 1/4 1/4
Gov't Lot _____ County Ada
Lat _____ Long _____
Address of Well Site Suave Drive
City Boise

Li. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	185	2100	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
55/8	+3	252	250	Steel	☒	☐	☒	☐
59/16	246	252	188	Steel	☐	☒	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method _____

X Screens Screen Type Johnson

From	To	Slot Size	Number	Diameter	Material
252	257	025		59/16	SS

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
15			1 hr

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
10	0	18	Cement sand		
8	18	120	Rusty cement sand		
8	120	180	Gray cement sand		
8	180	185	Rusty cement sand		
8	185	201	Brown clay		
8	210	238	Rusty cement sand		
6	238	258	Coarse sand	X	

Completed Depth 257 (Measurable)
Date: Started 5/19/98 Completed 5/22/98

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 Hiddleston & Son, Inc. Firm No. 35

Firm Official Ken Kosh Date 5-28-98

and Driller or Operator John Smith Date 5/25/98
(Sign once if Firm Official & Operator)

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Reclamation

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.

18
3-31-71
J. H. Stevens & Sons
Boise, Idaho

1. WELL OWNER

Name Boise Park Dept. (Amel Bank)
Address 1104 Royal Blvd. Boise, Idaho
Owner's Permit No. 63-3132

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

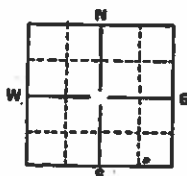
5. WELL CONSTRUCTION $\frac{1}{4}$ plate at base of 6"

Diameter of hole 12 inches Total depth 221 feet
Casing schedule: ☒ Steel ☐ Concrete
Thickness .375 inches Diameter 12 inches From plus 1' to 109' feet
250 inches 8 inches 100 feet 110 feet
250 inches 8 inches 120 feet 128 feet
250 inches 6 inches 128 feet 130 feet
250 inches 6 inches 150 feet 180 feet
250 inches 6 inches 200 feet 218 cement
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 Armo iron Model No. _____
Diameter 8" Slot size 30 Set from 110 feet to 120 feet
Diameter 6" Slot size 40 Set from 130 feet to 150 feet
6" 40 180 200
Gravel packed? ☒ Yes ☐ No Size of gravel #8 sand
Placed from 102 feet to 218 feet
pea gravel 218' to 221'
Surface seal? ☒ Yes ☐ No To what depth 45 feet
Material used in seal ☒ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Ada

SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34 T. 4 N. R. 2 E

7. WATER LEVEL

Static water level 51 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality good
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☒ Pump ☐ Bailor ☐ Other
Discharge G.P.M. 450 Draw Down 27 Hours Pumped 4 hrs.

9. LITHOLOGIC LOG

39587

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
16	0	3	top soil		X
16	3	42	brown clay & sand	X	
12	42	55	brown clay, sand & gravel	X	
12	55	73	brown clay & sand	X	
12	73	95	sticky blue clay		X
12	95	120	blue clay & sand (good)	X	
12	120	128	sticky blue clay		X
12	128	170	blue clay & sand (good)	X	
12	170	178	sticky blue clay		X
12	178	215	blue clay & sand, some small pea gravel (good)	X	
12	215	221	sticky blue clay & sand	X	
			surface SWL 33'		
			all water bearing zones held open hole while waiting for screens		
			all sand shown was heavily cemented with blue clay		
			chemicals used while surging and developing: 150 lbs. bentonite and mud remover 5 gals. SC-200		
			Engineering by: Anderson and Kelly Engineers Chemicals and Screens furnished by: Intermountain Water Service		

10. Work started Feb. 22, 1971 finished Mar. 23, 1971

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is
true to the best of my knowledge.
Russell Cowe Well Drilling 65

W.E. Stevens & Sons 153
Driller's or Firm's Name Number

3709 Hawthorne Drive Boise, Idaho

Address Boise, Idaho
Signed by Wayne E. Stevens Mar. 30, 1971
Date

USE ADDITIONAL SHEETS IF NECESSARY

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

800827 19

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat _____ Long _____

1. DRILLING PERMIT NO. _____

Other IDWR No. D0029370

2. OWNER:

Name Don Reiman

Address 2105 Mtn. Cove

City Boise State ID Zip 83702

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location

N

W  E
Twp. 3 North ☒ or South ☐
Rge. 2 East ☒ or West ☐
Sec. 1 1/4 1/4 1/4
10 acres 40 acres 160 acres

S

Gov't lot 3 County Ada

Lat: _____ Long: _____

Address of Well Site 2105 Mtn. Cove

City Boise

(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0'	18'	8 sacks	overbore

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

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1'	179'	.250	steel	☒	☐	☒	☐
5 9/16	167'	440'	.188	steel	☐	☒	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method torch

☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
400'	440'		120	5 9/16	steel	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

301 ft. below ground Artesian Pressure _____ lb

Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump	☐ Bailer	☒ Flowing Artesian	
Yield gal/min.	Drawdown	Pumping Level	Time
25 GPM		420'	1 Hr.

Water Temp. _____ Bottom hole temp. 80

Water Quality test or comments: _____

Depth first Water Encountered 94'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water				Y	N
Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.		
10"	0'	12'	brown clay		☒
10"	12'	18'	tan clay		☒
8"	18'	22'	cemented brown sand		☒
8"	22'	27'	hard brown clay		☒
8"	27'	41'	sticky tan clay		☒
8"	41'	94'	sticky blue clay		☒
8"	94'	107'	fractured gray & white granite	☒	
8"	107'	111'	soft gray granite		☒
8"	111'	153'	solid gray claystone		☒
8"	153'	170'	sticky blue clay		☒
6"	170'	188'	sticky blue clay		☒
6"	188'	202'	sticky purple clay		☒
6"	202'	214'	sticky blue clay		☒
6"	214'	233'	sticky gray clay		☒
6"	233'	239'	sticky gray clay w/occas. sm cracks	☒	
6"	239'	326'	sticky blue clay		☒
6"	326'	331'	hard purple clay		☒
6"	331'	334'	sticky blue clay		☒
6"	334'	339'	hard blue clay w/sm cracks	☒	
6"	339'	362'	sticky redish brown clay		☒
6"	362'	381'	brn & gm clay w/decomposed granite	☒	
6"	381'	404'	decompd gm granite w/gm clay strips		☒
6"	404'	413'	sticky green clay		☒
6"	413'	417'	hard green clay w/cracks	☒	
6"	417'	424'	sticky green clay		☒
6"	424'	429'	sticky gm & gry clay w/decom granit		☒
6"	429'	431'	hard green clay		☒
6"	431'	440'	soft gray clay w/decom granite		☒

Completed Depth: 440 (Measurable)

Date: Started 5-8-03 Completed 5-15-03

13. DRILLER'S CERTIFICATION

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

Firm Name SOS Welldrilling & Pump Co

Firm No. 212

Firm Official Frank Shriver

Date 6-18-03

Supervisor or Operator Don L. Smith
(Sign once if Firm Official & Operator)

Date 6-20-03

Date: 6/17/03 Time: 1:36 PM

RECEIVED
JUN 20 2003

WATER RESOURCES
WESTERN REGION

REPORT OF WELL DRILLER
State of Idaho

RECEIVED

AUG 29 1968

Department of Reclamation

20

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 Ernest Hawkins

Address N.E. of Boise

Owner's Permit No. _____

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

Water is to be used for: Mineral Exploration

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other _____

(explain) _____

CASING SCHEDULE: Threaded _____ Welded _____

4 "Diam. from 0 ft. to 77 ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

Thickness of casing: _____ Material: _____

Steel ☒ concrete ☐ wood ☐ other ☐

(explain) _____
PERFORATED? Yes ☐ No ☒ Type of
perforator used: _____

Size of perforations: _____ " by _____ "
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.
perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☐

Manufacturer's name _____

Type _____ 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?

18 ft. Material used in seal: Cement

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water: _____

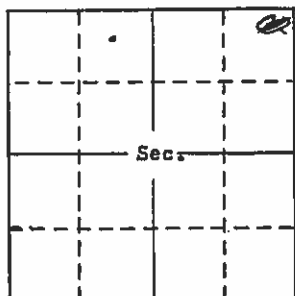
Depth of strata _____ ft. Method of sealing

strata off: _____

Surface casing used? Yes ☒ No ☐

Cemented in place? Yes ☒ No ☐

Locate well in section



LOCATION OF WELL: County ADA
NE 1/4 NW 1/4 Sec. 1 T. 3 N. R. 2 E. W.

Size of drilled hole: 4 Total
depth of well: 146 Standing water
level below ground: _____ Temp. _____
Fahr. _____ Test delivery: _____ gpm
or _____ cfs Pump? ☐ Bail ☒
Size of pump and motor used to make test: _____

Length of time of test: _____ Hrs. _____ Min.
Drawdown: _____ 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 MATERIAL WATER

FROM TO YES OR NO

FEET FEET

0 77 hard No

77 133 Water at 97' lower than No

133 146 Blue clay. No

133 146 Dark shale hard No

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

Work started: Aug. 14 - 1968

Work finished: Aug. 22 - 1968

Well Driller's Statement: This well was

drilled under my supervision and this report

is true to the best of my knowledge.

Name: Donald S. Drake

Address: 2500 W. Boise Ave.

Signed by: Donald S. Drake

License No. 4 Date: Aug 28 1968

Use other side for additional remarks

USGS

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

766560 21

Office Use Only			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat	:	Long	:

1. DRILLING PERMIT NO. _____

Other IDWR No. D0015670

2. OWNER:

Name Roger Michener

Address 2000 Mt. Cove Rd

City Boise State ID Zip 83702

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location

N

W	E	S	Twp. 3 North ☒ or South ☐			
			Rge. 2 East ☒ or West ☐			
			Sec. 1 1/4 10 acres SE 1/4 40 acres NW 1/4 160 acres			

Gov't lot _____ County Ada

Lat: _____ Long: _____

Address of Well Site 2000 Mt Cove Rd

City Boise

(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☐ New Well ☐ Modify ☐ Abandonment ☒ Other replacement

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0'	20'	8	overbore
bentonite	75'	250'	20	poured

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
8"	+2'	368'	.250	steel	☒	☐	☒	☐
10"	+1'	95'	.250	steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method torch (1/4" x 6")

☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
317'	367'		300	8"	steel	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

235 ft. below ground

Artesian Pressure _____ lb

Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
est 100 GPM			1 hr.

Water Temp. 79° Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encountered 22'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water	Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Y	N
	12.75	0'	2'	brown top soil		
	12.75	2'	5'	brown gravel		
	12.75	5'	10'	brown sand		
	12.75	10'	15'	blue sand		
	12.75	15'	20'	blue clay		
	10"	20'	22'	blue clay		
	10"	22'	35'	white sand		
	10"	35'	55'	brown sands & clay		
	10"	55'	60'	blue clay		
	10"	60'	75'	brown sand & gravel w/clay strips		
	10"	75'	85'	hard blue clay		
	10"	85'	88'	cracks in blue clay		
	10"	88'	175'	hard blue clay		
	10"	175'	202'	cracks in blue clay		
	10"	202'	210'	green clay		
	10"	210'	215'	brown clay		
	10"	215'	220'	green clay		
	10"	220'	225'	green & grey granite		
	10"	225'	290'	green granite		
	10"	290'	300'	white/green dcmpr granite/clay		
	10"	300'	330'	broken brown & white rock		
	10"	330'	370'	brown/white rock w/occasional cracks		

RECEIVED RECEIVED

NOV 09 2000

NOV 07 2000

Department of Water Resources

WATER RESOURCES
WESTERN REGION

Completed Depth: 370

(Measurable)

Date: Started 10-10-00

Completed 10-19-00

13. DRILLER'S CERTIFICATION

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

Firm Name SOS Well Drilling & Pump Co

Firm No. 212

Firm Official

Larry J. Blackwell

Date 11-6-00

Supervisor or Operator

Steve J. Kuehn
(Sign once if Firm Official & Operator)

Date 11-6-00

Date: 11/2/00 Time: 3:00 PM

22

FORWARD WHITE COPY TO WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

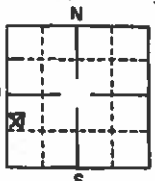
Location Corrected by IDWR To:

T03N R02E Sec. 2 NWSW

By: segbert 2010-10-15

State 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.

23

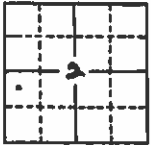
1. WELL OWNER Name <u>U.A. MEDICAL CENTER</u> Address <u>500 WEST FORT ST.</u> <u>BOISE ID. 83702</u> Owner's Permit No. <u>63-W-21</u>	7. WATER LEVEL Static water level <u>+12</u> feet ~~below~~ land surface. Flowing? ☒ Yes ☐ No G.P.M. flow <u>50</u> Artesian closed-in pressure <u>5</u> p.s.i. Controlled by: ☒ Valve ☐ Cap ☐ Plug Temperature <u>140</u> OF. Quality <u>GOOD</u> 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 <u>NONE</u> <u>P910F3</u> ☐ Pump ☐ Bailer ☐ Air ☐ Other																																																																																																																
3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☒ Waste Disposal or Injection ☐ Other (specify type)	<table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																													
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																															
4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other	9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th rowspan="2">Water Yes/No</th></tr><tr><th>From</th><th>To</th></tr></thead><tbody><tr><td>22</td><td>0</td><td>57</td><td>GRANITE SAND + GRAVEL</td><td>X</td></tr><tr><td>20</td><td>57</td><td>110</td><td>GRANITE SANDS</td><td>X</td></tr><tr><td>"</td><td>110</td><td>140</td><td>SAND + CLAY</td><td>X</td></tr><tr><td>124</td><td>140</td><td>561</td><td>SAND + CLAY LENSES</td><td>X</td></tr><tr><td>"</td><td>561</td><td>712</td><td>BASALT BLK HARD</td><td>X</td></tr><tr><td>"</td><td>712</td><td>884</td><td>SAND + CLAY INTERBED</td><td>X</td></tr><tr><td>"</td><td>884</td><td>1015</td><td>BASALT BLK HARD</td><td>X</td></tr><tr><td>"</td><td>1015</td><td>1091</td><td>CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1091</td><td>1240</td><td>SANDY CLAY GRAY</td><td>X</td></tr><tr><td>98</td><td>1240</td><td>1287</td><td>SANDY CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1287</td><td>1307</td><td>QUARTZ SAND CLEAN</td><td>X</td></tr><tr><td>"</td><td>1307</td><td>1407</td><td>CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1407</td><td>1530</td><td>BASALT BLK</td><td>X</td></tr><tr><td>"</td><td>1530</td><td>1560</td><td>ANDESITE GRAY</td><td>X</td></tr><tr><td>"</td><td>1560</td><td>1570</td><td>CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1570</td><td>1700</td><td>BASALT BLK</td><td>X</td></tr><tr><td>"</td><td>1700</td><td>1710</td><td>CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1710</td><td>1791</td><td>BASALT GRAY</td><td>X</td></tr><tr><td>"</td><td>1791</td><td>1812</td><td>CLAY GRAY</td><td>X</td></tr><tr><td>"</td><td>1812</td><td>1890</td><td>SAND CLEAN</td><td>X</td></tr><tr><td>"</td><td>1890</td><td>2300</td><td>PHYOLITE LITE GRAY</td><td>X</td></tr></tbody></table> 051210 SEE ATTACHMENTS.	Bore Diam.	Depth		Material	Water Yes/No	From	To	22	0	57	GRANITE SAND + GRAVEL	X	20	57	110	GRANITE SANDS	X	"	110	140	SAND + CLAY	X	124	140	561	SAND + CLAY LENSES	X	"	561	712	BASALT BLK HARD	X	"	712	884	SAND + CLAY INTERBED	X	"	884	1015	BASALT BLK HARD	X	"	1015	1091	CLAY GRAY	X	"	1091	1240	SANDY CLAY GRAY	X	98	1240	1287	SANDY CLAY GRAY	X	"	1287	1307	QUARTZ SAND CLEAN	X	"	1307	1407	CLAY GRAY	X	"	1407	1530	BASALT BLK	X	"	1530	1560	ANDESITE GRAY	X	"	1560	1570	CLAY GRAY	X	"	1570	1700	BASALT BLK	X	"	1700	1710	CLAY GRAY	X	"	1710	1791	BASALT GRAY	X	"	1791	1812	CLAY GRAY	X	"	1812	1890	SAND CLEAN	X	"	1890	2300	PHYOLITE LITE GRAY	X
Bore Diam.	Depth		Material	Water Yes/No																																																																																																													
	From	To																																																																																																															
22	0	57	GRANITE SAND + GRAVEL	X																																																																																																													
20	57	110	GRANITE SANDS	X																																																																																																													
"	110	140	SAND + CLAY	X																																																																																																													
124	140	561	SAND + CLAY LENSES	X																																																																																																													
"	561	712	BASALT BLK HARD	X																																																																																																													
"	712	884	SAND + CLAY INTERBED	X																																																																																																													
"	884	1015	BASALT BLK HARD	X																																																																																																													
"	1015	1091	CLAY GRAY	X																																																																																																													
"	1091	1240	SANDY CLAY GRAY	X																																																																																																													
98	1240	1287	SANDY CLAY GRAY	X																																																																																																													
"	1287	1307	QUARTZ SAND CLEAN	X																																																																																																													
"	1307	1407	CLAY GRAY	X																																																																																																													
"	1407	1530	BASALT BLK	X																																																																																																													
"	1530	1560	ANDESITE GRAY	X																																																																																																													
"	1560	1570	CLAY GRAY	X																																																																																																													
"	1570	1700	BASALT BLK	X																																																																																																													
"	1700	1710	CLAY GRAY	X																																																																																																													
"	1710	1791	BASALT GRAY	X																																																																																																													
"	1791	1812	CLAY GRAY	X																																																																																																													
"	1812	1890	SAND CLEAN	X																																																																																																													
"	1890	2300	PHYOLITE LITE GRAY	X																																																																																																													
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>2.50 inches</td><td>16.00 inches</td><td>+ 7 feet</td><td>140 feet</td></tr><tr><td>3.63 inches</td><td>10.300 inches</td><td>- 5 feet</td><td>1240 feet</td></tr><tr><td>3.17 inches</td><td>7.00 inches</td><td>1180 feet</td><td>2300 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 <u>5/8</u> inches by <u>3</u> inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>16,960 perforations</td><td>1240 feet</td><td>2300 feet</td></tr><tr><td>perforations</td><td>feet</td><td>feet</td></tr><tr><td>perforations</td><td>feet</td><td>feet</td></tr></tbody></table> 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>140</u> Material used in seal: ☒ Cement grout ☐ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☒ Threaded ☒ Welded ☐ Solvent ☒ Cemented between strata Describe access port <u>NONE</u> <u>FLOWING WELL</u>	Thickness	Diameter	From	To	2.50 inches	16.00 inches	+ 7 feet	140 feet	3.63 inches	10.300 inches	- 5 feet	1240 feet	3.17 inches	7.00 inches	1180 feet	2300 feet	Number	From	To	16,960 perforations	1240 feet	2300 feet	perforations	feet	feet	perforations	feet	feet																																																																																					
Thickness	Diameter	From	To																																																																																																														
2.50 inches	16.00 inches	+ 7 feet	140 feet																																																																																																														
3.63 inches	10.300 inches	- 5 feet	1240 feet																																																																																																														
3.17 inches	7.00 inches	1180 feet	2300 feet																																																																																																														
Number	From	To																																																																																																															
16,960 perforations	1240 feet	2300 feet																																																																																																															
perforations	feet	feet																																																																																																															
perforations	feet	feet																																																																																																															
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name <u>ADA</u> Lot No. _____ Block No. _____ County <u>ADA</u> <u>SW 1/4 NW 1/4 SW 1/4</u> T. <u>3</u> S. R. <u>2</u> E.	10. Work started <u>OCT 23 - 86</u> finished <u>JAN 8 - 87</u> 11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>ALMAH DRILLING CORP</u> Firm No. <u>108</u> Address <u>53410 9TH AVE</u> Date <u>MARCH 16-87</u> <u>SPOKANE WA.</u> Signed by (Firm Official) <u>Arnold E. Holman</u> and <u>PRES.</u> (Operator) <u>Arnold E. Holman</u>																																																																																																																

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PEN

09/11 1983

24

State 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>Veterans Administration</u> Address <u>Boise, Idaho</u> Owner's Permit No. <u>63-W-15</u>		7. WATER LEVEL Static water level <u> </u> feet below land surface. Flowing? ☒ Yes ☐ No G.P.M. flow <u>No test</u> Artesian closed-in pressure <u> </u> p.s.i. Controlled by: ☒ Valve ☐ Cap ☐ Plug Temperature <u> </u> °F. Quality <u>Good</u> <i>Describe artesian or temperature zones below.</i>																																																																																																																																																																	
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 ☐ Baller ☒ Air ☐ Other <u> </u> <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>Approx. 500</u></td><td><u> </u></td><td><u>14</u></td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		Discharge G.P.M.	Pumping Level	Hours Pumped	<u>Approx. 500</u>	<u> </u>	<u>14</u>																																																																																																																																																										
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																																																																																	
<u>Approx. 500</u>	<u> </u>	<u>14</u>																																																																																																																																																																	
3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☒ Other <u>Injection test</u> (specify type)		9. LITHOLOGIC LOG 83326 <table border="1"><thead><tr><th>Bore Diam.</th><th>Depth From</th><th>To</th><th>Material</th><th>Water Yes No</th></tr></thead><tbody><tr><td>10</td><td>0</td><td>24</td><td>Sandy Topsoil</td><td>X</td></tr><tr><td>10</td><td>24</td><td>25</td><td>Cemented Gravel</td><td>X</td></tr><tr><td>10</td><td>35</td><td>58</td><td>Sand & Gravel</td><td>X</td></tr><tr><td>10</td><td>58</td><td>70</td><td>Muddy Sand & Gravel</td><td>X</td></tr><tr><td>10</td><td>70</td><td>79</td><td>Cemented Sand</td><td>X</td></tr><tr><td>10</td><td>79</td><td>84</td><td>Sandy Blue Clay</td><td>X</td></tr><tr><td>10</td><td>84</td><td>116</td><td>Cemented Blue Sand</td><td>X</td></tr><tr><td>10</td><td>116</td><td>128</td><td>Blue Sand</td><td>X</td></tr><tr><td>10</td><td>128</td><td>132</td><td>Blue Clay</td><td>X</td></tr><tr><td>7</td><td>132</td><td>140</td><td>Sand Dark Black</td><td>X</td></tr><tr><td>7</td><td>140</td><td>208</td><td>Clay Dark Gray</td><td>X</td></tr><tr><td>7</td><td>208</td><td>355</td><td>Silt Gray</td><td>X</td></tr><tr><td>7</td><td>355</td><td>385</td><td>Sand & Silt Dark Gray</td><td>?</td></tr><tr><td>7</td><td>385</td><td>402</td><td>Clay Dark Gray</td><td>X</td></tr><tr><td>7</td><td>402</td><td>434</td><td>Fine Sand Gray</td><td>?</td></tr><tr><td>7</td><td>434</td><td>547</td><td>Clay & Sandy Clay - Gray</td><td>X</td></tr><tr><td>7</td><td>547</td><td>733</td><td>Basalt & Altered Basalt</td><td>?</td></tr><tr><td>7</td><td>733</td><td>793</td><td>Sand-White</td><td>?</td></tr><tr><td>7</td><td>793</td><td>822</td><td>Basalt Brn to Brn Gray</td><td>?</td></tr><tr><td>7</td><td>822</td><td>884</td><td>Sandy Clay</td><td>X</td></tr><tr><td>7</td><td>884</td><td>1088</td><td>Basalt Altered Clay</td><td>?</td></tr><tr><td>7</td><td>1088</td><td>1129</td><td>Sand & Sandy Clay</td><td>?</td></tr><tr><td>7</td><td>1129</td><td>1255</td><td>Basalt Gray</td><td>?</td></tr><tr><td>7</td><td>1255</td><td>1271</td><td>Clay -Green</td><td>X</td></tr><tr><td>7</td><td>1271</td><td>1352</td><td>Sand Green Sand Clay</td><td>?</td></tr><tr><td>7</td><td>1352</td><td>1358</td><td>Red-Brn Sandy Clay</td><td>X</td></tr><tr><td>7</td><td>1358</td><td>1412</td><td>Basalt</td><td>?</td></tr><tr><td>7</td><td>1412</td><td>1424</td><td>Red & Green Clay</td><td>X</td></tr><tr><td>7</td><td>1424</td><td>1823</td><td>Basalt Volcanic Dark</td><td>?</td></tr><tr><td>7</td><td>1823</td><td>1834</td><td>Clay Green & Red Brn</td><td>X</td></tr><tr><td>7</td><td>1834</td><td>1840</td><td>Sand Red-Brn</td><td>?</td></tr></tbody></table>		Bore Diam.	Depth From	To	Material	Water Yes No	10	0	24	Sandy Topsoil	X	10	24	25	Cemented Gravel	X	10	35	58	Sand & Gravel	X	10	58	70	Muddy Sand & Gravel	X	10	70	79	Cemented Sand	X	10	79	84	Sandy Blue Clay	X	10	84	116	Cemented Blue Sand	X	10	116	128	Blue Sand	X	10	128	132	Blue Clay	X	7	132	140	Sand Dark Black	X	7	140	208	Clay Dark Gray	X	7	208	355	Silt Gray	X	7	355	385	Sand & Silt Dark Gray	?	7	385	402	Clay Dark Gray	X	7	402	434	Fine Sand Gray	?	7	434	547	Clay & Sandy Clay - Gray	X	7	547	733	Basalt & Altered Basalt	?	7	733	793	Sand-White	?	7	793	822	Basalt Brn to Brn Gray	?	7	822	884	Sandy Clay	X	7	884	1088	Basalt Altered Clay	?	7	1088	1129	Sand & Sandy Clay	?	7	1129	1255	Basalt Gray	?	7	1255	1271	Clay -Green	X	7	1271	1352	Sand Green Sand Clay	?	7	1352	1358	Red-Brn Sandy Clay	X	7	1358	1412	Basalt	?	7	1412	1424	Red & Green Clay	X	7	1424	1823	Basalt Volcanic Dark	?	7	1823	1834	Clay Green & Red Brn	X	7	1834	1840	Sand Red-Brn	?
Bore Diam.	Depth From	To	Material	Water Yes No																																																																																																																																																															
10	0	24	Sandy Topsoil	X																																																																																																																																																															
10	24	25	Cemented Gravel	X																																																																																																																																																															
10	35	58	Sand & Gravel	X																																																																																																																																																															
10	58	70	Muddy Sand & Gravel	X																																																																																																																																																															
10	70	79	Cemented Sand	X																																																																																																																																																															
10	79	84	Sandy Blue Clay	X																																																																																																																																																															
10	84	116	Cemented Blue Sand	X																																																																																																																																																															
10	116	128	Blue Sand	X																																																																																																																																																															
10	128	132	Blue Clay	X																																																																																																																																																															
7	132	140	Sand Dark Black	X																																																																																																																																																															
7	140	208	Clay Dark Gray	X																																																																																																																																																															
7	208	355	Silt Gray	X																																																																																																																																																															
7	355	385	Sand & Silt Dark Gray	?																																																																																																																																																															
7	385	402	Clay Dark Gray	X																																																																																																																																																															
7	402	434	Fine Sand Gray	?																																																																																																																																																															
7	434	547	Clay & Sandy Clay - Gray	X																																																																																																																																																															
7	547	733	Basalt & Altered Basalt	?																																																																																																																																																															
7	733	793	Sand-White	?																																																																																																																																																															
7	793	822	Basalt Brn to Brn Gray	?																																																																																																																																																															
7	822	884	Sandy Clay	X																																																																																																																																																															
7	884	1088	Basalt Altered Clay	?																																																																																																																																																															
7	1088	1129	Sand & Sandy Clay	?																																																																																																																																																															
7	1129	1255	Basalt Gray	?																																																																																																																																																															
7	1255	1271	Clay -Green	X																																																																																																																																																															
7	1271	1352	Sand Green Sand Clay	?																																																																																																																																																															
7	1352	1358	Red-Brn Sandy Clay	X																																																																																																																																																															
7	1358	1412	Basalt	?																																																																																																																																																															
7	1412	1424	Red & Green Clay	X																																																																																																																																																															
7	1424	1823	Basalt Volcanic Dark	?																																																																																																																																																															
7	1823	1834	Clay Green & Red Brn	X																																																																																																																																																															
7	1834	1840	Sand Red-Brn	?																																																																																																																																																															
4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other <u> </u>		10. Work started <u>9-20-83</u> finished <u>9-29-83</u>																																																																																																																																																																	
5. WELL CONSTRUCTION Casing schedule: ☐ Steel ☐ Concrete ☐ Other <u> </u> <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.25</u> inches</td><td><u>10</u> inches</td><td><u>1</u> feet</td><td><u>130</u> feet</td></tr><tr><td><u>.272</u> inches</td><td><u>7</u> inches</td><td><u>2</u> feet</td><td><u>1480</u> feet</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </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 <u>1/8</u> inches by <u>12</u> inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>800</u> perforations</td><td><u>1480</u> feet</td><td><u>1280</u> feet</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> Well screen installed? ☐ Yes ☒ No Manufacturer's name <u> </u> Type <u> </u> Model No. <u> </u> Diameter <u> </u> Slot size <u> </u> Set from <u> </u> feet to <u> </u> feet Diameter <u> </u> Slot size <u> </u> Set from <u> </u> feet to <u> </u> feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel <u> </u> Placed from <u> </u> feet to <u> </u> feet Surface seal depth <u>22</u> Material used in seal: ☒ Cement grout ☐ Bentonite ☐ Puddling clay ☐ <u> </u> 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 <u>3/4" Coupling</u>		Thickness	Diameter	From	To	<u>.25</u> inches	<u>10</u> inches	<u>1</u> feet	<u>130</u> feet	<u>.272</u> inches	<u>7</u> inches	<u>2</u> feet	<u>1480</u> feet									Number	From	To	<u>800</u> perforations	<u>1480</u> feet	<u>1280</u> feet							11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Water Exploration, Inc.</u> Irfdm No. <u>429</u> Box <u>500</u> Address <u>Upton, WY 82730</u> Date <u>10-3-83</u> Signed by (Firm Official) <u>[Signature]</u> and (Operator) <u>[Signature]</u>																																																																																																																																	
Thickness	Diameter	From	To																																																																																																																																																																
<u>.25</u> inches	<u>10</u> inches	<u>1</u> feet	<u>130</u> feet																																																																																																																																																																
<u>.272</u> inches	<u>7</u> inches	<u>2</u> feet	<u>1480</u> feet																																																																																																																																																																
Number	From	To																																																																																																																																																																	
<u>800</u> perforations	<u>1480</u> feet	<u>1280</u> feet																																																																																																																																																																	
6. LOCATION OF WELL Sketch map location must agree with written location. N W  E S County <u>ADA</u> Subdivision Name <u> </u> Lot No. <u> </u> Block No. <u> </u> NW 1/4 Sec. <u>2</u> , T. <u>3N</u> N/S, R. <u>2E</u> E/W.		CONFIDENTIAL <u>Don't release until Oct 11 1984</u> <u>Released by VA 10/2/83</u> <u>gdt</u>																																																																																																																																																																	

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

870758-776056

25

Office Use Only			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat:	Long:		

1. WELL TAG NO. D 0019760

DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER:

Name Joe Gobel
Address 2400 E. Shaw Rd.
City Boise State ID Zip 83702

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N		Twp. <u>3</u>		North ☒ or South ☐	
W		Rge. <u>2</u>		East ☒ or West ☐	
E		Sec. <u>2</u>		1/4 SW 1/4 SE 1/4	
S		Gov't Lot		County <u>Ada</u> Long.	

Address of Well Site 2400 E Shaw Rd.

City Boise

(Give at least name of road + distance to road or landmarks)
LL. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK: check all that apply

(Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES:

Seal/Filter Pack			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	18	500	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 57

Was drive shoe seal tested? ☒ Y ☐ N How? air

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	+2	57	250	steel	☒	☐	☒	☐
4 1/2	40	300	.188	PVC	☐	☒	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS:

☒ Perforations Method saw
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
80	300	1/4x6	50	4 1/2	PVC	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

30 ft. below ground Artesian pressure _____ lb
Depth flow encountered 80-300 ft. Describe access port or control devices: cap

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30	280	280	1 hr

Water Temp. 56 Bottom hole temp. 56

Water Quality test or comments: _____

Depth first Water Encounter 80

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dig.	From	To	Remarks: Lithology, Water Quality & Temperature	Water	
				Y	N
10	0	2	TOP SOIL		
10	2	4	HARD PAN		
10	4	18	SANDY CLAY		
6	18	22	SANDY CLAY		
6	22	50	BROWN CLAY		
6	50	117	SOFT LAVA	X	
6	117	118	BROKEN LAVA	X	
6	118	138	SOFT LAVA		
6	138	141	CRACKED LAVA	X	
6	141	160	SOFT LAVA	X	
6	160	240	BAKED CLAY	X	
6	240	300	GREY SHELL	X	

RECEIVED

APR 17 2002

WATER RESOURCES
WESTERN REGION

Completed Depth 300 (Measurable)

Date: Started 4/9/2002 Completed 4/10/2002

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 Treasure Valley Drilling Firm No. 560

Firm Official [Signature] Date 4/12/2002

and Driller or Operator [Signature] Date 4/12/2002
(Sign once if Firm Official & Operator)

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 90 days after the completion or abandonment of the well.

26

1. WELL OWNER

Name Hurkins

Address MT. Cove Rd.

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 120 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness 25 inches Diameter 6 inches From 1 feet To 112 feet

_____ inches _____ inches _____ feet _____ feet

_____ inches _____ inches _____ feet _____ feet

_____ inches _____ inches _____ feet _____ feet

_____ inches _____ inches _____ feet _____ feet

Was a pecker 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? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

103

103

W

N

E

S

X

County Ada

NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 2 T. 3 N. $\frac{1}{4}$ R. 2 E. $\frac{1}{4}$

7. WATER LEVEL

Static water level 100 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

8. WELL TEST DATA

☐ Pump ☒ Bailor ☐ Other

Discharge G.P.M.

Draw Down

Hours Pumped

9. LITHOLOGIC LOG

39550

Hole Diam.

Depth

From

To

Material

Water

Yes

No

6"

0

4

TOP SOIL

4

15

GRAVEL

15

63

BLUE-GREEN SAND

65

70

BLUE SAND

70

90

BLUE SANDY CLAY

90

94

COARSE SAND

94

100

BLUE SANDY CLAY

100

105

COARSE SAND

105

120

BLUE SHALE

120

SAND

10.

Work started July 18, finished July 23, 73

11. DRILLER'S CERTIFICATION

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

PHIPPS DRILLING

Driller's or Firm's Name

2209 DOROTHY AVE, BOISE

Address

Wesley A Phipps

Signed By

98

Number

Aug 20, 73

Date

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

047879

27

WELL LOG AND REPORT OF THE STATE RECLAMATION ENGINEER OF IDAHO

Permit No. _____ Well No. _____ County ada
 Owner Henry Westby
 Address 311 Thatcher St Boise
 Driller F. J. Clayville
 Address 3817 Greenbrier Dr
 Well location 311 Thatcher St T 3 N 1 R 2 E 1/4
 Size of drilled hole 6"

Locate well in section

NW 1/4	NE 1/4
SW 1/4	SE 1/4

Total depth of well 137 ft

Give depth to standing water from the ground 32 ft Water temp _____ °Fahr.

On "Pumping Test" delivery was _____ g.p.m. or _____ c.f.s. Drawdown was _____ feet.

Size of pump and motor used to make test _____

Length of time of test _____ hours _____ minutes.

If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____

If flowing well, described control works _____

(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Domestic Weight of casing per lineal foot 19 lb

Thickness of casing 1/4" Casing material steel
 (STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing _____

(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.

Number and size of perforations _____ located _____ feet to _____ feet from ground

Date of commencement of well _____ Date of completion of well May 31-62

S. 2 3 N 2 E

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed F. J. Clayworth.
By _____

By _____

Dated: Sept 9, 1962

License No. 43

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR AMENDMENT OF A PERMIT

Fee is \$100 per § 42-221C, Idaho Code

80390
RECEIVED
AUG 18 2015
WATER RESOURCES
WESTERN REGION
Original

Applicant(s) City of Boise, Department of Parks & Recreation Phone 208.608.7614
Name connector (check one): ☐ and ☐ or ☐ and/or
Mailing address 1104 Royal Blvd City Boise
State ID _____ Zip 83706 Email: bpr@cityofboise.org

I am the owner of Water Appropriation Permit No. 63-33845 and request that the permit be amended as follows:

- ☐ Change point of diversion ☐ Add point of diversion ☐ Change period of use
☐ Change nature of use ☐ Change place of use ☒ Other Amend water-bearing zone

1. Point of diversion: ☒ No changes to point(s) of diversion. Skip item #1 and proceed to #2.
☐ Attach Eastern Snake Plain Aquifer analysis if this proposes to change a point of diversion affecting the ESPA.

Twp	Rge	Sec	Govt Lot	1/4	1/4	1/4	County	Source	Local name or tag #

2. Period and nature of use: ☒ No changes to period and/or nature of use. Skip item #2 and proceed to #3.

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year) (water use) (month/day) (month/day)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year) (water use) (month/day) (month/day)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year) (water use) (month/day) (month/day)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year) (water use) (month/day) (month/day)

3. Place of use or land to be irrigated: ☒ No changes to place of use. Skip item #3 and proceed to #4.

Twp	Rge	Sec	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	

Total number of acres to be irrigated _____

**superseded by amended app received 7-22-15. -DM*

4. Property ownership: ☒ No changes to point of diversion and/or place of use. Skip item #4 and proceed to #5.

- a. Who owns the property at the point of diversion? _____
- b. Who owns the land to be irrigated or place of use? _____
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing:
- _____
- _____
- _____

5. Describe the proposed change in narrative form:

The Department seeks to change the water-bearing zone to 210-400 feet. Please see attached analysis of geothermal potential of this site.

6. Map: ☒ The point(s) of diversion and/or the place of use are not amended, therefore a map is not attached.

Attach a map showing the proposed point(s) of diversion and/or place(s) of use. Clearly label the map with township, range, section, and ¼ ¼ of section information. A photocopy of a USGS 7.5 minute topographic quadrangle is commonly used, or the *Map Tool* available on the Department website provides a satisfactory template for creating the required map (<http://maps.idwr.idaho.gov/TransferApplicationLayouts/Map>).

7. Signature:

The information in this application is true to the best of my knowledge. I understand that any willful misrepresentations in this application may result in rejection of the application or cancellation of an approval.

Signature of applicant or authorized agent

Doug Holloway, Director
Print name (and title, if applicable)

8-18-15
Date

Signature of applicant or authorized agent

Print name (and title, if applicable)

Date

FOR DEPARTMENT USE ONLY

Received by _____

Date 8/18/15

Received by _____

Date 8/18/15

Reviewed by DM

Date _____

Receipt No. W043416

Neely, Rachel

From: Neely, Rachel
Sent: Wednesday, September 23, 2015 4:08 PM
To: 'LEGALS@IDAHOSTATESMAN.COM'
Subject: Ada Legal Ad
Attachments: Ada Cover Letter.docx; Ada Legal Ad (Autosaved).docx

Good Afternoon Legal Clerk,

Please see the attached ads for publication on 10/1/15 & 10/8/15.

Please confirm these are okay to publish as shown.

Thank you,

Rachel Neely

Administrative Assistant I
IDWR-Western Region
2735 Airport Way Boise, ID 83705
Rachel.Neely@idwr.idaho.gov

September 23, 2015

LEGAL NOTICE DEPARTMENT
IDAHO STATESMAN
PO BOX 40
BOISE, ID 83707

RE: Application for Permit No. 63-34095
 Application for Permit No. 63-34141
 Application for Permit No. 63-34113
 Application for Permit No. 63-34112
 Application for Permit No. 63-34111
 Application for Permit No. 63-34110
 Application for Permit No. 63-34046
 Application for Permit No. 63-34115
 Application for Amendment of Permit No. 63-33845

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 10/19/2015. Your cooperation is appreciated.

Sincerely,

Rachel Neely
Administrative Assistant

Enclosure(s)

The following applications have been filed to appropriate the public waters of the State of Idaho:

63-34095

STEVE WOODARD
ELLEN WOODARD
4795 N HARTLEY RD
EAGLE, ID 83616
(2) Points of Diversion NWNE S34 T05N R01W ADA County Source GROUND WATER
Use: IRRIGATION 03/01 to 11/15 0.18 CFS
Total Diversion: 0.18 CFS
Date Filed: 6/4/2015
Place of Use: IRRIGATION
T05N R01W S34 NWNE
Total Acres: 9
Water bearing zone to be appropriated is from 275 to 375 feet.

63-34141

TES FARMS LLC
7551 S FLAT LN
KUNA, ID 83634
Point of Diversion NWSE S16 T01N R01E ADA County Source GROUND WATER
Use: IRRIGATION 03/01 to 11/15 1.6 CFS
Total Diversion: 1.6 CFS
Date Filed: 9/17/2015
Place of Use: IRRIGATION
T01N R01E S16 NESE NWSE
Total Acres: 80
Water bearing zone to be appropriated is from 250 to 400 feet.

63-34113

M3 EAGLE LLC
4222 E CAMELBACK RD STE H100
PHOENIX, AZ 85018
Point of Diversion NWNE S34 T05N R01W ADA County Source GROUND WATER
Use: DOMESTIC 01/01 to 12/31 0.04 CFS
Use: IRRIGATION 03/01 to 11/15 0.12 CFS
Total Diversion: 0.16 CFS
Date Filed: 7/14/2015
Places of Use: DOMESTIC, IRRIGATION
T05N R01W S34 NWNE
Total Acres: 6
Water bearing zone to be appropriated is from 200 to 600 feet.

63-34112

M3 EAGLE LLC
4222 E CAMELBACK RD STE H100
PHOENIX, AZ 85018
Point of Diversion NWNE S34 T05N R01W ADA County Source GROUND WATER
Use: DOMESTIC 01/01 to 12/31 0.04 CFS
Use: IRRIGATION 03/01 to 11/15 0.1 CFS
Total Diversion: 0.14 CFS
Date Filed: 7/14/2015
Places of Use: DOMESTIC, IRRIGATION
T05N R01W S34 NWNE
Total Acres: 5.2
Water bearing zone to be appropriated is from 200 to 600 feet.

63-34111

ROBERT J HANSON
ELSIE V HANSON
4151 N HARTLEY RD
EAGLE, ID 83616
Point of Diversion NWNE S34 T05N R01W ADA County Source GROUND WATER
Use: DOMESTIC 01/01 to 12/31 0.04 CFS
Use: IRRIGATION 03/01 to 11/15 0.11 CFS
Total Diversion: 0.15 CFS
Date Filed: 7/14/2015
Places of Use: DOMESTIC, IRRIGATION
T05N R01W S34 NWNE
Total Acres: 5.4

Water bearing zone to be appropriated is from 200 to 600 feet

63-34110

ROBERT J HANSON

ELSIE V HANSON

4151 N HARTLEY RD

EAGLE, ID 83616

Point of Diversion NWNE S34 T05N R01W ADA County Source GROUND WATER

Use: DOMESTIC 01/01 to 12/31 0.04 CFS

Use: IRRIGATION 03/01 to 11/15 0.12 CFS

Total Diversion: 0.16 CFS

Date Filed: 7/14/2015

Places of Use: DOMESTIC IRRIGATION

T05N R01W S34 NWNE

Total Acres: 6

Water bearing zone to be appropriated is from 200 to 600 feet.

63-34046

MELLIN PROPERTIES LTD PARTNERSHIP

10100 W FRANKLIN RD

BOISE, ID 83709-0333

Point of Diversion NESE S24 T01N R01E ADA County Source GROUND WATER

Use: IRRIGATION 03/01 to 11/15 1.6 CFS

Total Diversion: 1.6 CFS

Date Filed: 2/25/2015

Place of Use: IRRIGATION

T01N R01E S24 NESE NWSE

Total Acres: 80

Water bearing zone to be appropriated is from 225 to 600 feet.

63-34115

DAVID SCAGGS

9408 W BURNETT DR

BOISE, ID 83709

Point of Diversion NWNE S26 T03N R01E ADA County Source GROUND WATER

Use: IRRIGATION 03/01 to 11/15 0.05 CFS

Total Diversion: 0.05 CFS

Date Filed: 7/16/2015

Place of Use: IRRIGATION

T03N R01E S26 NWNE

Total Acres: 1.5

Water bearing zone to be appropriated is from 100 to 150 feet.

PROPOSED AMENDMENT OF WATER PERMIT

City of Boise, Department of Parks and Recreation of 1104 Royal Blvd, Boise, ID, 83706 filed Application No. 80390 on August 18, 2015 to amend a water permit no. 63-33845 with a 2013 priority from groundwater totaling 0.14 cfs for municipal use. The permit provides municipal water for property located at Boise Hills Park on East Club View Drive in the Boise Foothills. The applicant proposes to amend the permit to change the water bearing zone from 225-250 feet to 200-400 feet.

Permits will be subject to all prior water rights. For additional information concerning the property location, contact Western Region office at (208) 334-2190; or for a full description of the right(s) or proposed amendment(s), please see www.idwr.idaho.gov/WaterManagement/WaterRights. Protests may be submitted based on the criteria of Idaho Code §§ 42-203A and 42-211. Any protest against the approval of the application(s) must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before 10-19-15. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published on 10/1/2015 and 10/8/2015



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

September 23, 2015

CITY OF BOISE, DEPT OF PARKS & REC
1104 ROYAL BLVD
BOISE ID 83706

Application for Amendment of Permit No. 63-33845

Dear Applicant(s):

The Department of Water Resources has received your water right application. Please refer to the number referenced above in all future correspondence regarding this application.

A legal notice of the application has been prepared and is scheduled for publication in the IDAHO STATESMAN on 10/1/2015 and 10/8/2015. Protests to this application may be submitted for a period ending ten (10) days after the second publication.

If the application is protested, you will be sent a copy of each protest. All protests must be resolved before the application can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter.

If the application is not protested, the Department will process your application and notify you of any action taken on the application. If your application is approved, the Department will send you a copy of the permit.

Please contact this office if you have any questions regarding the application.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rachel Neely', with a long horizontal flourish extending to the right.

Rachel Neely
Administrative Assistant

Merriman, Danielle

From: Maria Minicucci [MMinicucci@cityofboise.org]
Sent: Tuesday, September 22, 2015 11:17 AM
To: Merriman, Danielle
Subject: 63-33845 Amended Permit
Attachments: 63-33845.pdf

Danielle,

Attached please find the amended application form with the corrected water-bearing zone.

Thank you very much for your assistance. Please let me know if there is anything else that we need to do to move this application forward.

Maria Minicucci

Department of Parks & Recreation
mminicucci@cityofboise.org
208.608.7614

Merriman, Danielle

From: Merriman, Danielle
Sent: Tuesday, September 22, 2015 10:36 AM
To: 'mminicucci@cityofboise.org'
Subject: Application for Amendment of Permit 80390
Attachments: 80390 amendment form.pdf

Hi Maria,

Attached is the scanned version of the Application for Amendment of Permit for Boise Hills Park. Please review section five of the form. The water bearing zone listed here is 210- 400 feet. The recommended water bearing zone from the included consultant memorandum is 200-400 feet. Please correct section five of the form to reflect what the correct water bearing zone is to be. Please initial and date it and scan/send it back and we will get it to advertising this week!

Thank you!

Danie Merriman

Water Resource Agent

Idaho Department of Water Resources

Phone: (208) 334-2190

Fax: (208) 334-2348

Email: danie.merriman@idwr.idaho.gov



Doug Holloway
Director

Parks & Recreation
1104 Royal Boulevard
Boise, Idaho 83706-2840

Phone
208/608-7600

Fax
208/608-7648

TDD/TTY
800/377-3529

Web
www.cityofboise.org/parks

Mayor
David H. Bieter

City Council
President
Maryanne Jordan

Council Pro Tem
Elaine Clegg

Scot Ludwig
Lauren McLean
Ben Quintana
TJ Thomson

Boise Parks & Recreation

August 17, 2015

Angie Grimm, WR Supervisor
Western Region
Idaho Department of Water Resources
2735 Airport Way
Boise ID 83705

RECEIVED
AUG 18 2015
WATER RESOURCES
WESTERN REGION

RE: Permit No. 63-33845

Dear Ms. Grimm,

Enclosed please find an Application for Amendment of a Permit for the above-referenced permit.

The only change that we seek is to expand the water-bearing zone to allow for greater flexibility in the construction of the well.

Boise Parks & Recreation requests that this application be expedited to allow us to meet with our construction schedule. The well is part of a larger project for this site (installation of a pressurized irrigation system, turf, and several park amenities.) Without irrigation water we will not be able to "green-up" this site and will have to delay this project until funds become available again.

Thank you very much for your assistance. Please do not hesitate to contact this office if you need additional information.

Sincerely,

Maria Minicucci
Property and Water Rights Analyst
mminicucci@cityofboise.org
208.608.7614