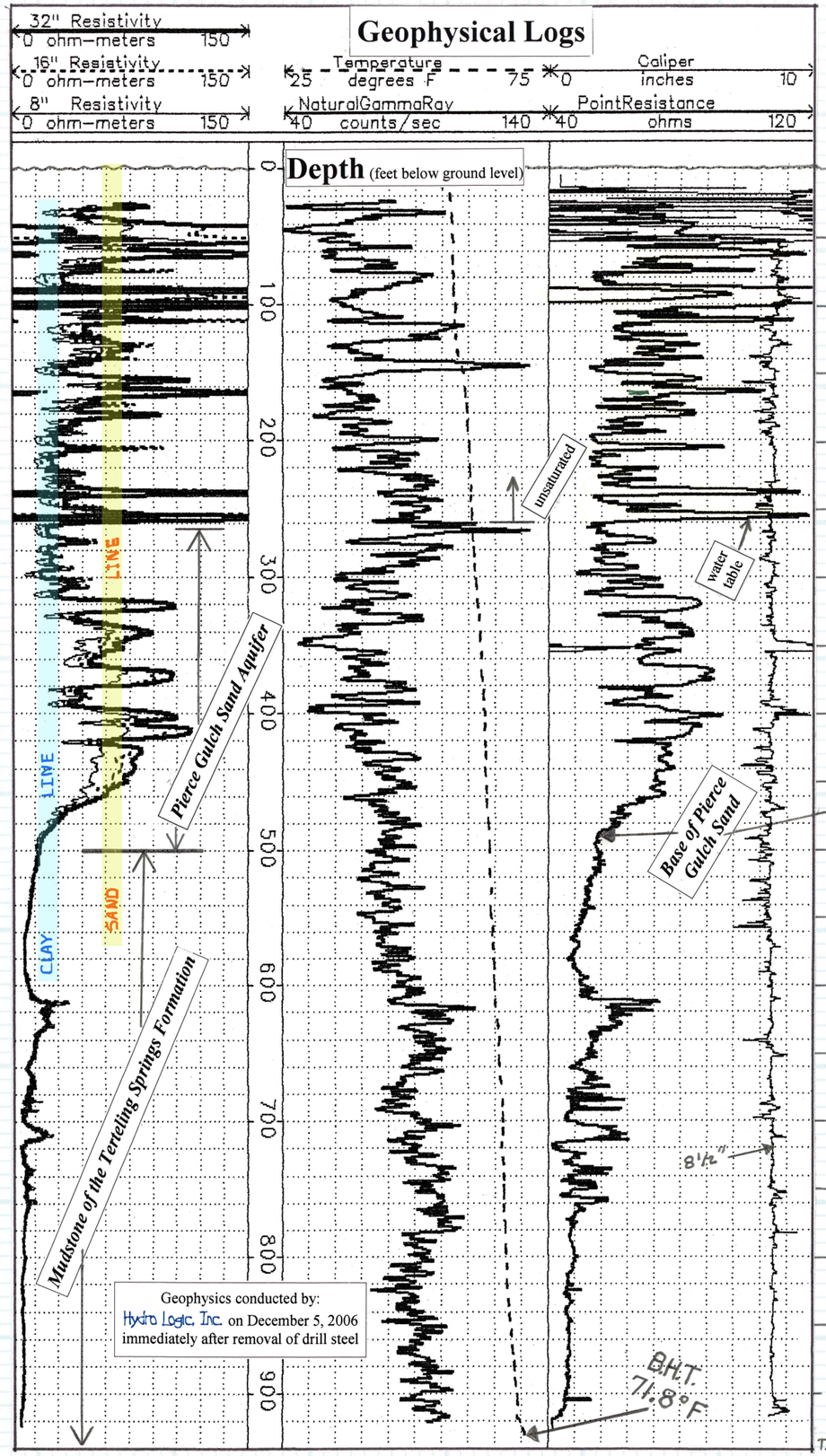
M3 Eagle - Test Well #3

T. 5 N., R. 1 W., Section 15, SW¼, SW¼, SW¼
Latitude 43° 45' 56.44" Longitude 116° 27' 8.35"
Well completed December, 2006

Geophysical Logs



Geophysics conducted by:
Hydro Logic, Inc. on December 5, 2006
immediately after removal of drill steel

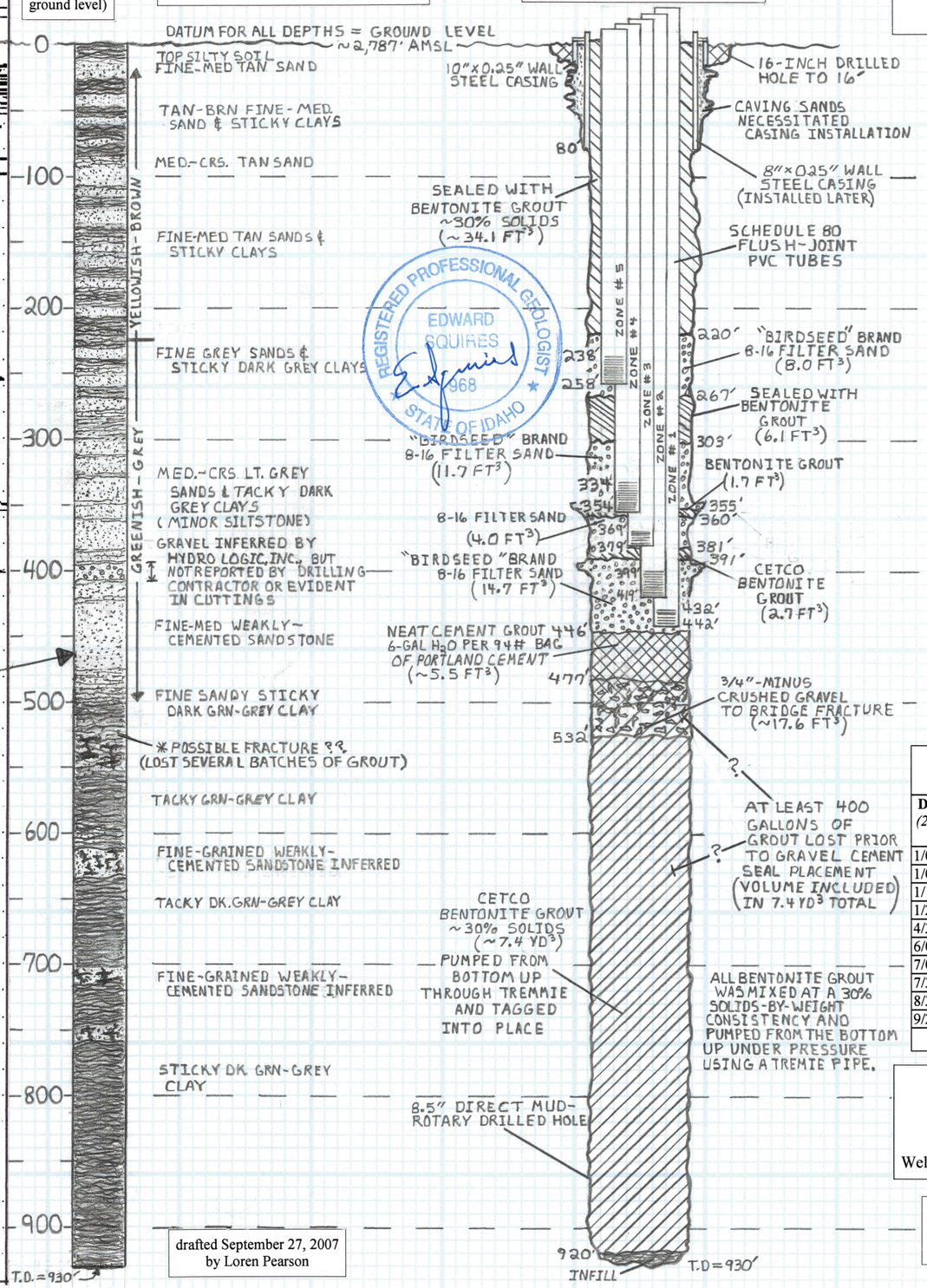
Depth
(feet below ground level)

Lithology

Hydro Logic, Inc. lithologic log is interpreted and drawn from geophysical logs and drilled cuttings from the borehole.

As-Built Well Construction

(horizontal scale 0.1"=0.5")
(vertical scale 1"=100')



drafted September 27, 2007
by Loren Pearson

Ground Water Chemistry

Analysis (in mg/L unless noted)	ZONE #1 (442 - 432 feet bgl)	ZONE #2 (419 - 399 feet bgl)	ZONE #3 (379 - 369 feet bgl)
Alkalinity	136.0	123.0	117.0
Ammonia as N	0.28	0.14	0.05
Arsenic	0.008	0.005	0.009
Calcium as $CaCO_3$	69.8	74.8	86.5
Chloride	5.39	5.31	7.02
Conductivity *(µS)*	316.0	305.0	321.0
Corrosivity	-0.14	-0.46	-0.30
Fluoride	0.51	0.52	0.52
Hardness	98.4	106.0	118.0
Iron *(dissolved)*	0.16	0.09	0.03
Magnesium	6.94	7.48	7.47
Manganese *(dissolved)*	0.07	0.09	0.05
Nitrate as N	0.13	0.13	0.12
Nitrite as N	<0.01	<0.01	<0.01
Orthophosphate	0.477	0.270	0.276
pH - Lab *(S.U.)*	7.90	7.59	7.72
Potassium	2.90	2.54	2.53
Silica	43.5	41.2	35.8
Sodium	30.4	24.3	26.2
Sulfate	22.7	23.9	32.3
Sulfide	< 0.05	< 0.05	< 0.05
Total Dissolved Solids	253	235.0	238.0
Total Kjeldahl Nitrogen	0.35	0.23	0.18
Total Organic Carbon	1.34	< 1.0	< 1.0
Field Conductivity (µS)	*310*	*307*	*321*
Field Dissolved Oxygen	*6.64*	*4.89*	*4.87*
Field O.R.P. (mV)	*+106*	*+6*	*+110*
Field pH (S.U.)	*7.62*	*7.22*	*7.46*
Field Temperature (°F)	*64.2*	*63.2*	*62.2*

Analyses by Alchem Laboratories, Boise, ID
Samples collected on January 30, 2007 by Hydro Logic, Inc.

Water Levels

(feet below measure point = 3.5 feet above ground)

Date / Time (24-hr clock)	ZONE #1 (442 - 432 feet bgl)	ZONE #2 (419 - 399 feet bgl)	ZONE #3 (379 - 369 feet bgl)	ZONE #4 (354 - 334 feet bgl)	ZONE #5 (258 - 238 feet bgl)
1/05/07 13:05	261.42	261.48	261.68	261.79	unsaturated zone (installed to prove water table depth)
1/08/07 17:34	262.28	262.34	262.43	262.62	
1/18/07 10:07	263.30	263.34	263.42	263.60	
1/29/07 09:26	262.22	262.30	262.35	262.54	
4/30/07 11:39	262.62	262.63	262.71	262.90	
6/01/07 09:45	261.85	261.84	261.90	262.09	
7/03/07 09:54	262.34	263.74	263.81	263.99	
7/31/07 10:58	263.85	263.82	263.92	264.07	
8/30/07 10:01	263.93	263.95	263.96	264.18	
9/20/07 16:06	262.15	262.10	262.17	262.35	

Water levels recorded by Hydro Logic, Inc.

On site supervision, well design, pump test design, and water quality sampling by Hydro Logic, Inc., Boise, ID.
Direct mud-rotary drilling and well construction by Treasure Valley Drilling and Pump, Inc., Weiser, ID
Well development by McLeran Well Drilling, LLC, New Plymouth, ID.

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