

Results of Aquifer Test Analysis

for the

Texas Lions Camp Well (HGCD Well No. 2102)

for

Headwaters Groundwater Conservation District
125 Lehmann Dr., Suite 100
Kerrville, TX 78028

WRGS Project No. 072-002-12

October 2012



Wet Rock Groundwater Services, L.L.C.

Groundwater Specialists

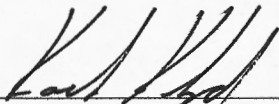
311 Ranch Road 620 South, Suite 103

Austin, Texas 78734

Phone: 512-773-3226 • www.wetrockgs.com

TBPG Firm No: 50038

The seal appearing on this document was authorized on November 1, 2012 by:



Kaveh Khorzad, P.G.
License No. 1126

Wet Rock Groundwater Services, LLC
TBPG Firm Registration No. 50038



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311 Ranch Road 620 South, Suite 103

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www.wetrockgs.com

Headwaters Groundwater Conservation District

Texas Lions Camp Well (HGCD Well No. 2102)

Middle Trinity Aquifer

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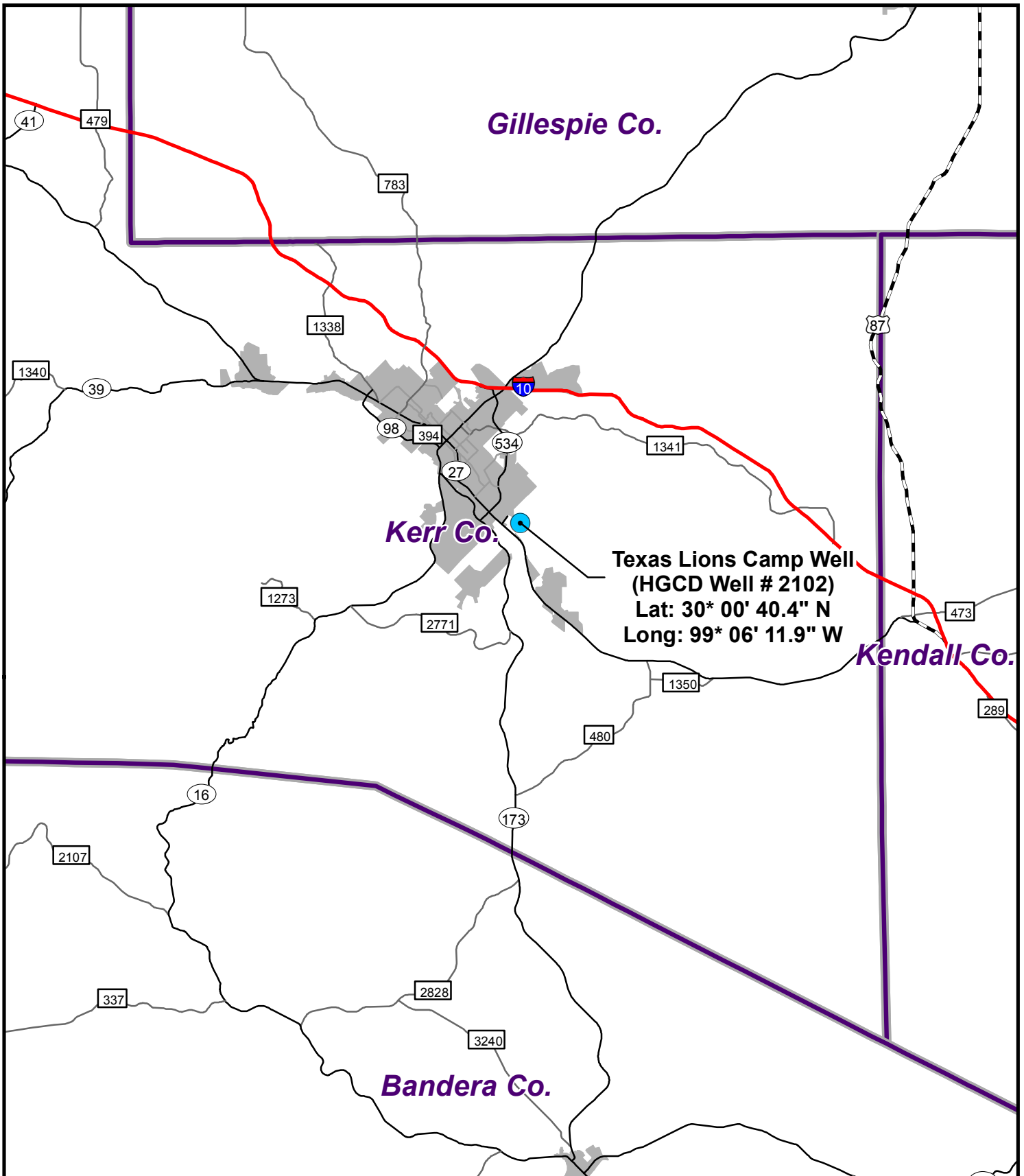
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Attachment 1

Well Location Map





Scale: 1 inch = 4 miles

Drawn By: BB Date: 10-29-12

Quad Name and No:
Terrell Wells, Texas 29098-C5

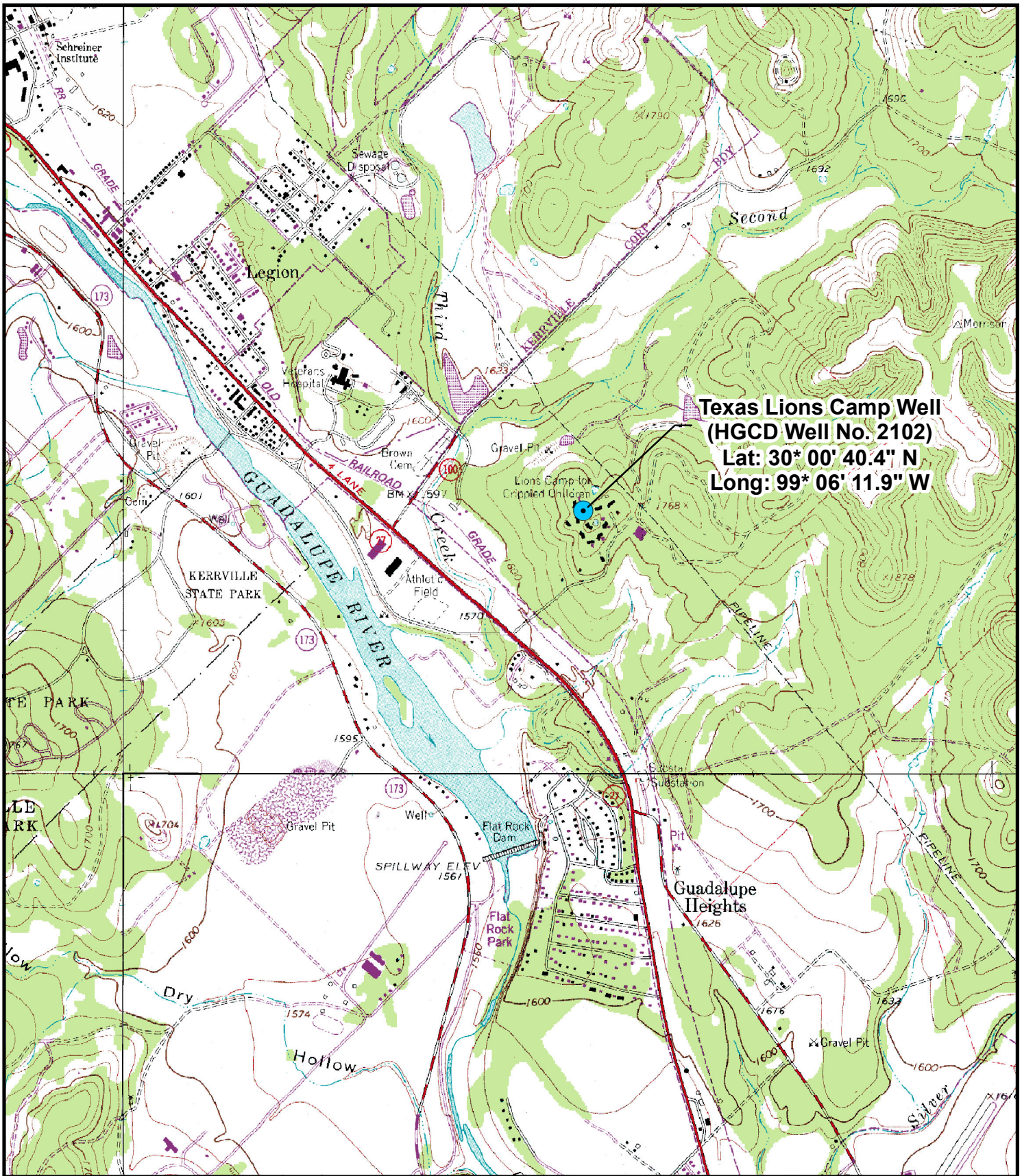
Projection:
UTM NAD 83 Zone 14

Location Map	
Texas Lions Camp Kerr County, Texas	 Wet Rock Groundwater Services, L.L.C. <i>Groundwater Specialists</i> <small>TBPG Firm No: 50038</small> 311 Ranch Road 620 South, Ste. 103 Austin, Texas 78734 Ph: 512.773.3226 www.wetrockgs.com

Attachment 2

U.S. Geological Survey Topographic Map





Texas Lions Camp Well
(HGCD Well No. 2102)
Lat: 30° 00' 40.4" N
Long: 99° 06' 11.9" W

Scale: 1 inch = 2,000 feet
Drawn By: BB Date: 7-27-11
Quad Name and No: Terrell Wells, Texas 29098-C5
Projection: UTM NAD 83 Zone 14



USGS Topographic Map

Texas Lions Camp

Kerr County, Texas



Wet Rock Groundwater Services, L.L.C.
Groundwater Specialists

TBPG Firm No: 50038

311 Ranch Road 620 South, Ste. 103
 Austin, Texas 78734 Ph: 512.773.3226

www.wetrockgs.com

Attachment 3

Log Plot: Texas Lions Camp Well (HGCD Well No. 2102)





Wet Rock Groundwater Services, LLC

Groundwater Specialists

311 Ranch Rd. 620 S., Ste. 103

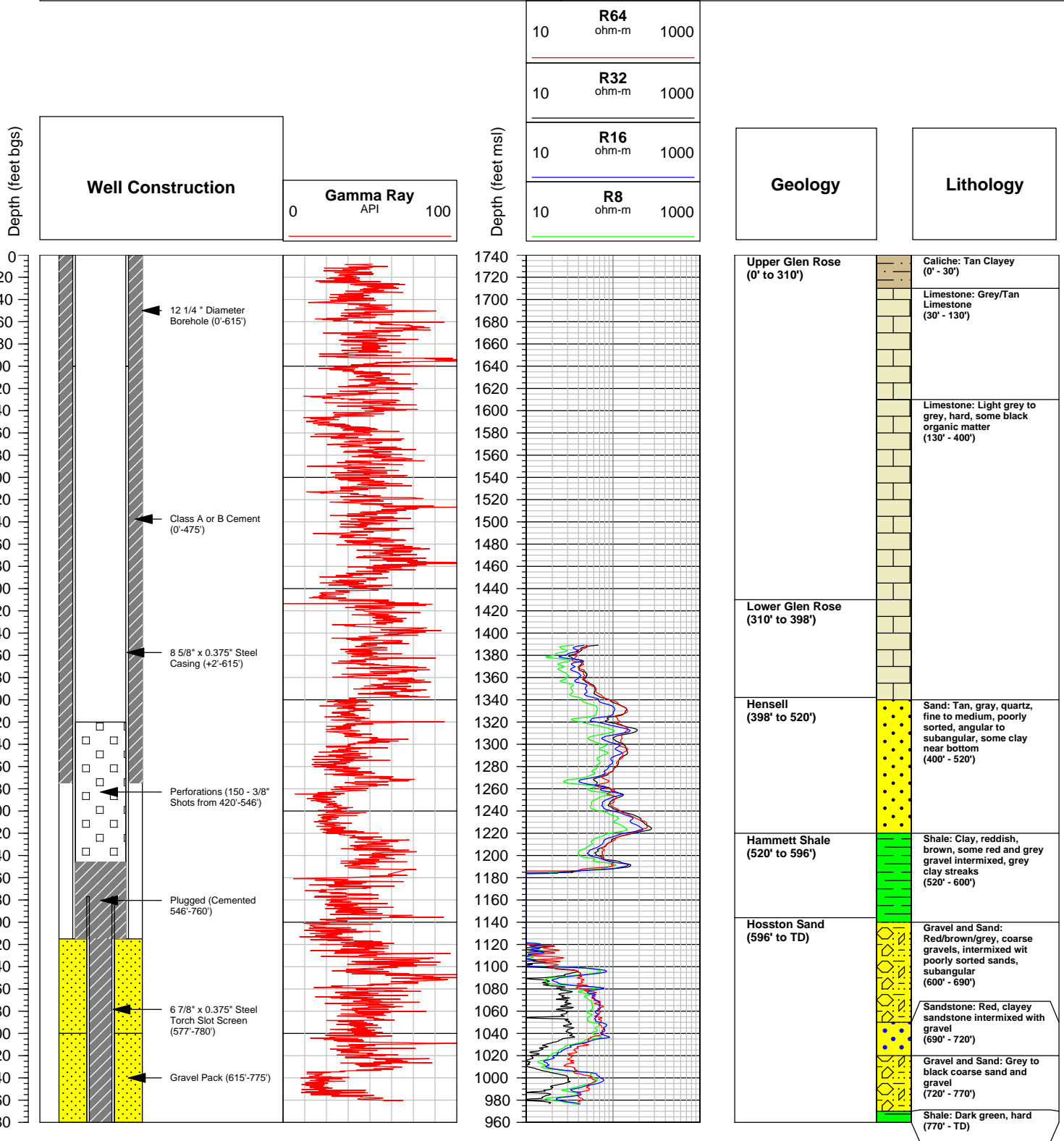
Austin, TX 78734

Ph: 512.773.3226 www.wetrockgs.com

Well Name: Texas Lions Camp Well (HGCD Well No. 2102)

Client: **Headwaters GCD**
 Location: **Kerr County, Texas**
 Drill Date: **May 14, 2012**
 Drilled By: **Edmonds Drilling Co.**

Elevation: **1740'**
 Total Depth: **780'**
 Latitude: **30° 00' 40.4" N**
 Longitude: **99° 06' 11.9" W**



Attachment 4

State of Texas Well Report



Attention Owner:
Confidentiality Privilege Notice
on reverse side of owner's copy.

Texas Department of Licensing and Regulation
Water Well Driller/Pump Installer Section
P.O. Box 12157 Austin, Texas 78711 (512)463-7880 FAX (512)463-8616
Toll free (800)803-9202

This form must be completed
and filed with the department
and owner within 60 days
upon completion of the well.

Email address: water.well@license.state.tx.us Web address: www.license.state.tx.us

WELL REPORT

1) WELL IDENTIFICATION AND LOCATION DATA

1) OWNER

Name: TX Lions Camp Inc Address: 4100 San Antonio Hwy City: Kerrville State: TX Zip: 78028

2) WELL LOCATION

Well # or # of wells drilled: 1 County: Kerr Physical Address: 4100 San Antonio Hwy City: 78028

3) Type of Work

New Well Reconditioning
 Replacement Deepening

4) Proposed Use (check)

Monitor Environmental Soil Boring Domestic Extraction
 Industrial Irrigation Injection Closed-Loop Geothermal De-watering Testwell
 Rig Supply Stock Public Supply - If Public Supply, were plans approved? Yes No

5) NT
Lions Camp
1 mile
 Hwy 27 East
4100

6) Drilling Date

Started 4/3/2012

Completed 4/20/2012

Diameter of Hole

Dia. (in)	From (ft)	To (ft)
12 1/4	Surface	615
7 7/8	615	730

7) Drilling Method (check)

Driven Air Rotary Mud Rotary
 Bored Air Hammer Cable Tool
 Jetted Hollow Stem Auger
 Reverse Circulation
 Other

8) Borehole Completion Open Hole Straight Wall

Under-reamed Gravel Packed Other
Gravel packed interval from: ft. to: ft. Size:

From (ft)	To (ft)	Description and color of formation material
0	10	Rocks
10	35	White - Caliche
35	260	Blue
260	280	Tan limestone
280	420	Blue shale
420	430	Redded Red shale
430	470	Hard limestone (white)
470	500	Tan H2O
500	615	TAN sand H2O (middle)
615	630	Hammet dark shale
630	630	SOFT sand H2O TAN
630	730	Coarse sand High water yield

9) Casing, Blank Pipe, and Well Screen Data

Dia. (in.)	New Or Used	Steel, Plastic, etc. Perf., Slotted, etc Screen Mfg., if commercial	Setting (ft)		Casing Screen
			From	To	
8 3/8	New	Steel (Blanks)	0	615	
6 3/8	New	Steel (Screen)	577	730	
		(Torch cut screen)			
		gravel pack	615	477	

9) Annular Seal Data: i.e. (from 2" to 120" #sacks & material (if cement))
from 475 ft. to 360 ft. #sacks & material 35 SLS port
from 360 ft. to 265 ft. #sacks & material 36 SLS port
from 265 ft. to 0 ft. #sacks & material 20 SLS port
Method Used Tremmie Performed By Edmond's
Distance to septic field or other concentrated contamination 300 ft ft.
Distance to Property Line 150 ft ft.
Method Verified: Tape line

13) Plugged Well plugged within 48 hours

Casing left in well: Cement/Bentonite placed in well:

From (ft)	To (ft)	From (ft)	To (ft)	# Sacks & Material used

14) Type Pump

Turbine Jet Submersible Cylinder
 Other
Depth to pump bowls, cylinder, jet etc., ft.

10) Surface Completion (If steel cased, leave blank)

Surface Slab Installed Surface Sleeve Installed
 Pileless Adapter Used Alternative Procedure Used

11) Water Level

Static level 364 ft. Date: 4/20/2012
Artesian Flow _____ gpm

12) Packers:

Type	Depth	Type	Depth

15) Water Test

Type test Pump Bailer Jetted Estimated
Yield: 100 gpm with 0 ft. drawdown after 2 hrs.

16) Water Quality

Type of water _____ Depth of Strata: _____ Was a chemical analysis made? Yes No
Did you knowingly penetrate a strata which contains undesirable constituents? Yes No If yes, Continue:
Check One: Naturally poor-quality groundwater - type _____ Hydrocarbons (i.e. gas, oil, etc.)
 Hazardous material/waste contamination encountered Other (describe) _____
 I certify that while drilling, deepening, or otherwise altering the above described well, undesirable water or constituents was encountered and the landowner was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.
By signing this well report, I certify that I drilled or supervised the drilling of this well and that each and all of the statements herein are true and correct.

Company & Individual's Name: (type or print) Edmond Drilling Co. Lic. No.: 58357W

Address: P.O. Box 1552 City: Kerrville State: TX Zip: 78028

Signature: Edmond Drilling Co. 4/25/2012 Signature:

TDLR FORM 001WWD/7-08 TDLR (Original) Landowner (copy) Driller/Pump Installer (copy)

H.G.C.D.
MAY 15 2012
RECEIVED

Attention Owner:
Confidentiality Privilege Notice
on reverse side of owner's copy.

Texas Department of Licensing and Regulation
Water Well Driller/Pump Installer Section
P.O. Box 12157 Austin, Texas 78711 (512)463-7880 FAX (512)463-8616
Toll free (800)803-9202
Email address: water.well@license.state.tx.us Web address: www.license.state.tx.us

This form must be completed
and filed with the department
and owner within 60 days
upon completion of the well.

WELL REPORT

A. WELL IDENTIFICATION AND LOCATION DATA

1) OWNER

Name: TEXAS LIONS CAMP INC. Address: P.O. Box 290247 City: KEARVILLE State: TX Zip: 78028

2) WELL LOCATION

Well # or # of wells drilled: 2102 County: KEAR Physical Address: HWY 27 EAST City: KEARVILLE TX

3) Type of Work

New Well Reconditioning
 Replacement Deepening

Lat. N 30° 00. 40.8 Long. W 099° 06. 12. 2 Grid #
4) Proposed Use (check) Monitor Environmental Soil Boring Domestic Extraction Frac 5)
 Industrial Irrigation Injection Closed-Loop Geothermal De-watering Test well
 Rig Supply Stock Public Supply - If Public Supply, were plans approved? Yes No

6) Drilling Date

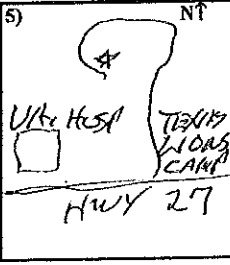
Started 1 1
Completed 1 1

Diameter of Hole

Dia. (in)	From (ft)	To (ft)
	Surface	

7) Drilling Method (check)

Driven Air Rotary Mud Rotary
 Bored Air Hammer Cable Tool
 Jetted Hollow Stem Auger
 Reverse Circulation
 Other



From (ft)	To (ft)	Description and color of formation material
<u>0</u>	<u>615</u>	<u>8 5/8 Steel Pipe IN PLACE</u>
<u>577</u>	<u>760</u>	<u>6 5/8 LINER STEEL PIPE WORKING</u>
<u>540</u>	<u>760</u>	<u>PUMPED 70% CEMENT PLUG. TRIMMED WITH DRILL PIPE</u>
<u>540</u>	<u>546</u>	<u>DATE. CEMENT TO 546</u>
		<u>TEST - NO WATER IN HOLE</u>
<u>420</u>	<u>546</u>	<u>SHOT 150 SHOTS 3/8 HOLE</u>
<u>AMENDED LOG - Plugged Lower Trinity perforated Middle Trinity</u>		

8) Borehole Completion Open Hole Straight Wall
 Under-reamed Gravel Packed Other
Gravel packed interval from: _____ ft. to: _____ ft. Size: _____

Casing, Blank Pipe, and Well Screen Data

Dia. (in.)	New Or Used	Steel, Plasto, etc. Perf., Slotted, etc Screen Mfg., if commercial	Setting (ft)		Gage Casing Screen
			From	To	

9) Annular Seal Data: i.e. (from 0 ft to 100 ft #sacks & material 13 cement)
from _____ ft. to _____ ft. #sacks & material _____
from _____ ft. to _____ ft. #sacks & material _____
from _____ ft. to _____ ft. #sacks & material _____
Method Used _____ Performed By _____
Distance to septic field or other concentrated contamination _____ ft.
Distance to Property Line _____ ft.
Method Verified: _____ Approved by Variance # _____

13) Plugged Well plugged within 48 hour

Casing left in well: _____ Cement/Bentonite placed in well: _____

From (ft)	To (ft)	From (ft)	To (ft)	# Sacks & Material used

10) Surface Completion (if steel cased, leave blank)
 Surface Slab Installed Surface Sleeve Installed
 Pitless Adapter Used Alternative Procedure Used

11) Water Level
Static level 364 ft. below surface Date: 4/13/18
Artesian Flow _____ gpm TDS 350

12) Packers:

Type	Depth	Type	Depth

14) Type Pump

Turbine Jet Submersible Cylinder
 Other _____
Depth to pump bowls, cylinder, jet, etc., _____ ft.

15) Water Test

Type test Pump Bailer Jetted Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.

16) Water Quality

Type of water: _____ Depth of Strata: _____ Was a chemical analysis made? Yes No
Did you knowingly penetrate a strata which contains undesirable constituents? Yes No If yes, Continue:
Check One: Naturally poor-quality groundwater - type _____ Hydrocarbons (i.e. gas, oil, etc.)
 Hazardous material/waste contamination encountered Other (describe) _____
 I certify that while drilling, deepening, or otherwise altering the above described well, undesirable water or constituents was encountered and the landowner was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.

By signing this well report, I certify that I drilled or supervised the drilling of this well and that each and all of the statements herein are true and correct.

Company & Individual's Name: (type or print) EDMONDS DRILLING CO. INC. WADE Blueemel Lic. No.: 58357
Address: P.O. Box 1552 City: KEARVILLE State: TX Zip: 78028
Signature: Waade Blueemel Date: 1 1 Signature: _____
Licensed Driller/Pump Installer _____ Date _____ Apprentice _____ Apprentice Reg. Number _____

Attachment 5

Table 1 - Well Construction Summary

Table 2 - Aquifer Testing Summary

Table 3 - Summary of Aquifer Testing Analyses



Table 1 - Well Construction Summary

<u>Well</u>	<u>Hole Diameter (inches)</u>	<u>From (ft)</u>	<u>To (ft)</u>	<u>Casing Type</u>	<u>Casing Diameter (inches)</u>	<u>From (ft)</u>	<u>To (ft)</u>
Texas Lions Camp Well (HGCD Well No. 2102)	12 1/4	0	615	Steel	8 5/8	0	615
	7 7/8	615	780	Torch Slot Screen	6 5/8	577	780
	-	-	-	Cement Plug	-	546	760
	-	-	-	Perforations (150 - 3/8" shots)	-	420	546

Table 2 - Aquifer Testing Summary

<u>Well</u>	<u>Static Water Level (ft bgs)</u>	<u>Static Water Level (ft MSL)</u>	<u>Q (gpm)</u>	<u>Drawdown (ft)</u>	<u>SC (gpm/ft)</u>	<u>Pumping Duration (hours)</u>
Texas Lions Camp Well (HGCD Well No. 2102)	384.02	1,355.98	80	84.5	0.95	54.9

Notes: Q = discharge; SC = specific capacity; bgs = below ground surface; MSL = Mean Sea Level; gpm = gallons per minute; ft = feet

Table 3 - Summary of Aquifer Testing Analyses

<u>Well</u>	<u>Analysis</u>	<u>b (ft)</u>	<u>T (ft²/day)</u>	<u>K</u>
Texas Lions Camp Well (HGCD Well No. 2102)	Theis Recovery	216	178	0.83

Notes: b = aquifer thickness; T = transmissivity; K = hydraulic conductivity

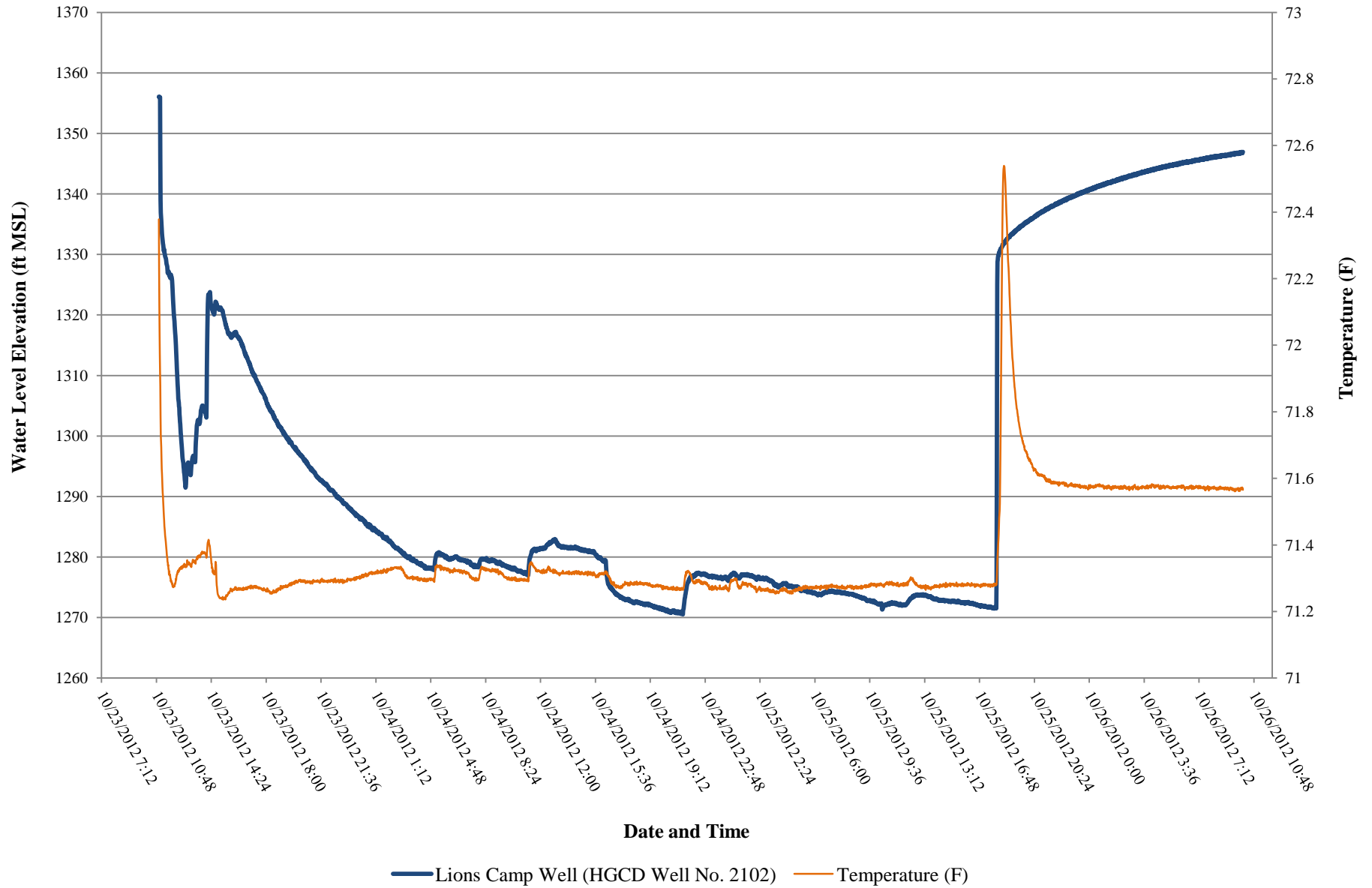


Attachment 6

Aquifer Test Drawdown and Temperature Curves



Headwaters GCD - Lions Camp Well (HGCD Well No. 2102) - Aquifer Test (October 23, 2012)



Attachment 7

Aquifer Test Analyses





Wet Rock Groundwater Services, LLC
 Groundwater Specialists
 311 Ranch Road 620 South, Suite 103
 Austin, Texas 78734
 Ph: 512.773.3226
 www.wetrockgs.com

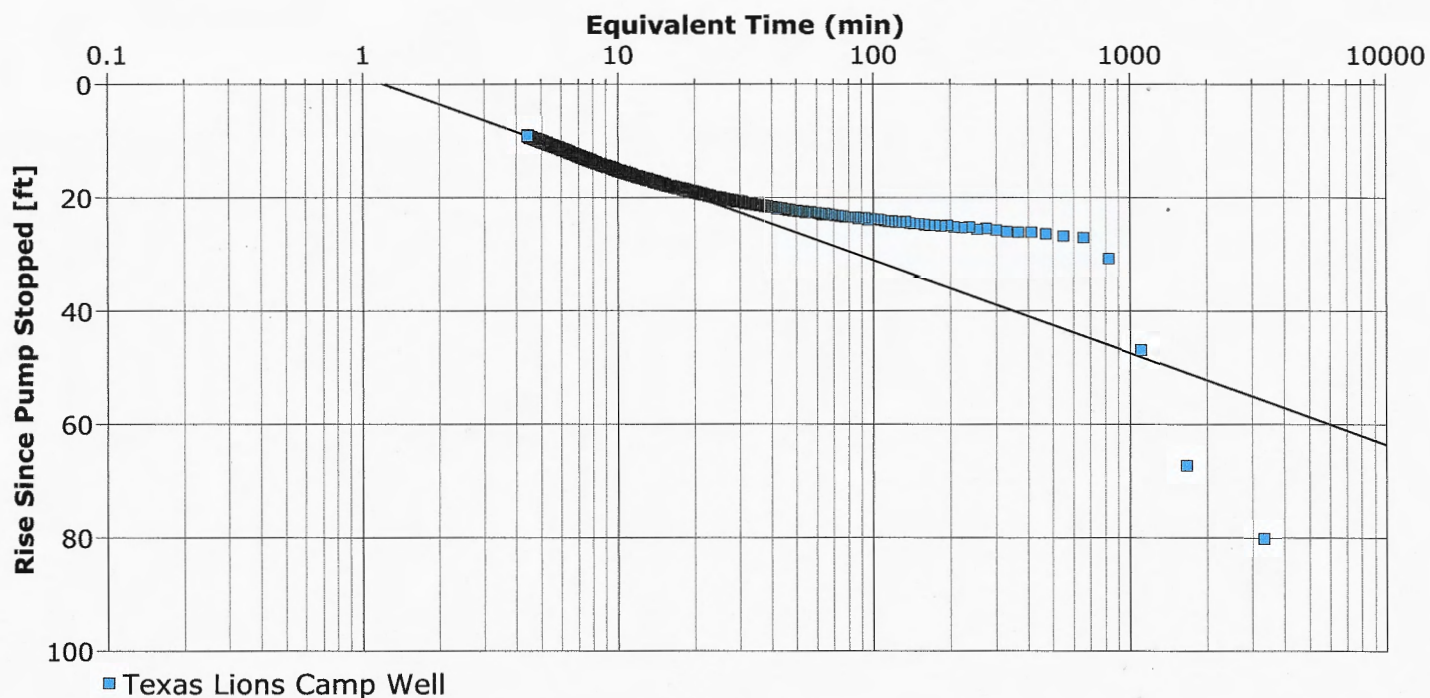
Pumping Test Analysis Report

Project: Texas Lions Camp (Headwaters GCD Well No. 2102)

Number: 072-001-12

Client: Headwaters GCD

Location: Kerr County, TX	Pumping Test: Texas Lions Camp Well	Pumping Well: Texas Lions Camp Well
Test Conducted by: BWB		Test Date: 10/23/2012
Analysis Performed by: BWB	Theis Recovery	Analysis Date: 10/31/2012
Aquifer Thickness: 216.00 ft	Discharge: variable, average rate 82.211 [U.S. gal/min]	



Calculation after Theis & Jacob

Observation Well	Transmissivity [ft ² /d]	Hydraulic Conductivity [ft/d]	Radial Distance to PW [ft]
Texas Lions Camp Well	1.78×10^2	8.26×10^{-1}	

Attachment 8

Aquifer Test Data



Headwaters GCD - Lions Camp Well (HGCD Well No. 2102) - Aquifer Test (October 23, 2012)

Date and Time	Time Since Pump Start (min)	Time Since Pump Stop (min)	Temperature (F)	Water Level (ft bgs)	Water Level (ft MSL)	Drawdown (ft)	Pump Rate (gpm)	Specific Capacity (gpm/ft)	Comments
10/23/2012 10:57			72.38	383.93	1356.07				
10/23/2012 10:58			72.23	383.95	1356.05				
10/23/2012 10:59			72.12	384.05	1355.95				
10/23/2012 11:00			72.04	384.00	1356.00				
10/23/2012 11:01			71.97	384.10	1355.90				
10/23/2012 11:02	0		71.92	384.02	1355.98	0.00			Pump Start
10/23/2012 11:03	1		71.88	394.33	1345.67	10.31	155	15.03	Meter = 134,200 Gallons
10/23/2012 11:04	2		71.79	401.04	1338.96	17.02	150	8.81	Some Sand
10/23/2012 11:05	3		71.73	403.08	1336.92	19.06			
10/23/2012 11:06	4		71.69	404.38	1335.62	20.36			
10/23/2012 11:07	5		71.66	405.13	1334.87	21.11	149	7.06	
10/23/2012 11:08	6		71.63	405.83	1334.17	21.81			
10/23/2012 11:09	7		71.61	406.56	1333.44	22.54			
10/23/2012 11:10	8		71.59	407.04	1332.96	23.02	145	6.30	
10/23/2012 11:11	9		71.57	407.43	1332.57	23.41			
10/23/2012 11:12	10		71.56	407.78	1332.22	23.76	145	6.10	
10/23/2012 11:13	11		71.55	408.20	1331.80	24.18			
10/23/2012 11:14	12		71.53	408.42	1331.58	24.40			
10/23/2012 11:15	13		71.52	408.78	1331.22	24.76			
10/23/2012 11:16	14		71.50	409.19	1330.81	25.17			
10/23/2012 11:17	15		71.49	409.48	1330.52	25.46	145	5.69	
10/23/2012 11:22	20		71.43	410.29	1329.71	26.27	143	5.44	
10/23/2012 11:27	25		71.38	411.56	1328.44	27.55	143	5.19	
10/23/2012 11:32	30		71.35	413.07	1326.93	29.05	142	4.89	
10/23/2012 11:47	45		71.29	413.72	1326.28	29.70	142	4.78	
10/23/2012 12:02	60		71.29	423.52	1316.48	39.50	142	3.60	Less Sand
10/23/2012 12:17	75		71.33	435.31	1304.69	51.29	140	2.73	
10/23/2012 12:32	90		71.33	444.24	1295.76	60.22	138	2.29	
10/23/2012 12:47	105		71.33	445.50	1294.50	61.48	130	2.11	Reduced Pump Rate at 102 Minutes
10/23/2012 13:02	120		71.34	446.49	1293.51	62.47	125	2.00	Reduced Pump Rate
10/23/2012 13:39	157		71.36	437.70	1302.30	53.68	118	2.20	Reduced Pump Rate
10/23/2012 14:02	180		71.37	436.61	1303.39	52.59	100	1.90	Reduced Pump Rate
10/23/2012 15:02	240		71.24	419.02	1320.98	35.00			
10/23/2012 16:02	300		71.27	423.27	1316.73	39.25			
10/23/2012 17:02	360		71.28	428.95	1311.05	44.93			
10/23/2012 18:02	420		71.26	434.66	1305.34	50.64			
10/23/2012 19:02	480		71.27	439.02	1300.98	55.00			

Note: bgs = below ground surface Column Pipe Diameter = 3-inch Horsepower = 30 HP
 MSL = Mean Sea Level Pump Setting = 483 feet bgs

Headwaters GCD - Lions Camp Well (HGCD Well No. 2102) - Aquifer Test (October 23, 2012)

Date and Time	Time Since Pump Start (min)	Time Since Pump Stop (min)	Temperature (F)	Water Level (ft bgs)	Water Level (ft MSL)	Drawdown (ft)	Pump Rate (gpm)	Specific Capacity (gpm/ft)	Comments
10/23/2012 20:02	540		71.29	442.57	1297.43	58.55			
10/23/2012 21:02	600		71.29	445.81	1294.19	61.79			
10/23/2012 22:02	660		71.29	448.39	1291.61	64.37			
10/23/2012 23:02	720		71.29	451.10	1288.90	67.08			
10/24/2012 0:02	780		71.30	453.29	1286.71	69.27			
10/24/2012 1:02	840		71.32	455.36	1284.64	71.34			
10/24/2012 2:02	900		71.32	457.28	1282.72	73.26			
10/24/2012 3:02	960		71.31	459.64	1280.36	75.62			
10/24/2012 4:02	1020		71.30	460.98	1279.02	76.96			
10/24/2012 5:02	1080		71.30	461.66	1278.34	77.64			
10/24/2012 6:02	1140		71.33	460.25	1279.75	76.23			
10/24/2012 7:02	1200		71.32	460.61	1279.39	76.59			
10/24/2012 8:02	1260		71.32	460.61	1279.39	76.59			
10/24/2012 9:02	1320		71.33	460.72	1279.28	76.70			
10/24/2012 10:02	1380		71.30	461.78	1278.22	77.76			
10/24/2012 11:02	1440		71.29	462.86	1277.14	78.84			
10/24/2012 12:02	1500		71.32	458.63	1281.37	74.61			
10/24/2012 13:02	1560		71.32	457.59	1282.41	73.58			
10/24/2012 14:02	1620		71.32	458.42	1281.58	74.40			
10/24/2012 15:02	1680		71.31	459.02	1280.98	75.00			
10/24/2012 16:02	1740		71.31	460.54	1279.46	76.52			
10/24/2012 17:02	1800		71.27	466.30	1273.70	82.28			
10/24/2012 18:02	1860		71.28	467.53	1272.47	83.51			
10/24/2012 19:02	1920		71.28	467.83	1272.17	83.81			
10/24/2012 20:02	1980		71.27	468.63	1271.37	84.61			
10/24/2012 21:02	2040		71.27	469.17	1270.83	85.15			
10/24/2012 22:02	2100		71.28	463.24	1276.76	79.22			
10/24/2012 23:02	2160		71.28	463.24	1276.76	79.22			
10/25/2012 0:02	2220		71.27	463.32	1276.68	79.30			
10/25/2012 1:02	2280		71.27	463.55	1276.45	79.53			
10/25/2012 2:02	2340		71.27	463.36	1276.64	79.34			
10/25/2012 3:02	2400		71.27	463.96	1276.04	79.94			
10/25/2012 4:02	2460		71.27	464.34	1275.66	80.32			
10/25/2012 5:02	2520		71.26	465.40	1274.60	81.38			
10/25/2012 6:02	2580		71.28	465.99	1274.01	81.97			
10/25/2012 7:02	2640		71.28	465.71	1274.29	81.69			
10/25/2012 8:02	2700		71.27	465.94	1274.06	81.92			

Note: bgs = below ground surface Column Pipe Diameter = 3-inch Horsepower = 30 HP
 MSL = Mean Sea Level Pump Setting = 483 feet bgs

Headwaters GCD - Lions Camp Well (HGCD Well No. 2102) - Aquifer Test (October 23, 2012)

Date and Time	Time Since Pump Start (min)	Time Since Pump Stop (min)	Temperature (F)	Water Level (ft bgs)	Water Level (ft MSL)	Drawdown (ft)	Pump Rate (gpm)	Specific Capacity (gpm/ft)	Comments
10/25/2012 9:02	2760		71.28	466.62	1273.38	82.60			
10/25/2012 10:02	2820		71.28	467.64	1272.36	83.62			
10/25/2012 11:02	2880		71.29	467.57	1272.43	83.55			
10/25/2012 12:02	2940		71.29	467.71	1272.29	83.69			
10/25/2012 13:02	3000		71.27	466.34	1273.66	82.32			
10/25/2012 14:02	3060		71.27	466.95	1273.05	82.93			
10/25/2012 15:02	3120		71.28	467.16	1272.84	83.14			
10/25/2012 16:02	3180		71.28	467.49	1272.51	83.47			
10/25/2012 17:02	3240		71.28	468.03	1271.97	84.01			
10/25/2012 17:53	3291	0	71.28	468.47	1271.53	84.46	80	0.95	Pump Stop
10/25/2012 17:54	3292	1	71.28	464.23	1275.77	80.21			Meter = 428,200 Gallons
10/25/2012 17:55	3293	2	71.29	451.19	1288.81	67.17			
10/25/2012 17:56	3294	3	71.31	430.89	1309.11	46.87			
10/25/2012 17:57	3295	4	71.34	414.93	1325.07	30.91			
10/25/2012 17:58	3296	5	71.36	411.22	1328.78	27.20			
10/25/2012 17:59	3297	6	71.38	410.93	1329.07	26.91			
10/25/2012 18:00	3298	7	71.39	410.45	1329.55	26.43			
10/25/2012 18:01	3299	8	71.40	410.22	1329.78	26.20			
10/25/2012 18:02	3300	9	71.42	410.23	1329.77	26.21			
10/25/2012 18:03	3301	10	71.43	410.07	1329.93	26.05			
10/25/2012 18:04	3302	11	71.45	409.76	1330.24	25.74			
10/25/2012 18:05	3303	12	71.48	409.62	1330.38	25.60			
10/25/2012 18:06	3304	13	71.50	409.66	1330.34	25.64			
10/25/2012 18:07	3305	14	71.53	409.36	1330.64	25.34			
10/25/2012 18:08	3306	15	71.59	409.48	1330.52	25.46			
10/25/2012 18:13	3311	20	72.00	408.97	1331.03	24.95			
10/25/2012 18:18	3316	25	72.40	408.40	1331.60	24.39			
10/25/2012 18:23	3321	30	72.54	408.28	1331.72	24.26			
10/25/2012 18:38	3336	45	72.29	407.47	1332.53	23.45			
10/25/2012 18:53	3351	60	72.02	406.62	1333.38	22.60			
10/25/2012 19:08	3366	75	71.85	406.07	1333.93	22.05			
10/25/2012 19:23	3381	90	71.76	405.70	1334.30	21.68			
10/25/2012 19:38	3396	105	71.71	405.20	1334.80	21.18			
10/25/2012 19:53	3411	120	71.68	404.58	1335.42	20.56			
10/25/2012 20:53	3471	180	71.61	403.07	1336.93	19.05			
10/25/2012 21:53	3531	240	71.59	401.68	1338.32	17.66			
10/25/2012 22:53	3591	300	71.58	400.34	1339.66	16.32			

Note: bgs = below ground surface Column Pipe Diameter = 3-inch Horsepower = 30 HP
 MSL = Mean Sea Level Pump Setting = 483 feet bgs

Headwaters GCD - Lions Camp Well (HGCD Well No. 2102) - Aquifer Test (October 23, 2012)

Date and Time	Time Since Pump Start (min)	Time Since Pump Stop (min)	Temperature (F)	Water Level (ft bgs)	Water Level (ft MSL)	Drawdown (ft)	Pump Rate (gpm)	Specific Capacity (gpm/ft)	Comments
10/25/2012 23:53	3651	360	71.57	399.50	1340.50	15.48			
10/26/2012 0:53	3711	420	71.58	398.61	1341.39	14.59			
10/26/2012 1:53	3771	480	71.58	397.56	1342.44	13.54			
10/26/2012 2:53	3831	540	71.57	396.87	1343.13	12.85			
10/26/2012 3:53	3891	600	71.58	396.27	1343.73	12.25			
10/26/2012 4:53	3951	660	71.58	395.62	1344.38	11.60			
10/26/2012 5:53	4011	720	71.58	394.90	1345.10	10.88			
10/26/2012 6:53	4071	780	71.57	394.46	1345.54	10.45			
10/26/2012 7:53	4131	840	71.57	393.93	1346.07	9.91			
10/26/2012 8:53	4191	900	71.57	393.55	1346.45	9.53			
10/26/2012 9:53	4251	960	71.57	393.32	1346.68	9.30			
10/26/2012 10:04	4262	971	71.57	393.06	1346.94	9.04			

Note: bgs = below ground surface Column Pipe Diameter = 3-inch Horsepower = 30 HP
 MSL = Mean Sea Level Pump Setting = 483 feet bgs