Results of Aquifer Test Analysis

for the

Headwaters GCD

Monitoring Well No. 12

for

Headwaters Groundwater Conservation District

125 Lehmann Dr., Suite 100

Kerrville, TX 78028

WRGS Project No. 072-002-10

August 19, 2010

Wet Rock Groundwater Services, L.L.C.
Groundwater Specialists
TBPG Firm No: 50038
P.O. Box 163144
Austin, Texas 78716
Ph: 512-773-3226 Fax: 512-879-6809
www.wetrockgs.com

The seal appearing on this document was authorized on August 19, 2010 by:

Kaveh Khorzad, P.G.
License No. 1126

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

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Wet Rock Groundwater Services, L.L.C.
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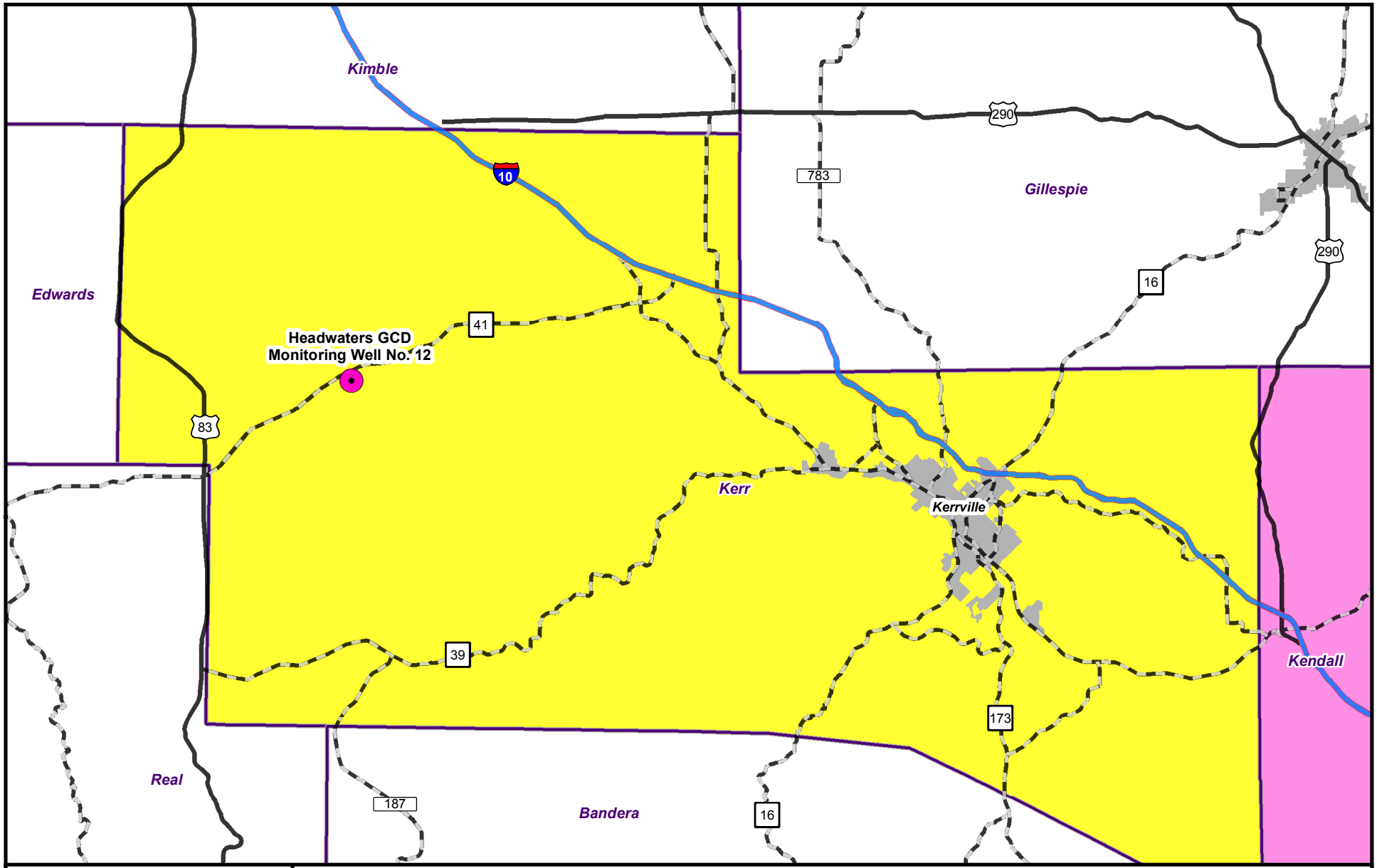
Headwaters Groundwater Conservation District
Monitoring Well No. 12
Middle and Lower Trinity Aquifers

Contents

Attachment 1

Well Location Map



0 5 10 Miles

Headwaters GCD Monitoring Well No. 12 Location Map

DRAWN BY: CAM DATE: 7/10

REVISED BY: DATE:

PROJECTION: UTM NAD 83 Zone 14

Headwaters GCD

Kerr County, Texas

Wet Rock Groundwater Services, L.L.C.
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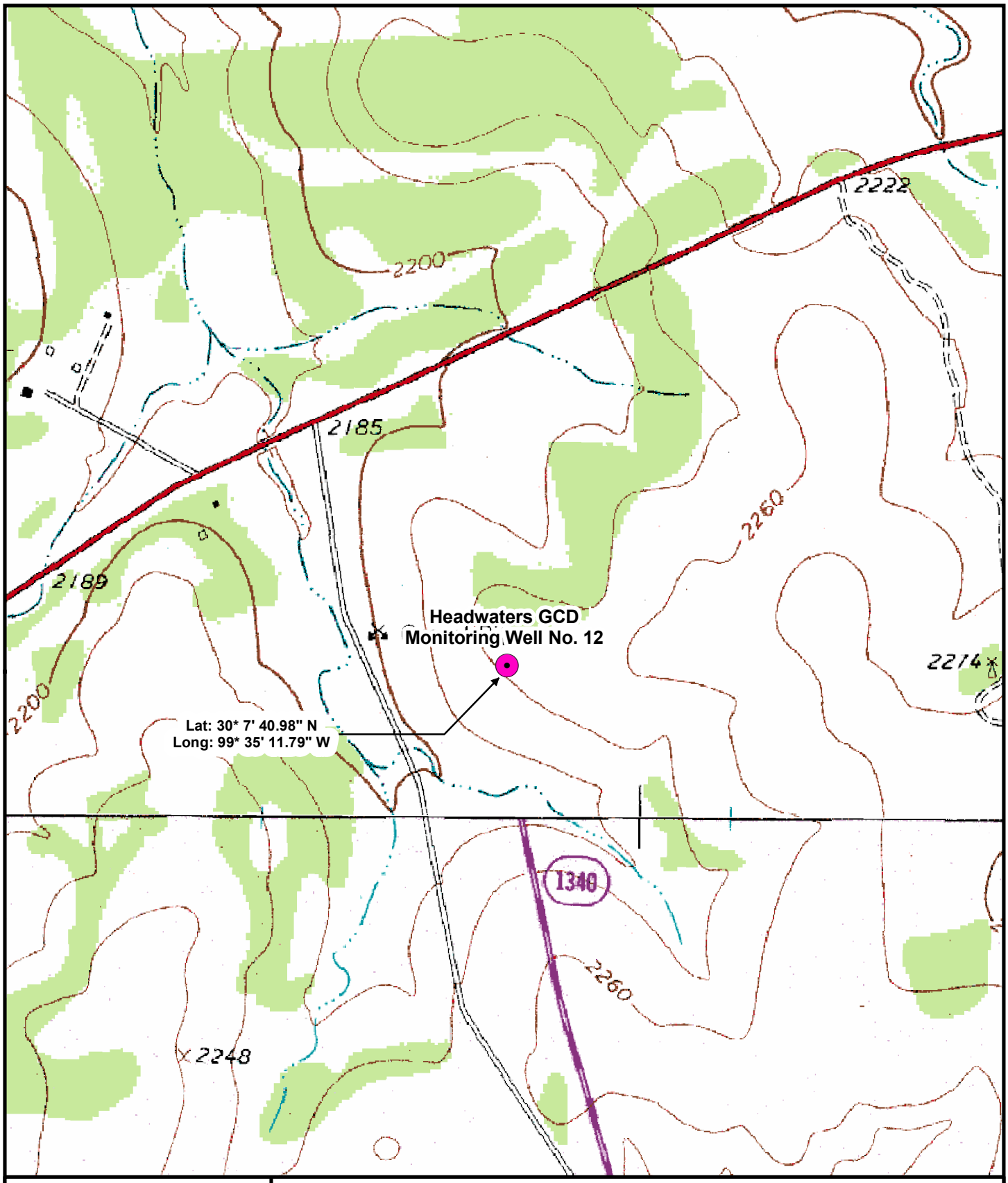
Attachment 2

U.S. Geological Survey Topographic Map



0 500 1,000 Feet

Headwaters GCD Monitoring Well No. 12 Topo Map

DRAWN BY: CAM DATE: 7/10

REVISED BY: DATE:

PROJECTION: UTM NAD 83 Zone 14

Headwaters GCD

Monitoring Well No. 12

Kerr County, Texas

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Attachment 3

Log Plot: Monitoring Well No. 12

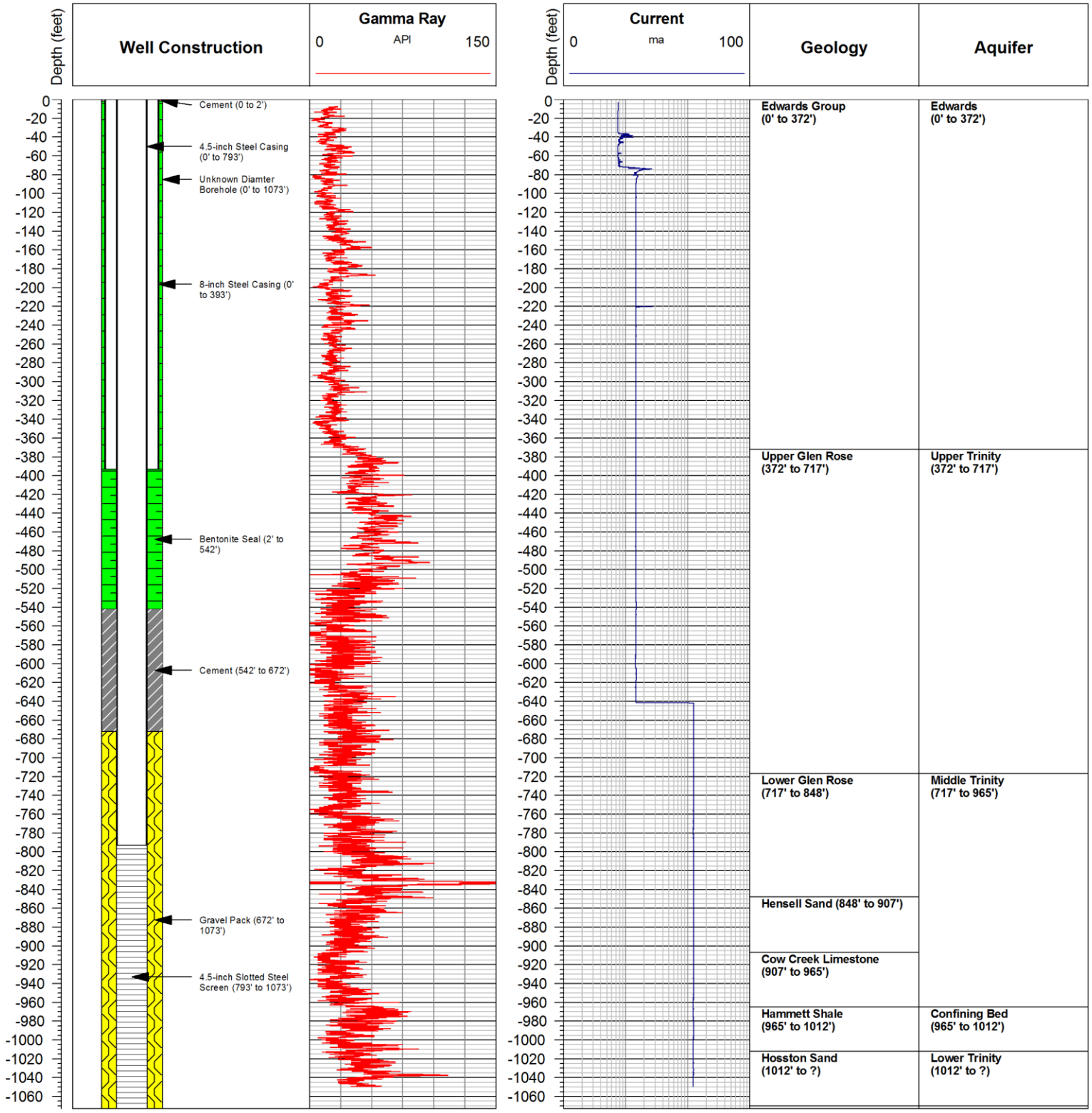
Wet Rock Groundwater Services, LLC

Groundwater Specialists

P.O. Box 163144 Austin, TX 78716
Ph: 512.799.5875 Fax: 512.879.6809
www.wetrockgs.com

Well Name: HGCD MW No. 12

Client:	**Headwaters GCD**	Elevation:	**2,240 ft msl**
Location:	**Kerr County, TX**	Total Depth:	**1,070 ft bgs**
Drill Date:	**DATE**	Latitude:	**30.128054**
Drilled By:	**Edmunds Drilling**	Longitude:	**-99.586666**



Attachment 4

State of Texas Well Report

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

[Tex]as Department of Licensing and Regul[ati]on
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:	Address:	City:	State:	Zip:
H G C D	125 LEHMANN	KERRVILLE	TX	78028

2) WELL LOCATION

Well # or # of wells drilled	County:	Physical Address:	City:
	KERR	HWY 1340	HUNT

Lat. N 30.07-40.6 Long. W 99.35-11.5 Grid # 56-52-7

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) N↑

6) Drilling Date
Started 8/11/08
Completed 8/25/08

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
0	20	LIMESTONE (EDWARDS CREEK)
20	30	MICRODOLOMITE
30	240	LIMESTONE (WHITE-CREAM)
240	250	(MARL) GRAY FOSSIL BEARING
250	370	LIMESTONE (WHITE-CREAM)
370	420	LIMESTONE - GRAY MARL WITH BEDDED DOLOMITE FRAGMENT
420	520	SILTSTONE - GRAY - TAN TOP OF HANSEL
520	530	MARL - GRAY
530	580	SILTSTONE - GRAY

(Use reverse side of Well Owner's copy, If necessary)

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, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft) From	To	Gage Casing Screen
8	N	STEEL	375	0	
4½	N	STEEL	0	193	
4½	N	STEEL (SLOT)	193	1673	

9) Annular Seal Data: i.e. (from 0 ft to 100 ft #sacks & material (1 cement))
from 373 ft. to 125 ft, #sacks & material 35 SKS CEM
from 125 ft. to 0 ft, #sacks & material BENT. SLURRY
from ft. to ft. #sacks & material
Method Used PRESSURE Performed By EDMONDS DRLG
Distance to septic field or other concentrated contamination N/A ft.
Distance to Property Line 75+ ft
Method Verified: MEASURED

13) Plugged ☐ Well plugged within 48 hours

Casing left in well: From (ft)	To (ft)	Cement/Bentonite placed in well: 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

14) Type Pump
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder ☐ Other
Depth to pump bowls, cylinder, jet etc., ft.

11) Water Level
Static level 641 ft. Date: 8/25/08
Artesian Flow gpm

12) Packers:

Type	Depth	Type	Depth
NONE			

15) Water Test
Type test ☐ Pump ☐ Bailer ☒ Jetted ☒ Estimated
Yield: 50 gpm with N/A ft. drawdown after 1 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 Drlg. (Sid Baumer) Lic. No.: 54755 WW
Address: P.O. Box 1552 City: KERRVILLE State: TX Zip 78029

Signature: [signature] 11/7/08 Signature:
Licensed Driller/Pump Installer Date Apprentice Apprentice Reg. Number

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

RECEIVED
NOV 10 2008
H.G.C.D.

Additional information or comments:

GRAVEL PACK -	FROM	1,072 TO	672
CEMENT -	FROM	672 TO	542
BENTONITE SLURRY -	FROM	542 TO	2
CEMENT -	FROM	2 TO	0

H 1/2 Copies

WELL REPORT CONFIDENTIALITY NOTICE

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record, if the department receives by certified mail, a written request from the owner.

From (ft)	To (ft)	Description and color of formation material
580	595	SABSKA - WHITE
595	604	LIMESTONE - GRAY
		MARL WITH THIN
		BEDDED PHOSPHATE
604	695	LIMESTONE - GRAY
		TOP OF LOWER GLEN ROSE
695	700	SANDSTONE - GRAY
700	710	LIMESTONE - GRAY
710	730	MARL - GRAY
730	737	~~MARL~~ SABNKA
		WHITE CLEAR
737	820	SILTSTONE - TAN
		TOP OF HENSEL
820	850	SANDSTONE - TAN-ORANGE
		FINE-MED - GRAINED
850	860	PALEOSOL - RED
860	870	MARL - GRAY
870	935	SANDSTONE TAN-ORANGE
		COARSE GRAINED
935	940	BENONITE - GREEN
940	960	SANDSTONE - TAN-ORANGE
		MEDIUM GRAINED
960	970	CLAYEY SANDSTONE
		ORANGE
970	980	SANDSTONE - ORANGE
980	1036	CLAYEY - ORANGE
1036	1100	DOLOMITE - WHITE -
		GRAY - TOP OF ELLENBURGER

RECEIVED
NOV 10 2008
H.G.C.D.

Attachment 5

Table 1 - Well Construction Summary
Table 2 - Aquifer Testing Summary
Table 3 - Summary of Aquifer Testing Analyses

Table 1 - Well Construction Summary

Well	Hole Diameter (inches)	From (ft)	To (ft)	Casing Type	Casing Diameter (inches)	From (ft)	To (ft)
Monitoring Well No. 12	9	0	1073	Steel	4.5	0	793
				Slotted PVC	4.5	793	1073
				Gravel Pack	n/a	672	1073

Table 2 - Aquifer Testing Summary

Well	Static Water Level (ft MSL)	Q (gpm)	Drawdown (ft)	SC (gpm/ft)	Pumping Duration (minutes)	Δ t (°F)	T_{R90} (minutes)
Monitoring Well No. 12	1,589.8	23	41.5	0.55	2,820	1.65	n/a

Notes: Q = discharge; SC = specific capacity; r = distance from pumping well; Δt = change in temperature; T_{R90} = Time pumping well Recovered 90%

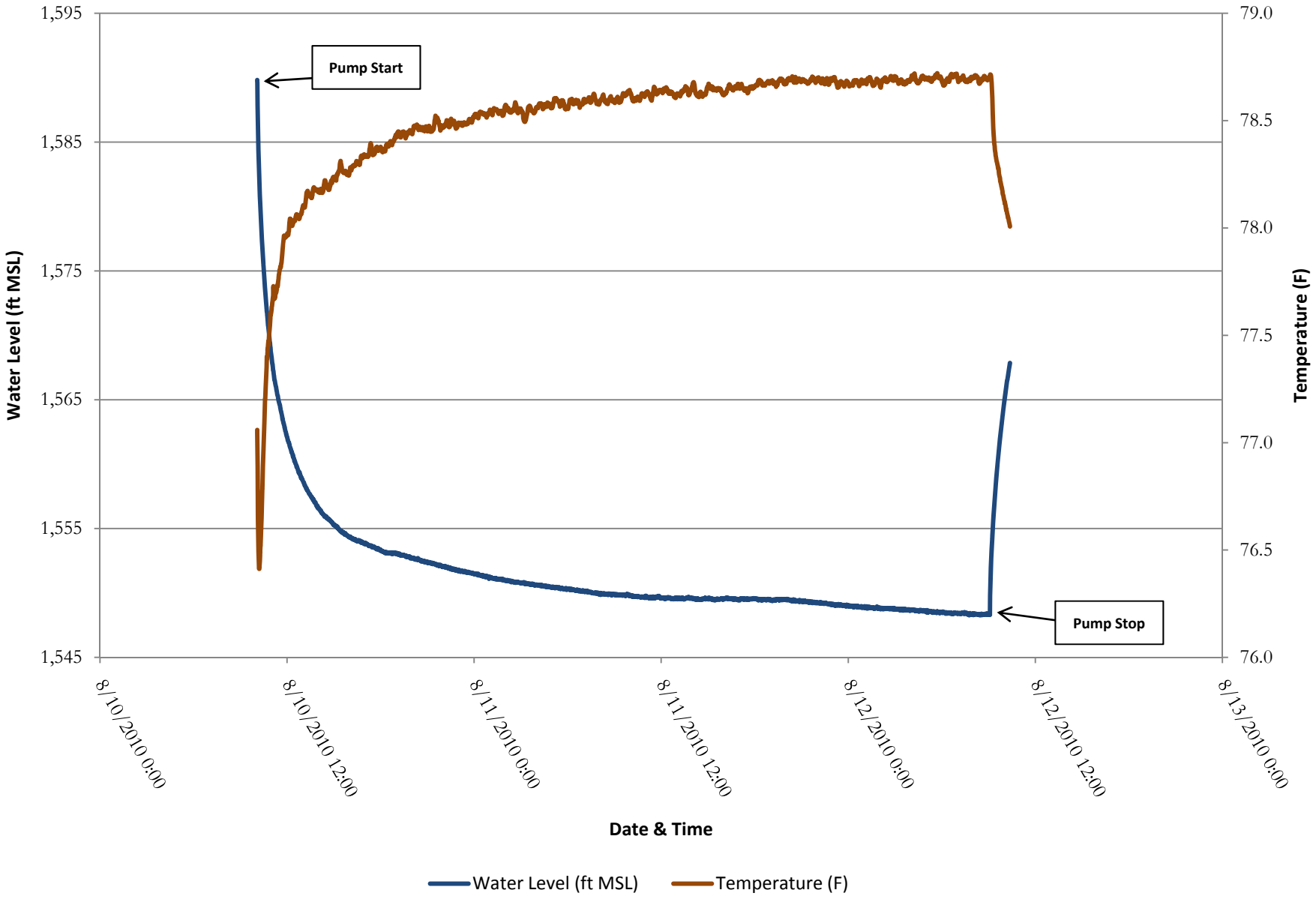
Table 3 - Summary of Aquifer Testing Analyses

Well	Analysis	b (ft)	T (ft^2/day)	K
Monitoring Well No. 12	**Theis**	260	49.8	0.19
	Theis Recovery	260	41.5	0.16
	Average:	260	45.65	0.18

Notes: b = aquifer thickness; r = distance from pumping well; T = transmissivity; S = storativity; K = hydraulic conductivity

Attachment 6

Aquifer Test Drawdown and Temperature Curves


Headwaters GCD MW No. 12 - 8/10/2010
Pump Start
Pump Stop
Water Level (ft MSL)
Temperature (F)
Date & Time
1,595
1,585
1,575
1,565
1,555
1,545
79.0
78.5
78.0
77.5
77.0
76.5
76.0
8/10/2010 0:00
8/10/2010 12:00
8/11/2010 0:00
8/11/2010 12:00
8/12/2010 0:00
8/12/2010 12:00
8/13/2010 0:00
Water Level (ft MSL)
Temperature (F)

Attachment 7

Aquifer Test Analyses

Wet Rock Groundwater Services, LLC
Groundwater Specialists
P.O. Box 163144 Austin, Texas 78716
Ph: 512.773.3226 Fax: 512.879.6809
www.wetrockgs.com

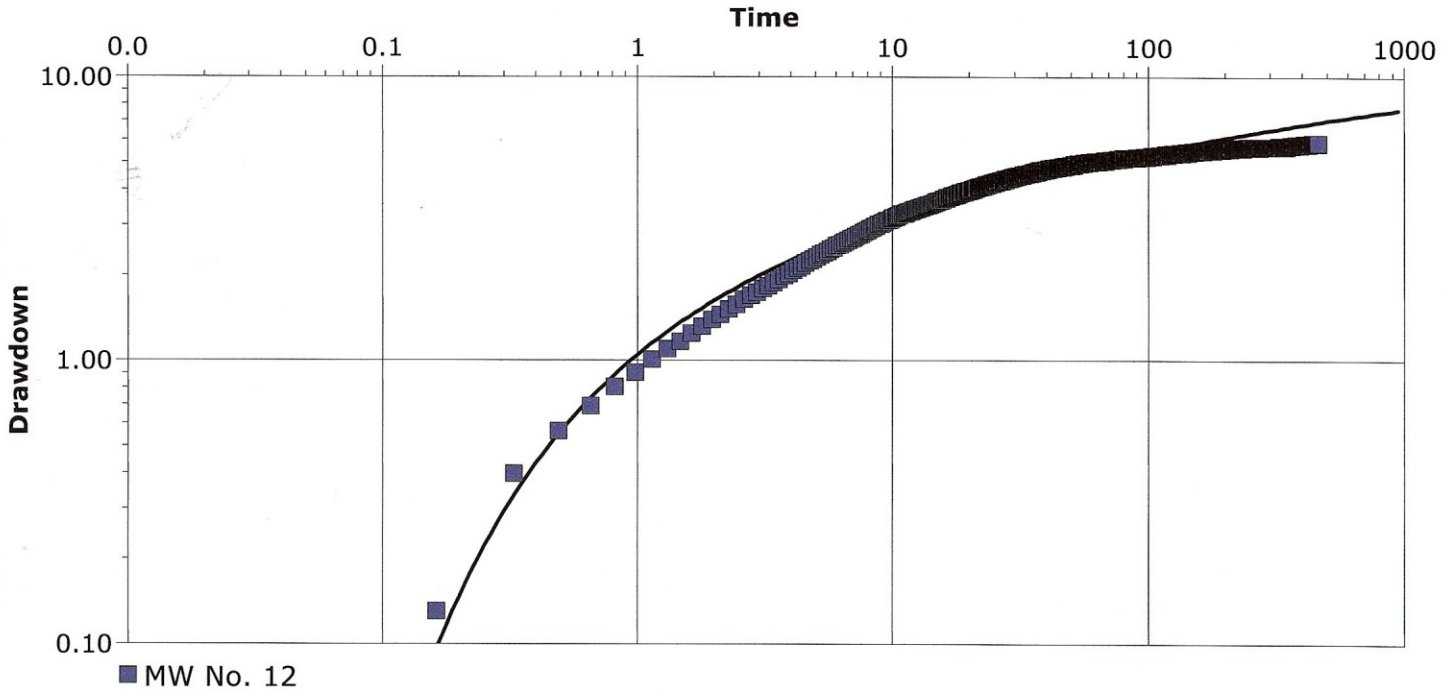
Pumping Test Analysis Report

Project: HGCD MW No. 12

Number: 072-002-10

Client: Headwaters GCD

Location: Kerr County, TX	Pumping Test: HGCD MW No. 12	Pumping Well: MW No. 12
Test Conducted by: Cassidy Miller		Test Date: 8/10/2010
Analysis Performed by: Cassidy Miller	Theis	Analysis Date: 8/18/2010
Aquifer Thickness:	Discharge: variable, average rate 23.048 [U.S. gal/min]	



Calculation after Theis

Observation Well	Transmissivity [ft²/d]	Storage coefficient	Radial Distance to PW [ft]	
MW No. 12	4.98×10^{1}			

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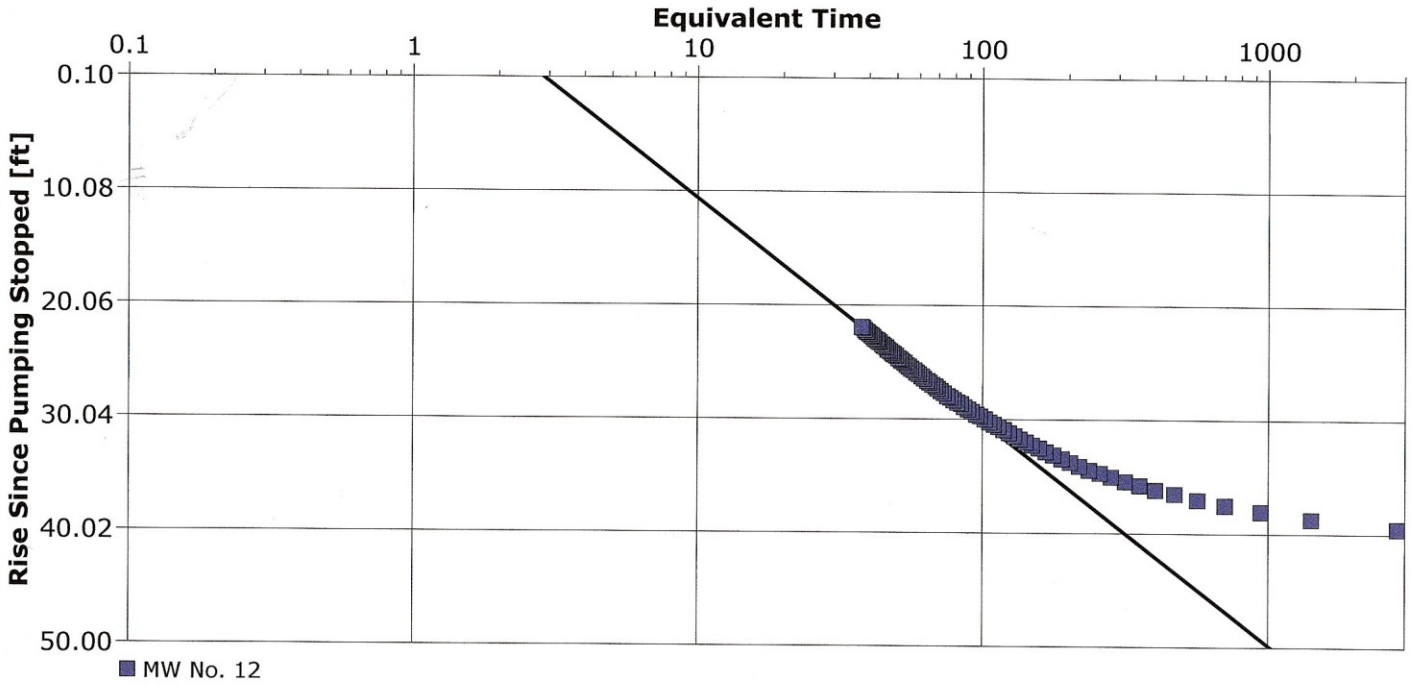
Pumping Test Analysis Report

Project: HGCD MW No. 12

Number: 072-002-10

Client: Headwaters GCD

Location: Kerr County, TX	Pumping Test: HGCD MW No. 12	Pumping Well: MW No. 12
Test Conducted by: Cassidy Miller		Test Date: 8/10/2010
Analysis Performed by: Cassidy Miller	Theis Recovery	Analysis Date: 8/18/2010
Aquifer Thickness:	Discharge: variable, average rate 23.048 [U.S. gal/min]	



Calculation after Theis & Jacob

Observation Well	Transmissivity [ft²/d]	Radial Distance to PW [ft]	
MW No. 12	4.15×10^{1}		

Attachment 8

Aquifer Test Data

HGCD MW No. 12 Pump Test Summary (8-10-2010)

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)	pH	Cond (µS*cm-1)	Comments
8/10/2010 10:05	0		77.06	650.18	1,589.82	0.00					Meter = 6,020,055 gallons
8/10/2010 10:06	1		76.94	651.11	1,588.89	0.92	26.5	28.68	7.48	1500	
8/10/2010 10:07	2		76.79	653.01	1,586.99	2.83					
8/10/2010 10:08	3		76.64	654.18	1,585.82	3.99					
8/10/2010 10:09	4		76.54	655.10	1,584.90	4.91					
8/10/2010 10:10	5		76.48	655.91	1,584.09	5.72	25.5	4.46	7.39	1420	
8/10/2010 10:11	6		76.44	656.62	1,583.38	6.44					
8/10/2010 10:12	7		76.41	657.32	1,582.68	7.13					
8/10/2010 10:13	8		76.41	657.97	1,582.03	7.79					
8/10/2010 10:14	9		76.43	658.45	1,581.55	8.27					
8/10/2010 10:15	10		76.45	659.01	1,580.99	8.82	25	2.83	7.28	1400	
8/10/2010 10:16	11		76.47	659.51	1,580.49	9.33					
8/10/2010 10:17	12		76.51	660.03	1,579.97	9.85					
8/10/2010 10:18	13		76.52	660.50	1,579.50	10.32					
8/10/2010 10:19	14		76.56	660.94	1,579.06	10.75					
8/10/2010 10:20	15		76.59	661.36	1,578.64	11.18	25	2.24	7.25	1380	
8/10/2010 10:25	20		76.79	663.19	1,576.81	13.00	25	1.92	7.21	1390	
8/10/2010 10:30	25		77.00	664.87	1,575.13	14.69	25	1.70	7.10	1380	
8/10/2010 10:35	30		77.20	666.29	1,573.71	16.11	25	1.55	7.09	1350	
8/10/2010 10:50	45		77.49	669.82	1,570.18	19.64	24.5	1.25	7.10	1300	
8/10/2010 11:05	60		77.67	672.44	1,567.56	22.26	24	1.08	7.08	1230	
8/10/2010 11:20	75		77.71	674.35	1,565.65	24.17	24	0.99	7.13	1230	
8/10/2010 11:35	90		77.82	675.78	1,564.22	25.60	23.5	0.92	7.08	1200	
8/10/2010 11:50	105		77.96	677.15	1,562.85	26.96	23.5	0.87	7.07	1170	
8/10/2010 12:05	120		77.97	678.25	1,561.75	28.07	23.2	0.83	7.05	1180	
8/10/2010 13:05	180		78.10	681.45	1,558.55	31.27					
8/10/2010 14:05	240		78.17	683.51	1,556.49	33.33					
8/10/2010 15:05	300		78.23	684.78	1,555.22	34.60					
8/10/2010 16:05	360		78.27	685.67	1,554.33	35.49					
8/10/2010 17:05	420		78.33	686.21	1,553.79	36.02					
8/10/2010 18:05	480		78.36	686.74	1,553.26	36.56					
8/10/2010 19:05	540		78.44	686.97	1,553.03	36.79					
8/10/2010 20:05	600		78.45	687.28	1,552.72	37.10					
8/10/2010 21:05	660		78.47	687.61	1,552.39	37.42					
8/10/2010 22:05	720		78.48	687.98	1,552.02	37.80					
8/10/2010 23:05	780		78.48	688.29	1,551.71	38.11					
8/11/2010 0:05	840		78.53	688.51	1,551.49	38.33					

Note: bgs = below ground surface Column Pipe Diameter = 2-inch steel Horsepower = 10 HP
MSL = Mean Sea Level Pump Setting = 760 feet bgs

HGCD MW No. 12 Pump Test Summary (8-10-2010)

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)	pH	Cond (µS*cm-1)	Comments
8/11/2010 1:05	900		78.54	688.78	1,551.22	38.59					
8/11/2010 2:05	960		78.56	689.03	1,550.97	38.85					
8/11/2010 3:05	1,020		78.54	689.19	1,550.81	39.01					
8/11/2010 4:05	1,080		78.56	689.37	1,550.63	39.19					
8/11/2010 5:05	1,140		78.58	689.57	1,550.43	39.39					
8/11/2010 6:05	1,200		78.58	689.73	1,550.27	39.55					
8/11/2010 7:05	1,260		78.59	689.88	1,550.12	39.69					
8/11/2010 8:05	1,320		78.59	690.00	1,550.00	39.81					
8/11/2010 9:05	1,380		78.60	690.15	1,549.85	39.97					
8/11/2010 10:05	1,440		78.62	690.19	1,549.81	40.01					
8/11/2010 11:05	1,500		78.64	690.27	1,549.73	40.09					
8/11/2010 12:05	1,560		78.63	690.40	1,549.60	40.22					
8/11/2010 13:05	1,620		78.62	690.43	1,549.57	40.24					
8/11/2010 14:05	1,680		78.68	690.43	1,549.57	40.25					
8/11/2010 15:05	1,740		78.66	690.40	1,549.60	40.22					
8/11/2010 16:05	1,800		78.63	690.47	1,549.53	40.28					
8/11/2010 17:05	1,860		78.66	690.44	1,549.56	40.26					
8/11/2010 18:05	1,920		78.67	690.46	1,549.54	40.28					
8/11/2010 19:05	1,980		78.68	690.54	1,549.46	40.36					
8/11/2010 20:05	2,040		78.69	690.56	1,549.44	40.37					
8/11/2010 21:05	2,100		78.69	690.71	1,549.29	40.52					
8/11/2010 22:05	2,160		78.70	690.79	1,549.21	40.61					
8/11/2010 23:05	2,220		78.70	690.87	1,549.13	40.69					
8/12/2010 0:05	2,280		78.66	691.00	1,549.00	40.81					
8/12/2010 1:05	2,340		78.68	691.14	1,548.86	40.96					
8/12/2010 2:05	2,400		78.65	691.15	1,548.85	40.97					
8/12/2010 3:05	2,460		78.70	691.27	1,548.73	41.09					
8/12/2010 4:05	2,520		78.70	691.33	1,548.67	41.15					
8/12/2010 5:05	2,580		78.69	691.51	1,548.49	41.33					
8/12/2010 6:05	2,640		78.66	691.52	1,548.48	41.34					
8/12/2010 7:05	2,700		78.69	691.58	1,548.42	41.40					
8/12/2010 8:05	2,760		78.70	691.62	1,548.38	41.44					
8/12/2010 9:05	2,820	0	78.71	691.70	1,548.30	41.51	23	0.55			Pump End
8/12/2010 9:06	2,821	1	78.71	689.74	1,550.26	39.56					
8/12/2010 9:07	2,822	2	78.71	688.96	1,551.04	38.77					
8/12/2010 9:08	2,823	3	78.71	688.29	1,551.71	38.11					
8/12/2010 9:09	2,824	4	78.71	687.76	1,552.24	37.58					

Note: bgs = below ground surface Column Pipe Diameter = 2-inch steel Horsepower = 10 HP
MSL = Mean Sea Level Pump Setting = 760 feet bgs

HGCD MW No. 12 Pump Test Summary (8-10-2010)

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)	pH	Cond (µS*cm-1)	Comments
8/12/2010 9:10	2,825	5	78.70	687.26	1,552.74	37.08					
8/12/2010 9:11	2,826	6	78.69	686.77	1,553.23	36.59					
8/12/2010 9:12	2,827	7	78.67	686.39	1,553.61	36.21					
8/12/2010 9:13	2,828	8	78.64	686.02	1,553.98	35.84					
8/12/2010 9:14	2,829	9	78.60	685.68	1,554.32	35.50					
8/12/2010 9:15	2,830	10	78.56	685.29	1,554.71	35.11					
8/12/2010 9:16	2,831	11	78.52	684.95	1,555.05	34.77					
8/12/2010 9:17	2,832	12	78.49	684.67	1,555.33	34.49					
8/12/2010 9:18	2,833	13	78.46	684.35	1,555.65	34.16					
8/12/2010 9:19	2,834	14	78.44	684.04	1,555.96	33.86					
8/12/2010 9:20	2,835	15	78.42	683.69	1,556.31	33.51					
8/12/2010 9:25	2,840	20	78.36	682.23	1,557.77	32.05					
8/12/2010 9:30	2,845	25	78.32	680.92	1,559.08	30.73					
8/12/2010 9:35	2,850	30	78.29	679.80	1,560.20	29.62					
8/12/2010 9:50	2,865	45	78.19	676.88	1,563.12	26.69					
8/12/2010 10:05	2,880	60	78.10	674.45	1,565.55	24.27					
8/12/2010 10:15	2,890	70	78.05	673.07	1,566.93	22.89					
8/12/2010 10:25	2,900	80	77.95	672.09	1,567.91	21.91					
8/12/2010 10:26	2,901	81	77.94	671.98	1,568.02	21.80					

Note: bgs = below ground surface Column Pipe Diameter = 2-inch steel Horsepower = 10 HP
MSL = Mean Sea Level Pump Setting = 760 feet bgs

Attachment 9

Water Quality Report

Lab Report

Upper Guadalupe River Authority

Date: *18-Aug-10*

125 Lehmann Dr. Suite 100, Kerrville, TX 78028
(830) 896-5445
TCEQ State Lab ID: 48145

CLIENT: Headwaters GCD
125 Lehmann
Kerrville , TX. 78028
gene@hgcd.org
Ph: 8308964110

Lab Order: 1008146

Project: HGCD MW12
System ID No: Private

Lab ID: 1008146-001
Sample Site: HGCD MW12
Sampled By: Roy K.

Collection Date/Time: 8/12/2010 9:00:00 AM
Source: GROUNDWATER
Sample Type:
Free Cl2 Residual: NA

Analyses	Result	LOQ	Qual	Units	DF	Date Analyzed
BACTERIA ANALYSIS		**Method : SM9223 B (N)**				
E. coli	Not found	1		P/A	1	8/12/2010 4:40:00 PM
Total coliforms (N)	Found	1		P/A	1	8/12/2010 4:40:00 PM
CHLORIDE		**Method : EPA300 (N)**				
Chloride	45	0.20		mg/L	1	8/12/2010
CONDUCTIVITY		**Method : M2510 B (N)**				
Conductivity	1,100	2.0		µmhos/cm	1	8/12/2010
FLUORIDE		**Method : E300 (N)**				
Fluoride	2.1	0.040		mg/L	1	8/12/2010
HARDNESS, TOTAL		**Method : M2340 C (N)**				
Hardness, Total	456	30		mg/L	1	8/12/2010
IRON, SOLUBLE		**Method : H8008**				
Iron	0.30	0.10		mg/L	1	8/12/2010 12:02:00 PM
NITRATE AS NITROGEN		**Method : E300 (N)**				
Nitrogen, Nitrate (As N)	<0.04	0.0400		mg/L	1	8/12/2010 5:16:00 PM
PH		**Method : M4500-H (N)**				
pH	7.2	1.0		pH units	1	8/12/2010 11:06:00 AM
SULFATE		**Method : E300 (N)**				
Sulfate	260	0.20		mg/L	1	8/12/2010

Quality Control sample results available upon request.

Suffix : (N) - NELAC Accredited Analysis

Qualifiers: S - Batch matrix spike is outside of acceptance criteria
D - Batch duplicate reproducibility sample is outside of acceptance criteria
Q - Test QC exceeded acceptance criteria

Upper Guadalupe River Authority

Date: *18-Aug-10*

125 Lehmann Dr. Suite 100, Kerrville, TX 78028
(830) 896-5445
TCEQ State Lab ID: 48145

CLIENT:	Headwaters GCD	**Lab Order:**	1008146
	125 Lehmann		
	Kerrville , TX. 78028		
	gene@hgcd.org		
	Ph: 8308964110		
Project:	HGCD MW12		
System ID No:	Private		

TOTAL DISSOLVED SOLIDS **Method : M2510 A**

Solids, Total Dissolved	722	0	mg/L	1	8/12/2010

Signature: Amy M Bryant

Amy Bryant, Lab Manager

Test Methods: Standard Methods for the Examination of Water and Wastewater, 21st edition 2005
EPA Methods for Water and Wastewater

NELAC Accredited by TCEQ – Certificate No: T104704283
Visit: www.ugra.org/geninfo.html for a list of Fields of Accreditation and current NELAC certificate

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Quality Control sample results available upon request.

Suffix : (N) - NELAC Accredited Analysis

Qualifiers: S - Batch matrix spike is outside of acceptance criteria
D - Batch duplicate reproducibility sample is outside of acceptance criteria
Q - Test QC exceeded acceptance criteria

Upper Guadalupe River Authority

Date: *18-Aug-10*

CLIENT: Headwaters GCD
Project: HGCD MW12
Lab Order: 1008146

CASE NARRATIVE

Sample was received at laboratory for pH analysis after the 15 minutes from collection holding time.