



RIVER VALLEY TESTING CORP.

1060 Breezewood Lane, Suite 102
Neenah, WI 54956
Telephone: 920/886-1406
FAX: 920/886-1409

June 6, 2011

Crystal Lake Rehabilitation District
c/o: Ms. Secret Strobl
Foth Infrastructure & Environment, LLC.
1402 Pankratz Street, Suite 300
Madison, WI 53704

Re: Report of Geotechnical Exploration
Proposed High Capacity Well
Crystal Lake Rehabilitation District
Dane and Columbia County, Wisconsin
RVT #M11-109

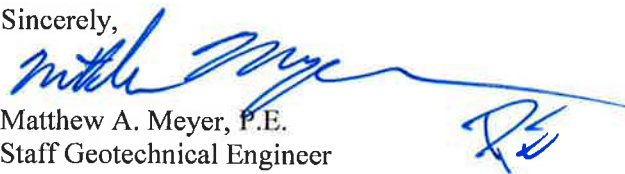
Ms. Strobl:

In accordance with your instructions, River Valley Testing Corp (RVT) has prepared this letter to document our fieldwork for the above referenced project. As directed by Foth Infrastructure & Environment, LLC., personnel, our scope of services included; 1) mobilizing to the site to conduct two (2) standard penetration test soil borings to a maximum depth of 90' below the existing grade, and 2) the installation of one (1) 2" diameter groundwater monitoring well/piezometer set at a maximum depth of 75' below the existing grade. Mr. David Padley of the Crystal Lake Rehabilitation District authorized RVT to perform these services on March 22, 2011.

We have attached boring logs, a boring location sketch, and a Wisconsin Department of Natural Resources Well Construction form to this letter for the above referenced project. In addition, the attached "Report of Mechanical Analysis of Soil" contain the results of the requested laboratory testing. If any additional laboratory testing would be of value to the project, please feel free to call either Mr. Alex Barker of RVT or myself at 920/886-1406. We will hold the collected soil samples for 30 days after the date of this letter.

We wish to point out that the subsurface conditions at other times and locations on the site may differ from those found at our test locations. Further, RVT prepared this letter in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this letter.

Sincerely,

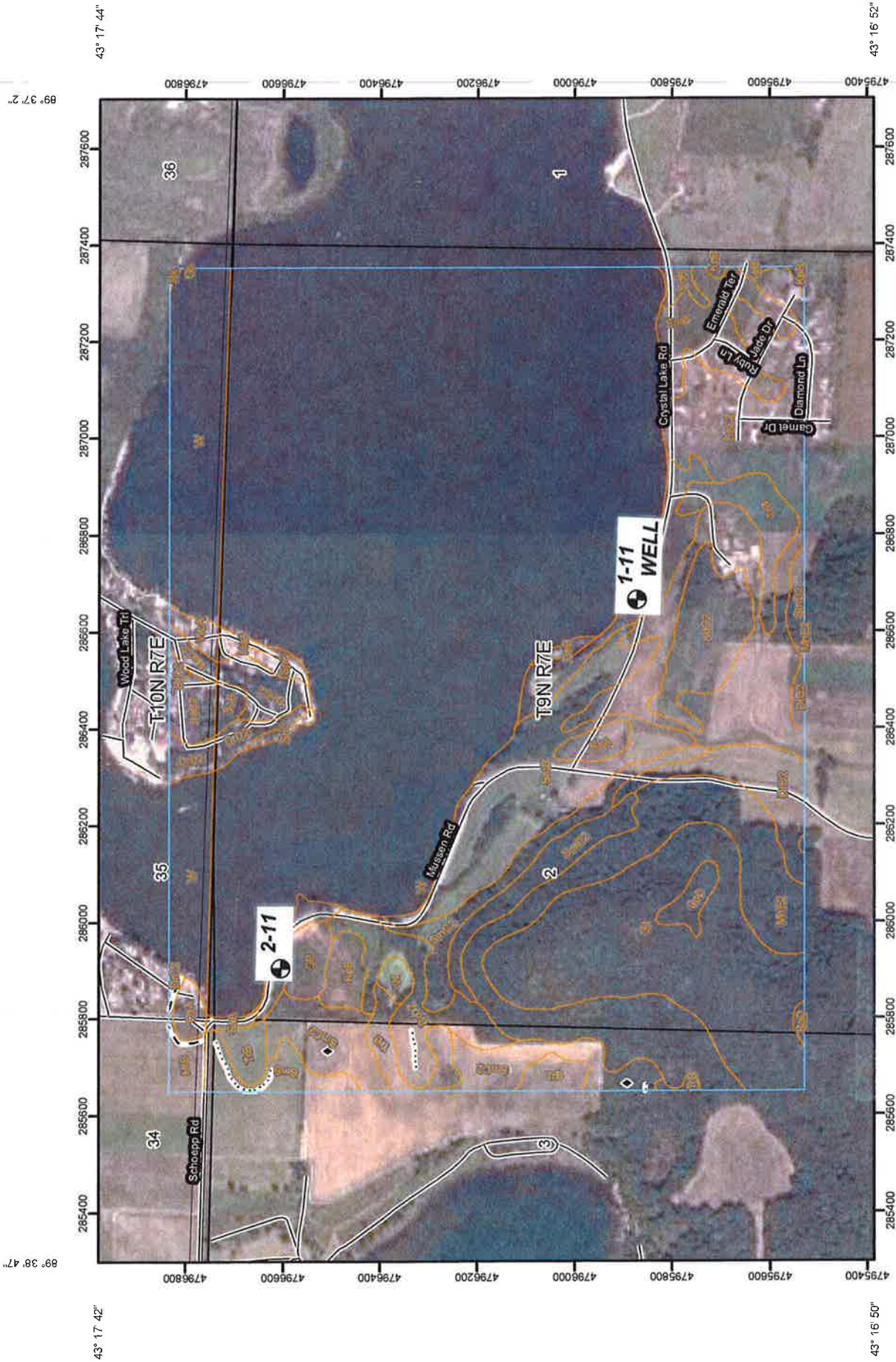


Matthew A. Meyer, P.E.
Staff Geotechnical Engineer

MAM/AEB/mam

cc. Mr. David Padley
Crystal Lake Rehabilitation District

NORTH



RVT LEGEND

- SOIL BORING LOCATION

BORING LOCATION SKETCH

PROJECT: PROPOSED HIGH CAPACITY WELL
CRYSTAL LAKE REHABILITATION DISTRICT
DANE AND COLUMBIA COUNTY, WISCONSIN

FILE NO: M11-109 DATE: 06/03/11 BY: M. MEYER



Appleton
Green Bay
Madison
Wisconsin

Geotechnical, Environmental, and Construction Consulting

TEST BORING LOG

Project: PROP. HIGH CAPACITY WELL - CRYSTAL LAKE

Location: DANE AND COLUMBIA COUNTIES, WISCONSIN

RVT File No: M11-109

Page: 1 of 2

Surface Elev: Not Det'n

Scale: 1" = 6'

Boring No: 1-11

GENERAL NOTES

Drilling Method:

HSA = Hollow Stem Auger
FA = Flight Auger
DM = Drilling Mud
_X = AX, BX, or NX Coring

Sampling Method:

SS = Split Spoon
3T = 3" Shelby Tube
F = Flight Auger Sample
B = Bag Sample
P = Test Pit Sample
CR = Core Recovery
NSR = No Sample Recovery
MH = Manual SPT Hammer
AH = Auto SPT Hammer

Water Level Symbol:

WLD = Water Level During Drilling
WLA = Water Level After Drilling
WL = Water Level At 24 Hours
WL__ = Water Level At __ Hours

Laboratory Test Symbols:

LL/PL = Liquid Limit/Plastic Limit
P200 = Percent Passing #200 Sieve
MA* = Mechanical Analysis
Qu = Unconfined Compressive Str
Pq = Hand Penetrometer Reading
DD = Dry Density
W = Moisture Content (by Weight)
RQD = Rock Quality Designation
* = See attached graph

DRILLING NOTES

Started: 5/10/11

Completed: 5/10/11

Driller: GABR/HDS Method: 3 1/4" HSA 0' to 58 1/2' (AH)

Depth (ft)	Blow Counts			Field Classification and Remarks Note: [] Indicates Possible Geologic Origin	Water Level Information	Sample		Laboratory Tests				
	0/6	6/12	Total (N)			No.	Type	W (%)	DD (pcf)	LL PL	Qu (psf)	Other
6	3	3		SILTY SAND, with Gravel, yellowish brown and light grey, moist, loose to dense (SM)	WLD							
	4	7	7	[POSSIBLE FILL]		1	SS					
		9				2	SS					
	10	12	22									
8 1/2	10	12		SAND, with Silt, medium to fine grain, light yellowish brown and multicolored, moist to water bearing, very dense (SP-SM)		3	SS					
	20		32	[OUTWASH]		4	SS					
	9	12	21	SAND, with Silt and a little Gravel, fine grain, light yellowish brown and grey, water bearing, dense (SP-SM)								
				[OUTWASH]		5	SS					
18 1/2		9										
	10	10	20									
		7		SILTY SAND, with a little Gravel, light yellowish brown, water bearing, medium dense (SM)		6	SS					
	8	10	18	[GLACIAL TILL]								
28 1/2		7				7	SS	11				MA*
		10	18									
		6		SILTY SAND, with Gravel and Cobbles, light grey and light yellowish brown, water bearing, medium dense to dense (SM)		8	SS	10				MA*
	6	8	14	[GLACIAL TILL]								
30				Continued On Next Page								



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TEST BORING LOG

Project: PROP. HIGH CAPACITY WELL - CRYSTAL LAKE

Location: DANE AND COLUMBIA COUNTIES, WISCONSIN

RVT File No: M11-109

Page: 2 of 2

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	0/6	6/12	Total (N)			No.	Type	W (%)	DD (pcf)	LL PL	Qu (psf)	Other
35	7	7	27	SILTY SAND, with Gravel and Cobbles, light grey and light yellowish brown, water bearing, medium dense to dense (SM) [GLACIAL TILL]		9	SS	11				MA*
40	9	9	18	GRAVEL, with Silt, Sand, and Cobbles, light grey and light yellowish brown, water bearing, medium dense (GP-GM) [GLACIAL TILL]		10	SS	12				MA*
48 1/2	16	15	33	GRAVEL, with Sand and Cobbles, light grey and light yellowish brown, water bearing, very dense (GP) [GLACIAL TILL]		11	SS	13				MA*
53 1/2	17	9	27	SAND, coarse to medium grain, light grey and multicolored, water bearing, extremely dense (SP) [OUTWASH]		12	SS	23				MA*
58 1/2	10	9	23	SILTY CLAYEY SAND, light yellowish brown, water bearing, dense (SC-SM) [GLACIAL TILL]		13	SS					
60	10	13	23	SILTY SAND, light yellowish brown, water bearing, dense (SM) [GLACIAL TILL] End of Boring at 60'		14	SS					



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TEST BORING LOG

Project: PROP. HIGH CAPACITY WELL - CRYSTAL LAKE

Location: DANE AND COLUMBIA COUNTIES, WISCONSIN

RVT File No: M11-109

Page: 1 of 2

Surface Elev: Not Det'n

Scale: 1" = 6'

Boring No: 2-11

GENERAL NOTES

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RQD = Rock Quality Designation
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DRILLING NOTES

Started: 5/9/11

Completed: 5/9/11

Driller: GABR/HDS Method: 3 1/4" HSA 0' to 68 1/2' (AH)

Depth (ft)	Blow Counts			Field Classification and Remarks Note: [] Indicates Possible Geologic Origin	Water Level Information	Sample		Laboratory Tests					
	0/6	6/12	Total (N)			No.	Type	W (%)	DD (pcf)	LL PL	Qu (psf)	Other	
3 ¹ / ₂	5	7		SAND, with Silt, fine grain, yellowish brown, water bearing, medium dense (SP-SM) [OUTWASH]	WLD	1	SS						
	4		11			2	SS						
	6	6	12	SAND, with Silt and Gravel, medium to fine grain, light yellowish brown and light grey, water bearing, medium dense to very loose (SP-SM) [OUTWASH]		3	SS						
	2	0	0			4	SS						
	0	2											
	0	1	1										
18 ¹ / ₂		7											
	9	10	19			5	SS						
		4											
	5	6	11	SAND, with Silt, coarse to fine grain, light yellowish brown and multicolored, water bearing, medium dense (SP-SM) [OUTWASH]	6	SS							
		5											
	6	7	13		7	SS							
28 ¹ / ₂		5											
	5	6	11	GRAVEL, with Silt and Sand, light grey and light yellowish brown, water bearing, medium dense (GP-GM) [OUTWASH]	8	SS							
		5											
		6											
33 ¹ / ₂		5											
35	6	9	15	SAND, with Silt, fine grain, light yellowish brown, water bearing, medium dense (SP-SM) [OUTWASH]	9	SS							
Continued On Next Page													



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TEST BORING LOG

Project: PROP. HIGH CAPACITY WELL - CRYSTAL LAKE

Location: DANE AND COLUMBIA COUNTIES, WISCONSIN

RVT File No: M11-109

Page: 2 of 2

Surface Elev: Not Det'n

Scale: 1" = 6'

Boring No: 2-11

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Started: 5/9/11

Completed: 5/9/11

Driller: GABR/HDS Method: 3 1/4" HSA 0' to 68 1/2' (AH)

Depth (ft)	Blow Counts			Field Classification and Remarks Note: [] Indicates Possible Geologic Origin	Water Level Information	Sample		Laboratory Tests					
	0/6	6/12	Total (N)			No.	Type	W (%)	DD (pcf)	LL PL	Qu (psf)	Other	
43 1/2		9		SAND, with Silt, fine grain, light yellowish brown, water bearing, medium dense (SP-SM)									
		[OUTWASH]											
	8	7	15			10	SS						
63 1/2	8	7	17	GRAVEL, with Silt and Sand, light grey and light yellowish brown, water bearing, medium dense to dense to medium dense (GP-GM)		11	SS						
		[OUTWASH]											
		9											
	9	9	18			12	SS						
68 1/2		9											
	10	11	21			13	SS						
		6											
	6	7	13			14	SS						
70		6											
	7	7	14	SAND, coarse to medium grain, light yellowish brown and multicolored, water bearing, medium dense (SP)		15	SS						
		[OUTWASH]											
	8	7	16	SILTY SAND, light yellowish brown, water bearing, medium dense (SM)		16	SS						
		[OUTWASH]											
				End of Boring at 70'									

UNIFIED SOIL CLASSIFICATION SYSTEM

ASTM: D2487-90

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests^A

				Soil Classification	
				Group Symbol	Group Name ^B
Coarse-Grained Soils: More than 50% retained on #200 sieve	Gravels: More than 50% of coarse fraction retained on #4 sieve	Clean Gravels with less than 5% fines ^C	$C_u \geq 4$ and $1 < C_c \leq 3^E$	GW	Well-graded gravel
		Gravels with more than 12% fines ^C	$C_u < 4$ and/or $1 > C_c > 3^E$	GP	Poorly graded gravel
		Clean Sands with less than 5% fines ^D	Fines classify as ML or MH	GM	Silty gravel ^{F, G, H}
		Sands with more than 12% fines ^D	Fines classify as CL or CH	GC	Clayey gravel ^{F, G, H}
	Sands: 50% or more of coarse fraction passes #4 sieve	Clean Sands with less than 5% fines ^D	$C_u \geq 6$ and $1 < C_c \leq 3^E$	SW	Well-graded sand
		Sands with more than 12% fines ^D	$C_u < 6$ and/or $1 > C_c > 3^E$	SP	Poorly graded sand
		Inorganic	Fines classify as ML or MH	SM	Silty sand ^{G, H, J}
		Inorganic	Fines classify as CL or CH	SC	Clayey sand ^{G, H, J}
	Silt and Clays: Liquid limit less than 50	Inorganic	$PI > 7$ and plots on or above "A" line ^I	CL	Lean clay ^{K, L, M}
		Organic ^N	$PI < 4$ or plots below "A" line ^I	ML	Silt ^{K, L, M}
Fine-Grained Soils: 50% or more passes the #200 sieve	Silt and Clays: Liquid limit 50 or more	Inorganic	Liquid limit (oven dried) < 0.75	OL	Organic clay ^{K, L, M, N}
		Inorganic	Liquid limit (not dried)		Organic silt ^{K, L, M, O}
		Inorganic	$PI > 7$ and plots on or above "A" line	CH	Fat clay ^{K, L, M}
		Inorganic	$PI < 4$ or plots below "A" line	MH	Elastic Silt ^{K, L, M}
	Silt and Clays: Liquid limit 50 or more	Inorganic	Liquid limit (oven dried) < 0.75	OH	Organic clay ^{K, L, M, P}
		Inorganic	Liquid limit (not dried)		Organic silt ^{K, L, M, O}
		Inorganic	$PI > 7$ and plots on or above "A" line	CH	Fat clay ^{K, L, M}
		Inorganic	$PI < 4$ or plots below "A" line	MH	Elastic Silt ^{K, L, M}
	Highly organic soils ^S	Primarily organic matter, dark in color, and organic odor		PT	Peat

^A Based on the material passing the 3" (75mm) sieve.

^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^C Gravels with 5 to 12% fines require dual symbols:

GW-GM, well-graded gravel with silt
GW-GC, well-graded gravel with clay
GP-GM, poorly graded gravel with silt
GP-GC, poorly graded gravel with clay

^D Sands with 5 to 12% fines require dual symbols:

SW-SM, well-graded sand with silt
SW-SC, well-graded sand with clay
SP-SM, poorly graded sand with silt
SP-SC, poorly graded sand with clay

$$C_u = D_{60}/D_{10} \quad C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

^E If soil contains $\geq 15\%$ sand, add "with sand" to group name.

^F If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.

^G If fines are organic, add "with organic fines" to group name.

^H If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^I If Atterberg limits plot in hatched area, soil is a CL-ML, silty sand.

^K If soil contains 15 to 29% plus #200, add "with sand" or "with gravel," whichever is predominant.

^L If soil contains $\geq 30\%$ plus #200, predominantly sand, add "sandy" to group name.

^M If soil contains $\geq 30\%$ plus #200, predominantly gravel, add "gravelly" to group name.

^N $PI > 4$ and plots on or above "A" line.

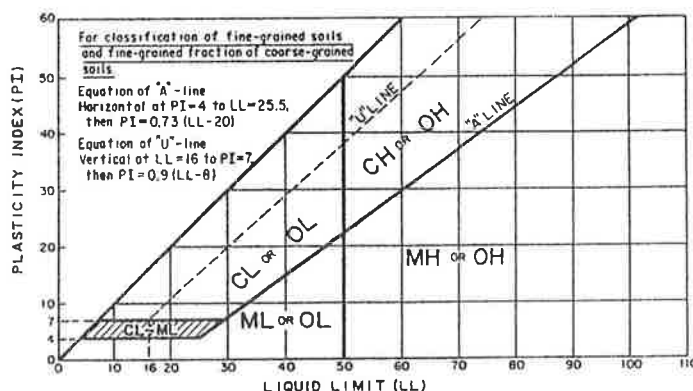
^O $PI < 4$ or plots below "A" line.

^P PI plots on or above "A" line.

^Q PI plots below "A" line.

^R Organic Content $> 5\%$ and $\leq 30\%$.

^S Organic Content $> 30\%$.



ADDITIONAL DESCRIPTIVE TERMINOLOGY

Soil Type	Size Range
Boulder	$> 12"$
Cobble	$12" - 3"$
Gravel	$3" - \#4"$
Sand:	
Coarse	$\#4 - \#10$
Medium	$\#10 - \#40$
Fine	$\#40 - \#200$
Silt & Clay	$< \#200$, based on plasticity

^A U.S. Standard Sieve Sizes

Relative Gravel Contents	
Descriptive Term	Gravel Content
Sand:	
A Little Gravel	5 - 14%
With Gravel	15 - 49%
Silt & Clay:	
A Little Gravel	5 - 14%
With Gravel	15 - 29%
Gravelly	30 - 49%

Consistency (Clay)	"N" Blows/Ft	Relative Density (Sand)
Soft	0 - 4	Very Loose
Medium	5 - 9	Loose
Rather Stiff	10 - 19	Medium Dense
Stiff	20 - 29	Dense
Very Stiff	30 - 49	Very Dense
Hard	50+	Extremely Dense

Other Descriptive Terms	
Lamination	Stratum up to 1/16" thick
Seam	Stratum 1/16" to 1/2" thick
Layer	Stratum from 1/2" to 6" thick
Lens	Discontinuous stratum or pocket from 1/2" to 6" thick
Varved	Alternating laminations or seams of clay, silt and/or fine grained sand; or alternating colors
Mottled	Mixture of clay, silt and/or fine sand exhibiting no layering; or mixture of colors exhibiting no layering
Moist	Below saturation
Wet	Saturated relatively impervious soils
Waterbearing	Saturated Pervious soils

REPORT OF MECHANICAL ANALYSIS OF SOIL

1060 Breezewood Lane, Suite 102
Neenah, WI 54956
ph 920-886-1406
fax 920-886-1409
www.rvtcorp.com

Project: **PROPOSED HIGH CAPACITY WELL
CRYSTAL LAKE
DANE AND COLUMBIA COUNTIES, WISCONSIN**

Client: Ms. Secret Strobl
Foth Infrastructure & Environment, LLC
1402 Pankratz Street, Suite 300
Madison, WI 53704

Date: May 26, 2011

Copies:

RVT File No: M11-109

GENERAL:

Date of Test: 5/18/11 Lab Technician: A Phillips of RVT
Sample Location: Soil Borings Material Source: In-Situ
Sampled By: G Broennimann/H Scheelk of RVT Date Submitted: 5/10/11

RESULTS:

Test Method: ASTM C117-90 & C136-92

Boring No:	1-11		1-11		1-11	
Sample No:	7		8		9	
Sieve Size	% Retained	% Passing	% Retained	% Passing	% Retained	% Passing
1"			10	90		
3/4"	0.0	100	---	---	0.0	100
1/2"	2.5	98	16	84	11	89
3/8"	3.5	97	17	83	13	87
#4	8.1	92	21	79	23	77
#10	14	86	24	76	29	71
#40	24	76	33	67	39	61
#100	55	45	61	39	66	34
#200	70	30	75	25	77	23

REMARKS:

A portion of the samples will be held for 30 days after the date of this report and then will be discarded unless otherwise specified.

Respectfully Submitted,
River Valley Testing Corp

Project: **PROPOSED HIGH CAPACITY WELL**
CRYSTAL LAKE
DANE AND COLUMBIA COUNTIES, WISCONSIN

Copies:

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RESULTS:

Test Method: ASTM C117-90 & C136-92

Boring No:	1-11		1-11		1-11	
Sample No:	10		11		12	
Sieve Size	% Retained	% Passing	% Retained	% Passing	% Retained	% Passing
1"	18	82	0.0	100		
3/4"	---	---	40	60		
1/2"	46	54	46	54		
3/8"	61	39	51	49	0.0	100
#4	75	25	72	28	1.9	98
#10	77	23	80	20	31	69
#40	82	18	86	14	99	1.0
#100	89	11	93	6.6	100	0.5
#200	93	7.5	96	4.4	100	0.5

REMARKS:

A portion of the samples will be held for 30 days after the date of this report and then will be discarded unless otherwise specified.

Respectfully Submitted,
River Valley Testing Corp



Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name Crystal Lake Rehabilitation Distr		Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W.		Well Name 1-11	
Facility License, Permit or Monitoring No.		Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. <input type="checkbox"/> Long. <input type="checkbox"/> or		Wis. Unique Well No. <u>VZ730</u> DNR Well ID No. <u> </u>	
Facility ID		St. Plane <u> </u> ft. N. <u> </u> ft. E. S/C/N		Date Well Installed <u>5/10/2011</u> m m d d y y y y	
Type of Well Well Code <u>12 / pz</u>		Section Location of Waste/Source SW 1/4 of NE 1/4 of Sec. <u>2</u> , T. <u>9</u> N, R. <u>7</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W		Well Installed By: Name (first, last) and Firm <u>Gerald Broennimann</u> <u>River Valley Testing Corp.</u>	
Distance from Waste/Source <u> </u> ft.		Enf. Stds. Apply <input type="checkbox"/>		Gov. Lot Number <u> </u>	
		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known			

A. Protective pipe, top elevation 3 ft. MSL
B. Well casing, top elevation 3 ft. MSL
C. Land surface elevation ft. MSL
D. Surface seal, bottom ft. MSL or ft.

12. USCS classification of soil near screen:
GP ☒ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☒ Yes ☐ No

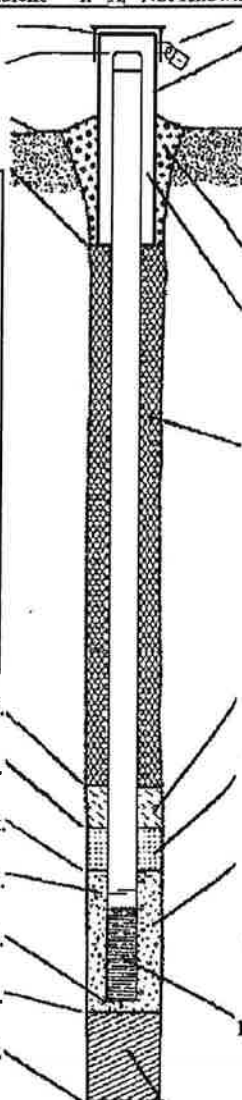
14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top ft. MSL or ft.
F. Fine sand, top ft. MSL or 35 ft.
G. Filter pack, top ft. MSL or 37 ft.
H. Screen joint, top ft. MSL or 39 ft.
I. Well bottom ft. MSL or 44 ft.
J. Filter pack, bottom ft. MSL or 47 ft.
K. Borehole, bottom ft. MSL or 47 ft.
L. Borehole, diameter 8 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 7 ft.
c. Material: Steel ☒ 04
Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30
Concrete ☐ 01
Other ☐

4. Material between well casing and protective pipe: Bentonite ☒ 30
Other ☐

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. Lbs/gal mud weight Bentonite-sand slurry ☐ 35
c. Lbs/gal mud weight Bentonite slurry ☐ 31
d. % Bentonite Bentonite-cement grout ☐ 50
e. Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 32
c. Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. Silica
b. Volume added 0.7 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint
b. Volume added 3.5 ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material:
a. Screen type: Factory cut ☐ 11
Continuous slot ☒ 01
Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.01 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14
Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Gerald Broennimann Firm River Valley Testing Corp

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other _____

(1) GENERAL INFORMATION			(2) FACILITY/ OWNER INFORMATION	
WI Unique Well No.	DNR Well ID No.	County	Facility Name	
		DANE		
Common Well Name Crystal Lake Rd Gov't Lot (If applicable)			Facility ID	License/Permit/Monitoring No.
SW 1/4 of NE 1/4 of Sec. 2 ; T. 9 N; R. 7 [X] E Grid Location			Street Address of Well	
_____ ft. [] N. [] S., _____ ft. [] E. [] W.			8269 Crystal Lake Road	
Local Grid Origin [] (estimated: []) or Well Location []			City, Village, or Town	
Lat. _____ Long. _____ or			Town of Roxbury, WI	
St. Plane _____ ft. N. _____ ft. E. [] [] [] Zone			Present Well Owner	Original Owner
Reason For Abandonment			Crystal Lake Rehabilitation Distr	
Sampling complete			Street Address or Route of Owner	
WI Unique Well No.			7161 Kippley Road	
of Replacement Well _____			City, State, Zip Code	
			Sauk City WI 53583-	

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL	
Original Construction Date 5/10/2011		Pump & Piping Removed? [] Yes [] No [X] Not Applicable	
[] Monitoring Well		Liner(s) Removed? [] Yes [] No [X] Not Applicable	
[] Water Well		Screen Removed? [] Yes [] No [X] Not Applicable	
[X] Borehole / Drillhole		Casing Left in Place? [] Yes [X] No	
Construction Type:		Was Casing Cut Off Below Surface? [] Yes [X] No	
[X] Drilled [] Driven (Sandpoint) [] Dug		Did Sealing Material Rise to Surface? [X] Yes [] No	
[] Other (Specify) _____		Did Material Settle After 24 Hours? [] Yes [X] No	
Formation Type:		If Yes, Was Hole Retopped? [] Yes [X] No	
[X] Unconsolidated Formation [] Bedrock		Required Method of Placing Sealing Material	
Total Well Depth (ft.) 60 Casing Diameter (in.) 3.25		[X] Conductor Pipe-Gravity [] Conductor Pipe-Pumped	
(From ground surface) Casing Depth (ft.) 58.5		[] Screened & Poured (Bentonite Chips) [] Other (Explain)	
Lower Drillhole Diameter (in.) _____		Sealing Materials	
Was Well Annular Space Grouted? [] Yes [] No [] Unknown		[] Neat Cement Grout	
If Yes, To What Depth? _____ Feet		[] Sand-Cement (Concrete) Grout	
Depth to Water (Feet) _____		[] Concrete	
		[] Clay-Sand Slurry (11 lb./gal. wt.)	
		[] Bentonite-Sand Slurry " "	
		[X] Bentonite Chips	
		For monitoring wells and monitoring well boreholes only	
		[] Bentonite Chips	
		[] Granular Bentonite	
		[] Bentonite - Cement Grout	
		[] Bentonite - Sand Slurry	

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
3/8" chipped bentonite	Surface	60	17	

(6) Comments: 1-11

(7) Name of Person or Firm Doing Sealing Work		Date of Abandonment	
River Valley Testing Corp		5/10/2011	
Signature of Person Doing Work		Date Signed	
[Signature]			
Street or Route		Telephone Number	
1060 Breezewood Lane, Ste 102		(920) 886-1406	
City, State, Zip Code			
Neenah WI 54956-			

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other

(1) GENERAL INFORMATION		(2) FACILITY/ OWNER INFORMATION	
WI Unique Well No.	DNR Well ID No.	County DANE	
Common Well Name Mussen Road Gov't Lot (If applicable)		Facility ID	License/Permit/Monitoring No.
Grid Location NW 1/4 of NW 1/4 of Sec. 2 ; T. 9 N; R. 7 E [X] W		Street Address of Well 8269 Crystal Lake Road	
ft. N. S. ft. E. W.		City, Village, or Town Town of Roxbury, WI	
Local Grid Origin (estimated:) or Well Location		Present Well Owner Crystal Lake Rehabilitation Dist.	Original Owner
Lat. Long. or		Street Address or Route of Owner 7161 Kippely Road	
St. Plane ft. N. ft. E. S C N Zone		City, State, Zip Code Sauk City WI 53583-	
Reason For Abandonment Sampling complete		WI Unique Well No. of Replacement Well	

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL	
Original Construction Date 5/10/2011		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No [X] Not Applicable	
<input type="checkbox"/> Monitoring Well		Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No [X] Not Applicable	
<input type="checkbox"/> Water Well		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No [X] Not Applicable	
[X] Borehole / Drillhole		Casing Left in Place? <input type="checkbox"/> Yes [X] No	
Construction Type:		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes [X] No	
[X] Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		Did Sealing Material Rise to Surface? [X] Yes <input type="checkbox"/> No	
<input type="checkbox"/> Other (Specify)		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes [X] No	
Formation Type:		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
[X] Unconsolidated Formation <input type="checkbox"/> Bedrock		Required Method of Placing Sealing Material	
Total Well Depth (ft.) 70 Casing Diameter (in.) 3.25		[X] Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
(From ground surface) Casing Depth (ft.) 68.5		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain)	
Lower Drillhole Diameter (in.)		Sealing Materials	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Neat Cement Grout	
If Yes, To What Depth? Feet		<input type="checkbox"/> Sand-Cement (Concrete) Grout	
Depth to Water (Feet)		<input type="checkbox"/> Concrete	
		<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)	
		<input type="checkbox"/> Bentonite-Sand Slurry " "	
		[X] Bentonite Chips	

(5) Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
	Surface	70	20	
3/8" chipped bentonite				

(6) Comments: 2-11

(7) Name of Person or Firm Doing Sealing Work		Date of Abandonment	
River Valley Testing Corp		5/10/2011	
Signature of Person Doing Work		Date Signed	
Street or Route 1060 Breezewood Lane, Ste 102		Telephone Number (920) 886-1406	
City, State, Zip Code Neenah WI 54956-			

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	