Long Lake Geoprobe Well & Boring Forms

- Monitoring Well Construction (4400-113A)
- Monitoring Well Development (4400-113B)
- Borehole Abandonment (3300-05)

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: LL 01 (Site 11)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20982 Long. -89.45635 or	Wis. Unique Well No.: VQ817 / DNR Well ID No.: ____
Facility ID: WID = 70002793	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/11/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Doug Kapuga, OnSite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____

A. Protective pipe, top elevation 1114.33 ft. MSL

B. Well casing, top elevation 1114.30 ft. MSL

C. Land surface elevation 1110.92 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1103.80 ft. MSL or ____ ft.

H. Screen joint, top 1101.80 ft. MSL or ____ ft.

I. Well bottom 1091.80 ft. MSL or ____ ft.

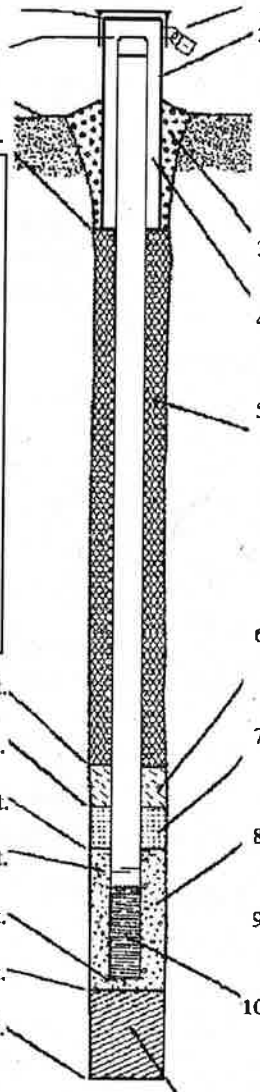
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1089.92 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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: Sand
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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red flint #1/0 / Native
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Maroflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL01. (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VG817	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒

3. Time spent developing well 35 min.

4. Depth of well (from top of well casisng) 22.5 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 19.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 14.26 ft.	14.32 ft.
Date	b. 07/11/2018 (m m d d y y y y)	07/11/2018
Time	c. 10:45 ☒ a.m. ☐ p.m.	11:20 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	7.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL01B (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20981 Long. -89.45634	Wis. Unique Well No.: VQ841 / DNR Well ID No.: ____
Facility ID: WID = 70002319	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 11/16/2018 (mm dd yyyy)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapigi, OnSite Environmental
Distance from Waste/Source: _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1113.08 ft. MSL
B. Well casing, top elevation 1112.97 ft. MSL
C. Land surface elevation 1110.54 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

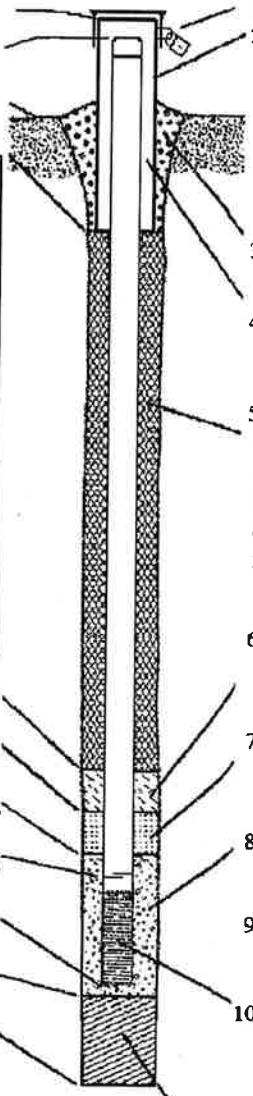
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1065.27 ft. MSL or _____ ft.
H. Screen joint, top 1063.27 ft. MSL or _____ ft.
I. Well bottom 1058.27 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1058.54 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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 ☒ Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL01B (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ841 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 54.7 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 1.8 gal.

7. Volume of water removed from well 10. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 12.53 ft.	12.53 ft.
Date	b. 11/20/2018 (m m d d y y y y)	11/20/2018
Time	c. 13:05 ☐ a.m. ☒ p.m.	13:45 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: LL02 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20786 Long. -89.46113 or	Wis. Unique Well No.: VQ818 / DNR Well ID No.: ____
Facility ID: WID=70002294	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/17/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____ T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapgi, Onsite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: ____	

A. Protective pipe, top elevation 1110.67 ft. MSL

B. Well casing, top elevation 1110.59 MSL

C. Land surface elevation 1108.14 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 ☒ Geoprobe

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):
NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1102.39 ft. MSL or ____ ft.

H. Screen joint, top 1100.39 ft. MSL or ____ ft.

I. Well bottom 1090.39 ft. MSL or ____ ft.

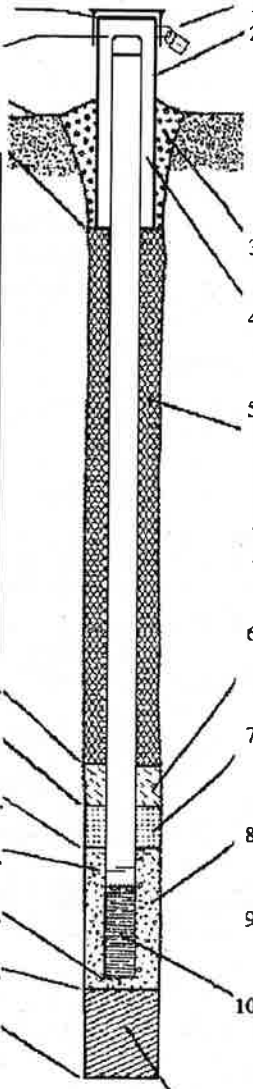
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1088.14 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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:
Sand
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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40/Native
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael S Parsen	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL02 (Site ID)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	70	VQ818	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☑

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 20.2 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 11.51 ft.	11.45 ft.
Date	b. 07/17/2018 (m m d d y y y y)	07/17/2018
Time	c. 12:30 ☐ a.m. ☒ p.m.	13:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	1.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	Brown Opaque	

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: LL02B (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat.: 44.20784 Long.: -89.46113	Wis. Unique Well No.: VQB42 DNR Well ID No.: ____
Facility ID: WID = 70002320	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 01/15/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapigi, OnSite Environmental
Distance from Waste/Source ____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: ____

A. Protective pipe, top elevation 1110.46 ft. MSL
B. Well casing, top elevation 1110.23 ft. MSL
C. Land surface elevation 1107.96 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

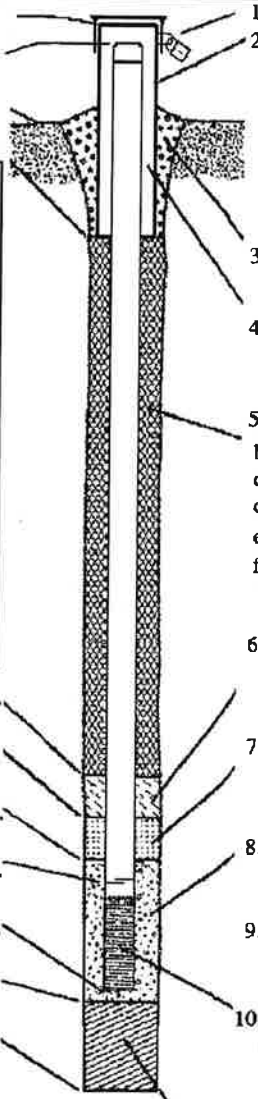
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☐ 41; Other ☒ Geoprobe

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): Sn Prairie

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1073.23 ft. MSL or ____ ft.
H. Screen joint, top 1071.23 ft. MSL or ____ ft.
I. Well bottom 1066.23 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 1064.96 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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; Sand; 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. ____ Ft^3 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. ____
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL02B (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ842 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other ___	☐ [illegible]

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 44. ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 1.8 gal.

7. Volume of water removed from well 35. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 9.80 ft.	9.81 ft.
Date	b. 11/20/2018 (m m d d y y y y)	11/20/2018
Time	c. 12:05 ☐ a.m. ☒ p.m.	12:35 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: LL 03 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20660 Long. -89.46092 or	Wis. Unique Well No.: VQ819 DNR Well ID No.: ___
Facility ID: WID=70002295	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/16/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapuzi, Onsite Environmental
Distance from Waste/Source ____ ft. Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____

A. Protective pipe, top elevation 1117.16 ft. MSL

B. Well casing, top elevation 1117.21 ft. MSL

C. Land surface elevation 1114.67 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 ☒
Geoprobe

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

16. Drilling additives used? ☐ Yes ☒ No

Describe NA

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1103.51 ft. MSL or ____ ft.

H. Screen joint, top 1101.51 ft. MSL or ____ ft.

I. Well bottom 1091.51 ft. MSL or ____ ft.

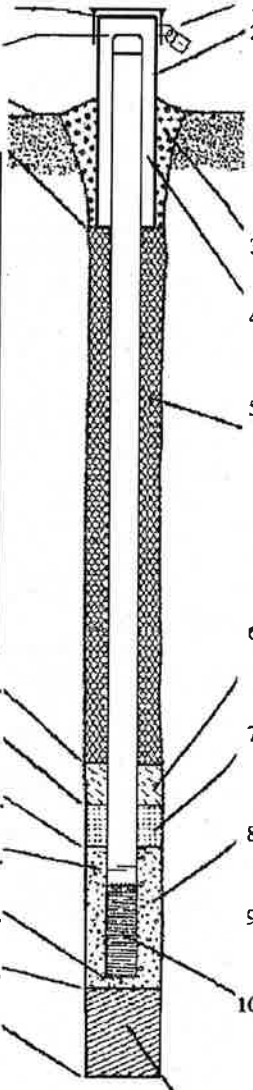
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1089.67 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

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

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

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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael J. Parsen Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL 03 (Site ID)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	70	VQ819	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☒	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 25.7 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 12.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 18.22 ft.	18.21 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018 (m m d d y y y y)
Time	c. 10:20 ☒ a.m. ☐ p.m.	11:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	2.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Opaque Brown	Brown Slight-mod. turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N ☐S _____ ft. ☐E ☐W	Well Name: LL04 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20398 Long. -89.45143 or	Wis. Unique Well No.: VQ820 DNR Well ID No.: ___
Facility ID: WID = 700072796	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/17/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi Onsite
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____

A. Protective pipe, top elevation 1127.79 ft. MSL

B. Well casing, top elevation 1127.76 ft. MSL

C. Land surface elevation 1124.91 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ___ ft. MSL or ___ ft.

F. Fine sand, top ___ ft. MSL or ___ ft.

G. Filter pack, top 1102.66 ft. MSL or ___ ft.

H. Screen joint, top 1100.66 ft. MSL or ___ ft.

I. Well bottom 1090.66 ft. MSL or ___ ft.

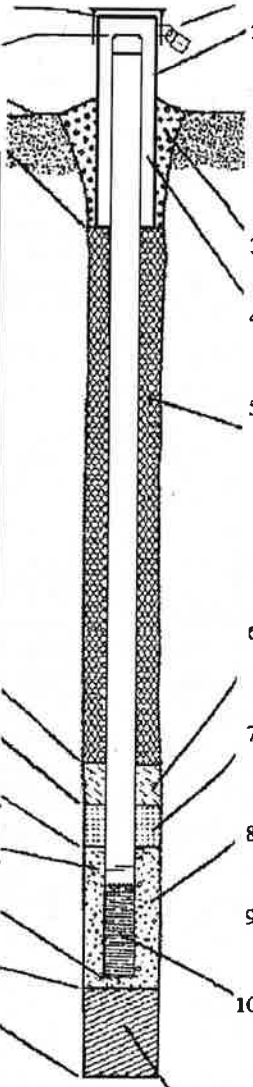
J. Filter pack, bottom ___ ft. MSL or ___ ft.

K. Borehole, bottom 1089.91 ft. MSL or ___ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ___
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

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

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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ___
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parsen Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL04 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ820 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 37.1 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 15.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 29.04 ft.	29.07 ft.
Date	b. 07/17/2018 (m m d d y y y y)	07/17/2018 (m m d d y y y y)
Time	c. 10:40 ☒ a.m. ☐ p.m.	11:20 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	14.0 inches	0.9 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

LL05

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara		

Latitude / Longitude (see instructions)	Format Code	Method Code
44.20530 N	☑ DD	☑ GPS008
-89.44784 W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Exploratory Boring	

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID= 70002297 SITE ID= LL05

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☑ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 7/16/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe borehole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
20	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	10

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	20'		

6. Comments

Borehole was abandoned and sealed

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapugi Onsite Environmental		7/16/2018

Street or Route	Telephone Number
	( )

City	State	ZIP Code	Signature of Person Doing Work	Date Signed

DNR Use Only

Date Received	Noted By
Comments	

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL05B (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20534 Long. -89.44784 or	Wis. Unique Well No.: VQ824 / DNR Well ID No.: ___
Facility ID: WID= 70002798	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1110.80 ft. MSL
B. Well casing, top elevation 1110.59 ft. MSL
C. Land surface elevation 1108.57 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 ☒ Geoprobe

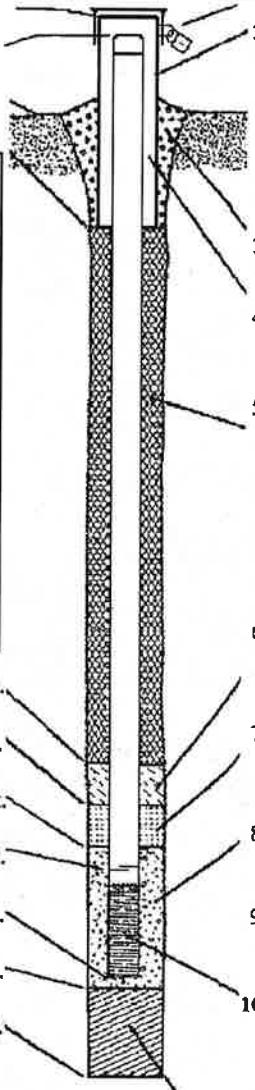
15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

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

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1103.79 ft. MSL or _____ ft.
H. Screen joint, top 1101.79 ft. MSL or _____ ft.
I. Well bottom 1091.79 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1088.57 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☐ 01; Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30; Other ☒ Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ _____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael J. Parsen | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL05B (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ821	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well 50 min.

4. Depth of well (from top of well casisng) 18.8 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 3.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 11.55 ft.	11.61 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018 (m m d d y y y y)
Time	c. 16:00 ☐ a.m. ☒ p.m.	16:50 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	6.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Very dark gray opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Very dark gray opaque

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study
Facility License, Permit or Monitoring No.: WGNHS
Facility ID: WID = 70002321
Type of Well: Well Code 11 / MW
Distance from Waste/Source ____ ft. | Enf. Stds. Apply ☐

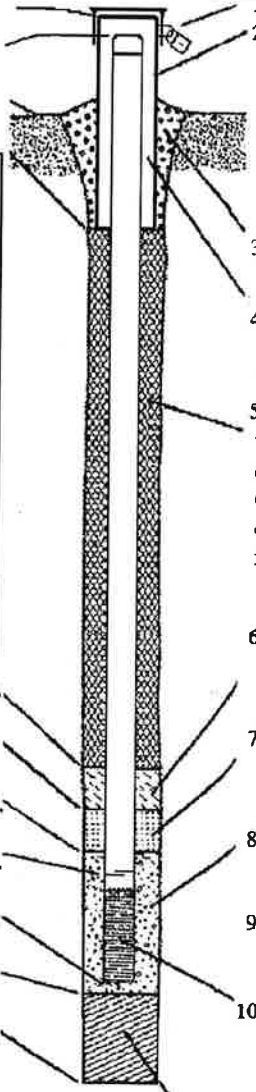
Local Grid Location of Well ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.
Local Grid Origin ☐ (estimated: ☐) or Well Location ☒
Lat. 44.20535 Long. -89.44784
St. Plane ____ ft. N, ____ ft. E. S/C/N
Section Location of Waste/Source
____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐ E ☐ W
Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
Gov. Lot Number: ____

Well Name: LL05C (Site ID)
Wis. Unique Well No.: VQ843 | DNR Well ID No.: ____
Date Well Installed: 01/15/2018 (m m d d y y y y)
Well Installed By: Name (first, last) and Firm: Tony Kapugi, OnSite Environmental

A. Protective pipe, top elevation 1110.85 ft. MSL
B. Well casing, top elevation 1110.87 ft. MSL
C. Land surface elevation 1108.64 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 ☒ Geoprobe
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): Sm Prairie

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1059.67 ft. MSL or ____ ft.
H. Screen joint, top 1057.67 ft. MSL or ____ ft.
I. Well bottom 1052.67 ft. MSL or ____ ft.
J. Filter pack, bottom ____ MSL or ____ ft.
K. Borehole, bottom 1052.64 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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: Sand
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. ____ Ft^3 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. ____
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 | Flush threaded PVC schedule 80 ☐ 24 | Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 | Continuous slot ☐ 01 | Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 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: Michael T. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LLOSC (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ843 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 55 min.

4. Depth of well (from top of well casisng) 58.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 1.8 gal.

7. Volume of water removed from well 28. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 10.38 ft.	10.37 ft.
Date	b. 11/20/2018 (m m d d y y y y)	11/20/2018 (m m d d y y y y)
Time	c. 10:40 ☒ a.m. ☐ p.m.	11:35 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	10.7 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL06 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20648 Long. -89.45102 or	Wis. Unique Well No.: VQ822 / DNR Well ID No.: ____
Facility ID: WID = 70002299	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, OnSite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1126.81 ft. MSL
B. Well casing, top elevation 1126.53 ft. MSL
C. Land surface elevation 1124.61 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 ☒
Geoprobe

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):
NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1104.33 ft. MSL or _____ ft.
H. Screen joint, top 1102.33 ft. MSL or _____ ft.
I. Well bottom 1092.33 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1094.61 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.

PVC well deeper than borehole

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ ____
Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ ____
Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL06 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	YQ822	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 45 min.

4. Depth of well (from top of well casisng) 34.2 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 13.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 27.04 ft.	27.03 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018 (m m d d y y y y)
Time	c. 14:00 ☐ a.m. ☒ p.m.	14:45 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	7.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	Opaque Brown	
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 33.5 pre-development

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL07 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20842 Long. -89.45400 or	Wis. Unique Well No.: VQ823 DNR Well ID No.: ___
Facility ID: WID = 70007300	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1122.07 ft. MSL

B. Well casing, top elevation 1121.80 ft. MSL

C. Land surface elevation 1119.33 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 1103.10 ft. MSL or _____ ft.

H. Screen joint, top 1101.10 ft. MSL or _____ ft.

I. Well bottom 1091.10 ft. MSL or _____ ft.

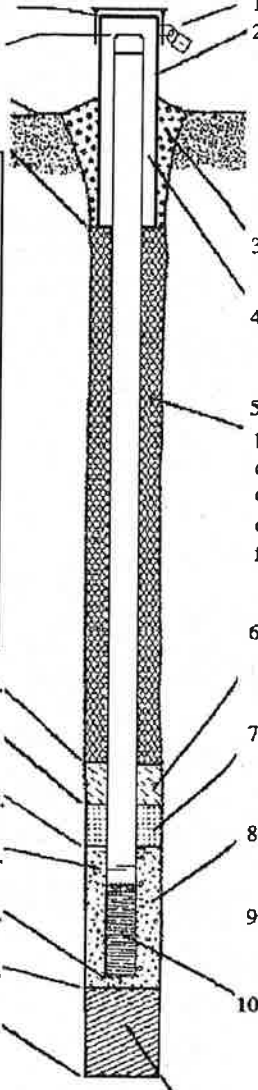
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 1089.33 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ___
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

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

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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ___
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael G. Parsen Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL07 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ823	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well ___35 min.

4. Depth of well (from top of well casisng) __30.7 ft.

5. Inside diameter of well __1.9__ in.

6. Volume of water in filter pack and well casing ___0.3 gal.

7. Volume of water removed from well __14.0 gal.

8. Volume of water added (if any) ___0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __22.00 ft.	__22.00 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018
Time	c. 12:50 ☐ a.m. ☒ p.m.	13:25 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	__9.0 inches	__0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Light Brown Slight turbidity
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 29.8 pre-development

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL08 (Site 19)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20903 Long. -89.45995 or	Wis. Unique Well No.: VQ824 / DNR Well ID No.: ____
Facility ID: WID = 70002301	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1121.97 ft. MSL

B. Well casing, top elevation 1122.01 ft. MSL

C. Land surface elevation 1119.41 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1104.01 ft. MSL or ____ ft.

H. Screen joint, top 1102.01 ft. MSL or ____ ft.

I. Well bottom 1092.01 ft. MSL or ____ ft.

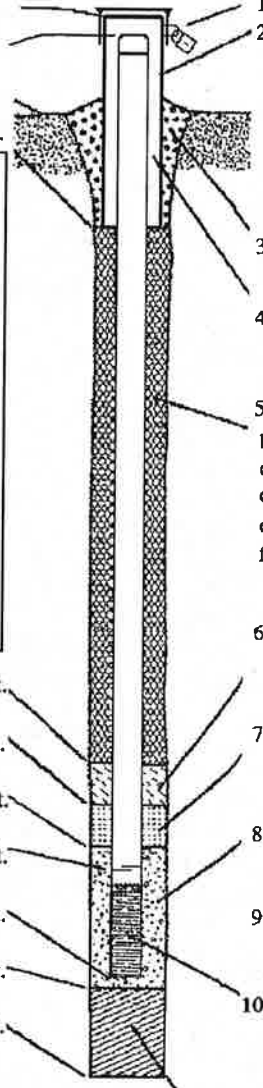
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1089.41 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ ____
Native Soil

4. Material between well casing and protective pipe:
Sand
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. ____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael G. Parsen	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL 08 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	79	VQ824	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☒	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	___

3. Time spent developing well 45 min.

4. Depth of well (from top of well casisng) 30.0 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 15.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No (If yes, attach results)
NA

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 22.17 ft.	22.18 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018
Time	c. 11:25 ☒ a.m. ☐ p.m.	12:10 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	8.5 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Light Brown Slight-mod. turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 29.34 pre-development
2.5 stick up

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL09 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20542 Long. -89.45637 or	Wis. Unique Well No.: VQ825 / DNR Well ID No.: ____
Facility ID: WID=7000 2307	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/2015 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Grage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1117.89 ft. MSL

B. Well casing, top elevation 1117.71 ft. MSL

C. Land surface elevation 1115.52 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 ☒ — Geoprobe

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): N/A

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1101.91 ft. MSL or ____ ft.

H. Screen joint, top 1099.91 ft. MSL or ____ ft.

I. Well bottom 1089.91 ft. MSL or ____ ft.

J. Filter pack, bottom ____ ft. MSL or ____ ft.

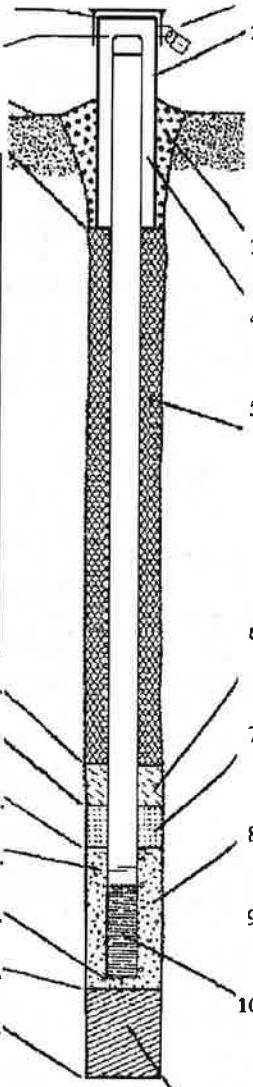
K. Borehole, bottom 1090.52 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.

PVC well deeper than borehole



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ — Native Soil

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

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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T. Parsen	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL09 (Sik ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ825 / ---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 35 min.

4. Depth of well (from top of well casisng) 27.8 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 15.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 18.64 ft.	18.64 ft.
Date	b. 07/16/2018 (m m d d y y y y)	07/16/2018 (m m d d y y y y)
Time	c. 17:00 ☐ a.m. ☒ p.m.	17:35 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	14.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☒ 20 Turbid ☐ 25 (Describe)
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 26.25 pre-development

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL09B (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20542 Long. -89.45636	Wis. Unique Well No.: VQ844 DNR Well ID No.: _____
Facility ID: WID = 70002322	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 11/14/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, OnSite Environmental
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____

A. Protective pipe, top elevation 1117.91 ft. MSL
B. Well casing, top elevation 1117.98 ft. MSL
C. Land surface elevation 1115.37 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
Geoprobe — Other ☒

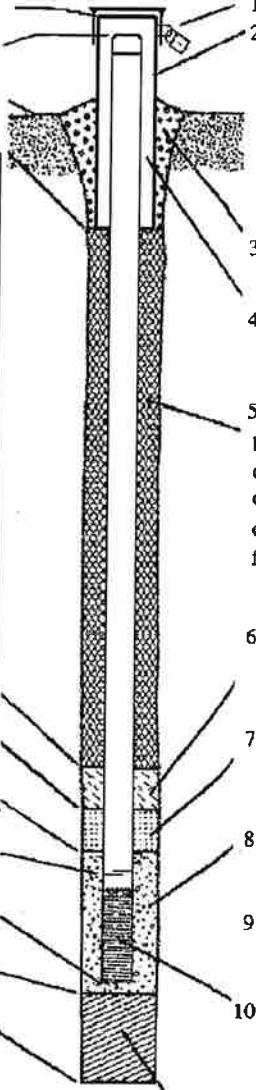
15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

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

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1049.28 ft. MSL or _____ ft.
H. Screen joint, top 1047.28 ft. MSL or _____ ft.
I. Well bottom 1042.28 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1040.37 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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: Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL09B (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ844 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well ___65___ min.

4. Depth of well (from top of well casisng) ___75.3___ ft.

5. Inside diameter of well ___1.0___ in.

6. Volume of water in filter pack and well casing ___1.8___ gal.

7. Volume of water removed from well ___60.=___ gal.

8. Volume of water added (if any) ___=.=___ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	18.33 ft.	18.34 ft.
Date b. (m m d d y y y y)	11/20/2018	11/20/2018
Time c.	09:15 ☒ a.m. ☐ p.m.	10:20 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	3.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)		

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: LL 10 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44.20664 Long. -89.45761 or	Wis. Unique Well No.: VQ826 / DNR Well ID No.: ____
Facility ID: WID=70002303	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/16/1998 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gregg Kapuga, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1119.39 ft. MSL
B. Well casing, top elevation 1119.46 ft. MSL
C. Land surface elevation 1117.10 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 ☒ Geoprobe

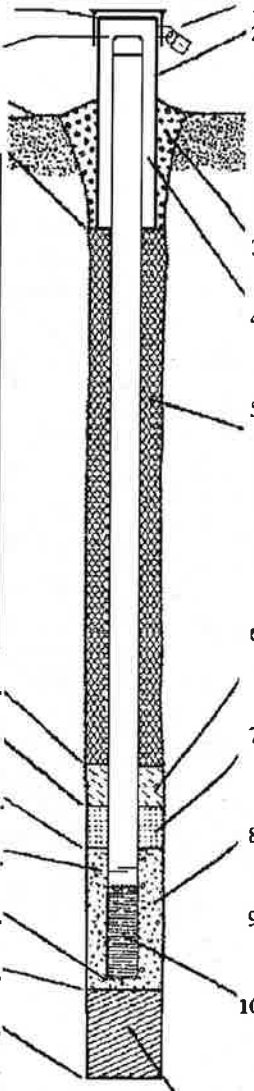
15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe NA

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1102.86 ft. MSL or ____ ft.
H. Screen joint, top 1100.86 ft. MSL or ____ ft.
I. Well bottom 1090.86 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 1091.10 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.

Well PVC deeper than borehole



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ Sand
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. ____ Ft^3 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. ____ ____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael J. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	LL 10 (Site 10)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ826	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other Waterra	☒	___

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 28.6 ft.

5. Inside diameter of well 1.9 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 150.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 20.29 ft.	20.35 ft.
Date	b. 07/17/2018 (m m d d y y y y)	07/17/2018 (m m d d y y y y)
Time	c. 11:55 ☒ a.m. ☐ p.m.	12:35 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	13.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Opaque Brown	Brown Moderate turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-development = 27.5

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parker
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parker
Print Name: Mike Parker
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

Plainfield Lake Geoprobe Well & Boring Forms

- Monitoring Well Construction (4400-113A)
- Monitoring Well Development (4400-113B)
- Borehole Abandonment (3300-05)

PFL01

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	N/A

Latitude / Longitude (see instructions)	Format Code	Method Code
44.20928 N -89.47345 W	☑ DD ☐ DDM	☑ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Boring hit refusal	

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☑ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 7/10/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (specify): Geoprobe borehole

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
45'	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4"	N/A

Was well annular space grouted? ☐ Yes ☑ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID= 70002281; SITE ID PFL01

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☑ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☑ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	45		

6. Comments

Borehole was abandoned and sealed.

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapugi OnSite Environmental		7/10/2018

Street or Route	Telephone Number
	( )

City	State	ZIP Code	Signature of Person Doing Work	Date Signed

DNR Use Only

Date Received	Noted By

Comments

PFL01B

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	N/A

Latitude / Longitude (see instructions): 44.20930 N, -89.47345 W
Format Code: ☑ DD ☐ DDM
Method Code: ☑ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town | Well ZIP Code

Subdivision Name | Lot #

Reason for Removal from Service: Boring hit refusal
WI Unique Well # of Replacement Well: _____

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study
Facility ID (FID or PWS): WGNHS
License/Permit/Monitoring #: WID = 700022 82 ; SITE ID = PFL01B

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner | State | ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☑ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 7/10/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☑ Other (specify): Geoprobe borehole

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	N/A
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.4"	N/A

Was well annular space grouted? ☐ Yes ☑ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	12		

6. Comments

Borehole was abandoned and sealed.

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing: Tony Kapugi; Onsite Environmental | License # | Date of Filling & Sealing or Verification (mm/dd/yyyy): 7/10/2018

Street or Route | Telephone Number ( )

City | State | ZIP Code | Signature of Person Doing Work | Date Signed

DNR Use Only
Date Received | Noted By
Comments

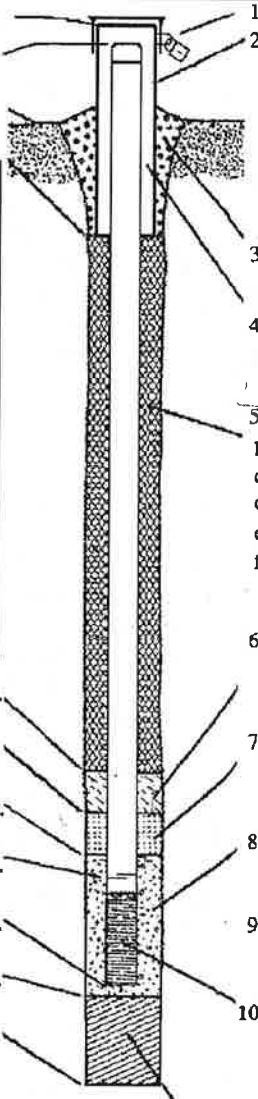
State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N ☐S ____ ft. ☐E ☐W	Well Name: PFL 02 (SITE 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20893 Long. -89.47474 or	Wis. Unique Well No.: VQ808 / DNR Well ID No.: ____
Facility ID: WID = 700002283	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/10/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____



A. Protective pipe, top elevation 1124.70 ft. MSL

B. Well casing, top elevation 1124.52 ft. MSL

C. Land surface elevation 1123.45 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 ☒ Geoprobe

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): N/A

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1101.12 ft. MSL or ____ ft.

H. Screen joint, top 1099.12 ft. MSL or ____ ft.

I. Well bottom 1089.12 ft. MSL or ____ ft.

J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1087.08 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

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

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

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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parsen | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL02 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ808 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other Waterra	☒	

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 35.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 25.64 ft.	25.64 ft.
Date	b. 07/10/2018 (m m d d y y y y)	07/10/2018
Time	c. 16:00 ☐ a.m. ☒ p.m.	16:40 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2. inches	0. inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

PFL02B

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	N/A

Latitude / Longitude (see instructions)	Format Code	Method Code
44.20892 N -89.47474 W	☑ DD ☐ DDM	☑ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Exploratory boring	

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID = 700022284; Sik ID = PFL02B

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 7/10/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe Borehole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
35	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	25

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☒ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips & slurry below water table	Surface	35		

6. Comments

Borehole was abandoned and sealed.

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Capogi Onsite Environmental		7/10/2018

Street or Route	Telephone Number
	( )

City	State	ZIP Code

Signature of Person Doing Work	Date Signed

DNR Use Only

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL03 (SITE ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20476 Long. -89.46942 or	Wis. Unique Well No.: VQ829 / DNR Well ID No.: ____
Facility ID: WID = 70002285	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/09/2018 (m m d d y y y y)
Type of Well: Well Code 11 / NMW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec, ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1124.27 ft. MSL
B. Well casing, top elevation 1124.35 ft. MSL
C. Land surface elevation 1121.67 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

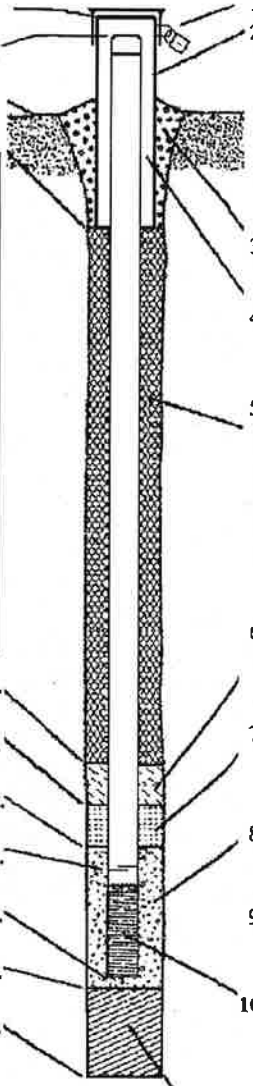
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): N/A

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1099.65 ft. MSL or ____ ft.
H. Screen joint, top 1097.65 ft. MSL or ____ ft.
I. Well bottom 1087.65 ft. MSL or 36.7 ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 1086.67 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ Sand
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. _____ Ft^3 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. ____ _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T Parsen	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 03 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	72	VQ809	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 45 min.

4. Depth of well (from top of well casisng) 36.7 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 13.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 25.82 ft.	25.83 ft.
Date	b. 07/09/2018 (m m d d y y y y)	07/09/2018
Time	c. 13:50 ☐ a.m. ☒ p.m.	14:35 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2.0 inches	0. inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Dark Reddish Brown Opaque	Light Reddish Brown Slight Turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sand Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL04 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20880 Long. -89.47771 or	Wis. Unique Well No.: VQ810 / DNR Well ID No.: ____
Facility ID: WID= 70002786	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/09/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1108.10 ft. MSL

B. Well casing, top elevation 1107.97 ft. MSL

C. Land surface elevation 1105.84 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 ☒ Geoprobe

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): N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 1100.07 ft. MSL or _____ ft.

H. Screen joint, top 1098.07 ft. MSL or _____ ft.

I. Well bottom 1088.07 ft. MSL or _____ ft.

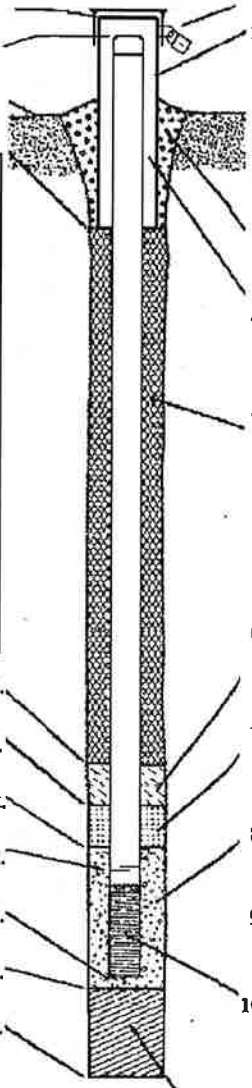
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 1083.84 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

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

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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Native Soil
b. Volume added 0 ft^3

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

10. Screen material: Sch 40 PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Mono Flex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL04 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ812 / ---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other Waterra	☒	--

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 19.9 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.4 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 5.88 ft.	5.99 ft.
Date	b. 07/10/2018 (m m d d y y y y)	07/10/2018
Time	c. 07:50 ☒ a.m. ☐ p.m.	08:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	6.0 inches	0.1 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Red brown Opaque	Red brown moderate turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

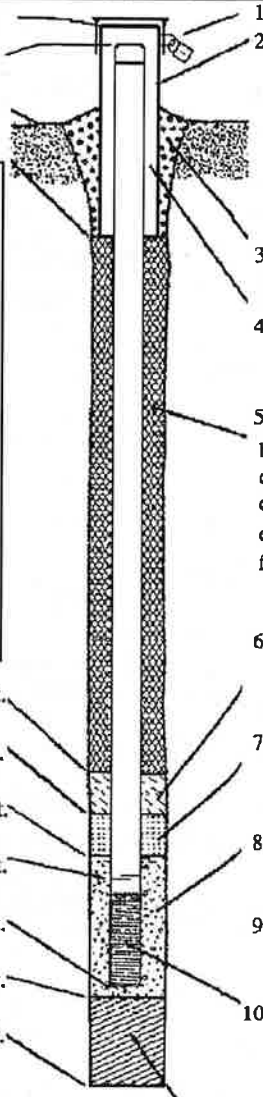
State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sand Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL 05 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20747 Long. -89.46895 or	Wis. Unique Well No.: VQ811 / DNR Well ID No.: ____
Facility ID: WID = 70002287	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/19/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source: _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____



A. Protective pipe, top elevation: 1115.97 ft. MSL
B. Well casing, top elevation: 1115.72 ft. MSL
C. Land surface elevation: 1113.51 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1100.52 ft. MSL or ____ ft.
H. Screen joint, top 1098.52 ft. MSL or ____ ft.
I. Well bottom 1088.52 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 1088.51 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☐ 01 Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☒ Sand
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. ____ Ft^3 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. ____ ____
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer Mase-flex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T Paster	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL05 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ811	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 27.2 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 16.80 ft.	16.81 ft.
Date	b. 07/11/2018 (m m d d y y y y)	07/11/2018
Time	c. 08:10 ☒ a.m. ☐ p.m.	08:50 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	7.0 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown Slight/moderate turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael D Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL 07 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20548 Long. -89.46732 ☐ or	Wis. Unique Well No.: VQ812 / DNR Well ID No.: ____
Facility ID: WID= 70002288	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/11/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1106.26 ft. MSL

B. Well casing, top elevation 1106.13 MSL

C. Land surface elevation 1103.51 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 ☒ Geoprobe

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

16. Drilling additives used? ☐ Yes ☒ No
Describe NA

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1102.03 ft. MSL or ____ ft.

H. Screen joint, top 1100.03 ft. MSL or ____ ft.

I. Well bottom 1090.03 ft. MSL or ____ ft.

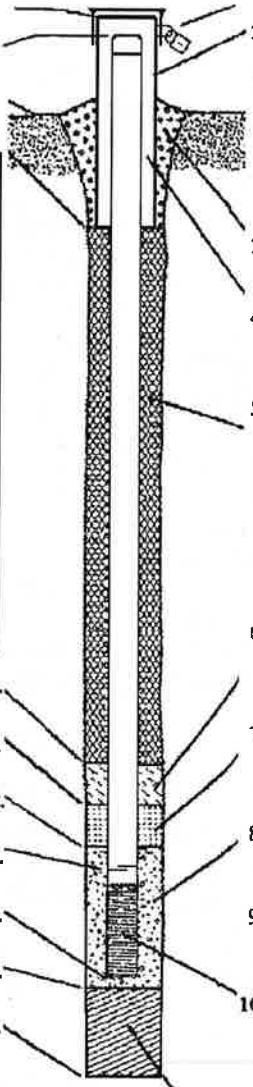
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1088.51 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

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

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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 07 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ812	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other Waterra	☒	

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 16.1 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 7.52 ft.	7.55 ft.
Date	b. 07/11/2018 (m m d d y y y y)	07/11/2018
Time	c. 10:00 ☒ a.m. ☐ p.m.	10:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	3.5 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Brown Moderate Turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N ☐S _____ ft. ☐E ☐W	Well Name: PFL09 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20490 Long. -89.47159 ☐E ☒W	Wis. Unique Well No.: VQ813 DNR Well ID No.: ____
Facility ID: WID = 70002289	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/09/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____

A. Protective pipe, top elevation 1136.50 ft. MSL
B. Well casing, top elevation 1136.10 MSL
C. Land surface elevation 1134.07 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
Geoprobe Other ☒

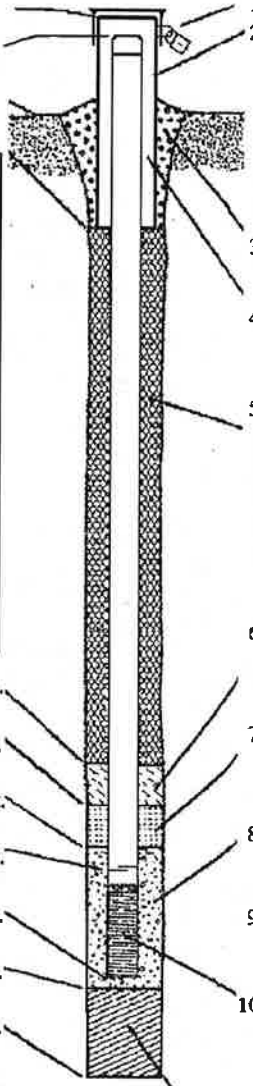
15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 1102.50 ft. MSL or ____ ft.
H. Screen joint, top 1100.50 ft. MSL or ____ ft.
I. Well bottom 1090.50 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 1089.07 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04
Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30
Concrete ☐ 01
Native Soil Other ☐
4. Material between well casing and protective pipe:
Bentonite ☐ 30
Sand 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Native / Redflint #F40
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
_____ Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T. Parker	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL09 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ813	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Water Pump	☒ 80

3. Time spent developing well 55 min.

4. Depth of well (from top of well casisng) 45.6 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 9.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 37.59 ft.	37.54 ft.
Date	b. 07/09/2018 (m m d d y y y y)	07/09/2018
Time	c. 14:45 ☐ a.m. ☒ p.m.	15:40 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Red brown opaque	Clear ☐ 20 Turbid ☐ 25 (Describe) light red brown slight turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
Lost 3" watera valve to bottom of well

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Peter
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL 11 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20541 Long. -89.47460 or	Wis. Unique Well No.: VQ814 / DNR Well ID No.: ___
Facility ID: WID = 70002290	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/09/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1150.65 ft. MSL

B. Well casing, top elevation 1150.52 ft. MSL

C. Land surface elevation 1148.29 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1101.12 ft. MSL or ____ ft.

H. Screen joint, top 1099.12 ft. MSL or ____ ft.

I. Well bottom 1089.12 ft. MSL or ____ ft.

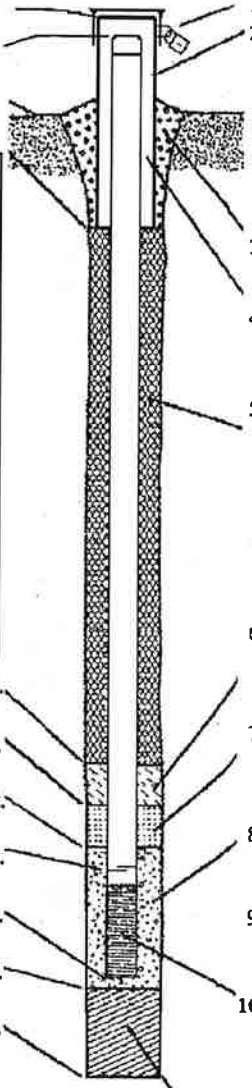
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1088.29 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

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

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. ____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael J. Parker	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL11 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ814	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other Waterra	☒	

3. Time spent developing well 50 min.

4. Depth of well (from top of well casisng) 61.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 9.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 51.94 ft.	51.95 ft.
Date	b. 07/09/2018 (m m d d y y y y)	07/09/2018
Time	c. 16:20 ☐ a.m. ☒ p.m.	17:10 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	0.2 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Red brown opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Red brown moderate turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____.__ mg/l _____.__ mg/l

15. COD _____.__ mg/l _____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL13 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20763 Long. -89.4772 ___ or	Wis. Unique Well No.: VQ815 / DNR Well ID No.: ___
Facility ID: WID= 70002791 ___	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/12/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec, ___ T, ___ N, R. ___ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number	

A. Protective pipe, top elevation 1107.25 ft. MSL

B. Well casing, top elevation 1107.09 ft. MSL

C. Land surface elevation 1104.74 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1100.39 ft. MSL or ____ ft.

H. Screen joint, top 1098.39 ft. MSL or ____ ft.

I. Well bottom 1088.39 ft. MSL or ____ ft.

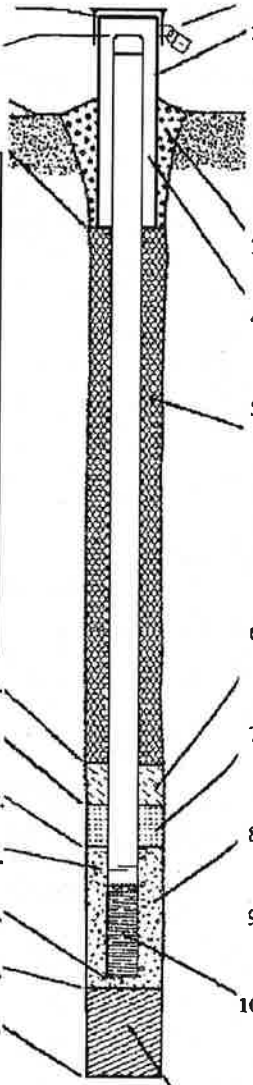
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1084.74 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Native Soil — Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ ____

4. Material between well casing and protective pipe: Sand — 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. _____ Ft^3 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. _____
b. Volume added 0 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Native Soil
b. Volume added 0 ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker — Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 13 (Sink ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ815	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 18.7 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 8.49 ft.	8.46 ft.
Date	b. 07/10/2018 (m m d d y y y y)	07/10/2018 (m m d d y y y y)
Time	c. 09:20 ☒ a.m. ☐ p.m.	10:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	6.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Light brown Slight turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: PFL 14 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20645 Long. -89.47664 or	Wis. Unique Well No.: VQ816 / DNR Well ID No.: ____
Facility ID: WID = 70007291	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/11/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____

A. Protective pipe, top elevation 1151.86 ft. MSL

B. Well casing, top elevation 1151.88 ft. MSL

C. Land surface elevation 1148.91 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 ☒ Geoprobe

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): N/A

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1102.08 ft. MSL or ____ ft.

H. Screen joint, top 1100.08 ft. MSL or ____ ft.

I. Well bottom 1090.08 ft. MSL or ____ ft.

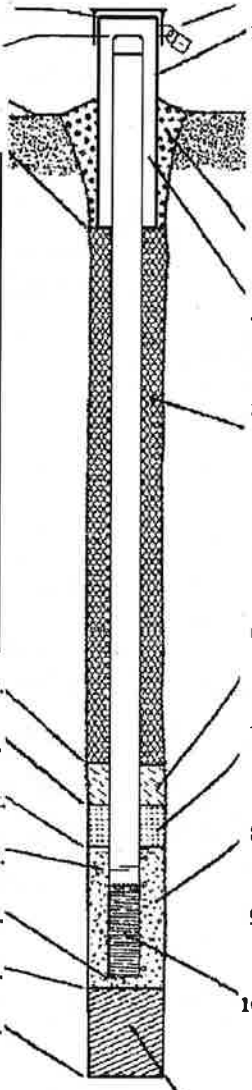
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1088.91 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

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

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

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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Redflint #40
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael J. Parsen Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 14 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	YQ816	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 61.8 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 53.45 ft.	53.48 ft.
Date	b. 07/11/2018 (m m d d y y y y)	07/11/2018 (m m d d y y y y)
Time	c. 09:20 ☒ a.m. ☐ p.m.	09:50 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	4.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Brown Moderate turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: PFL 15 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat.: 44.20902 Long.: -89.47022	Wis. Unique Well No.: VQ840 / DNR Well ID No.: ___
Facility ID: WID = 70002318	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 06/20/2019 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, OnSite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____

A. Protective pipe, top elevation 1118.58 ft. MSL

B. Well casing, top elevation 1118.35 ft. MSL

C. Land surface elevation 1118.58 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 ☒ Geoprobe

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): N/A

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 1103.75 ft. MSL or ____ ft.

H. Screen joint, top 1101.75 ft. MSL or ____ ft.

I. Well bottom 1091.75 ft. MSL or ____ ft.

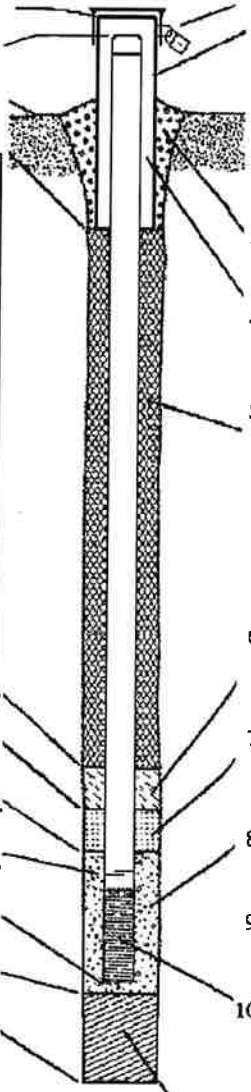
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 1090.58 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

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

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

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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☐ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Potter Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL15 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ840 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ __

3. Time spent developing well 55 min.

4. Depth of well (from top of well casisng) 26.6 ft.

5. Inside diameter of well 1.05 in.

6. Volume of water in filter pack and well casing 0.4 gal.

7. Volume of water removed from well 40. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 17.80 ft.	17.80 ft.
Date	b. 11/20/2018 (m m d d y y y y)	11/20/2018
Time	c. 14:05 ☐ a.m. ☒ p.m.	15:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	3.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☐ 25 (Describe)
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ☐ N. _____ ft. ☐ S. ☐ E. _____ ft. ☐ W.	Well Name: PFL 16 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 44.20294 Long. -89.47359	Wis. Unique Well No.: _____ DNR Well ID No.: _____
Facility ID: WID = 70002324	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 06/20/2019 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐ E ☐ W	Well Installed By: Name (first, last) and Firm: Tony Kapigi, OnSite Environmental
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____

A. Protective pipe, top elevation 1134.72 ft. MSL

B. Well casing, top elevation 1134.80 ft. MSL

C. Land surface elevation 1132.12 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
Geoprobe — 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):
N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 1106.8 ft. MSL or _____ ft.

H. Screen joint, top 1104.8 ft. MSL or _____ ft.

I. Well bottom 1094.8 ft. MSL or _____ ft.

J. Filter pack, bottom _____ ft. MSL or _____ ft.

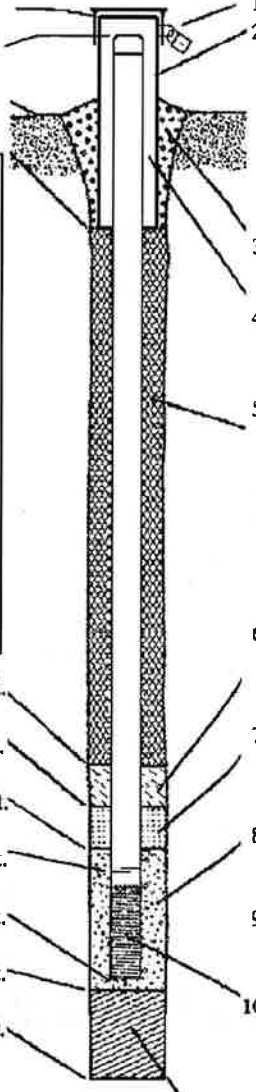
K. Borehole, bottom 1095.2 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.

PVC well pushed deeper than borehole



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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:
Sand — 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ _____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 16 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ845 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well ___30___ min.

4. Depth of well (from top of well casisng) _392.3_ ft.

5. Inside diameter of well ___1.0___ in.

6. Volume of water in filter pack and well casing ___29.___ gal.

7. Volume of water removed from well ___20.___ gal.

8. Volume of water added (if any) ___---___ gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 32.27 ft.	32.29 ft.
Date	b. 07/17/2019 (m m d d y y y y)	07/19/2019 (m m d d y y y y)
Time	c. 13:00 ☐ a.m. ☒ p.m.	13:30 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	___.___ inches	___.___ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	dark brown Sandy	light brown to opaque

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.___ mg/l	_____.___ mg/l
15. COD	_____.___ mg/l	_____.___ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

PFL Bot. well after development = 40.0 below Top PVC

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study '17	Local Grid Location of Well: ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.	Well Name: PFL 17 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat.: 44.20147 Long.: -89.46886	Wis. Unique Well No.: _____ DNR Well ID No.: _____
Facility ID: WID = 70002325	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 06/20/2019 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐ E ☐ W	Well Installed By: Name (first, last) and Firm: Tony Kapigi, OnSite Environmental
Distance from Waste/Source ____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: ____

A. Protective pipe, top elevation 1126.83 ft. MSL
B. Well casing, top elevation 1126.59 ft. MSL
C. Land surface elevation 1123.92 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

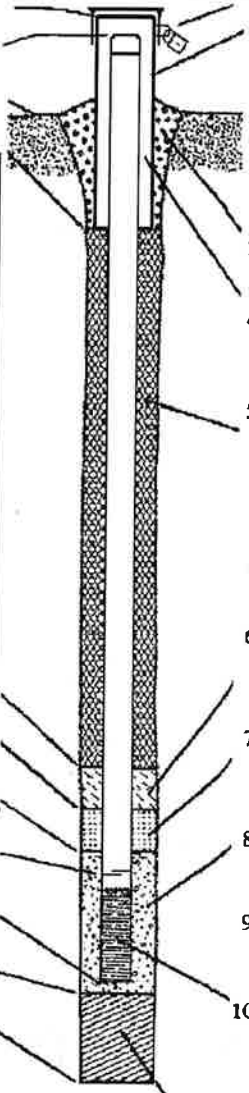
14. Drilling method used: Rotary ☐ 50 Hollow Stem Auger ☐ 41 Other ☒
Geoprobe

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):
N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1105.69 ft. MSL or _____ ft.
H. Screen joint, top 1103.69 ft. MSL or _____ ft.
I. Well bottom 1093.69 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1091.92 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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: Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 17 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ846 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 32.54 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 2.9 gal.

7. Volume of water removed from well 30. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 24.62 ft.	24.62 ft.
Date	b. 06/21/2019 (m m d d y y y y)	06/21/2019 (m m d d y y y y)
Time	c. 10:45 ☒ a.m. ☐ p.m.	11:15 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	4.3 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe) light brown	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

Bot well after development = 32.90' below Top PVC

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PFL 18 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat.: 44. 19948 Long.: -89. 46871	Wis. Unique Well No.: _____ DNR Well ID No.: _____
Facility ID: WID = 70002326	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 06/20/2019 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, On Site Environmental
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number: _____

A. Protective pipe, top elevation 1119.13 ft. MSL

B. Well casing, top elevation 1119.34 ft. MSL

C. Land surface elevation 1116.50 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
Geoprobe 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):
N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 1105.54 ft. MSL or _____ ft.

H. Screen joint, top 1103.54 ft. MSL or _____ ft.

I. Well bottom 1093.54 ft. MSL or _____ ft.

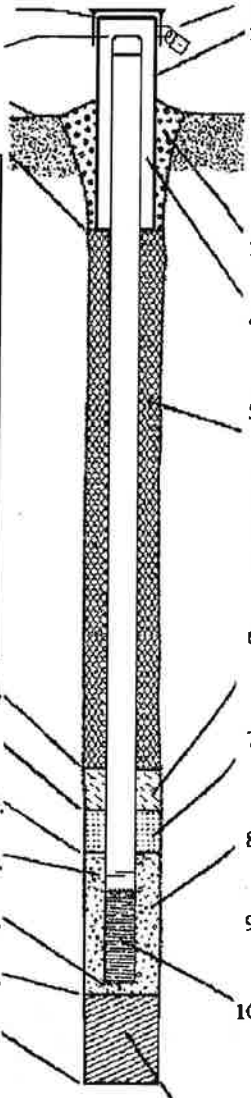
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 1091.50 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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:
Sand 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 18 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ847 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ __

3. Time spent developing well 34 min.

4. Depth of well (from top of well casisng) 25.3 ft.

5. Inside diameter of well 1.__ in.

6. Volume of water in filter pack and well casing 30.__ gal.

7. Volume of water removed from well 34.__ gal.

8. Volume of water added (if any) ___.__ gal.

9. Source of water added N/A

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 17.69 ft.	17.70 ft.
Date	b. 06/21/2019 (m m d d y y y y)	06/21/2019
Time	c. 9:32 ☒ a.m. ☐ p.m.	10:06 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	5.3 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☐ 15 (Describe) light brown fine Sand	Clear ☒ 20 Turbid ☐ 25 (Describe) clear
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

well depth after development 25.81 below top PVC

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

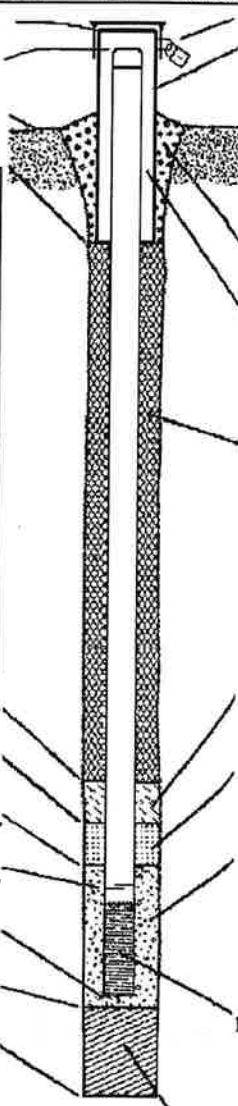
Route to: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

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

Facility/Project Name: Central Sands Lakes Study
Facility License, Permit or Monitoring No.: WGNHS
Facility ID: WID = 70002327
Type of Well — Well Code: 11 / MW
Distance from Waste/Source: _____ ft. Enf. Stds. Apply ☐

Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.
Local Grid Origin ☐ (estimated: ☐) or Well Location ☒
Lat.: 44.20332 Long.: -89.46944
St. Plane _____ ft. N, _____ ft. E. S/C/N
Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W
Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
Gov. Lot Number: _____

Well Name: PFL 19 (Site ID)
Wis. Unique Well No.: _____ DNR Well ID No.: _____
Date Well Installed: 06/20/2019 (m m d d y y y y)
Well Installed By: Name (first, last) and Firm: Tony Kapigi, OnSite Environmental



A. Protective pipe, top elevation 1117.30 ft. MSL
B. Well casing, top elevation 1117.45 ft. MSL
C. Land surface elevation 1114.90 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 ☒ Geoprobe

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): N/A

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 1106.55 ft. MSL or _____ ft.
H. Screen joint, top 1104.55 ft. MSL or _____ ft.
I. Well bottom 1094.55 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 1094.90 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in. PVC well pushed
N. I.D. well casing 1.0 in. deeper than borehole

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 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 ☒ Sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ _____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PFL 19 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	WQ 848 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other Waterra	☒ ___

3. Time spent developing well 20 min.

4. Depth of well (from top of well casisng) 22.6 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 2.7 gal.

7. Volume of water removed from well 24. gal.

8. Volume of water added (if any) ___ gal.

9. Source of water added N/A

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.3 ft.	15.3 ft.
Date	b. 06/21/2019 (m m d d y y y y)	06/21/2019
Time	c. 8:23 ☒ a.m. ☐ p.m.	8:43 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	2.8 inches	___ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) light brown	Clear ☐ 20 Turbid ☒ 25 (Describe) clear / opaque

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____. mg/l	____. mg/l
15. COD	____. mg/l	____. mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Mike Last Name: Parsen
Firm: WGNHS

17. Additional comments on development:

well depth after development 22.9 below top PVC

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael J. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

PFL20

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	

Latitude / Longitude (see instructions)	Format Code	Method Code
44.20488 N -89.46800 W	☒ DD ☐ DDM	☒ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Exploratory Boring	

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID = 70002328 Site ID = PFL20

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe bore hole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
47	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	20

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☒ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Slurry	Surface	47		

6. Comments

Borehole was abandoned and Sealed

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapugi Ouite Environmental		6/19/2019

Street or Route	Telephone Number
	( )

City	State	ZIP Code	Signature of Person Doing Work	Date Signed

DNR Use Only

Date Received	Noted By

Comments

PFL21

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	

Latitude / Longitude (see instructions)	Format Code	Method Code
44. 20453 N -89. 46874 W	☒ DD ☐ DDM	☒ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Exploratory Boring	

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID = 70002329 Site ID = PFL21

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe bore hole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
75	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☒ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Slurry	Surface	75		

6. Comments

Borehole was abandoned and sealed

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapugi Ouite Environmental		6/ /2019

Street or Route	Telephone Number
	( )

City	State	ZIP Code	Signature of Person Doing Work	Date Signed

DNR Use Only

Date Received	Noted By

Comments

PFL22

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	

Latitude / Longitude (see instructions)	Format Code	Method Code
44. 20494 N -89. 46688 W	☒ DDD ☐ DDM	☒ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town	Well ZIP Code

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Exploratory Boring	

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study

Facility ID (FID or PWS): WGNHS

License/Permit/Monitoring #: WID = 70002330 Site ID = PFL22

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy):

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe bore hole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
10	N/A

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.4	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☒ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite Slurry			
Surface	10		

6. Comments

Borehole was abandoned and sealed

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapugi Ouik Environmental		6/1/2019

Street or Route	Telephone Number	City	State	ZIP Code
	( )			

Signature of Person Doing Work

Date Signed

DNR Use Only

Date Received	Noted By

Comments

Pleasant Lake Geoprobe Well & Boring Forms

- Monitoring Well Construction (4400-113A)

- Monitoring Well Development (4400-113B)

- Borehole Abandonment (3300-05)

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: BNT01 (Site ID)
Facility License, Permit or Monitoring No.: WBNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98449 Long. -89.55848 or	Wis. Unique Well No.: YQ827 DNR Well ID No.: ___
Facility ID: WID = 70002304	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/25/2018 (m m d d y y y y)
Type of Well: Well Code 11 / NMW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1000.25 ft. MSL

B. Well casing, top elevation 1000.09 ft. MSL

C. Land surface elevation 997.30 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 986.69 ft. MSL or _____ ft.

H. Screen joint, top 984.69 ft. MSL or _____ ft.

I. Well bottom 974.69 ft. MSL or _____ ft.

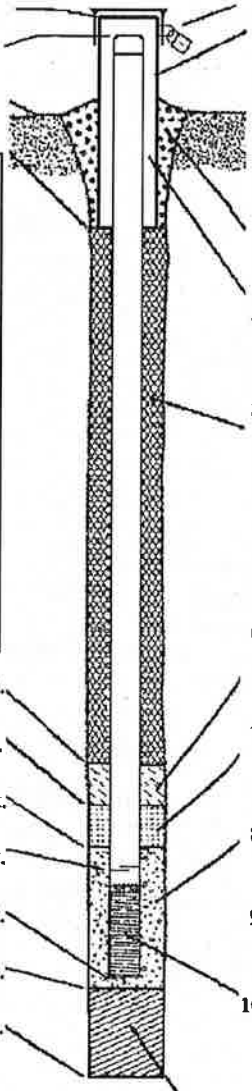
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 972.30 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ___
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☒ ___
#40 Sand

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. _____ Ft^3 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. ?
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ___
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T. Parker	WBNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT 01 (Site 11)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	70	VQ827	___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 25.4 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 20.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 17.38 ft.	17.41 ft.
Date	b. 07/25/2018 (m m d d y y y y)	07/25/2018
Time	c. 15:20 ☐ a.m. ☒ p.m.	16:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Opaque Brown	Brown Moderate Turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 25.3 pre-development

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ☐ N. ____ ft. ☐ S. ☐ E. ____ ft. ☐ W.	Well Name: PSNT 03 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98230 Long. -89.54688 or	Wis. Unique Well No.: VQ828 / DNR Well ID No.: ____
Facility ID: WID = 70002305	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/17/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐ E ☐ W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, OnSite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: ____

A. Protective pipe, top elevation 996.46 ft. MSL
B. Well casing, top elevation 996.35 ft. MSL
C. Land surface elevation 993.84 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 ☒ Geoprobe

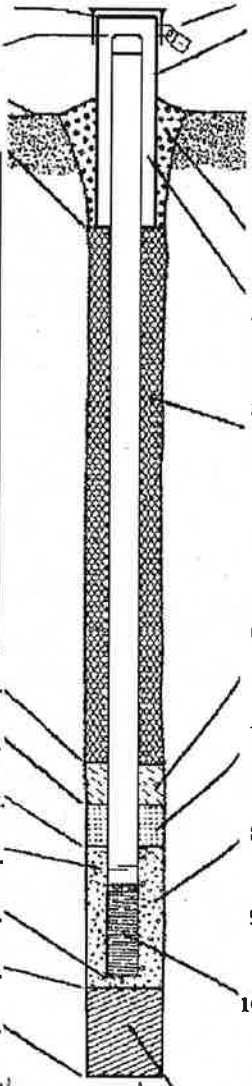
15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 980.75 ft. MSL or ____ ft.
H. Screen joint, top 978.75 ft. MSL or ____ ft.
I. Well bottom 968.75 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 968.84 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.

PVC well pushed deeper than borehole



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04; Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Native Soil
Bentonite ☐ 30; Concrete ☐ 01; Other ☒ ____
4. Material between well casing and protective pipe: #40
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. ____ Ft^3 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. ____
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T Parker Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT-03 (Sit ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	WA828	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☒ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well 35 min.

4. Depth of well (from top of well casisng) 27.6 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 150.0 gal.

8. Volume of water added (if any) 0.9 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 19.16 ft.	19.15 ft.
Date	b. 07/17/2018 (m m d d y y y y)	07/17/2018 (m m d d y y y y)
Time	c. 15:45 ☐ a.m. ☒ p.m.	16:20 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	7.9 inches	0.9 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Opaque Brown	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB 27.05 pre-development

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Mike Last Name: Parker
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parker
Print Name: Mike Parker
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

PSNT 04

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Waushara	N/A	N/A

Latitude / Longitude (see instructions): 43.98784 N, -89.55634 W
Format Code: ☑ DD ☐ DDM
Method Code: ☑ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address

Well City, Village or Town | Well ZIP Code

Subdivision Name | Lot #

Reason for Removal from Service: Boring hit refusal
WI Unique Well # of Replacement Well:

2. Facility / Owner Information

Facility Name: Central Sands Lakes Study
Facility ID (FID or PWS): WGNHS
License/Permit/Monitoring #: WID = 70002306 ; SITE ID PSNT04
Original Well Owner
Present Well Owner
Mailing Address of Present Owner
City of Present Owner | State | ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 7/17/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe borehole

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
32'	N/A
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.4"	N/A

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	N/A

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☐ N/A
Liner(s) perforated?	☐ Yes	☐ No	☐ N/A
Screen removed?	☐ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	32		

6. Comments

Borehole was abandoned and sealed

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Tony Kapuzi OnSite Environmental		7/17/2018

Street or Route | Telephone Number ( )

City | State | ZIP Code | Signature of Person Doing Work | Date Signed

DNR Use Only
Date Received | Noted By
Comments

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N ☐S _____ ft. ☐E ☐W	Well Name: PSNT05 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98672 Long. -89.54539 or	Wis. Unique Well No.: VQ829 / DNR Well ID No.: ___
Facility ID: WID = 70002307	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/17/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec, _____ T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1023.39 ft. MSL
B. Well casing, top elevation 1023.33 ft. MSL
C. Land surface elevation 1021.03 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 ☒ Geoprobe

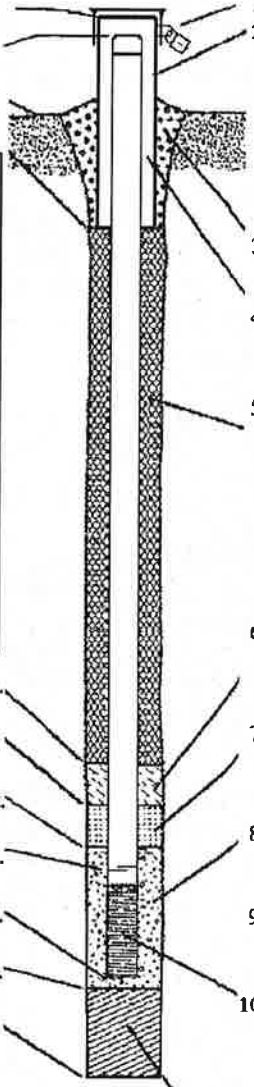
15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

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

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 981.03 ft. MSL or ____ ft.
H. Screen joint, top 979.03 ft. MSL or ____ ft.
I. Well bottom 969.03 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 966.03 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ Sand #40
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael G. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT05 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	70	VQ829	---

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ---

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 54.3 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 47.51 ft.	47.52 ft.
Date	b. 07/17/2018 (m m / d d / y y y y)	07/17/2018
Time	c. 14:20 ☐ a.m. ☒ p.m.	15:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	5.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Brown Slight turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 53.9

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street:
City/State/Zip:

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PSNT 06 (Site 11)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98108 Long. -89.54892 or	Wis. Unique Well No.: VQ830 / DNR Well ID No.: ___
Facility ID: WID=39000214	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/17/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Craig Kapuga, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1002.20 ft. MSL
B. Well casing, top elevation 1002.23 ft. MSL
C. Land surface elevation 999.77 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

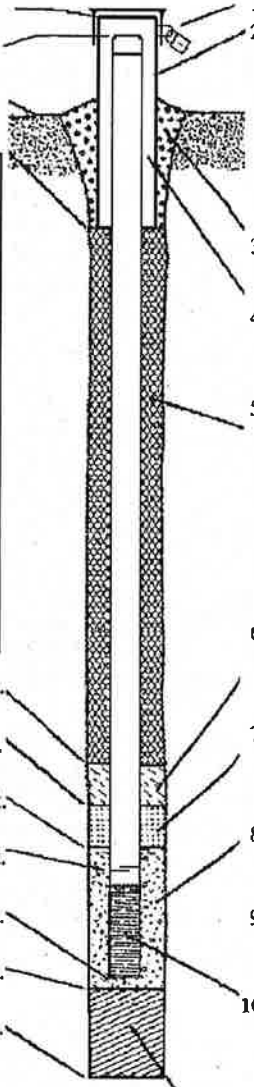
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 984.13 ft. MSL or ____ ft.
H. Screen joint, top 982.13 ft. MSL or ____ ft.
I. Well bottom 972.13 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 969.77 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 2 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ ____
Native Soil
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ ____
#40 sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #40
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T Parker	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	MARQUETTE	PSNT06 (Site ID)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	39	VQ839	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 30.1 ft.

5. Inside diameter of well 1.9 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 18.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 22.96 ft.	23.01 ft.
Date	b. 07/18/2018 (m m d d y y y y)	07/18/2018 (m m d d y y y y)
Time	c. 09:20 ☒ a.m. ☐ p.m.	10:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	12.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown Mod. Turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 29.0

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PSNT07 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98207 Long. -89.55164 ___ or	Wis. Unique Well No.: VQ831 / DNR Well ID No.: ___
Facility ID: WID = 390000215	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/18/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N, R. ___ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 1013.62 ft. MSL

B. Well casing, top elevation 1013.64 ft. MSL

C. Land surface elevation 1010.24 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 982.44 ft. MSL or _____ ft.

H. Screen joint, top 980.44 ft. MSL or _____ ft.

I. Well bottom 970.44 ft. MSL or _____ ft.

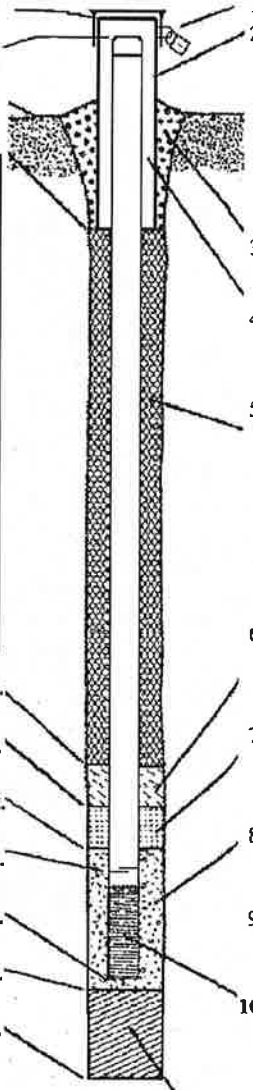
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 970.24 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 5 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Native Soil — Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒

4. Material between well casing and protective pipe: #40 Sand — 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. #40 Red Flint Sand
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker — Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	MARQUETTE	PSNT 07 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	39	VQ831	---

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ---

3. Time spent developing well 49 min.

4. Depth of well (from top of well casisng) 43.2 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 8.9 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 34.20 ft.	34.35 ft.
Date	b. 07/18/2018 (m m d d y y y y)	07/18/2018
Time	c. 11:00 ☒ a.m. ☐ p.m.	11:40 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	9.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown Mod. Turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids _____.__ mg/l _____.__ mg/l

15. COD _____.__ mg/l _____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 42.0

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael F. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PSNT-08 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98042 Long. -89.55430 ___ or	Wis. Unique Well No.: VQ832 / DNR Well ID No.: ____
Facility ID: WID = 39000216	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/26/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Tony Kapugi, Onsite Environmental
Distance from Waste/Source: _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 990.19 ft. MSL
B. Well casing, top elevation 990.14 ft. MSL
C. Land surface elevation 987.96 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

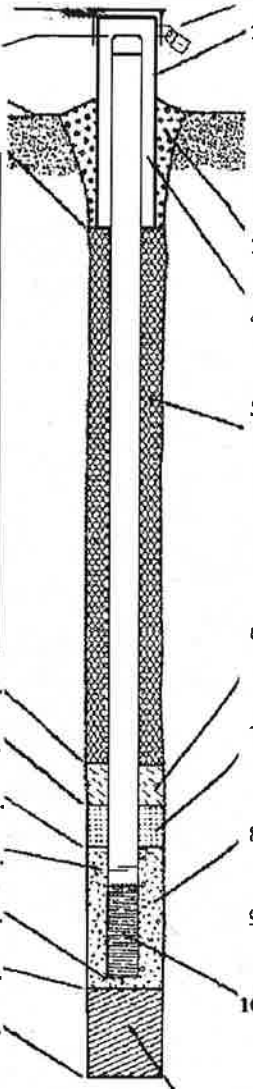
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 982.14 ft. MSL or _____ ft.
H. Screen joint, top 980.14 ft. MSL or _____ ft.
I. Well bottom 970.14 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 967.96 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ Native
4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ #40 sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #40
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Mono Flex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	MARQUETTE	PSNT 08 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	39	VQ832	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well _____ min.

4. Depth of well (from top of well casisng) 20.9 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 11.55 ft.	11.52 ft.
Date	b. 07/26/2018 (m m d d y y y y)	07/26/2018 (m m d d y y y y)
Time	c. 10:00 ☒ a.m. ☐ p.m.	10:35 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	13.0 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Opaque Brown	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 18.9

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Cabal Study	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: PSNT09 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98088 Long. -89.55748 or	Wis. Unique Well No.: VQ833 / DNR Well ID No.: ___
Facility ID: WID = 39000217	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/18/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐ E ☐ W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1010.23 ft. MSL

B. Well casing, top elevation 1010.13 ft. MSL

C. Land surface elevation 1007.47 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 983.83 ft. MSL or ____ ft.

H. Screen joint, top 981.83 ft. MSL or ____ ft.

I. Well bottom 971.83 ft. MSL or ____ ft.

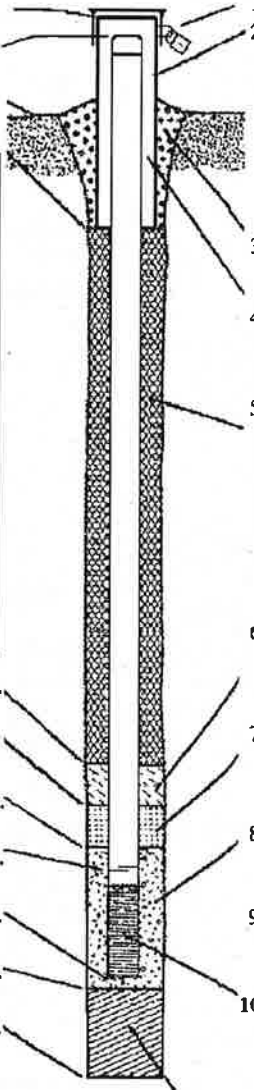
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 967.47 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☐ Yes ☒ No

2. Protective cover pipe:
a. Inside diameter: 5 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Native Soil — Bentonite ☐ 30 / Concrete ☐ 01 / Other ☒ ____

4. Material between well casing and protective pipe: Sand #40 — 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. ____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ____
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker — Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	MARQUETTE	PSNT 09 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	39	VQ833 / ___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☒ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 38.3 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 29.95 ft.	29.93 ft.
Date	b. 07/18/2018 (m m d d y y y y)	07/18/2018
Time	c. 11:45 ☒ a.m. ☐ p.m.	12:15 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	4.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Opaque Brown	Clear ☐ 20 Turbid ☒ 25 (Describe) Brown Mod. Turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael P Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Cates Study	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: PSNT 10 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98499 Long. -89.54472 or	Wis. Unique Well No.: VQ834 DNR Well ID No.: ____
Facility ID: WID = 70002308	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/25/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____ T. ____ N. R. ____ ☐ E ☐ W	Well Installed By: Name (first, last) and Firm: Grage Kapugi Onsite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: ____	

A. Protective pipe, top elevation 1025.65 ft. MSL

B. Well casing, top elevation 1025.70 ft. MSL

C. Land surface elevation 1023.13 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top 981.50 ft. MSL or ____ ft.

H. Screen joint, top 979.50 ft. MSL or ____ ft.

I. Well bottom 969.50 ft. MSL or ____ ft.

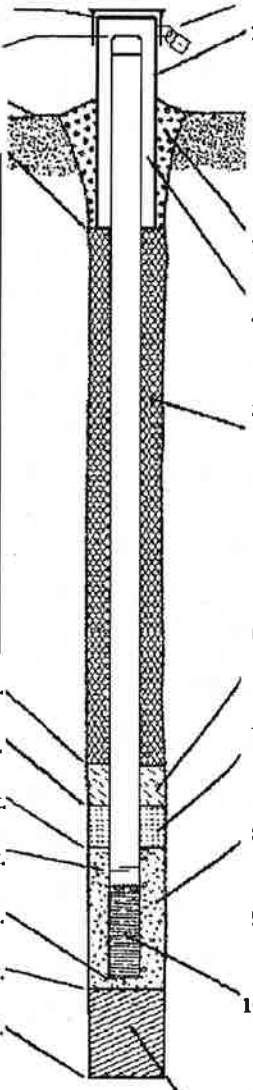
J. Filter pack, bottom ____ ft. MSL or ____ ft.

K. Borehole, bottom 968.13 ft. MSL or ____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ ____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

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

4. Material between well casing and protective pipe: Sand
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. ____ Ft^3 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. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. #140 / Native
b. Volume added ____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael T. Parker	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT10 (Site ID
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ834 / ___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 56.2 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.2 gal.

7. Volume of water removed from well 100.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 50.21 ft.	50.19 ft.
Date	b. 07/25/2018 (m m d d y y y y)	07/25/2018 (m m d d y y y y)
Time	c. 9:00 ☒ a.m. ☐ p.m.	9:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	1.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	Brown Opaque	Brown Slight turbidity

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 56.1
stick up 2.31

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N ☐S _____ ft. ☐E ☐W	Well Name: PSNT 11 (Sik 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98858 Long. -89.54900 or	Wis. Unique Well No.: VQ835 / DNR Well ID No.: ____
Facility ID: WI = 700502309	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/25/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, UNSW Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 984.13 ft. MSL
B. Well casing, top elevation 984.49 ft. MSL
C. Land surface elevation 984.13 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

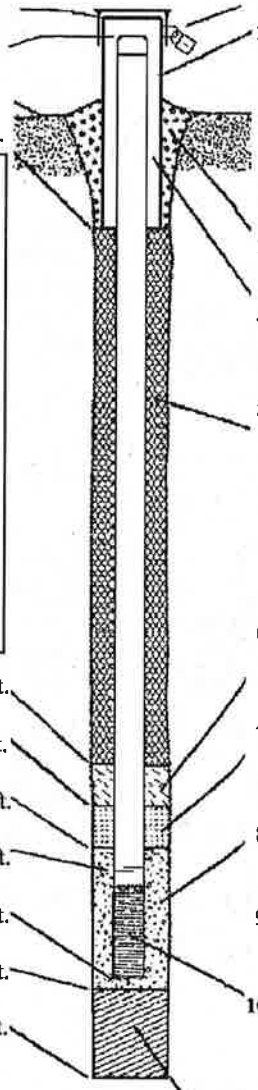
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top 984.59 ft. MSL or _____ ft.
H. Screen joint, top 982.59 ft. MSL or _____ ft.
I. Well bottom 972.59 ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom 969.13 ft. MSL or _____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe: flush mount cover
a. Inside diameter: 9 in.
b. Length: 1.5 ft.
c. Material: Flush mount — 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: Sand — 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #140
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT. 11 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	70	VQ835 / ___

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 11.9 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 15.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	3.80 ft.	3.78 ft.
Date b. (mm dd yyyy)	07/25/2018	07/25/2018
Time c.	11:00 ☒ a.m. ☐ p.m.	11:40 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	1.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Opaque Dark Gray-Brown	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids ____.__ mg/l ____.__ mg/l

15. COD ____.__ mg/l ____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 11.8

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PSNT 14 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98806 Long. -89.55237 or	Wis. Unique Well No.: VQ836 / DNR Well ID No.: ___
Facility ID: WID = 70002310	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 07/25/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: _____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Craig Kapuga, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 996.61 ft. MSL

B. Well casing, top elevation 996.67 ft. MSL

C. Land surface elevation 993.95 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 985.67 ft. MSL or _____ ft.

H. Screen joint, top 983.67 ft. MSL or _____ ft.

I. Well bottom 973.67 ft. MSL or _____ ft.

J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 973.95 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.

PVC well pushed deeper than borehole

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: _____ Steel ☒ 04 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

4. Material between well casing and protective pipe: Sand — 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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael J. Parsen | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT 1.4 (Site 10)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	79	VQ836	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 23.0 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 12.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.58 ft.	15.57 ft.
Date	b. 07/25/2018 (m m d d y y y y)	07/25/2018
Time	c. 10:10 ☒ a.m. ☐ p.m.	10:40 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	5.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Brown Opaque	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 22.6

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: PSNT 15 (Site 10)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98213 Long. -89.55947 or	Wis. Unique Well No.: VQ837 / DNR Well ID No.: ___
Facility ID: WID= 390002 18	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 02/26/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec. ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: _____	

A. Protective pipe, top elevation 1028.24 ft. MSL

B. Well casing, top elevation 1028.30 ft. MSL

C. Land surface elevation 1024.86 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 ☒ Geoprobe

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): NA

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 985.80 ft. MSL or _____ ft.

H. Screen joint, top 983.80 ft. MSL or _____ ft.

I. Well bottom 973.80 ft. MSL or _____ ft.

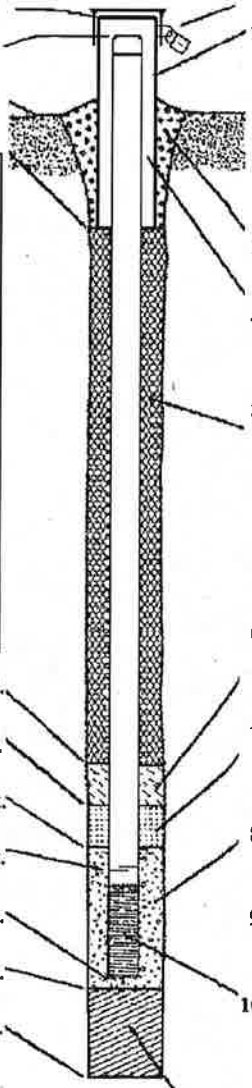
J. Filter pack, bottom _____ ft. MSL or _____ ft.

K. Borehole, bottom 972.86 ft. MSL or _____ ft.

L. Borehole, diameter 2.4 in.

M. O.D. well casing 1.2 in.

N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

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

4. Material between well casing and protective pipe: #40 sand
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. _____ Ft^3 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. _____
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added _____ ft^3

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

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Manoflex
c. Slot size: 0.010 in.
d. Slotted length: 10 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	Firm
Michael D Parker	WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	MARQUETTE	PSNT-15 (Site ID)
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	39	VQ837	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method
- surged with bailer and bailed ☐ 41
- surged with bailer and pumped ☐ 61
- surged with block and bailed ☐ 42
- surged with block and pumped ☒ 62
- surged with block, bailed and pumped ☐ 70
- compressed air ☐ 20
- bailed only ☐ 10
- pumped only ☐ 51
- pumped slowly ☐ 50
- Other _____ ☐

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 54.5 ft.

5. Inside diameter of well 1.9 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 46.23 ft.	46.24 ft.
Date	b. 07/26/2018 (m m d d y y y y)	07/26/2018
Time	c. 11:19 ☒ a.m. ☐ p.m.	11:40 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	___.__ inches	___.__ inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) gray opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) gray

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael G. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

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

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

Facility/Project Name: Central Sands Lakes Study	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: PSNT16 (Site ID)
Facility License, Permit or Monitoring No.: WGNHS	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 43.98754 Long. -89.55524 or	Wis. Unique Well No.: VQ838 / DNR Well ID No.: ____
Facility ID: WID= 70002311	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 07/25/2018 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: ____ 1/4 of ____ 1/4 of Sec, ____, T. ____ N, R. ____ ☐E ☐W	Well Installed By: Name (first, last) and Firm: Gage Kapugi, Onsite Environmental
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number: ____	

A. Protective pipe, top elevation 1009.19 ft. MSL
B. Well casing, top elevation 1008.86 ft. MSL
C. Land surface elevation 1009.19 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

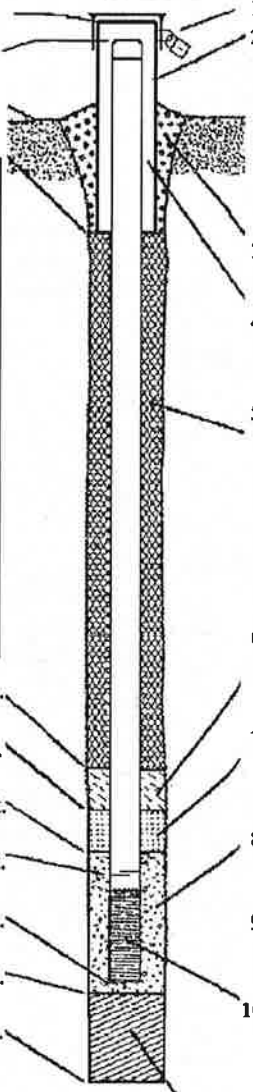
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☐ 41 / Other ☒ Geoprobe

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): NA

E. Bentonite seal, top ____ ft. MSL or ____ ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 986.56 ft. MSL or ____ ft.
H. Screen joint, top 984.56 ft. MSL or ____ ft.
I. Well bottom 974.56 ft. MSL or ____ ft.
J. Filter pack, bottom ____ ft. MSL or ____ ft.
K. Borehole, bottom 974.19 ft. MSL or ____ ft.
L. Borehole, diameter 2.4 in.
M. O.D. well casing 1.2 in.
N. I.D. well casing 1.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe: Flush mount cover
a. Inside diameter: 9 in.
b. Length: 1.5 ft.
c. Material: Flush Mount — 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: Sand — 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. ____ Ft^3 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. ____
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. #40 / Native
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐
b. Manufacturer ManoFlex
c. Slot size: 0.010 in.
d. Slotted length: 10 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: Michael T. Parker | Firm: WGNHS

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports 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 these forms 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

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

Facility/Project Name	County Name	Well Name
	Waushara	PSNT 16 (Site 10)

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	70	VQ8336	___

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☒ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 36.3 ft.

5. Inside diameter of well 1.0 in.

6. Volume of water in filter pack and well casing 0.3 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 26.28 ft.	26.29 ft.
Date	b. 07/26/2018 (m m d d y y y y)	07/26/2018
Time	c. 09:10 ☒ a.m. ☐ p.m.	09:50 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	3.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Cloudy Opaque	Clear ☐ 20 Turbid ☒ 25 (Describe) Cloudy Slight Turbidity
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Peter Last Name: Chase
Firm: WGNHS

17. Additional comments on development:
DTB pre-develop = 34.1

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Mike Last Name: Parsen
Facility/Firm: WGNHS
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Michael T. Parsen
Print Name: Mike Parsen
Firm: WGNHS

NOTE: See instructions for more information including a list of county codes and well type codes.