

Andrew Boettcher Wisconsin Department of Natural Resources Southern Region 2300 North Dr. MLK Jr Drive Milwaukee, WI 53212



ARCADIS U.S., Inc. 126 N. Jefferson Street Suite 400 Milwaukee Wisconsin 53202 Tel 414.276.7742 Fax 414.276.7603 www.arcadis-us.com

Subject: Well Aband, Fins (Per Toni) R

Request for Final Case Closure, 67th Place Industrial Park, 1960 South 67th Place, West Allis, Wisconsin BRRTS No. 02-41-184802, FID No. 241222520

Dear Mr. Boettcher:

Attached are the Well/Drillhole/Borehole Filling & Sealing forms (WDNR Form 3300-005) for five monitoring wells abandoned on June 17, 2011. All onsite monitoring wells have been abandoned.

We appreciate your assistance with this project. Should you have any questions regarding the project, please feel free to contact us at your convenience.

Sincerely,

ARCADIS U.S., Inc.

Low L. Schoer

Toni L. Schoen Hydrogeologist Date:

July 11, 2011

ENVIRONMENT

Contacts:

Toni Schoen

Phone:

414.276.7742

Email:

toni.schoen@arcadis-

us.com

Well / Drillhole / Borehole Filling & Sealing Form 3300-005 (R 4/08) Page 1 of 2

*Notice: Completion of this report is required by chs. 160, 281,283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 forteiture 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.

X Verification Only of Fill and Seal	Drinking Waste Mana	_	Watershed	d/Wastewater X Rer	mediation/Redevelopment					
1. Well Location Information		2. Facility / Owner Information								
County WI Unique Well No. Removed Well No.		Facility Name Lime Pit (former Novak)Site Common Well Name MW-9								
Lattitude / Longitude (Degrees and Minutes) Method Cod		24122520 License/Permit/Monitoring #								
or Gov't Lot # N	ange E W	Original Well								
Well Street Address		Present Well Owner City of Wort Allic								
1960 South 67th Place Well City, Village or Town Well Z	IP Code	City of West Allis Mailing Address of Present Owner								
West Allis 532		75Ž5 Greenfield Avenue								
Subdivision Name Lot #	- ; ;	West A	nt Owner .llis	Sta	te ZIP Code WI 53214					
				Casing & Sealing Mater						
Reason For Removal From Service WI Unique Well # of	Replacement Well									
Investigation Complete		Liner(s) removed?								
3. Well/Drillhole/Borehole Information		Screen removed?								
Monitoring Well Original Construction Da	te (mm/dd/yyyy)	Casing left inplace? X Yes No N/A								
Water Well If a Well Construction Rep	ort is available,	Was casing cut off below surface? X Yes No N/A								
Borehole / Drillhole please attach.		Did sealing material rise to surface? X Yes No N/A								
Construction Type:		Did material settle after 24 hours? Yes No X N/A								
X Drilled Driven (Sandpoint)	Dug	If yes, was hole retopped? If bentonite chips were used, were they								
Other (specify):		hydrated with water from a known safe source? Yes No X N/A								
Formation Type:		Required Method of Placing Sealing Material Conductor Pipe-Gravity Conductor Pipe-Pumped								
X Unconsolidated Formation Bedro	ck	X Screened & Poured (Bentonite Chips) Other (Explain):								
Total Well Depth From Groundsurface (ft.) Casing Diamet	ter (in.)	Sealing Materials								
22.53 2		Neat Cement Grout Clay-Sand Slurry (11 lb./gal.wt.)								
Lower Drillhole Diameter (in.) Casing Depth		Sand-Cement (Concrete) Grout Bentonite-Sand Slurry " "								
8.25 22.53		Concrete Sentonite Chips								
Was well annular space grouted? Yes X No	Unknown	For Monitorii	ng Wells and	Monitori <u>ng W</u> ell Borehole						
If yes, to what depth (feet)? Depth to Water (fee	t)	X Bentoni	•		Cement Grout					
7.02		Granular Bentonite Bentonite - Sand Slurry								
5. Material Used to Fill Well / Drillhole		From (ft.)	To (ft.)	No. Yards, Sacks Sea or Volume (circle on						
Holeplug 3/8" bentonite chips	**	Surface	22.53	3/4						
6. Comments		1								
11111										
7. Supervision of Work				Date Received	Noted By					
Name of Person or Firm Doing Filling & Sealing Cari Bray/ARCADIS License #	C	g & Sealing (mr 16/17/201		Comments	Noted by					
126 N. Jefferson Street, Suite 400		76-7742	~	Comments						
City State ZIP Code WI Pressteel/wi1074/limepit/graphics/logs/mw9 aban.ai		ature of Person Pari Bra	- 13		Date Signed					

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

Well / Drillhole / Borehole Filling & Sealing

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 forteiture 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. Route to: Watershed/Wastewater X Remediation/Redevelopment Verification Only of Fill and Seal Drinking Water Waste Management Other: 1. Well Location Information 2. Facility / Owner Information WI Unique Well No. Removed Well County Hicap # Facility Name Common Well Name Limé Pit (former Novak) Site MW-14 Milwaukee Facility ID (FID or PWS) Lattitude / Longitude (Degrees and Minutes) | Method Code (see instructions) 241222520 License/Permit/Monitoring # 1/4 / 1/4 Range Section Township ΠE Original Well Owner or Gov't Lot # \square W Well Street Address Present Well Owner City of West Allis 1960 South 67th Place Mailing Address of Present Owner 7525 Greenfield Avenue Well City, Village or Town Well ZIP Code West Allis 53214 City of Present Owner State ZIP Code Subdivision Name Lot # West Allis WI 53214 4. Pump, Liner, Screen, Casing & Sealing Material Reason For Removal From Service WI Unique Well # of Replacement Well No X N/A Yes Pump and piping removed? **Investigation Complete** Yes No X N/A Liner(s) removed? 3. Well/Drillhole/Borehole Information No □N/A Screen removed? Yes Original Construction Date (mm/dd/yyyy) No X Monitoring Well Casing left inplace? Unknown Water Well X Yes Nο Was casing cut off below surface? If a Well Construction Report is available, please attach. X Yes Borehole / Drillhole Did sealing material rise to surface? Yes No X Did material settle after 24 hours? Construction Type: If yes, was hole retopped? **T**Yes No 🔽 X Drilled Driven (Sandpoint) Dua If bentonite chips were used, were they hydrated with water from a known safe source? Yes No X N/A Other (specify): Required Method of Placing Sealing Material Formation Type: Conductor Pipe-Gravity Conductor Pipe-Pumped Bedrock Screened & Poured X Unconsolidated Formation Other (Explain): (Bentonite Chips) Total Well Depth From Groundsurface (ft.) Casing Diameter (in.) Sealing Materials 22.60 Clay-Sand Slurry (11 lb./gal.wt.) Neat Cement Grout Lower Drillhole Diameter (in.) Casing Depth (ft.) Bentonite-Sand Slurry " " Sand-Cement (Concrete) Grout 22.60 8.25 X Bentonite Chips Concrete X No Was well annular space grouted? Unknown ☐ Yes For Monitoring Wells and Monitoring Well Boreholes Only: Bentonite - Cement Grout If yes, to what depth (feet)? Depth to Water (feet) X Bentonite Chips Bentonite - Sand Slurry **Granular Bentonite** 10.28 No. Yards, Sacks Sealant Mix Ratio or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) **Mud Weight** or Volume (circle one) 22.60 Holeplua 3/8" bentonite chips Surface 6. Comments **DNR Use Only** 7. Supervision of Work Date Received Noted By Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing (mm/dd/yyyy) License # Cari Bray/ARCADIS 06/17/2011 Comments Street or Route Telephone Number 126 N. Jefferson Street, Suite 400 414-276-7742 City State ZIP Code Signature of Person Doing Work Date Signed

Cari Bray

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Milwaukee

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

Well / Drillhole / Borehole Filling & Sealing

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 forteiture 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. Route to: Watershed/Wastewater X Remediation/Redevelopment **Verification Only of Fill and Seal Drinking Water** Waste Management Other: 1. Well Location Information 2. Facility / Owner Information WI Unique Well No. Removed Well County Hicap# Facility Name Common Well Name Limé Pit (former Novak) Site MW-3 Milwaukee Facility ID (FID or PWS) Lattitude / Longitude (Degrees and Minutes) Method Code (see instructions) 241222520 License/Permit/Monitoring # 1/4 / 1/4 Range Section Township ПΕ Original Well Owner or Gov't Lot # \square W Ν Well Street Address Present Well Owner City of West Allis 1960 South 67th Place Mailing Address of Present Owner 7525 Greenfield Avenue Well City, Village or Town Well ZIP Code West Allis 53214 City of Present Owner State 7IP Code **Subdivision Name** Lot# West Allis WI 53214 4. Pump, Liner, Screen, Casing & Sealing Material Reason For Removal From Service WI Unique Well # of Replacement Well No X N/A Pump and piping removed? **Investigation Complete** Yes No X N/A Liner(s) removed? 3. Well/Drillhole/Borehole Information Yes X No Screen removed? Original Construction Date (mm/dd/yyyy) Monitoring Well No Casing left inplace? Unknown Water Well X Yes No Was casing cut off below surface? If a Well Construction Report is available, please attach. X Yes Borehole / Drillhole l No l Did sealing material rise to surface? No X Did material settle after 24 hours? Construction Type: Yes No X N/A If yes, was hole retopped? X Drilled Driven (Sandpoint) Dug If bentonite chips were used, were they hydrated with water from a known safe source? Yes No X N/A Other (specify): Required Method of Placing Sealing Material Formation Type: Conductor Pipe-Gravity Conductor Pipe-Pumped Bedrock X Screened & Poured X Unconsolidated Formation Other (Explain): (Bentonite Chips) Total Well Depth From Groundsurface (ft.) Casing Diameter (in.) Sealing Materials Clay-Sand Slurry (11 lb./gal.wt.) 22.86 Neat Cement Grout Casing Depth (ft.) Lower Drillhole Diameter (in.) Bentonite-Sand Slurry " " Sand-Cement (Concrete) Grout 8.25 22.86 X Bentonite Chips Concrete ⊠ No Was well annular space grouted? Yes Unknown For Monitoring Wells and Monitoring Well Boreholes Only: Depth to Water (feet) Bentonite - Cement Grout If yes, to what depth (feet)? X Bentonite Chips Bentonite - Sand Slurry **Granular Bentonite** 7.29 No. Yards, Sacks Sealant Mix Ratio or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) or Volume (circle one) Mud Weight 22.86 Holeplua 3/8" bentonite chips Surface 6. Comments DNR Use Only 7. Supervision of Work Date Received Noted By Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing (mm/dd/yyyy) License # Cari Bray/ARCADIS 06/17/2011 Comments Telephone Number Street or Route 126 N. Jefferson Street, Suite 400 414-276-7742 Date Signed City State ZIP Code

Cavi Bray

Milwaukee

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

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08) Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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 forteiture 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. Route to: Watershed/Wastewater **Drinking Water** X Remediation/Redevelopment Verification Only of Fill and Seal Waste Management Other: 1. Well Location Information 2. Facility / Owner Information WI Unique Well No. Removed Well Hicap# Facility Name Common Well Name County Lime Pit (former Novak) Site MW-11R Milwaukee Facility ID (FID or PWS) Lattitude / Longitude (Degrees and Minutes) Method Code (see instructions) 241222520 License/Permit/Monitoring # 1/4 / 1/4 Range Section Township □ E Original Well Owner or Goy't Lot # \square w Well Street Address Present Well Owner City of West Allis 1960 South 67th Place Mailing Address of Present Owner 7525 Greenfield Avenue Well ZIP Code Well City, Village or Town West Allis 53214 City of Present Owner State ZIP Code Subdivision Name Lot# West Allis 53214 4. Pump, Liner, Screen, Casing & Sealing Material Reason For Removal From Service WI Unique Well # of Replacement Well Yes No X N/A Pump and piping removed? **Investigation Complete** Yes No X N/A Liner(s) removed? 3. Well/Drillhole/Borehole Information Yes X No Screen removed? Original Construction Date (mm/dd/yyyy) X Monitoring Well No Casing left inplace? Unknown Water Well X Yes Was casing cut off below surface? If a Well Construction Report is available, please attach. Borehole / Drillhole X Yes Did sealing material rise to surface? Did material settle after 24 hours? Yes No X Construction Type: If yes, was hole retopped? X Drilled Driven (Sandpoint) Dua If bentonite chips were used, were they hydrated with water from a known safe source? Yes No X N/A Other (specify): Required Method of Placing Sealing Material Formation Type: Conductor Pipe-Gravity Conductor Pipe-Pumped X Screened & Poured Bedrock X Unconsolidated Formation Other (Explain):_ (Bentonite Chips) Total Well Depth From Groundsurface (ft.) Casing Diameter (in.) Sealing Materials 19.98 Clay-Sand Slurry (11 lb./gal.wt.) Neat Cement Grout Lower Drillhole Diameter (in.) Casing Depth (ft.) Bentonite-Sand Slurry " Sand-Cement (Concrete) Grout 8.25 19.98 X Bentonite Chips Concrete ☐ Yes X No Was well annular space grouted? Unknown For Monitoring Wells and Monitoring Well Boreholes Only: Bentonite - Cement Grout If yes, to what depth (feet)? Depth to Water (feet) X Bentonite Chips Bentonite - Sand Slurry **Granular Bentonite** 8.89 No. Yards, Sacks Sealant Mix Ratio or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) Mud Weight or Volume (circle one) 19.98 Holeplua 3/8" bentonite chips 3/4 Surface 6. Comments **DNR Use Only** 7. Supervision of Work Date Received Noted By Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing (mm/dd/yyyy) License # Cari Bray/ARCADIS 06/17/2011 Comments Street or Route Telephone Number

Street or Route
126 N. Jefferson Street, Suite 400
City
Milwaukee

Telephone Number
414-276-7742
Signature of Person Doing Work
Milwaukee

WI
53202

Comments

Date Signed

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

Well / Drillhole / Borehole Filling & Sealing Form 3300-005 (R 4/08)

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X Verification Only of Fill and Seal Route to: Drinking V Waste Mar						Ro	7											
						-									opment			
1. Well Location Information								2. Facility / Owner Information										
County WI Unique Well No. Removed Well Will No. Removed Well								Facility Name Lime Pit (former Novak) Site Common Well Name MW-8R										
Lattitude / Longitude (Degrees and Minutes) Method Code (see instructions)							Facility ID (FID or PWS) 241222520											
							License/Permit/Monitoring #											
1/4 / 1/4	1/4	Section Township Range							-									
or Gov't Lot #	Section Township hange E								Original Well Owner									
Well Street Address								Present Well Owner										
1960 South 67th Place							City of West Allis											
Well City, Village or Town Well ZIP Code							Mailing Address of Present Owner 7525 Greenfield Avenue											
West Allis 53214								City of Pres	ent	t Owner			Sta		ZIP Code			
Subdivision Name Lot #								West			Caci	ng & Sealin	a Mate	WI]	5321	. 4		
Passan For Re	moval Fro	m San	vice	T 14/1 1 2	nique M	Voll # o	f Ponla	acomont!	Mali	-					y Mate	$\overline{}$. Dw	□
Reason For Removal From Service WI Unique Well # of Replacement Well							Tampana piping removed:											
Investigation Complete — — — — — — — — — — — — — — — — — —							Liner(s) removed?											
Original Construction Data (mm/dd/sana)							Screen removed? Yes No N/A											
Monitoring well Inknown							Casing left inplace?											
Water Well If a Well Construction Report is available						le,	Was casing cut off below surface? X Yes No N/A											
Borehole / Drillhole please attach.							Did sealing material rise to surface?											
Construction Type:						Did material settle after 24 hours? Yes No X N/A												
X Drilled Driven (Sandpoint) Dug						If yes, was hole retopped? Yes No X N/A If bentonite chips were used, were they												
Other (specify):						hydrated with water from a known safe source? Yes No X N/A												
Formation Type:							Required Method of Placing Sealing Material Conductor Pipe-Gravity Conductor Pipe-Pumped											
■ Bedrock							X Screened & Poured (Bentonite Chips) Other (Explain):											
Total Well Depth From Groundsurface (ft.) Casing Diameter (in.)							Sealing Materials											
13.30 2 Lower Drillhole Diameter (in.) Casing Depth (ft.)								☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)										
8.25 Casing Depth (it.) 8.30							Sand-Cement (Concrete) Grout Bentonite-Sand Slurry" " X Bentonite Chips											
							OWID	Concrete XIBENTONITE Chips For Monitoring Wells and Monitoring Well Boreholes Only:										
If yes, to what depth (feet)? Depth to Water (feet)							-	For Monitoring Wells and Monitoring Well Boreholes Only:										
7.06					c.,			Granular Bentonite Bentonite - Sand Slurry										
5. Material Used to Fill Well / Drillhole							From (ft.)		To (ft.)		lo. Yards, Sa r Volume (c			Mix Rat Mud We				
Holeplug 3/8" bentonite chips							Surface		13.30		1/2							
											Ļ		_					
6. Comments								<u> </u>			<u> </u>	2						
0. Comment	.3	<u> </u>										When Water		<u> </u>				
											I		11)				
7. Supervision of Work Name of Person or Firm Doing Filling & Sealing License # Date of Filling						g & Sealing (n	nm/	(dd/\\\\\\		Date Rece		Use C	oted By					
Name of Person or Firm Doing Filling & Sealing License # Date o					Date Of)6/17/201		au, yyyyj									
Street or Route Telephone N										Comments								
City State ZIP Code Signa							n D	oing Work	3				signed					
City State ZIP Code Signature of Person Doing Works Date Signed Milwaukee WI 53202 Corr Braj 1/11/11																		