

Saari, Christopher A - DNR

From: Gozdziwski, John F
Sent: Thursday, July 27, 2006 7:39 AM
To: Saari, Christopher A.
Cc: Robinson, John H.
Subject: RE: Meeting With C.M. Christiansen Company

Thanks Chris... appreciate the summary.... sounds like the meeting went very well! Will be sharing this with the Secretary as an FYI. Take care....

From: Saari, Christopher A.
Sent: Tuesday, July 25, 2006 8:25 AM
To: Gozdziwski, John F
Cc: Robinson, John H.
Subject: Meeting With C.M. Christiansen Company

Hi John:

As you requested on Thursday, here's a brief summary of our Friday meeting with the company:

Department staff (John Robinson, Chris Saari and Tom Janisch, Remediation & Redevelopment Program, and Jim Killian, Watershed Management Program) met with Eric Christiansen of the C.M. Christiansen Co., Inc., and Christiansen's environmental consultants on July 21 in Rhinelander. The meeting focused on re-starting the sediment investigation on Military Creek, adjacent to the former C.M. Christiansen Co. Pole Yard site in Phelps, Vilas County. The company treated wooden power poles at the site with a solution of fuel oil and pentachlorophenol (PCP) until 1981. The stretch of the creek adjacent to the site is a Class I trout stream, and this stream flows into North Twin Lake, which is classified as an Outstanding Resource Water. Previous investigations by DNR have encountered dioxin and furan concentrations in the creek sediments that are higher than at any other site in the state. The dioxins and furans are a manufacturing byproduct of the PCP treatment chemical.

The meeting resulted in agreement on a conceptual framework for an investigation work plan for the creek. The work plan should help bring the company back into compliance with a Spill Response Agreement signed by the company and the Department in April 1998.

Please let me know if you have any questions about the meeting or the site.

Chris Saari
Hydrogeologist, Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
Telephone: 715-685-2920
E-mail: Christopher.Saari@Wisconsin.gov

Saari, Christopher A.

From: Charles Warzecha [warzecj@dhfs.state.wi.us]
Sent: Wednesday, July 26, 2006 2:09 PM
To: Saari, Christopher A.
Cc: Nehls-Lowe, Henry; Robinson, John H.
Subject: Re: CM Christiansen

Sure Chris,

I am currently available the 4th thru the 14th of September but then I'm tied up on the 15th thru the 22nd. Otherwise, pretty much all of October is still unspoken for. Glad to hear things are again moving on this project. I'll talk to you when I receive a workplan so I'm sure to turn it around in the timeframe you need.

I hope you are doing well these days. Did you get much rain over the past week? Probably not enough to put a dent in water levels.

Chuck

Chuck Warzecha
Health Hazard Evaluation
Wisconsin Department of Health and Family Services
(608) 267-3732

Check out our website at:

www.dhfs.state.wi.us/eh

* * * * *

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>>> "Saari, Christopher A." <Christopher.Saari@dnr.state.wi.us>

07/26/06 1:56 PM >>>

Hi Chuck:

I didn't get a chance to talk to you too much in Wisconsin Rapids earlier this month, hope your summer is going well. I think I did mention that we were meeting with Eric Christiansen of CM Christiansen Co. and his consultants (NRT) on July 21st. Well, we did meet with them and hopefully got the project back on track, or at least pointed at the track.

NRT indicated that they intend to do a site-specific risk assessment for the dioxins/furans in the sediment. During the next couple months, NRT is going to prepare a work plan for additional investigation. They hope to get input and agreement with minimal back-and-forth discussion, so I was wondering if you would have time to review the draft work plan when it becomes available. We tentatively set a date of around September 15th for a conference call between Christiansen, NRT, DNR and you, if you're available, to discuss the draft, which would be sent out prior to the call. The intent would then be to have the work plan finalized around October 15th.

Let me know if you'll have time to work on this, or if you have any questions. Thanks.

Chris Saari
Hydrogeologist, Remediation & Redevelopment Program Wisconsin Department of Natural Resources
Telephone: 715-685-2920
E-mail: Christopher.Saari@Wisconsin.gov



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C.M. CHRISTIANSEN-POLE YARD

Site Information

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Site Name: C.M. CHRISTIANSEN-POLE YARD

Street: COUNTY E (LAKE ST.)

City / State / ZIP: PHELPS, WI 54554

NPL Status: Not on the NPL

Non-NPL Status: Other Cleanup Activity: State-Lead Cleanup

ERS Exclusion: An Eligible Response Site (ERS) Exclusion decision has been made at this site.

EPA ID: WID988639035

EPA Region: 05

County: VILAS

Federal Facility Flag: Not a Federal Facility

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Actions

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<u>OU</u>	<u>Action Name</u>	<u>Qualifier</u>	<u>Lead</u>	<u>Actual Start</u>	<u>Actual Completion</u>
00	DISCOVERY		S		04/09/1993
00	PRELIMINARY ASSESSMENT	H	S		08/26/1993
00	SITE INSPECTION	L	S	09/21/1993	09/26/1995
00	EXPANDED SITE INSPECTION	L	S	08/11/2003	09/28/2004

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7/21/06

CM Christensen mtg.

Eric Christensen

Lauree Parsons

Rock Fox

Tom Jewisch

Tom Killian

Went to insurance company after Edgerton decision, suit & counter-suit, now in mediation. Insurance company is now paying for some limited work (recent GW sampling, initial sed. work). Another mediation session in couple weeks, hopefully will be settled @ that time; hope this will allow them to do what is needed (w/in coverage limits)

- Ability to pay not an option @ this time

- Reviewed EST, have some concerns but agree risk assessment work is needed

Do have questions about ranking & score, might be germane to their discussions w/ insurance company

- Get actual lab data to Laurie (all results)

- Do have some issues w/ dioxin data, much of it unusable. Also high Detect Lim ~~make~~ pop much PAN data useless

TP will check w/ Gierfelte
on release of HRS
score

- focus on COPCs (doxins), focus on pathways

- NRT would prefer to focus on COPCs (dioxins), focus on pathways that are realistic ←
- Agreement that dioxins will be driver ↓
- Need to document rationale for eliminating exposure pathways
- NRT wants to focus on site-specific risk assess. now, Fall-blown, basically follow EPA guidance
- What about SW? Upland & GW contributions might be probably are limited
- Rick recommended conf call to discuss screening justification (too much? too little?) so they know they're not missing the boat. Need to include *Chuck Werszcha early
- Laurie had question about DRO analyses (still need it?) Probably not
- They'll want to do more discrete interval sampling to 6" bioactive zone, maybe greater depth interval will be collected, too
- Determining action levels based on risk - might not, for instance, excavate to action level. Leaving some contain behind then relates to sedi. stability
- Eric - If insurance company settles for amount of money, could CMC turn \$ over to DNR and have us do the work? Probably not, but we'll check

- Invoice ~ 10/15/06

try to do conf. call ~ 9/15

Preliminary Conceptual Site Model for Military Creek Media, Contaminants, and Ecological Receptors

Potential Source	Transport Mechanisms, Exposure Media, Exposure Pathways			Exposure Routes	Ecological Receptors							
<p>Historical Operations of Wood Treating Operation. Release of Penta (with dioxins / furans) and Fuel Oil Carrier to Military Creek .</p> <p>Assumption is that soil remedial action in 1998 dealt with contaminated flood plain soils. No or low potential for runoff to carry contaminants from surface soils to creek. Potential for contaminated sediments to be deposited on remediated floodplain</p> <p>What is the possibility of contaminated groundwater to discharge to Creek.?</p>					Preliminary, needs to be determined							
	Sediment	Sediment Pore Water As appropriate to Receptor		Direct Contact / Absorption	◇	◇	●	●	?	◇	◇	◇
	Bioaccumulation			Ingestion			●	●	?	◇	◇	◇
	Surface Water	Biota		Ingestion			●	●	?	●	●	●
	Surface Water			Direct Contact / Absorption	◇	◇	◇	◇	?			
	Surface Water			Ingestion	◇		◇	◇	?	◇	◇	◇
	Surface Water			Inhalation								

- - Potentially Important Exposure Route
- ◇ - Minor Exposure Route
- ? - Exposure route needs to be determined
- Blank – Incomplete Exposure Route

Preliminary Conceptual Site Model for Military Creek Media, Contaminants, and Human Receptors

Potential Source	Transport Mechanisms, Exposure Media, Exposure Pathways			Exposure Routes	Human Receptors					
<p>Historical Operations of Wood Treating Operation. Release of Penta (with dioxins / furans) and Fuel Oil Carrier to Military Creek .</p>				<p>Possible exposure scenarios and assumptions need to be considered. Outcome of considerations may be incomplete exposure pathway</p>	<p>Adolescent / Child Accessing Wadable Portions of Creek</p>	<p>Fisherperson Subsistence or Sport</p>	<p>Swimmers</p>	<p>Canoeing</p>		
<p>Assumption is that soil remedial action in 1998 dealt with contaminated flood plain soils. No or low potential for runoff to carry contaminants from surface soils to creek. Potential for contaminated sediments to be deposited on remediated floodplain</p>	<p>Sediment</p>	<p>Sediment Pore Water As appropriate to Receptor</p>	<p>Biota (Fish)</p>	<p>Direct Contact / Absorption</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>		
<p>What is the possibility of contaminated groundwater to discharge to Creek?</p>	<p>Surface Water</p>			<p>Direct Contact / Absorption</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>		
				<p>Ingestion</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>		
				<p>Inhalation</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>	<p>NTBC</p>		

● - Potentially Important Exposure Route

NTBC - Needs To Be Considered

◇ - Minor Exposure Route

? - Exposure route needs to be determined

Blank - Incomplete Exposure Route

Saari, Christopher A.

From: Laurie L. Parsons [lparsons@naturalrt.com]
Sent: Thursday, July 20, 2006 11:10 AM
To: Saari, Christopher A.
Cc: Robinson, John H.; Eric R. Christiansen; erich@rich-law.com; Richard G. Fox
Subject: RE: CMC Co. Meeting Agenda
Attachments: 1226CMCSedimentPathwayDraft.pdf

Chris, Confirming that we are still on for our meeting at DNR's Rhinelander office tomorrow at 10:30 am. Cell phone numbers for Rick Fox (traveling from near Iron Mountain) and myself (traveling from Hartford, Wis.) are below, should anyone need to reach us while in transit Friday morning. I believe Eric C. will be coming from Phelps. Also, for convenience, I am re-sending the agenda (below) and attachment for discussion at our meeting.

Laurie Parsons
 Natural Resource Technology, Inc.
 262.522.1193 Direct Dial
 262.523.9000 General Number
262-719-4502 cell

Rick Fox
262-719-4503 cell

From: Laurie L. Parsons
Sent: Wednesday, June 21, 2006 3:37 PM
To: Saari, Christopher A.
Cc: Robinson, John H.; 'Eric R. Christiansen'; Elizabeth Rich (erich@rich-law.com); Richard G. Fox
Subject: FW: CMC Co. Meeting Agenda

Chris,

This is to confirm that our meeting for tomorrow on the CM Christiansen Co. site will be postponed and to relay an agenda for the meeting.

We understand that Tom Janisch will not be available. Given his significant involvement on the ESI supplement, we will postpone and re-establish available meeting times. Unfortunately Eric Christiansen is essentially not available in July, which is why he was hoping to get this in before then. He will be out of state except weekends from June 26 through August 3. We tried calling you by phone earlier today (easier to schedule), but were not able to reach you.

In short, August 7th through 25th is fairly open for NRT/CMC. Eric indicated he can try to make July 21st in Rhinelander work, but would have to juggle a few things to make it up to Rhinelander in time. Rick would have to cancel another commitment, but may be able to do it. Please call or email on re-scheduling this meeting.

Below is the agenda we envisioned for our meeting. Please add any items you have, we can review & revise prior. Also attached is a Conceptual Site Model graphic for discussion under Item 2.

1. Overview of ESI Results
 - a. PCP data
 - b. ESI Dioxin data interpretation
2. Draft Conceptual Site Model for discussion
 - a. Purpose
 - b. Pathways of concern
3. Site Specific Risk Assessment

07/20/2006



Mr. Eric Christiansen
C.M. Christiansen Co., Inc.
5501 N. Santa Monica
Milwaukee, Wisconsin 53217

July 10, 2006
(1226/7.1)

RE: Groundwater Sampling Results-May 2006
Former Poleyard Property, Phelps, Wisconsin
BRRTS#02-64-000068

Dear Mr. Christiansen:

Enclosed are results of the most recent round of groundwater sampling for the Phelps property. The sampling was completed on May 30th, 2006 by Northern Lake Services of Crandon, WI including measurement of water levels at 13 wells and sampling of five wells for Pentachlorophenol (PCP). Following is a brief summary of the results, with figures, tables, lab reports and field notes attached.

RESULTS

Groundwater elevations observed on the site are summarized on Table 1 and are within the range of previous water level measurements. Five monitoring wells were sampled for PCP. The results are tabulated below and shown with historic data on Figure 2.

Monitoring Well	PCP Concentration ($\mu\text{g/L}$)
MW-4	ND
MW-6	1.7
MW-10	<u>0.92</u>
PMW-11	99
PMW-11B	<u>0.10</u>

All sample locations had lower PCP concentrations compared to the previous sampling round conducted in September of 2003. Two wells, MW-6 and PMW-11 continue to exceed the NR 140 Enforcement Standard (ES) of 1 $\mu\text{g/L}$. Two wells, MW-10 and PMW-11B are below the ES but above the NR 140 Preventive Action Limit (PAL) of 0.1 $\mu\text{g/L}$. One well, MW-4 had no detection of PCPs in groundwater. The reported concentration for PMW-11B was flagged on the lab report for being between the limit of detection and limit of quantification. Of note the PCP concentration at PMW-11B is significantly lower than reported by WDNR on September 20, 2003 (well was installed September 8, 2003).

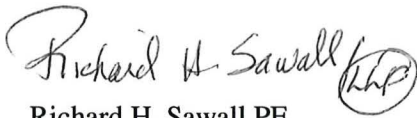
Additional data will need to be collected before any conclusion can be drawn about the observed reduction in PCP concentrations during this round of sampling. The next round of groundwater sampling is scheduled for October 2006, pending CMC approval.

C.M. Christiansen, Co.
July 10, 2006
Page 2

We appreciate the opportunity to provide continued services to C.M. Christiansen Co., Inc. Please do not hesitate to contact Richard Sawall (262-522-1226) or Laurie Parsons (262-522-1193) if any questions arise during your review of this letter.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.



Richard H. Sawall PE
Geological Engineer



Laurie L. Parsons PE
Principal Engineer

Enc: Table 1- Groundwater Elevation Summary
Figure 2- PCP Concentration in Groundwater
Laboratory Report with field notes

P:\1226\CMC groundwater results 060706



Date	PCP
9/14/95	0.18
12/15/95	0.73
7/24/96	27
11/18/96	4.8
5/25/99	1.3
11/29/99	4.0
5/23/00	1.3
11/30/00	0.054
5/30/01	0.12

Date	PCP
9/14/95	nd
12/14/95	nd
7/24/96	nd
11/18/96	nd
5/25/99	nd
11/30/99	nd
9/30/03	45.0 *

Date	PCP
9/14/95	2.5
12/15/95	1.2
7/25/96	0.4
11/19/96	0.74
5/25/99	0.42
11/30/99	0.55
5/23/00	0.16
11/30/00	0.13
5/30/01	nd

Date	PCP
7/25/96	350
11/19/96	2.5
5/25/99	0.2
11/30/99	0.77
5/23/00	0.15
11/30/00	0.32
5/30/01	1.8
11/27/01	20
5/31/02	<1
11/19/02	0.1
9/30/03	0.040

Date	PCP
9/14/95	0.12
12/14/95	0.67
7/24/96	0.48
11/18/96	0.3
5/24/99	0.12
5/30/01	0.12

Date	PCP
9/14/95	0.12
12/15/95	0.56
7/24/96	0.42
11/18/96	0.58
5/24/99	0.12

Date	PCP
7/24/96	nd
11/18/96	nd
5/24/99	nd

Date	PCP
7/24/96	0.15
11/18/96	0.14
5/24/99	0.089

Date	PCP
7/24/96	nd
11/18/96	0.45
5/24/99	nd

Date	PCP
7/25/96	820
11/18/96	720
11/6/97	1300
5/25/99	170
11/30/99	280
5/23/00	430
11/30/00	730
5/30/01	920
11/27/01	1,000
5/31/02	810
11/19/02	200
9/30/03	1500 *
5/30/06	99

Date	PCP
9/30/03	1300 *
5/30/06	0.10

Date	PCP
9/14/95	960
12/15/95	5,200

Date	PCP
5/25/99	nd
11/29/99	nd
5/23/00	nd
11/30/00	nd

Date	PCP
9/30/03	<5.0 *

Date	PCP
9/14/95	nd
12/15/95	0.084
7/24/96	nd
11/18/96	nd
5/24/99	nd
11/29/99	0.26
5/23/00	0.13
11/30/00	0.092
5/30/01	nd
9/30/03	<5.0 *
5/30/06	ND

Date	PCP
5/25/99	0.54
11/29/99	nd
5/23/00	nd
11/30/00	nd
5/30/01	nd

Date	PCP
7/25/96	34
11/18/96	7.5
11/6/97	17
5/25/99	4.6
11/30/99	5.4
5/23/00	7.8
11/30/00	7.9
5/30/01	4.2
11/27/01	7.7
5/31/02	8.2
11/19/02	2.8
9/30/03	4.73 *
9/30/03	1.93 *
5/30/06	0.92

Date	PCP
9/14/95	1,300
12/15/95	32
7/25/96	21
11/19/96	10.0
5/25/99	1.9
11/30/99	28
5/23/00	13
11/30/00	18
5/30/01	1.0
11/27/01	2.7
5/31/02	1.0
11/19/02	0.96
9/30/03	9.1
5/30/06	1.7

Date	PCP
5/24/99	nd
11/29/99	nd
5/23/00	nd

Date	PCP
9/30/03	<5.0 *

Date	PCP
5/25/99	0.15
11/29/99	nd
5/23/00	nd
11/30/00	nd
5/30/01	nd

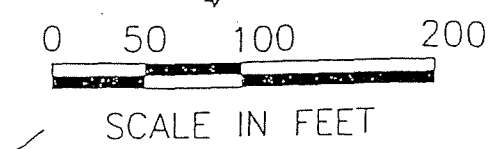
LEGEND

- MW-12 BORING/MONITORING WELL
- PMW-14 PIEZOMETER
- MW-7 ABANDONED MONITORING WELL
- APPROXIMATE TREE LINE OR NEW GROWTH
- PCP** PENTACHLOROPHENOL
- NA** NOT ANALYZED
- ND** NOT DETECTED
- 170 CONCENTRATION AT OR ABOVE NR 140 ENFORCEMENT STANDARD (1.0 µg/L)
- 0.45 CONCENTRATION AT OR ABOVE NR 140 PREVENTIVE ACTION LIMIT (0.1 µg/L)

SOURCE NOTE:
THIS MAP WAS MODIFIED FROM DRAWING BY COLEMAN ENGINEERING COMPANY (CEC), IRON MOUNTAIN, MICHIGAN, DATED FEBRUARY 1997. JOB NO. 95042 A7, AND A SURVEY BY EAGLE LANDMARK SURVEYING, INC., EAGLE RIVER, WISCONSIN, DWG. NO. E1292, DATED 1-06-98, REVISED ON 5-13-99.

NOTES:
BASE MAP SURVEY COMPLETED BY CEC WITH ADDITIONAL INFORMATION OBTAINED FROM USDA-ASCS HISTORICAL AERIAL PHOTOGRAPHS, A 7/7/95 SITE VISIT WITH C M CHRISTIANSEN CO., AND A 5/21/96 FIELD INSPECTION.
MAY 30, 2001 PCP RESULTS ADDED JUNE 2001.
NOVEMBER 27, 2001 AND MAY 31, 2002 ADDED JUNE 2002.
NOVEMBER 19, 2002 PCP RESULTS ADDED DECEMBER 2002.

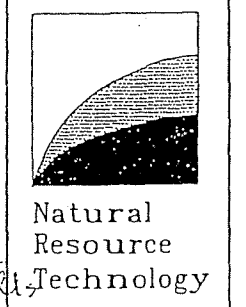
* WDNr collected sample
SED-0X A taken from top 8" of core
SED-0X B everything below 8" of core
DNR well



ESI	MW	PROJECT NO.
GW-01	MW-2	1226/5.4
GW-02	PMW-11B	
GW-03	PMW-11	
GW-04	MW-10	DRAWING NO.
GW-05	MW-4	1226-54-B01
GW-06	PMW-4A	
GW-07	PMW-4B	FIGURE NO.
Taken from Fig 2		2

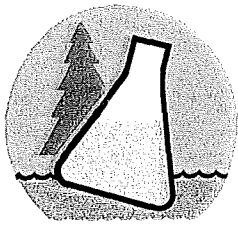
DATE: 12/27/02
DRAWN BY: TAS
CHECKED BY: SLF
APPROVED BY:
AUTOCAD FILE: 1226-54-B01.DWG

PCP CONCENTRATIONS IN GROUNDWATER
C.M. CHRISTIANSEN COMPANY, INC.
FORMER POLE TREATMENT FACILITY
PHELPS, WISCONSIN



SED-1A
SED-1B
SW-1

09/03 Data added 01/05 JTB/LLP
05/30/2006 Data added 7/7/06 JTB



JUN 26 2006

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services

June 23, 2006

Natural Resources Technology, Inc.
Attn: Richard H. Sawall
23713 West Paul Road (Suite D)
Pewaukee, WI 53072

Hi Hardy,

Enclosed is the Analytical Report for the May 30th, 2006 Northern Lake Service sampling of the C.M. Christiansen Company site in Phelps Wisconsin.

If you have any questions or comments concerning the enclosed data, please call Andy Ostrowski or myself at your convenience.

Sincerely,

Steve Macauley
Field Operations Coordinator
Northern Lake Service, Inc.

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI00034

Printed: 07/07/06 Code: S Page 1 of 3

Client: Natural Resource Technology Inc
 Attn: Richard H. Sawall
 23713 West Paul Road (Suite D)
 Pewaukee, WI 53072

NLS Project: 98506

NLS Customer: 84233

Fax: 262 523 9001 Phone: 262 523 9000

Project: C.M. Christiansen Company May 2006

PMW-18 NLS ID: 406990

Ref. Line COC PMW-18 Matrix: GW
 Collected: 05/30/06 09:46 Received: 05/30/06
 Parameter
 Could not sample

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
key broken off in lock					05/30/06	NA	721026460

MW-18 NLS ID: 406991

Ref. Line COC MW-18 Matrix: GW
 Collected: 05/30/06 09:59 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1684.01	ft, NGVD	1			05/30/06	NA	721026460

MW-2 NLS ID: 406992

Ref. Line COC MW-2 Matrix: GW
 Collected: 05/30/06 10:26 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1684.86	ft, NGVD	1			05/30/06	NA	721026460

MW-4 NLS ID: 406993

Ref. Line COC MW-4 Matrix: GW
 Collected: 05/30/06 11:38 Received: 05/30/06
 Parameter
 Field static water level
 Chlorinated Herbicides (water) by EPA 8151

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1683.82	ft, NGVD	1			05/30/06	NA	721026460

Organics Extraction (Herbicides)
 see attached
 Analyzed at Davy Laboratories.
 yes

06/08/06	SW846 8151	632021390
06/06/06	EPA 8151A	632021390

PMW-17 NLS ID: 406994

Ref. Line COC PMW-17 Matrix: GW
 Collected: 05/30/06 10:51 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1684.60	ft, NGVD	1			05/30/06	NA	721026460

MW-17 NLS ID: 406995

Ref. Line COC MW-17 Matrix: GW
 Collected: 05/30/06 10:54 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1683.44	ft, NGVD	1			05/30/06	NA	721026460

PMW-14 NLS ID: 406996

Ref. Line COC PMW-14 Matrix: GW
 Collected: 05/30/06 12:06 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1684.94	ft, NGVD	1			05/30/06	NA	721026460

MW-12 NLS ID: 406997

Ref. Line COC MW-12 Matrix: GW
 Collected: 05/30/06 12:09 Received: 05/30/06
 Parameter
 Field static water level

Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
1684.93	ft, NGVD	1			05/30/06	NA	721026460

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI00034
 Printed: 07/07/06 Code: S Page 2 of 3
 NLS Project: 98506
 NLS Customer: 84233
 Fax: 262 523 9001 Phone: 262 523 9000

Client: Natural Resource Technology Inc
 Attn: Richard H. Sawall
 23713 West Paul Road (Suite D)
 Pewaukee, WI 53072

Project: C.M. Christiansen Company May 2006

MW-13 NLS ID: 406998

Ref. Line COC MW-13 Matrix: GW
 Collected: 05/30/06 11:49 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1695.85	ft, NGVD	1			05/30/06	NA	721026460

MW-8 NLS ID: 406999

Ref. Line COC MW-8 Matrix: GW
 Collected: 05/30/06 11:58 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1687.16	ft, NGVD	1			05/30/06	NA	721026460

MW-3 NLS ID: 407000

Ref. Line COC MW-3 Matrix: GW
 Collected: 05/30/06 10:14 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1685.49	ft, NGVD	1			05/30/06	NA	721026460

MW-6 NLS ID: 407001

Ref. Line COC MW-6 Matrix: GW
 Collected: 05/30/06 12:18 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1685.01	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached Analyzed at Davy Laboratories.					06/09/06	SW846 8151	632021390
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

MW-10 NLS ID: 407002

Ref. Line COC MW-10 Matrix: GW
 Collected: 05/30/06 13:08 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.71	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached Analyzed at Davy Laboratories.					06/09/06	SW846 8151	632021390
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

PMW-11 NLS ID: 407003

Ref. Line COC PMW-11 Matrix: GW
 Collected: 05/30/06 13:43 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.71	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached Analyzed at Davy Laboratories.					06/09/06	SW846 8151	632021390
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

PMW-11B NLS ID: 407004

Ref. Line COC PMW-11B Matrix: GW
 Collected: 05/30/06 14:47 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field depth to water	4.47	ft.	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached Analyzed at Davy Laboratories.					06/09/06	SW846 8151	632021390
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 07/07/06 Code: S Page 3 of 3

Client: Natural Resource Technology Inc
Attn: Richard H. Sawall
23713 West Paul Road (Suite D)
Pewaukee, WI 53072

NLS Project: 98506

NLS Customer: 84233

Fax: 262 523 9001 Phone: 262 523 9000

Project: C.M. Christiansen Company May 2006

Effluent NLS ID: 407005

Ref. Line COC Effluent Matrix: GW

Collected: 05/30/06 15:05 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Could not sample	pump or generator malfunction					05/30/06	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected 1000 ug/L = 1 mg/L
DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000
MCL = Maximum Contaminant Levels for Drinking Water Samples

Reviewed by: _____
Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: Chlorinated Herbicides by EPA 8151

Customer: Natural Resource Technology Inc NLS Project: 98506

Project Description: C.M. Christiansen Company

Project Title: May 2006

Template: DAV8151W Printed: 07/07/2006 13:19

Sample: 406993 MW-4		Collected: 05/30/06	Analyzed: 06/08/06 -			
ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	
Pentachlorophenol	ND	ug/L	1	0.070	0.24	
DCAA (SURR**)	119%					

Sample: 407001 MW-6		Collected: 05/30/06	Analyzed: 06/09/06 -			
ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	
Pentachlorophenol	1.7	ug/L	1	0.070	0.24	
DCAA (SURR**)	85.7%					

Sample: 407002 MW-10		Collected: 05/30/06	Analyzed: 06/09/06 -			
ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	
Pentachlorophenol	0.92	ug/L	1	0.070	0.24	
DCAA (SURR**)	109%					

Sample: 407003 PMW-11		Collected: 05/30/06	Analyzed: 06/09/06 -			
ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	
Pentachlorophenol	99	ug/L	1	1.4	4.8	
DCAA (SURR**)	91.6%					

Sample: 407004 PMW-11B		Collected: 05/30/06	Analyzed: 06/09/06 -			
ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	
Pentachlorophenol	[0.10]	ug/L	1	0.070	24	
DCAA (SURR**)	97.8%					

** Surrogates are used to evaluate a method's Quality Control.

NORTHERN LAKE SERVICE, INC. FIELD GROUNDWATER MONITORING RECORD

NLS Laboratory Number	406990	406991	406992	406993	406994	406995	406996	406997	406998	406999	407002	407001
Facility: Natural Resource Technology	PMW-18	MW-18	MW-2	MW-4	PMW-17	MW-17	PMW-14	MW-12	MW-13	MW-8	MW-3	MW-6
C M Christensen Co. pg 1 of 2												
DNR ID#												
Well Condition (see key)	see back	OK	see back OK	see back OK	OK	OK	NL WL OK	NL OK	heaved NL	booky has	NL Lock	OK
Pipetop Elevation (ft. NGVD)	1690.68	1690.74	1714.54	1689.63	1686.68	1686.98	1712.40	1711.09	1703.06	1703.50	1692.87	1691.52
Depth to Water (ft.)		6.73	29.68	5.81	2.08	3.54	27.46	26.16	7.21	16.34	7.38	6.51
STATIC WATER ELEVATION		1684.01	1684.86	1683.82	1684.60	1683.44	1684.94	1684.93	1695.85	1687.16	1685.40	1685.01
Depth to Well Bottom (ft.)	37.7	15.9	37.3	15.9 25.3	36.7	16.1	47.1	31.7	21.2	23.3	20.1	15.1
Standing Water Column (ft.)	---	---	---	19.49	---	---	---	---	---	---	---	8.59
Standing Water Volume (gal.)	---	---	---	3.33	---	---	---	---	---	---	---	1.46
Purging Methods (see key)	---	---	---	HB	---	---	---	---	---	---	---	HB
Purge Info. (see key) (4 vol.)	---	---	---	P4K	---	---	---	---	---	---	---	P004
Volume Purged (gal.)	---	---	---	13.3	---	---	---	---	---	---	---	2.7
Appearance During Purging	---	---	---	silt. silty tan	---	---	---	---	---	---	---	silt. silty
FIELD COLOR (describe)	---	---	---	ND	---	---	---	---	---	---	---	ND
FIELD CONDUCTIVITY (umho @ 25C)	---	---	---	---	---	---	---	---	---	---	---	---
Field Filtered (Y/N describe)	---	---	---	NO	---	---	---	---	---	---	---	NO
FIELD ODOR (describe)	---	---	---	ND	---	---	---	---	---	---	---	ND
FIELD pH (standard units)	---	---	---	---	---	---	---	---	---	---	---	---
FIELD TEMPERATURE (degree C)	---	---	---	---	---	---	---	---	---	---	---	---
FIELD TURBIDITY	Quantity	---	---	Ext.	---	---	---	---	---	---	---	mod
	Texture	---	---	fine	---	---	---	---	---	---	---	fine
	Color	---	---	tan brown	---	---	---	---	---	---	---	tan brown
Purge Time-if not immed.												
TIME SAMPLED	946	959	1026	1138	1051	1054	1206	1209	1149	1158	1014	1218
DATE SAMPLED	5/30/06											

The following information applies to samples on the reverse side of this sheet.

Date 5/30/06 Date _____
 Crew Chief Ron Smith Crew Chief _____
 Crew _____ Crew _____
 Weather/Comments: Overcast
mid 70's - Lo 80's
PMW4 DTB - 45.7

SAMPLE COLLECTION COMMENTS

PMW18 - a key is broken off inside lock
 couldn't open,
 MW2 - ~~New lock - big silva master lock which I had~~
~~a key for it, it turned, while hitting it with~~
~~hammer, it wouldn't open. Tried again - succeeded~~
 MW4 - 2-wells unlabeled in app. area both over 20' DTB
 MW4 DTB is 16.9 - called Hardy S. left message at 104)
 Hardy called back - 2 new wells put in by DWR - MW4 goes sample shallow well

SAMPLE CUSTODY

RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME	CONDITION	TEMP.
<u>Ron Smith</u>		<u>5/30/06 1630</u>	<u>Good</u>	<u>1 on ice</u>
REMARKS & OTHER INFORMATION				

KEY OF ABBREVIATIONS

- Purging Method: HB hand bailed PB power bailer DP deep well pump PP peristaltic pump
- Purging Info: P-X purged (X) volumes
 Dry purged dry
 DD(x) level drew down; purged (x) volume of remaining column
 O other (explain)
- Well Condition: WD well damaged (explain)
 NL well not locked
 NC no cap on inner casing
 SD seal damaged (explain)
 O other problems (i.e. bent casing, ants in well)
 OK well in good condition
- Purging Appearances: description (i.e. sandy, cloudy, clear, dark, red, etc)
- Filtered: Y or N
- Filterability: G=good, M=moderately good, P=poor, D=difficult, special procedures (explain)

NORTHERN LAKE SERVICE, INC. FIELD GROUNDWATER MONITORING RECORD

NLS Laboratory Number	407002	407003	407004	407005															
Facility: Natural Resource Technology	MW-10	PMW-11	PMW-11B	Effluent															
C M Christensen Co. pg 2 of 2																			
DNR ID#																			
Well Condition (see key)	OK	OK	OK																
Pipetop Elevation (ft. NGVD)	1689.13	1689.25																	
Depth to Water (ft.)	5.42	5.51	4.47																
STATIC WATER ELEVATION	1683.71	1683.71																	
Depth to Well Bottom (ft.)	15.2	30.0	48.5																
Standing Water Column (ft.)	9.78	24.86	44.03																
Standing Water Volume (gal.)	1.67	4.18	7.52																
Purging Methods (see key)	HB	HB	HB																
Purge Info. (see key) (4 vol.)	P4X	P004	P4X																
Volume Purged (gal.)	6.0	8.7	30.11																
Appearance During Purging	clay some orange	silt clay	silty tan																
FIELD COLOR (describe)	orange	NP	tan																
FIELD CONDUCTIVITY (umho @ 25C)	---	---	---																
Field Filtered (Y/N describe)	NO	NO	NO																
FIELD ODOR (describe)	NP	NP	NP																
FIELD pH (standard units)	---	---	---																
FIELD TEMPERATURE (degree C)	---	---	---																
FIELD TURBIDITY																			
Quantity	Ext	5ft	Ext																
Texture	fine	fine	fine																
Color	orange	tan	brown																
Purge Time-if not immed.																			
TIME SAMPLED	1308	1343	1447	1505															
DATE SAMPLED	5/30/06			5/30/06															

The following information applies to samples on the reverse side of this sheet.

Date 5/30/06 Date _____

Crew Chief Ron Smith Crew Chief _____

Crew _____ Crew _____

Weather/Comments: Sunny
80°s

SAMPLE COLLECTION COMMENTS

SAMPLE CUSTODY

RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME
<u>Ron Smith</u>	<u>Ron Smith</u>	<u>5/30/06 1630</u>
RECEIVED AT NLS BY (signature)		DATE/TIME
<u>Ron Smith</u>		<u>5/30/06 1630</u>
REMARKS & OTHER INFORMATION		CONDITION
		<u>Good</u>
		TEMP.
		<u>on ice</u>

KEY OF ABBREVIATIONS

Purging Method:	HB	hand bailed	Purging Info:	P-X	purged (X) volumes
	PB	power bailer		Dry	purged dry
	DP	deep well pump		DD(x)	level drew down; purged (x) volume of remaining column
	PP	peristaltic pump		O	other (explain)
Well Condition:	WD	well damaged (explain)			
	NL	well not locked			
	NC	no cap on inner casing			
	SD	seal damaged (explain)			
	O	other problems (i.e. bent casing, ants in well)			
	OK	well in good condition			

Purging Appearances: description (i.e. sandy, cloudy, clear, dark, red, etc)

Filtered: Y or N

Filterability: G=good, M=moderately good, P=poor, D=difficult, special procedures (explain)

MASTER FILE COPY
PROJECT # 9226
CO: data (groundwater)

Saari, Christopher A.

From: Saari, Christopher A.
Sent: Monday, July 10, 2006 1:11 PM
To: 'Laurie L. Parsons'
Cc: erc@wi.rr.com; Richard G. Fox
Subject: RE: CMC Co. Groundwater Results

Laurie, could you send me the site map as a hard copy? I don't have the ability to print 11x17 sheets here in my office, and shrinking the map makes it a little hard to read. Thanks.

From: Laurie L. Parsons [mailto:lparsons@naturalrt.com]
Sent: Monday, July 10, 2006 12:56 PM
To: Saari, Christopher A.
Cc: erc@wi.rr.com; Richard G. Fox
Subject: CMC Co. Groundwater Results

Chris,

On behalf of CM Christiansen Co. Inc. attached for your file is updated groundwater sampling information for their former poleyard property in Phelps. Groundwater sampling occurred in May 2006. Please let us know if you prefer a hard copy via mail.

Thank you,

Laurie L. Parsons, PE
Natural Resource Technology, Inc.
23713 W. Paul Road, Suite D
Pewaukee, WI 53072
262.522.1193 Direct Dial
262.523.9000 General Number
lparsons@naturalrt.com
www.naturalrt.com



Mr. Eric Christiansen
C.M. Christiansen Co., Inc.
5501 N. Santa Monica
Milwaukee, Wisconsin 53217

July 10, 2006
(1226/7.1)

RE: Groundwater Sampling Results-May 2006
Former Poleyard Property, Phelps, Wisconsin
BRRTS#02-64-000068

Dear Mr. Christiansen:

Enclosed are results of the most recent round of groundwater sampling for the Phelps property. The sampling was completed on May 30th, 2006 by Northern Lake Services of Crandon, WI including measurement of water levels at 13 wells and sampling of five wells for Pentachlorophenol (PCP). Following is a brief summary of the results, with figures, tables, lab reports and field notes attached.

RESULTS

Groundwater elevations observed on the site are summarized on Table 1 and are within the range of previous water level measurements. Five monitoring wells were sampled for PCP. The results are tabulated below and shown with historic data on Figure 2.

Monitoring Well	PCP Concentration ($\mu\text{g/L}$)
MW-4	ND
MW-6	1.7
MW-10	0.92
PMW-11	99
PMW-11B	0.10

All sample locations had lower PCP concentrations compared to the previous sampling round conducted in September of 2003. Two wells, MW-6 and PMW-11 continue to exceed the NR 140 Enforcement Standard (ES) of 1 $\mu\text{g/L}$. Two wells, MW-10 and PMW-11B are below the ES but above the NR 140 Preventive Action Limit (PAL) of 0.1 $\mu\text{g/L}$. One well, MW-4 had no detection of PCPs in groundwater. The reported concentration for PMW-11B was flagged on the lab report for being between the limit of detection and limit of quantification. Of note the PCP concentration at PMW-11B is significantly lower than reported by WDNR on September 20, 2003 (well was installed September 8, 2003).

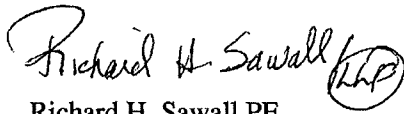
Additional data will need to be collected before any conclusion can be drawn about the observed reduction in PCP concentrations during this round of sampling. The next round of groundwater sampling is scheduled for October 2006, pending CMC approval.

C.M. Christiansen, Co.
July 10, 2006
Page 2

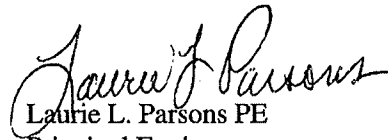
We appreciate the opportunity to provide continued services to C.M. Christiansen Co., Inc. Please do not hesitate to contact Richard Sawall (262-522-1226) or Laurie Parsons (262-522-1193) if any questions arise during your review of this letter.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.



Richard H. Sawall PE
Geological Engineer



Laurie L. Parsons PE
Principal Engineer

Enc: Table 1- Groundwater Elevation Summary
Figure 2- PCP Concentration in Groundwater
Laboratory Report with field notes

P:\1226\CMC groundwater results 060706

MW-1

Date	PCP
9/14/95	0.18
12/15/95	0.73
7/24/96	27
11/18/96	4.8
5/25/99	1.3
11/29/99	4.0
5/23/00	1.3
11/30/00	0.054
5/30/01	0.12

MW-2

Date	PCP
9/14/95	nd
12/14/95	nd
7/24/96	nd
11/18/96	nd
5/25/99	nd
11/30/99	nd
9/30/03	45.0 *

MW-8

Date	PCP
9/14/95	2.5
12/15/95	1.2
7/25/96	0.4
11/19/96	0.74
5/25/99	0.42
11/30/99	0.55
5/23/00	0.16
11/30/00	0.13
5/30/01	nd

MW-5

Date	PCP
9/14/95	0.12
12/15/95	0.56
7/24/96	0.42
11/18/96	0.58
5/24/99	0.12

PMW-14

Date	PCP
7/24/96	nd
11/18/96	nd
5/24/99	nd

MW-3

Date	PCP
9/14/95	0.12
12/14/95	0.67
7/24/96	0.48
11/18/96	0.3
5/24/99	0.12
5/30/01	0.12

MW-9

Date	PCP
7/24/96	0.15
11/18/96	0.14
5/24/99	0.089

MW-12

Date	PCP
7/24/96	nd
11/18/96	0.45
5/24/99	nd

COUNTY TRUNK HIGHWAY E
RIGHT-OF-WAY

PMW-11

Date	PCP
7/25/96	820
11/18/96	720
11/6/97	1300
5/25/99	170
11/30/99	280
5/23/00	430
11/30/00	730
5/30/01	920
11/27/01	1,000
5/31/02	810
11/19/02	200
9/30/02	1500 *
5/30/06	99

PMW-11B

Date	PCP
9/30/03	1300 *
5/30/06	0.10

Date	PCP
9/14/95	960
12/15/95	5,200

MW-6

Date	PCP
9/14/95	1,300
12/15/95	32
7/25/96	21
11/19/96	10.0
5/25/99	1.9
11/30/99	28
5/23/00	13
11/30/00	18
5/30/01	1.0
11/27/01	2.7
5/31/02	1.0
11/19/02	0.96
9/30/03	1.1
5/30/06	1.2

MW-4A

Date	PCP
9/30/03	<5.0 *

MW-4

Date	PCP
9/14/95	nd
12/15/95	0.084
7/24/96	nd
11/18/96	nd
5/24/99	nd
11/29/99	0.26
5/23/00	0.13
11/30/00	0.092
5/30/01	nd
9/30/03	<5.0 *
5/30/06	ND

MW-18

Date	PCP
5/25/99	0.54
11/29/99	nd
5/23/00	nd
11/30/00	nd
5/30/01	nd

MW-10

Date	PCP
7/25/96	34
11/18/96	7.5
11/6/97	17
5/25/99	4.6
11/30/99	5.4
5/23/00	7.8
11/30/00	7.9
5/30/01	4.2
11/27/01	7.7
5/31/02	8.2
11/19/02	2.6
9/30/03	11.75 *
9/30/03	11.95 *
5/30/06	0.92

MULTI-USE DRAIN

CENTER LINE

STREAM FLOW

MW-4B

Date	PCP
9/30/03	<5.0 *

PMW-1

Date	PCP
5/25/99	
11/29/99	
5/23/01	
11/30/00	
5/30/01	

Table 1 - Groundwater Elevation Summary
CM Christiansen - Phelps, WI

Monitoring Point	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	PMW-11	PMW-11B	MW-12	PMW-14	MW-13	
Top of Casing Elevation	1690.29	1714.54	1692.87	1689.63	1696.03	1691.52	1700.80	1703.50	1706.63	1689.13	1689.25	Well	1711.09	1712.40	1703.06	
Ground Surface Elevation	1688.1	1712.7	1690.8	1687.8	1693.5	1689.2	1698.5	1700.5	1704.2	1686.4	1686.5	Installed	1709.0	1709.5	1700.1	
Top of Screen Elev.	1680.1	1687.1	1682.8	1682.8	1689.5	1686.7	1688.5	1690.0	1689.1	1683.9	1664.0	by	1689.0	1670.0	1690.1	
Bottom of Screen Elev.	1675.1	1677.4	1672.8	1672.8	1679.5	1676.7	1678.5	1680.0	1679.1	1673.9	1659.0	Boart	1679.0	1665.0	1680.1	
	Groundwater Elevation (ft NGVD)												Longyear			
DATE	9/14/1995	1683.79	1685.27	1685.04	1683.42	1685.15	1685.23	1685.25	1685.94	nm	nm	nm	for	nm	nm	nm
	12/15/1995	1684.28	1685.20	1686.23	1684.09	1685.48	1685.12	1685.17	1687.01	nm	nm	nm	WDNR	nm	nm	nm
	7/3/1996	1684.58	1685.83	1686.38	1684.00	1686.13	1685.70	1685.56*	1688.00	1685.70	1683.89	1685.09	on	1685.71	1685.73	1695.50
	7/11/1996	1684.29	1685.74	1686.39	1684.05	1685.96	1685.56	1685.57*	1687.90	1685.60	1683.68	1684.89	9/8/2003	1685.61	1685.62	1695.60
	7/24-25/96	1684.52	1685.78	1686.68	1683.77	1686.23	1685.55	1685.48*	1686.93	1685.65	1683.75	1685.00		1685.64	1685.59	1695.42
	8/6/1996	1684.61	1685.75	1686.40	1684.29	1686.48	1685.62	1685.59*	1687.51	1685.09	1684.21	1685.04	TOC	1685.67	1685.68	1694.84
	8/7/1996	1684.76	1685.78	1686.52	1684.66	1686.17	1685.73	nm	1687.74	1685.12	1684.30	1685.12	46 ft	1685.69	1685.70	1697.31
	8/27/1996	1684.25	1685.68	1685.17	1683.68	1685.95	1685.50	1685.57*	1686.84	1685.59	1683.79	1684.87		1685.59	1685.61	1696.71
	9/4/1996	1684.33	1685.70	1685.99	1683.78	1685.84	1685.54	1685.65*	1686.51	1685.65	1684.18	1684.90		1685.62	1685.64	1696.57
	11/18/1996	1685.20	1685.62	1686.28	1684.56	1686.18	1685.74	1685.62	1686.43	1685.67	1684.45	1685.28		1685.61	1685.65	1697.19
	5/24/1999	1685.12	1685.28	1686.53	1684.56	1686.27	1685.50	1685.43	1686.66	1685.42	1684.31	1685.18		1685.37	1685.38	1698.18
	11/29-30/99	1683.93	1684.90	nm	1684.24	nm	1684.90	nm	1684.85	nm	1683.59	1684.24		nm	nm	1697.13
	5/23/2000	1683.86	1684.83	1685.25	1684.63	1685.14	1684.78	nm	1685.52	1684.90	1683.41	1684.22		1684.87	1684.87	1696.73
	11/30/2000	1683.82	1684.65	1684.56	1684.06	1684.68	1684.67	nm	1685.79	1684.73	1683.45	1684.06		1684.69	1684.72	1694.62
	5/30/2001	nm	1685.11	1686.02	1684.39	nm	1685.09	nm	1686.37	nm	1683.52	1684.60		1685.12	1685.14	1695.12
	11/27/2001	nm	1685.01	1685.17	1684.63	nm	1685.05	nm	1686.24	nm	1683.91	1684.27		1685.03	1685.05	1694.68
	5/31/2002	nm	1685.93	1686.84	1684.44	nm	1685.68	nm	1687.47	nm	1683.54	1684.63		1685.78	1685.79	1693.81
	11/19/2002	nm	1685.31	1685.64	1684.28	nm	1685.19	nm	1686.77	nm	1683.58	1684.55		1685.26	1685.28	1694.87
	9/9/2003 ^A	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	2.00	nm	nm	nm
	9/30/2003	1683.75	nm ^B	1684.55	nm ^B	1684.74	1684.85	Well Abandoned	nm ^C	1685.01	nm ^B	nm ^B	nm ^B	1685.00	1685.04	1693.87
	5/30/2006	nm	1684.86	1685.49	1683.82	nm	1685.01	nm	1687.16	nm	1683.71	1683.71	nm	1684.93	1684.94	1695.85

(R-HMS 6/27/01, C-JTB 6/28/01)
(R-JTB 12/1/01, C-AAS 12/12/01)
(R-BGH 9/16/02, C-SAS 9/17/02)
(R-SLF 12/13/02, C-MJR 12/13/02)
(R-JTB01/18/05, C-EPK 1/19/05)
(R-RHS 06/05/06, C-JTB 06/05/06)

Monitoring Point	MW-17	PMW-17	MW-18	PMW-18	PMW-4A	PMW-4B	Military Crk
Top of Casing Elevation	1686.98	1686.68	1690.74	1690.68	Well	Well	1685.92
Ground Surface Elevation	1684.8	1684.5	1688.3	1688.1	Installed	Installed	--
Top of Screen Elev.	1681.1	1654.2	1684.8	1658.1	by	by	--
Bottom of Screen Elev.	1671.1	1649.2	1674.8	1653.1	Boart	Boart	--
	Groundwater Elevation (ft NGVD)				Longyear	Longyear	
DATE	8/6/1996	nm	nm	nm	for	for	1684.00
	8/7/1996	nm	nm	nm	WDNR	WDNR	1684.06
	8/27/1996	nm	nm	nm	on	on	nm
	9/4/1996	nm	nm	nm	9/8/2003	9/8/2003	1684.27
	11/18/1996	nm	nm	nm			1684.14
	5/24/1999	1684.01	1685.26	1684.38	TOC	TOC	nm
	11/29-30/99	1683.55	1684.79	1683.69	29.80 ft	44.00 ft	nm
	5/23/2000	1683.43	1684.69	1683.54			nm
	11/30/2000	1683.39	nm**	1683.48			nm
	5/30/2001	1683.52	1685.82	1683.76			nm
	11/27/2001	1683.66	1684.24	1683.89			nm
	5/31/2002	1683.53	1685.54	1683.84			nm
	11/19/2002	1683.42	nm**	1683.69			nm
	9/9/2003 ^A	nm	nm	nm	6.5	7.1	nm
	9/30/2003	1683.2	1684.7	nm	nm ^B	nm ^B	nm
	5/30/2006	1683.44	1684.60	1684.01	nm	nm	nm

Notes:

NGVD = elevation with respect to National Vertical Geodetic Datum.

Military Crk = creek elevation measured at stream gauge.

* Elevation of free product.

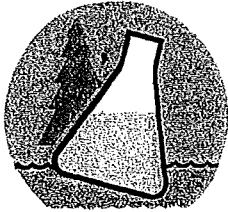
nm = elevation not measured.

** well frozen

A: Wells Installed by Boart Longyear on August 8 & 9, 2003 for WDNR, currently no survey information available, water elevation is groundwater depth from top of casing (TOC.)

B: Wisconsin Department of Natural Resources (WDNR) took groundwater levels for these specific wells, no information provided.

C: Depth to groundwater not measured in monitoring well MW-8 on 9/30/2003 because well could not be opened due to rusted lock.



JUN 26 2006

NORTHERN LAKE SERVICE, INC.

Analytical Laboratory and Environmental Services

June 23, 2006

Natural Resources Technology, Inc.
Attn: Richard H. Sawall
23713 West Paul Road (Suite D)
Pewaukee, WI 53072

Hi Hardy,

Enclosed is the Analytical Report for the May 30th, 2006 Northern Lake Service sampling of the C.M. Christiansen Company site in Phelps Wisconsin.

If you have any questions or comments concerning the enclosed data, please call Andy Ostrowski or myself at your convenience.

Sincerely,

Steve Macauley
Field Operations Coordinator
Northern Lake Service, Inc.

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI00034

Printed: 07/07/06 Code: S Page 1 of 3

Client: Natural Resource Technology Inc
 Attn: Richard H. Sawall
 23713 West Paul Road (Suite D)
 Pewaukee, WI 53072

NLS Project: 98506

NLS Customer: 84233

Fax: 262 523 9001 Phone: 262 523 9000

Project: C.M. Christiansen Company May 2006

PMW-18 NLS ID: 406990

Ref. Line COC PMW-18 Matrix: GW
 Collected: 05/30/06 09:46 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Could not sample	key broken off in lock					05/30/06	NA	721026460

MW-18 NLS ID: 406991

Ref. Line COC MW-18 Matrix: GW
 Collected: 05/30/06 09:59 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1684.01	ft, NGVD	1			05/30/06	NA	721026460

MW-2 NLS ID: 406992

Ref. Line COC MW-2 Matrix: GW
 Collected: 05/30/06 10:26 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1684.86	ft, NGVD	1			05/30/06	NA	721026460

MW-4 NLS ID: 406993

Ref. Line COC MW-4 Matrix: GW
 Collected: 05/30/06 11:38 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.82	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached					06/08/06	SW846 8151	632021390
	Analyzed at Davy Laboratories.							
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

PMW-17 NLS ID: 406994

Ref. Line COC PMW-17 Matrix: GW
 Collected: 05/30/06 10:51 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1684.60	ft, NGVD	1			05/30/06	NA	721026460

MW-17 NLS ID: 406995

Ref. Line COC MW-17 Matrix: GW
 Collected: 05/30/06 10:54 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.44	ft, NGVD	1			05/30/06	NA	721026460

PMW-14 NLS ID: 406996

Ref. Line COC PMW-14 Matrix: GW
 Collected: 05/30/06 12:06 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1684.94	ft, NGVD	1			05/30/06	NA	721026460

MW-12 NLS ID: 406997

Ref. Line COC MW-12 Matrix: GW
 Collected: 05/30/06 12:09 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1684.93	ft, NGVD	1			05/30/06	NA	721026460

NORTHERN LAKE SERVICE, INC.
 Analytical Laboratory and Environmental Services
 400 North Lake Avenue - Crandon, WI 54520
 Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
 WDATCP Laboratory Certification No. 105-330
 EPA Laboratory ID No. WI00034

Client: Natural Resource Technology Inc
 Attn: Richard H. Sawall
 23713 West Paul Road (Suite D)
 Pewaukee, WI 53072

Printed: 07/07/06 Code: S Page 2 of 3
 NLS Project: 98506
 NLS Customer: 84233
 Fax: 262 523 9001 Phone: 262 523 9000

Project: C.M. Christiansen Company May 2006

MW-13 NLS ID: 406998

Ref. Line COC MW-13 Matrix: GW
 Collected: 05/30/06 11:49 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1695.85	ft, NGVD	1			05/30/06	NA	721026460

MW-8 NLS ID: 406999

Ref. Line COC MW-8 Matrix: GW
 Collected: 05/30/06 11:58 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1687.16	ft, NGVD	1			05/30/06	NA	721026460

MW-3 NLS ID: 407000

Ref. Line COC MW-3 Matrix: GW
 Collected: 05/30/06 10:14 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1685.49	ft, NGVD	1			05/30/06	NA	721026460

MW-6 NLS ID: 407001

Ref. Line COC MW-6 Matrix: GW
 Collected: 05/30/06 12:18 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1685.01	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached					06/09/06	SW846 8151	632021390
Analyzed at Davy Laboratories.								
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

MW-10 NLS ID: 407002

Ref. Line COC MW-10 Matrix: GW
 Collected: 05/30/06 13:08 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.71	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached					06/09/06	SW846 8151	632021390
Analyzed at Davy Laboratories.								
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

PMW-11 NLS ID: 407003

Ref. Line COC PMW-11 Matrix: GW
 Collected: 05/30/06 13:43 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field static water level	1683.71	ft, NGVD	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached					06/09/06	SW846 8151	632021390
Analyzed at Davy Laboratories.								
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

PMW-11B NLS ID: 407004

Ref. Line COC PMW-11B Matrix: GW
 Collected: 05/30/06 14:47 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field depth to water	4.47	ft.	1			05/30/06	NA	721026460
Chlorinated Herbicides (water) by EPA 8151	see attached					06/09/06	SW846 8151	632021390
Analyzed at Davy Laboratories.								
Organics Extraction (Herbicides)	yes					06/06/06	EPA 8151A	632021390

NORTHERN LAKE SERVICE, INC.
Analytical Laboratory and Environmental Services
400 North Lake Avenue - Crandon, WI 54520
Ph: (715)-478-2777 Fax: (715)-478-3060

ANALYTICAL REPORT

WDNR Laboratory ID No. 721026460
WDATCP Laboratory Certification No. 105-330
EPA Laboratory ID No. WI00034

Printed: 07/07/06 Code: S Page 3 of 3

Client: Natural Resource Technology Inc
Attn: Richard H. Sawall
23713 West Paul Road (Suite D)
Pewaukee, WI 53072

NLS Project: 98506

NLS Customer: 84233

Fax: 262 523 9001 Phone: 262 523 9000

Project: C.M. Christiansen Company May 2006

Effluent NLS ID: 407005

Ref. Line COC Effluent Matrix: GW

Collected: 05/30/06 15:05 Received: 05/30/06

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Could not sample	pump or generator malfunction					05/30/06	NA	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution.

LOD = Limit of Detection LOQ = Limit of Quantitation ND = Not Detected 1000 ug/L = 1 mg/L

DWB = Dry Weight Basis NA = Not Applicable %DWB = (mg/kg DWB) / 10000

MCL = Maximum Contaminant Levels for Drinking Water Samples

Reviewed by: _____

Authorized by:
R. T. Krueger
President

ANALYTICAL RESULTS: Chlorinated Herbicides by EPA 8151

Page 1 of 1

Customer: Natural Resource Technology Inc NLS Project: 98506

Project Description: C.M. Christiansen Company

Project Title: May 2006

Template: DAV8151W Printed: 07/07/2006 13:19

Sample: 406993 MW-4 Collected: 05/30/06 Analyzed: 06/08/06 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Pentachlorophenol	ND	ug/L	1	0.070	0.24
DCAA (SURR**)	119%				

Sample: 407001 MW-6 Collected: 05/30/06 Analyzed: 06/09/06 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Pentachlorophenol	1.7	ug/L	1	0.070	0.24
DCAA (SURR**)	85.7%				

Sample: 407002 MW-10 Collected: 05/30/06 Analyzed: 06/09/06 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Pentachlorophenol	0.92	ug/L	1	0.070	0.24
DCAA (SURR**)	109%				

Sample: 407003 PMW-11 Collected: 05/30/06 Analyzed: 06/09/06 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Pentachlorophenol	99	ug/L	1	1.4	4.8
DCAA (SURR**)	91.6%				

Sample: 407004 PMW-11B Collected: 05/30/06 Analyzed: 06/09/06 -

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ
Pentachlorophenol	[0.10]	ug/L	1	0.070	24
DCAA (SURR**)	97.8%				

** Surrogates are used to evaluate a method's Quality Control.

NORTHERN LAKE SERVICE, INC. FIELD GROUNDWATER MONITORING RECORD

NLS Laboratory Number	406990	406991	406992	406993	406994	406995	406996	406997	406998	406999	407002	407001
Facility: Natural Resource Technology	PMW-18	MW-18	MW-2	MW-4	PMW-17	MW-17	PMW-14	MW-12	MW-13	MW-8	MW-3	MW-6
C M Christensen Co. pg 1 of 2												
DNR. ID#												
Well Condition (see key)	see back	OK	see back	see back	OK	OK	Nil WLSK	Nil NC	heaved NL	hooky has	No Lock	OK
Pipetop Elevation (ft. NGVD)	1690.68	1690.74	1714.54	1689.63	1686.68	1686.98	1712.40	1711.09	1703.06	1703.50	1692.87	1691.52
Depth to Water (ft.)		6.73	29.68	5.81	208	3.54	27.46	2616	7.21	1634	7.38	6.51
STATIC WATER ELEVATION		1684.01	1684.86	1683.82	1684.60	1683.44	1684.94	1684.93	1695.85	1687.16	1685.49	1685.01
Depth to Well Bottom (ft.)	37.7	15.9	37.3	25.3 19.49	36.7	16.1	47.1	31.7	21.2	23.3	20.1	15.1
Standing Water Column (ft.)	---	---	---	---	---	---	---	---	---	---	---	8.59
Standing Water Volume (gal.)	---	---	---	3.33	---	---	---	---	---	---	---	1.46
Purging Methods (see key)	---	---	---	HB	---	---	---	---	---	---	---	HB
Purge Info. (see key) (4 vol.)	---	---	---	Pure	---	---	---	---	---	---	---	PDP4
Volume Purged (gal.)	---	---	---	13.3	---	---	---	---	---	---	---	2.7
Appearance During Purging	---	---	---	sl. silty tan	---	---	---	---	---	---	---	silty
FIELD COLOR (describe)	---	---	---	ND	---	---	---	---	---	---	---	ND
FIELD CONDUCTIVITY (umho @ 25C)	---	---	---	---	---	---	---	---	---	---	---	---
Field Filtered (Y/N describe)	---	---	---	NO	---	---	---	---	---	---	---	NO
FIELD ODOR (describe)	---	---	---	ND	---	---	---	---	---	---	---	ND
FIELD pH (standard units)	---	---	---	---	---	---	---	---	---	---	---	---
FIELD TEMPERATURE (degree C)	---	---	---	---	---	---	---	---	---	---	---	---
FIELD TURBIDITY	---	---	---	Ext.	---	---	---	---	---	---	---	mod
Quantity	---	---	---	---	---	---	---	---	---	---	---	---
Texture	---	---	---	fine	---	---	---	---	---	---	---	fine
Color	---	---	---	tan brown	---	---	---	---	---	---	---	tan brown
Purge Time-if not immed.												
TIME SAMPLED	946	959	1026	1138	1051	1054	1206	1209	1149	1158	1014	1218
DATE SAMPLED	5/30/00											

The following information applies to samples on the reverse side of this sheet.

Date 5/30/06 Date _____
 Crew Chief Ron Smith Crew Chief _____
 Crew _____ Crew _____
 Weather/Comments: Overcast
mid 70's - Lo 80's
PMW4 DTB - 45.7

SAMPLE COLLECTION COMMENTS

PMW18 - a key is broken off inside lock
 couldn't open,
 MW2 - ~~New lock - big silver master lock which I had~~
~~a key for it, it turned, while hitting it with~~
~~hammer, it wouldn't open. Tried again - succeeded~~
 MW4 - 2-wells unlabeled in app. area both over 20' DTB
 MW4 DTB is 16.9 - called Hardy S. left message at 1041

~~Hardy called back - 2 new wells put in by DWR - MW4 gone, sample shaken w/c~~

SAMPLE CUSTODY

RELINQUISHED BY (signature)	RECEIVED BY (signature)	DATE/TIME	CONDITION	TEMP.
<u>Ron Smith</u>		<u>5/30/06 1630</u>	<u>Good</u>	<u>1 on ice</u>
REMARKS & OTHER INFORMATION				

KEY OF ABBREVIATIONS

- Purging Method: HB hand bailed
 PB power bailer
 DP deep well pump
 PP peristaltic pump
- Purging Info: P-X purged (X) volumes
 Dry purged dry
 DD(x) level drew down; purged (x) volume of remaining column
 O other (explain)
- Well Condition: WD well damaged (explain)
 NL well not locked
 NC no cap on inner casing
 SD seal damaged (explain)
 O other problems (i.e. bent casing, ants in well)
 OK well in good condition

Purging Appearance: description (i.e. sandy, cloudy, clear, dark, red, etc)

Filtered: Y or N

Filterability: G=good, M=moderately good, P=poor, D=difficult,
 special procedures (explain)

NORTHERN LAKE SERVICE, INC. FIELD GROUNDWATER MONITORING RECORD

NLS Laboratory Number	407002	407003	407004	407005															
Facility: Natural Resource Technology	MW-10	PMW-11	PMW-11B	Effluent															
C M Christensen Co. pg 2 of 2																			
DNR ID#																			
Well Condition (see key)	OK	OK	OK																
Pipetop Elevation (ft. NGVD)	1689.13	1689.25																	
Depth to Water (ft.)	5.42	5.54	4.47																
STATIC WATER ELEVATION	1683.71	1683.71																	
Depth to Well Bottom (ft.)	15.2	30.0	48.5																
Standing Water Column (ft.)	9.78	24.46	44.03																
Standing Water Volume (gal.)	1.67	4.18	7.52																
Purging Methods (see key)	HB	HB	HB																
Purge Info. (see key) (4 vol.)	P4X	P004	P4X																
Volume Purged (gal.)	6.6	8.7	30.11																
Appearance During Purging	cloudy orange	silt cloudy	silty tan																
FIELD COLOR (describe)	orange	NP	tan																
FIELD CONDUCTIVITY (umho @ 25C)	---	---	---																
Field Filtered (Y/N describe)	NO	NO	NO																
FIELD ODOR (describe)	NP	NP	NP																
FIELD pH (standard units)	---	---	---																
FIELD TEMPERATURE (degree C)	---	---	---																
FIELD TURBIDITY	Quantity	Ext	50t	Ext															
	Texture	fine	fine	fine															
	Color	orange	tan	brown															
Purge Time-if not immed.																			
TIME SAMPLED	1308	1343	1447	1505															
DATE SAMPLED	5/30/06			5/30/06															

The following information applies to samples on the reverse side of this sheet.

Date 5/30/06 Date _____

Crew Chief Ron Smith Crew Chief _____

Crew _____ Crew _____

Weather/Comments: Sunny
80's

SAMPLE COLLECTION COMMENTS

[Empty box for sample collection comments]

SAMPLE CUSTODY

RELINQUISHED BY (signature) RECEIVED BY (signature) DATE/TIME

RECEIVED AT NLS BY (signature) DATE/TIME CONDITION TEMP.
Ron Smith 5/30/06 1630 Good on ice

REMARKS & OTHER INFORMATION

KEY OF ABBREVIATIONS

- Purging Method:
 - HB hand bailed
 - PB power bailer
 - DP deep well pump
 - PP peristaltic pump
- Purging Info:
 - P-X purged (X) volumes
 - Dry purged dry
 - DD(x) level drew down; purged (x) volume of remaining column
 - O other (explain)
- Well Condition:
 - WD well damaged (explain)
 - NL well not locked
 - NC no cap on inner casing
 - SD seal damaged (explain)
 - O other problems (i.e. bent casing, ants in well)
 - OK well in good condition

Purging Appearances: description (i.e. sandy, cloudy, clear, dark, red, etc)

Filtered: Y or N

Filterability: G=good, M=moderately good, P=poor, D=difficult, special procedures (explain)

MASTER FILE COPY
PROJECT # 9226
CO: data (groundwater)

Saari, Christopher A.

From: Laurie L. Parsons [lparsons@naturalrt.com]
Sent: Wednesday, June 21, 2006 3:37 PM
To: Saari, Christopher A.
Cc: Robinson, John H.; Eric R. Christiansen; erich@rich-law.com; Richard G. Fox
Subject: FW: CMC Co. Meeting Agenda
Attachments: 1226CMCSedimentPathwayDraft.pdf

Chris,

This is to confirm that our meeting for tomorrow on the CM Christiansen Co. site will be postponed and to relay an agenda for the meeting.

We understand that Tom Janisch will not be available. Given his significant involvement on the ESI supplement, we will postpone and re-establish available meeting times. Unfortunately Eric Christiansen is essentially not available in July, which is why he was hoping to get this in before then. He will be out of state except weekends from June 26 through August 3. We tried calling you by phone earlier today (easier to schedule), but were not able to reach you.

In short, August 7th through 25th is fairly open for NRT/CMC. Eric indicated he can try to make July 21st in Rhinelander work, but would have to juggle a few things to make it up to Rhinelander in time. Rick would have to cancel another commitment, but may be able to do it. Please call or email on re-scheduling this meeting.

Below is the agenda we envisioned for our meeting. Please add any items you have, we can review & revise prior. Also attached is a Conceptual Site Model graphic for discussion under Item 2.

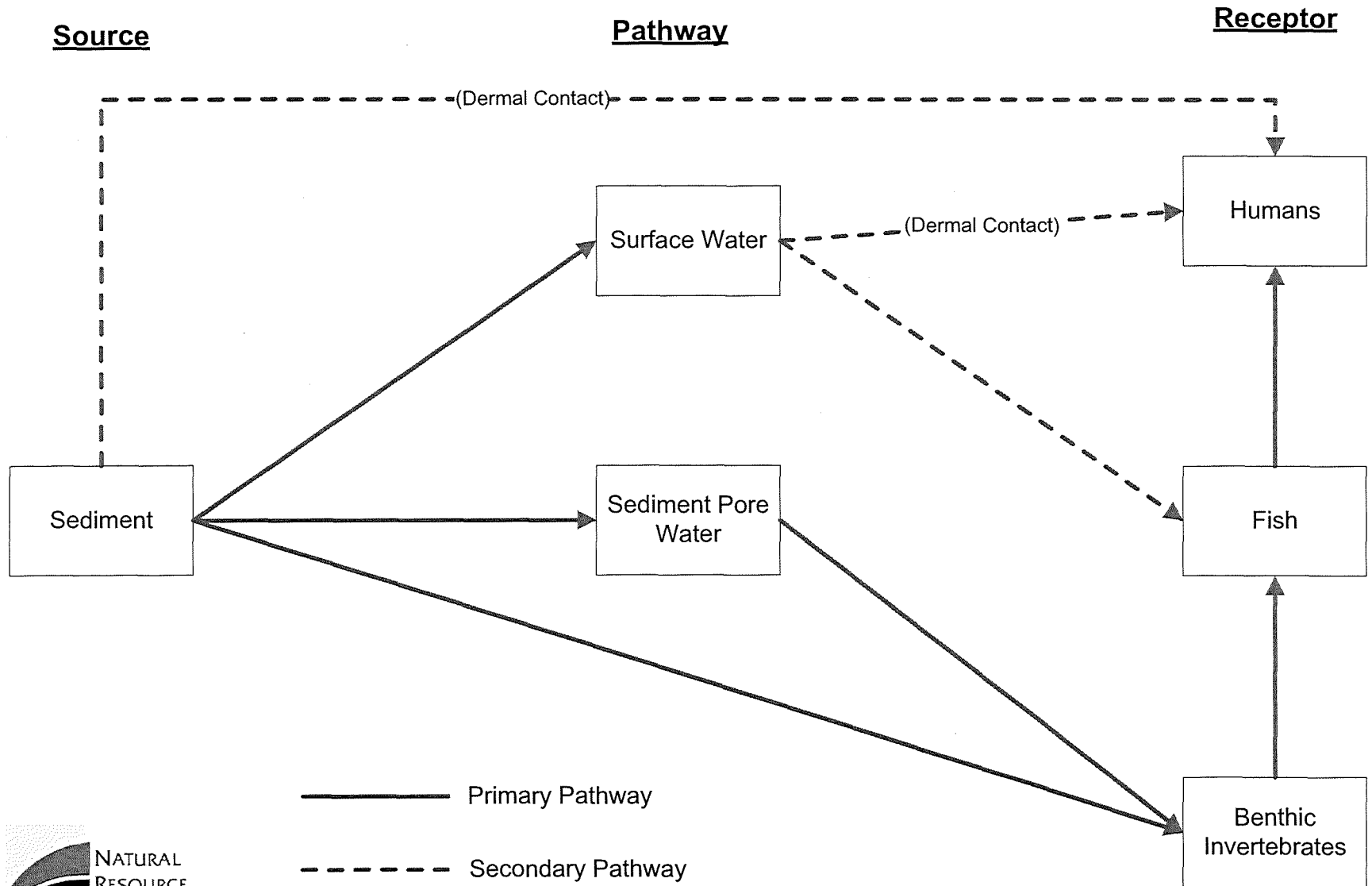
1. Overview of ESI Results
 - a. PCP data
 - b. ESI Dioxin data interpretation
2. Draft Conceptual Site Model for discussion
 - a. Purpose
 - b. Pathways of concern
3. Site Specific Risk Assessment
 - a. Chemicals of concern
 - b. Other anticipated elements
4. Work Plan

Laurie L. Parsons, PE
Natural Resource Technology, Inc.
23713 W. Paul Road, Suite D
Pewaukee, WI 53072
262.522.1193 Direct Dial
262.523.9000 General Number
lparsons@naturalrt.com
www.naturalrt.com

07/07/2006

Current CSM for Military Creek Sediments

Draft for Discussion



Saari, Christopher A.

From: Saari, Christopher A.
Sent: Friday, May 19, 2006 1:26 PM
To: Robinson, John H.; Debrock Owens, Michelle
Subject: CM Christiansen

FYI - I just talked with Laurie Parsons of NRT regarding their proposed meeting. She asked first about this being fee-based, and I said it would probably not require a fee because of the Haz Waste Grant commitments. We then agreed that this should be a technical meeting, hence no attorneys, but she will need to discuss this point with Eric Christiansen first to make sure.

Parsons said that they would like to use this meeting to figure out where we left off at our last meeting, and then try to fill in the blanks as far as starting to reach compliance with the Spill Response Agreement. She also said they would like to reach consensus on a work plan approval format so that there will be few, if any, revisions needed to the document. Parsons requested that anyone who might be involved in the sediment portion of the site be present at the meeting, so we are all talking about the same things at the same time. I said that we would like to have Tom Janisch assisting with the reviews, etc., and Parsons thought it important that Janisch be present at our discussion. Parsons also said that they will do a review of existing data as discussed in their letter and get something to us prior to the meeting.

Based on John's and my schedules, I gave her some potential meeting dates (June 21, 22, 23?, 28, 29, 30?) and possible meeting locations (Rhineland, Wausau, Green Bay, Madison). She will check with Christiansen to find out if any of these dates/places work for him. I expect to hear from her some time early next week.

Chris Saari
Hydrogeologist, Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
Telephone: 715-685-2920
E-mail: Christopher.Saari@Wisconsin.gov



Mr. Christopher Saari
Wisconsin Department of Natural Resources
2501 Golf Course Road
Ashland, WI 54806

May 15, 2006
(1226)

RE: C.M. Christiansen Co., Inc. (CMC), Former Utility Pole Treating Facility, Phelps, Wisconsin

Dear Mr. Saari:

On behalf of C.M. Christiansen Co., Inc. (CMC), Natural Resource Technology, Inc. (NRT) is responding to the February 24, 2006 letter from WDNR regarding the former Poleyard Property in Phelps, Wisconsin. The referenced WDNR letter is a response to CMC's earlier correspondence from June 10, 2005 and asks for a timeline for completion of the following provisions of the April 1998 Spill Response Agreement:

- Item No. 4: *Military Creek Sampling Start*
- Item No. 9: *Submittal of Military Creek Investigation Report*
- Item No. 10: *Submittal of a Military Creek Remedial Action Options Report*

Considering the history of this project and complex technical issues that can face sediment projects, NRT recommends that to the extent possible, further investigation of sediment conditions be performed with collaborative agreement on technical scope and major milestones. With clear understanding of process, objectives and goals upfront in the project planning process, we can then re-establish agreement on technical interpretation of assessments performed to date, and proceed under a WDNR-approved work plan designed to address open items of the Spill Response Agreement. To begin this process, we propose the following:


1. Project Re-Start Meeting with WDNR (June/July 2006). Prior to the meeting CMC's technical team will complete their review of available information, and develop an outline of technical discussion points and conceptual content for a Work Plan that supplements the Expanded Site Inspection (ESI) performed by WDNR. The outline will be provided no later than one week in advance of the meeting along with a site conceptual model (CSM) designed to help the team focus on critical pathways of concern, and to establish a framework under which a site-specific risk assessment can be performed. Specifically, we are interested in discussing the conclusions from the ESI Report and concur that further work is necessary to determine whether dioxins in the sediment of Military Creek pose a risk to human health or the environment.
2. Supplemental Work Plan (60 days following concurrence on approach). On behalf of CMC, NRT will prepare a Supplemental Work Plan. This plan will be tailored to address the exposure pathways mutually agreed to. The Work Plan will contain a proposed sampling and analysis plan, and schedule for moving the project through the milestones anticipated by Items 4, 9 and 10, of the Spill Response Agreement. Expected scheduling for this work can be discussed in our meeting.

Mr. Christopher Saari, WDNR
May 15, 2006
Page 2

We believe that re-establishing project goals in this manner will lead to a more efficient process and proactive decision-making as to how the sediment related concerns at the site should be addressed. We look forward to your response and working with you on the CMC site. Please do not hesitate to contact Eric Christiansen or NRT should you have any questions on our proposed approach for this project.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.


Richard G. Fox
Managing Scientist


Laurie L. Parsons, PE
Principal Engineer

Cc: Ms. Michelle DeBrock-Owens, WDNR-Northeast Region, Rhinelander, Wisconsin
Mr. Eric R. Christiansen, C. M. Christiansen Co., Inc.
Ms. Elizabeth Gamsky Rich

[P:\1200\1226\Corres\WDNR\CMC 051506 WDNR Letter rev.doc]



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
John Gozdziwski, Regional Director

Northern Region Headquarters
107 Sutliff Ave.
Rhineland, Wisconsin 54501-3349
Telephone 715-365-8900
FAX 715-365-8932
TTY Access via relay - 711

March 24, 2006

File Ref.: 4190
CASETRACK #: 2005-NOEE-029

Mr. Eric R. Christiansen
5501 N. Santa Monica Blvd.
Milwaukee, WI 53217

Subject: Extension Request

Dear Mr. Christiansen:

The Department is willing to grant your extension request. Please respond to the Department's February 24, 2006 letter by May 15, 2006.

If you have any questions, please call me at 715-365-8935. If you have any technical questions concerning the case, please contact Chris Saari at 715-685-2920.

Sincerely,

Michelle DeBrock-Owens
Environmental Enforcement Specialist

c: Enforcement File, Rhineland
CASETRACK File, Rhineland
Chris Saari, Ashland
John Robinson, Rhineland
Deb Johnson, LS/5

C.M. CHRISTIANSEN CO., INC.

MILWAUKEE:

5501 NORTH SANTA MONICA BLVD.

MILWAUKEE, WI 53217

TEL: (414) 963-9211

EMAIL: erc@execpc.com

PHELPS:

1 LAKE STREET

P.O. Box 100

PHELPS, WI 54554

TEL: (715) 545-2333

FAX: (715) 545-2334

SENT BY FAX & REGULAR MAIL

March 19, 2006

Ms. Michelle DeBrock-Owens
Wisconsin Dept. of Natural Resources
107 Sutliff Avenue
Rhineland, WI 54501-3349

Re: Your February 24, 2006 letter

Dear Ms. DeBrock-Owens:

We have received your February 24, 2006 letter. We respectfully request an extension of the time you have given us to respond, until May 15, 2006.

We are currently in litigation with our insurance company, which has denied coverage relating to environmental claims related to the Poleyard. Our suit against them, filed last fall, demanded they assume the defense of this action and requested reimbursement for prior expenses incurred. This has been met by their countersuit seeking declaratory relief. Since last November, we have been attempting to schedule a mediation hearing on these actions.

Our environmental consultants have not been paid for some time and are naturally reluctant to proceed without some assurance that past-due invoices will be paid and that future work will be compensated. We cannot respond to your letter without significant assistance from them. If we resolve (one way or the other) issues with our insurance company, we will be able to address not only the substance of WDNR's environmental concerns but also specifically respond to your comment that WDNR might consider taking on this case as a state lead project.

We believe we are close to reaching an accommodation with the insurance company, and respectfully request this extension to enable us to complete that effort.

If you have any questions, please don't hesitate to contact me.

Very truly yours,

C.M. CHRISTIANSEN CO., INC.



Eric R. Christiansen, President

cc: P.C. Christiansen
Laurie Parsons, NRT
Elizabeth Gamsky Rich, Esq.
Jeffrey O. Davis, Esq.
Chris Saari, WDNR ✓



Mar 19 06 09:43p

Christiansen

p. 1

C.M. CHRISTIANSEN CO., INC.**MILWAUKEE**

5501 NORTH SANTA MONICA BLVD.

MILWAUKEE, WI 53217

TEL: (414) 963-9211

EMAIL: erc@execpc.com**PHELPS.**

1 LAKE STREET

P.O. Box 100

PHELPS, WI 54554

TEL: (715) 545-2333

FAX: (715) 545-2334

SENT BY FAX & REGULAR MAIL

March 19, 2006

Ms. Michelle DeBrock-Owens
 Wisconsin Dept. of Natural Resources
 107 Sutliff Avenue
 Rhinelander, WI 54501-3349

Re: Your February 24, 2006 letter

Post-it® Fax Note	7671	Date	3/19/06	# of pages	1
To	Chris Saari	From	Michelle Owens		
cc:	DNR-Ashland	Co.	DNR-		
Phone #		Phone #	Rhine		
Fax #		Fax #			

Dear Ms. DeBrock-Owens:

We have received your February 24, 2006 letter. We respectfully request an extension of the time you have given us to respond, until May 15, 2006.

We are currently in litigation with our insurance company, which has denied coverage relating to environmental claims related to the Poleyard. Our suit against them, filed last fall, demanded they assume the defense of this action and requested reimbursement for prior expenses incurred. This has been met by their countersuit seeking declaratory relief. Since last November, we have been attempting to schedule a mediation hearing on these actions.

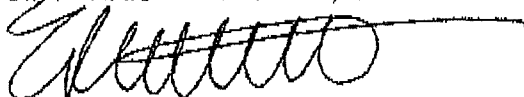
Our environmental consultants have not been paid for some time and are naturally reluctant to proceed without some assurance that past-due invoices will be paid and that future work will be compensated. We cannot respond to your letter without significant assistance from them. If we resolve (one way or the other) issues with our insurance company, we will be able to address not only the substance of WDNR's environmental concerns but also specifically respond to your comment that WDNR might consider taking on this case as a state lead project.

We believe we are close to reaching an accommodation with the insurance company, and respectfully request this extension to enable us to complete that effort.

If you have any questions, please don't hesitate to contact me.

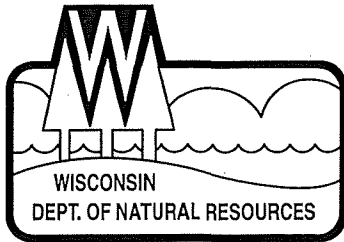
Very truly yours,

C.M. CHRISTIANSEN CO., INC.



Eric R. Christiansen, President

cc: P.C. Christiansen
 Laurie Parsons, NRT
 Elizabeth Gamsky Rich, Esq.
 Jeffrey O. Davis, Esq.
 Chris Saari, WDNR



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
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107 Sutliff Ave.
Rhinelander, Wisconsin 54501-3349
Telephone 715-365-8900
FAX 715-365-8932
TTY Access via relay - 711

February 24, 2006

File Ref.: 4190
CASETRACK #: 2005-NOEE-029

Mr. Eric R. Christiansen
5501 N. Santa Monica Blvd.
Milwaukee, WI 53217

Subject: Remedial Alternatives for Dioxin and April 1998 Spill Response Agreement Activities

Dear Mr. Christiansen:

The Department is writing today in response to some of the issues raised in your letter of June 10, 2005. This is not intended to be a point-by-point response to your letter, but we believe that it does address the issues that you raised.

The first issue in your letter relates to the *Expanded Site Inspection Report* prepared by the Department, and that report's lack of recommendations. To respond to this issue, you must first understand the purpose of that report, which was "to collect information concerning conditions at the C.M. Christiansen - Pole Yard sufficient to assess the threat posed to human health and the environment, and to determine the need for additional investigation under CERCLA or other authority, and if appropriate, support site evaluation using the Hazard Ranking System (HRS) for proposal to the National Priorities List (NPL)." The Department's intent in conducting the Expanded Site Inspection (ESI) was not to come up with a listing of specific investigative or remedial actions needed at the site, but rather to determine the types of threats posed by site contaminants, to determine whether further investigation is needed, and to determine if the site scored high enough to be included on the NPL as a potential Superfund site. Appendix D of the report describes the Department's findings of the high risk posed to the environment by the contaminated sediments. Furthermore, based on your discussions with Department staff at the offices of Natural Resource Technology on February 15, 2005, it should be apparent that the Department believes that additional investigation and remedial evaluation of Military Creek sediments are needed. It is not the Department's role under the ch. NR 700, Wis. Adm. Code process to recommend or require specific investigative or remedial actions; that role falls to the party or parties responsible for the contamination.

As was agreed to at the February 15, 2005 meeting, the Department has done some research into remedial alternatives for dioxins, and we have found that there may indeed be feasible alternatives available. We have discussed this site in general terms with the following individuals, and they have indicated, at least conceptually, that remedial options for dioxins do exist. These individuals would be willing to share their knowledge of different remedial approaches to this class of contaminants.

- Bill Lundy - DeepEarth Technologies, Inc., 12635 Kroll Dr., Alsip, IL 60803, telephone (708) 396-0100, e-mail wlundy@cool-ox.com
- Ian T. Osgerby, Ph. D., PE - US Army Corps of Engineers, telephone (978) 318-8631, e-mail ian.t.osgerby@usace.army.mil
- H. Eric Nuttall, Ph. D. - University of New Mexico, telephone (505) 277-6112, e-mail nuttall@unm.edu

In addition, we shared the ESI sediment dioxin results with Rick Pager of Waste Management, Inc., and discussed the potential for landfill disposal of dredged sediments. Mr. Pager indicated that, based on his comparison of the dioxin results with Michigan Department of Environmental Quality regulations, the reported dioxin concentrations would not preclude these sediments from being disposed of in Waste Management's K&W Landfill. Mr. Pager can be reached at telephone (262) 250-8386 if you would like to discuss this issue directly with him.

Based on the above discussions, the Department believes that there are potentially viable remedial options to address the contaminated sediments. Consequently, we feel that the Military Creek investigation and remedial action options analysis required in the April 1998 Spill Response Agreement need to be completed. Specifically, complete the investigation of Military Creek (the Department only completed a screening and not a complete extent and degree investigation) as required in number 4 and 9 of the agreement and submit a completed Remedial Actions Option Report as required in number 10 of the agreement. Please respond to the Department within 30 days, indicating when the C. M. Christiansen Company can follow through and complete items 4, 9, and 10 of the Spill Response Agreement.

The Department is still willing to follow through with the ability-to-pay procedures as outlined in Chris Saari's March 24, 2005 letter to you, if you feel the Company cannot pay for the remaining work as outlined in 4, 9, and 10 of the Spill Response Agreement. If the C.M. Christiansen Company is unable or unwilling to complete the remaining work, the Department will consider taking on this case as a state lead project. The Department does pursue cost recovery, where warranted, on state lead projects. As mentioned in my May 13, 2005 letter, the Department will consider the C.M. Christiansen Company to be in violation of the Spill Response Agreement if items 4, 9, and 10 are not completed and the Company is unable to show inability to pay.

If you have any questions concerning this letter, please call me at 715-365-8935. If you have any technical questions concerning this case, please contact Chris Saari at 715-685-2920.

Sincerely,



Michelle DeBrock-Owens
Environmental Enforcement Specialist

- c: Enforcement File, Rhinelander
- CASETRACK File, Rhinelander
- Chris Saari, Ashland
- John Robinson, Rhinelander
- Deb Johnson, LS/5



PHONE CONVERSATION RECORD

DATE: 2/3/06
TIME: 0949 hrs.

CONVERSED WITH: Rick Payer
Waste Management, Inc.
262/250-8386
888/964-4700x104

SUBJECT/PROJECT: CM Christiansen

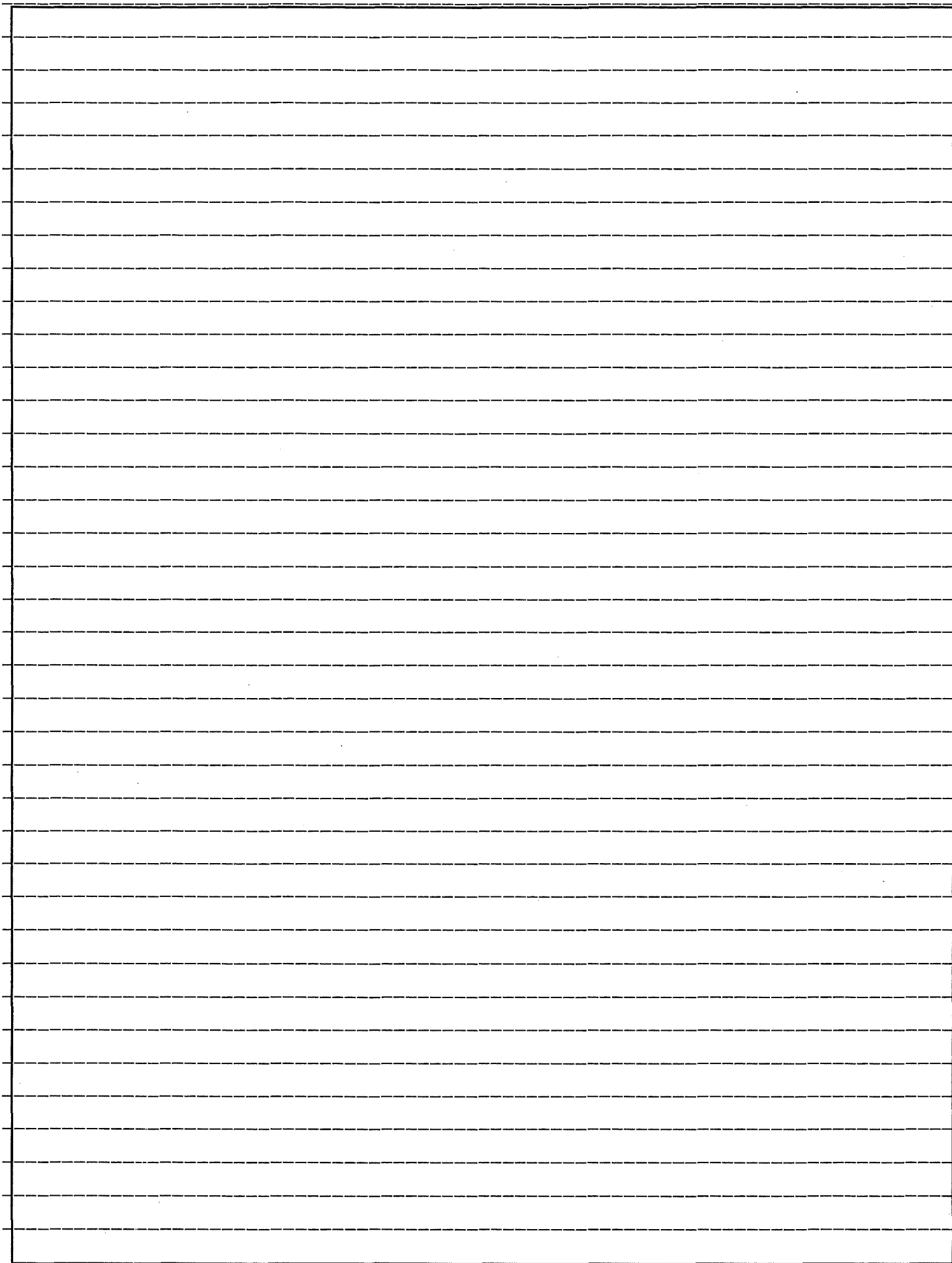
UNIQUE ID#.: 02-64-000068

Payer called to discuss the sediment dioxin results from DNR's Expanded Site Inspection, which I had e-mailed to Payer yesterday. Payer had questions about the meaning of the TE_{EQ} column on the tables. I explained that TE_{EQ} was a toxicity normalization in relation to 2,3,7,8-TCDD form of dioxin.

I then explained to Payer why I was looking at potential landfill disposal of these sediments, and the fact that the CM Christiansen Co. said disposal was not an option. Payer said that the Michigan Dept. of Environmental Quality has a state-only hazardous waste listing for 2,3,7,8-TCDD (0025) which prohibits disposal of waste with greater than 1ppm. Payer said the results I e-mailed to him are nowhere close (ppt vs. ppm) to the limit, so Payer did not think these sediment would be excluded for landfill disposal.

I told Payer that DNR would be writing to CM Christiansen, and asked if Payer would mind DNR including this discussion in our letter. Payer said that was OK with him.

Signature: Christopher Nelson
(please write legibly)



Saari, Christopher A.

From: Saari, Christopher A.
Sent: Wednesday, January 11, 2006 11:16 AM
To: 'ian.t.osgerby@usace.army.mil'; 'nuttall@unm.edu'; 'dcassidy@ggl.ulaval.ca';
'tddgator@aol.com'
Cc: Robinson, John H.
Subject: Remedial Options for Dioxins

Good Morning:

I was provided with your names during a December phone conversation with Bill Lundy of DeepEarth Technologies, Inc.; I believe that Mr. Lundy also included you on an electronic summary of that conversation back to me and my supervisor. What I spoke with Mr. Lundy about in December, and the issue on which I was hoping to gain some insight from you, is as follows:

I am overseeing the investigation and cleanup of a former wood treating facility in northern Wisconsin. The facility treated power poles with a 5% pentachlorophenol - 95% fuel oil solution. The facility was located adjacent to a stream classified by Wisconsin DNR as a trout stream; approximately 1,400 feet downstream of the facility, the stream discharges to a lake classified as an Outstanding Resource Water (i.e., no contaminant discharges are allowed). WDNR is for the most part satisfied with the investigation and cleanup of the soil and groundwater pathways, but only limited information is available on sediment/surface water quality in the stream.

The sediment data we do have available (collected by WDNR as part of a Superfund Expanded Site Inspection) indicates the presence of dioxins. In terms of TCDD -TEQ, the dioxin concentrations exceed Highly Probably Risk and/or Probable Risk criteria for adverse impacts on benthic macroinvertebrates, and WDNR has asked the responsible party to conduct further investigation of the stream and evaluate potential remedial options. The responsible party has replied that, because there are no disposal sites available for dioxin-contaminated sediments, there is no reason why they even need to define the extent of sediment contamination. In sort of a circular argument, WDNR has responded that a "do nothing" approach may well be the ultimate solution here, but we cannot know that that would be an acceptable approach until the extent of contamination is known and possible remedial options have been explored. The bottom line for WDNR is it would not be possible for us to, in essence, write off contamination in this stream without the supporting technical background for making that decision.

Mr. Lundy provided me with some useful information about remedial technologies to address dioxins, and he suggested that I discuss with you your experience in dealing with these contaminants. I would be very interested in either speaking with you directly or corresponding by e-mail to gain your insight on potential remedial options, so that I could then share this information with the responsible party and hopefully move us beyond the point at which we are now stalled. If you would have some time available to discuss this issue with me, please either give me a call or reply by e-mail with a time that would be convenient for me to call you. Thank you in advance for your assistance!

Chris Saari
Hydrogeologist, Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
Telephone: 715-685-2920
E-mail: Christopher.Saari@dnr.state.wi.us

Saari, Christopher A.

From: William Lundy [wlundy@cool-ox.com]
Sent: Tuesday, December 27, 2005 11:17 AM
To: Robinson, John H.
Cc: Saari, Christopher A.; reed.t@comcast.net; robin@cool-ox.com;
ian.t.osgerby@usace.army.mil; nuttall@unm.edu; 'Daniel P. Cassidy Ph. D.';
tddgator@aol.com; wwiley@cool-ox.com
Subject: Abstract of 12-19-05 telecon
Attachments: Telecon John Robertson 12-19-05.doc

John/Chris:

I trust this finds you well after the Christmas rush. Attached please find a quick synopsis of the points I covered during our telecon on 12/19. The people I have listed as contacts are very knowledgeable and have a superior understanding of not only what can be done to mitigate a variety of contaminant situations but, are "field schooled" in the applied aspects of what works. Tom Douglas has had 14 years of experience as a regulator with the Florida DEP and has used us on at least twenty sites. He can relate to the circumstances you are faced with. Thank you again for your time and for giving us the opportunity to help. Please keep us in mind and informed as the work continues at CPY and other sites in Northern Wisconsin. I am very interested in tracking the Railroad tie grinding sites and other wood treating sites. We can address chloro-phenolic and creosote compounds more affectively than any other technology that I know of to date. Have a happy, safe and prosperous new year,

Bill Lundy
DeepEarth Technologies, Inc.
12635 Kroll Dr.
Alsip, IL 60803
ofc. (708)396-0100 - fax(708)396-0111
cell (312)909-3667
w.lundy@comcast.net
www.deepearthtech.com

Abstract of Telecon

John/Chris:

Thank you for taking the time to discuss the CM Christianson Pole Yard (CPY) site and relating the dilemma you face with the ongoing forensic study. It was very nice to hear that Jim Cummings had referred me to you as an expert in the remediation of PCP and dioxins. He may have overstated my abilities and experience but, it was very kind of him.

May I assure you that the principals at the CPY site are not the only ones that are attempting to use the argument that; "*since there is no technology available to mitigate dioxins, therefore, there is no good reason to continue to assess the extent of the problem.*" This argument is not quite legitimate. In reality, there are technologies (incineration) that can deal with dioxins however, the expense of such an undertaking is usually so overwhelming the solution is not economically practical.

As an example, in 2000, I was called upon to attempt to remediate (in-situ) a small site in Indiana. The contaminants were the herbicides 2,4-D; 2,4-DP; 2,4,5-T as well as a number of single and double ring (ether linked) chloro-phenolic manufacturing by-products. These compounds were land banned and therefore, incineration or land-fill in Canada were the only disposal options. The least expensive price of disposal was circa \$350,000. Our price at the time was approximately \$50,000. This did not nearly cover our total costs but, the project was very worth while because it provided a small scale field opportunity to test the evolution of our chemox technology to that point. A NFA letter was issued by the State and the site closed. The point being is that there was technology available and now it is available at a reasonable price. As I mentioned on the phone, we also just received word that the large site we treated in California two years ago has been issued a NFA letter by the California Regional Water Quality Control Board, North Coast Region.

The point that Chris made; that you are obligated to investigate the environmental circumstances remaining at the CPY site and attempt to assess their affect on public health is well taken. I believe that from the regulatory standpoint, this is imperative. However, as I stated, even though you find contaminants at high enough concentrations to be measured, it may not be practical to pursue an ISCO remedy. If the concentrations are extremely low, we would have to inject a higher volume of oxidizer simply to increase the probability of molecular contact. I am sure that at the California site we achieved success through a combination of chemox and bio attrition. Cassidy has demonstrated in the laboratory that after (and even during) our *Cool-OxTM* oxidation reaction phase of treatment, bio factors become very evident.

The contact people I mentioned that have a high degree of understanding and are field results oriented are:

Ian T. Osgerby, Ph. D., PE – USACE - (978) 318-8631 - ian.t.osgerby@usace.army.mil

H. Eric Nuttall, Ph. D., U. of New Mexico - (505) 277-6112 - nuttall@unm.edu

Dan Cassidy, Ph. D., U. of Laval, Canada - (418) 656-2131 ex 8720 - dcassidy@ggl.ulaval.ca

Tom Douglass, PE, In-Situ Scientific Inc., - 850- 712-1811- tddgator@aol.com