ADDITIONAL SITE ASSESSMENT REPORT

BNSF Railway Company
Dwight Glover, Former Lease 40,580,246
Knoxville, Iowa
Marion County

EMR Project No. 6981.001

Prepared for:

Ms. Judith M. McDonough
Manager of Environmental Remediation
BNSF Railway Company
4515 Kansas Avenue
Kansas City, Kansas 66106

Prepared by:

EMR, Inc. 5301 East River Road, Suite 114 Fridley, MN 55421

OCTOBER 2005



ENVIRONMENTAL MANAGEMENT RESOURCES

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OCTOBER 2005



October 24, 2005

Mr. Hylton Jackson Environmental Specialist Iowa Department of Natural Resources 502 East 9th Street Des Moines, Iowa 50319

RE:

Additional Site Assessment Dwight Glover, Knoxville, Marion County, Iowa BNSF Leased Property No. 40,580,246 EMR Project Number 6981.001

Dear Mr. Jackson,

EMR, Inc. has completed an additional investigation for the Limited Phase II Assessment for the above referenced property. This additional investigation is in response to a letter from the Iowa Department of Natural Resources (IDNR) dated May 17, 2004, in which they requested that BNSF needs to further investigate the southern half of the property. This letter is submitted to present our findings of our investigation of the southern half of the property and should be viewed as an addition to the initial Limited Phase II Assessment Report submitted by EMR in November, 2003.

Background and Setting

The property is located southwest of the intersection of Rock Island Street and Kent Street approximately 10 feet north of the former BNSF Railway Company (BNSF) rail spur in the community of Knoxville, Marion County, Iowa (Figure 1). The parcel is rectangular and contains approximately 15,600 square feet (130' x 120') (Figure 2). The property is comprised of one parcel, and was leased to Dwight Glover, doing business as Glover Sanitation in November 1993 for the purpose of storage of a truck, cars, and a location of a shop. The property was formerly a bulk oil site reportedly operated by Sinclair Refining. Historical improvements included one warehouse/storage building and aboveground storage tanks.

Findings

EMR conducted a Phase II investigation on October 15, 2003. At the time of the site visit, the subject property was not in operation. Improvements remaining the parcel include one cement block storage building (access was locked), one concrete drainage culvert opening, one drainage access, one concrete driveway entrance, and a gravel driveway. Also observed on the subject property are one full 55-gallon sealed drum of unknown liquid substance, one concrete block, one farm equipment piece, metal fencing, and one exposed pipe. Noted observations on the adjacent property to the west include one pump house, one truck, one trailer, one propane tank, and two exposed pipes. EMR returned to the site in April, 2005 to conduct the further investigation. Improvements that are noted above still remained. The 55 gallon drum was profiled as oil and



DATE STAMP

2153 AM11:55 10/28/05

water in March, 2005 and was properly disposed of by Hazardous Waste Management of Waukee, IA. The waste profile and the manifest for disposal are attached.

Evaluation of shallow subsurface soils was conducted utilizing a Geoprobe hydraulic sampler. Three borings were drilled on the south side of the subject parcel. Depths of the soil borings ranged from 12 feet to 16 feet below ground surface (bgs). Soil samples were collected continuously during advancement of the Geoprobe. The subsurface soil samples were collected from depths ranging from 4 feet to 12 feet below the ground surface, and were submitted to Keystone laboratory for the detection of Petroleum Hydrocarbons. Boring logs are included as an attachment. Laboratory results did not detect petroleum hydrocarbons above method detection limits. Results for the soil samples are summarized in Table 1.

Three groundwater samples were collected and submitted to the laboratory for the detection of petroleum hydrocarbons. Laboratory results of the groundwater samples did not detect any of the constituents of concern above their respective detection limits. Analytical data sheets are provided as an attachment. Analytical results are summarized in Table 2.

Please feel free to contact Tanya Drake or myself at (763) 277-5200 with any questions or comments.

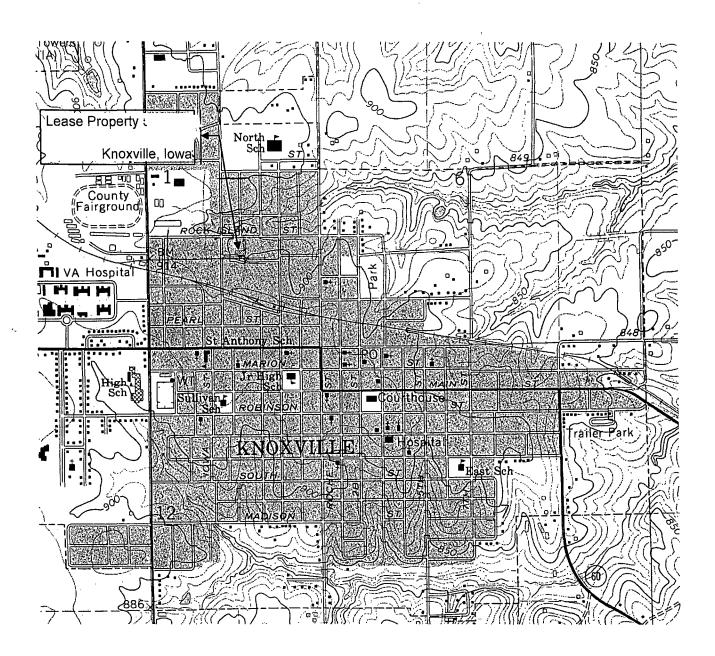
Sincerely,

EMR, Inc.

David Radabaugh Project Scientist

Enclosure

cc. Ms. Judith McDonough, Manager Environmental Remediation, BNSF Railway



Source: United States Geological Service

Figure No.

Site Vicinity Map

DATE: September 8, 1998 ccd DRAWN BY: ks CHECKED BY: REVISION NO.: 3586 PROJECT NO .: REFERENCE:



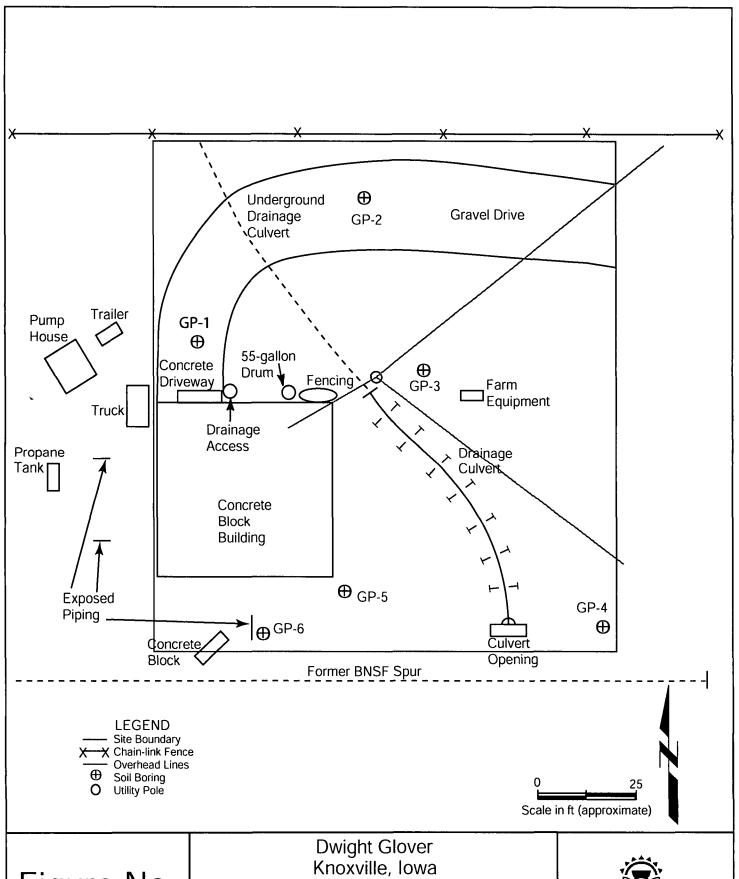


Figure No.

Lease Property No.: 40,580,246

Site Map

DRAWN BY: DKR	DATE: 10/21/05
TD	REVISION NO.: 1
PROJECT NO.:	REFERENCE;



ENVIRONMENTAL MANAGEMENT RESOURCES

Analytical Results Tables

Table 1: Soil Analytical Results
Dwight Glover BNSFLease Property 40,580,246

Soft Borling	E3pth (L3 5)	Date	Benzene	Tidhaus	(Mhy)	1619) X V Ions	Mije	EVEE	DIPE	TAME	TEA	offers)	Hill-Dird And	LEOSECEN = LEEU
GP-4	10'-12'	4/26/2005	<0.025	<0.025	<0.025	<0.051	<0.051	<0.051	<0.051	<0.051	<1.26	<5	<5	<5
GP-5	10'-12'	4/26/2005	<0.025	<0.025	<0.025	<0.050	<0.050	<0.050	<0.050	<0.050	<1.24	<5	<5	<5
GP-6	4'-6'	4/26/2005	<0.026	<0.026	<0.026	<0.052	<0.052	<0.052	<0.052	<0.052	<1.29	<5	<5	<5

Notes:
All Data Reported in milligram per kilogram (mg/kg)
MTBE: Methyl-tert-Butyl Ether
ETBE: Ethyl-tert-Butyl Ether
DIPE: Di-iso-Propyl Ether
TAME: tert-Amyl Methyl Ether
TBA: tert-Butyl Alcohol

Table 2: Groundwater Analytical Results Dwight Glover BNSFLease Property 40,580,246

Monitoring (Mall	Date	Benzene	Tibiliterre	(perixeus	Total Myknes	MIES	EVE3	oire	VAME	VEA	li ll o Graffine	THI - Disc Aug	Kodew - Hen
GP-4	4/26/2005	<1	<1	<1	<2	<1	<2	<2	<2	<50	<100	<100	<100
GP-5	4/26/2005	<2	<2	<2	<4	<2	<4	<4	<4	<100	<100	<100	<100
GP-6	4/26/2005	<1	<1	<1	<2	<1	<2	<2	<2	<50	<100	<100	<100
							 					=	
IDNI Groundreter ligsethon Whits (ngAr)		5	10TO	700	10000							1200	

Notes:
All Data Reported in micrograms per liter (ug/L)
MTBE: Methyl-tert-Butyl Ether
ETBE: Ethyl-tert-Butyl Ether
DIPE: Di-iso-Propyl Ether
TAME: tert-Amyl Methyl Ether
TBA: tert-Butyl Alcohol

Laboratory Results







Accreditations: Iowa DNR: 095 New Jersey DEP: IA001 Kansas DHE: E-10287

ANALYTICAL REPORT

May 09, 2005

Work Order: 15D1183

Page 1 of 3

Report To

David Radabaugh EMR, Inc. - Minneapolis 5301 E River Rd., Suite 114 Fridley, MN 55421

Project: Iowa UST Analysis Project Number: Knoxville, IA

Work Order Information

Date Received: 04/26/2005 2:15PM Collector: David Radabaugh Phone: (763) 277-5200

PO Number:

Result	MRL	Method	Analyst	Analyzed Qualifier
,		Matrix:Soil	(Collected: 04/26/05 09:20
<0.051 mg/kg	0.051	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.051 mg/kg	0.051	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.051 mg/kg	0.051	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.051 mg/kg	0.051	OA-1 (GC/MS)	KRM	05/02/05 22:28
<0.051 mg/kg	0.051	OA-1 (GC/MS)	KRM	05/02/05 22:28
<1.26 mg/kg	1.26	OA-1 (GC/MS)	KRM	05/02/05 22:28
99.5 %		64-143	KRM	05/02/05 22:28
<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 5:36
	5	Iowa OA-2	SMG	05/06/05 5:36
<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 5:36
<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 5:36
82.1 %		60-140	SMG	05/06/05 5:36
		Matrix: Water		Collected: 04/26/05 09:46
<1 ug/l	1	OA-1 (GC/MS)		04/29/05 20:43
	1			04/29/05 20:43
_	i	` '		04/29/05 20:43
-	1	•		04/29/05 20:43
	2			04/29/05 20:43
	2			04/29/05 20:43
				04/29/05 20:43
	2			04/29/05 20:43
			KRM	04/29/05 20:43
95.8 %		79-118	KRM	04/29/05 20:43
	0.1	Iowa OA-2	SMG	04/29/05 17:34
		Iowa OA-2	SMG	04/29/05 17:34
		Iowa OA-2	SMG	04/29/05 17:34
<0.1 mg/l	0.1	Iowa OA-2	SMG	04/29/05 17:34
\U.1 III\\(\alpha\) I	V. 1		01110	01,40,000 17.51
	<0.051 mg/kg <0.025 mg/kg <0.025 mg/kg <0.025 mg/kg <0.051 mg/kg <0.051 mg/kg <0.051 mg/kg <0.051 mg/kg <0.051 mg/kg <1.26 mg/kg <5 mg/kg <5 mg/kg <5 mg/kg <5 mg/kg <5 mg/kg <5 ug/l <1 ug/l <1 ug/l <1 ug/l <1 ug/l <2 ug/l <1 ug/l <2 ug/l <2 ug/l <2 ug/l <1 ug/l	<pre><0.051 mg/kg</pre>	Matrix:Soil	Matrix:Soil (0.051 mg/kg 0.051 OA-1 (GC/MS) KRM (0.025 mg/kg 0.025 OA-1 (GC/MS) KRM (0.051 mg/kg 0.051 OA-1 (GC/MS) KRM (0.051 mg/l 0.04-1 (GC/MS) KRM (0.051 mg/l 0.04-2 SMG (0.051 mg

15D1183-03

GP-5 (10-12')

Matrix:Soil

Collected: 04/26/05 10:35

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.







EMR, Inc. - Minneapolis 5301 E River Rd., Suite 114 Fridley, MN 55421

Work Order: 15D1183

May 09, 2005

Page 2 of 3

Analyte	Result	MRL	Method	Analyst Analyzed Qualifier
15D1183-03 GP-5 (10-12')			Matrix:Soil	Collected: 04/26/05 10:35
Methyl-t-butyl Ether (MTBE)	<0.050 mg/kg	0.050	OA-1 (GC/MS)	KRM 05/02/05 23:08
Benzene	<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM 05/02/05 23:08
Toluene	<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM 05/02/05 23:08
Ethylbenzene	<0.025 mg/kg	0.025	OA-1 (GC/MS)	KRM 05/02/05 23:08
Xylenes, total	<0.050 mg/kg	0.050	OA-1 (GC/MS)	KRM 05/02/05 23:08
Ethyl-tert-Butyl Ether (ETBE)	<0.050 mg/kg	0.050	OA-1 (GC/MS)	KRM 05/02/05 23:08
Di-iso-Propyl Ether (DIPE)	<0.050 mg/kg	0.050	OA-1 (GC/MS)	KRM 05/02/05 23:08
tert-Amyl Methyl Ether (TAME)	<0.050 mg/kg	0.050	OA-1 (GC/MS)	KRM 05/02/05 23:08
tert-Butyl Alcohol (TBA)	<1.24 mg/kg	1.24	OA-1 (GC/MS)	KRM 05/02/05 23:08
Surrogate: 4-Bromofluorobenzene	100 %		64-143	KRM 05/02/05 23:08
TEH, as gasoline	<5 mg/kg	5	Iowa OA-2	SMG 05/06/05 6:24
TEH, as #2 diesel fuel	<5 mg/kg	5	Iowa OA-2	SMG 05/06/05 6:24
TEH, as waste oil	<5 mg/kg	5	Iowa OA-2	SMG 05/06/05 6:24
Total Extractable Hydrocarbons	<5 mg/kg	5	Iowa OA-2	SMG 05/06/05 6:24
Surrogate: Pentacosane	78.2 %		60-140	SMG 05/06/05 6:24
15D1183-04 GP-5			Matrix: Water	Collected: 04/26/05 10:50
Methyl-t-butyl Ether (MTBE)	<2 ug/l	2	OA-1 (GC/MS)	KRM 04/30/05 0:05
Benzene	<2 ug/l	2	OA-1 (GC/MS)	KRM 04/30/05 0:05
Toluene	<2 ug/l	2	OA-1 (GC/MS)	KRM 04/30/05 0:05
Ethylbenzene	<2 ug/l	2	OA-1 (GC/MS)	KRM 04/30/05 0:05
Xylenes, total	<4 ug/l	4	OA-1 (GC/MS)	KRM 04/30/05 0:05
Ethyl-tert-Butyl Ether (ETBE)	<4 ug/l	4	OA-1 (GC/MS)	KRM 04/30/05 0:05
Di-iso-Propyl Ether (DIPE)	<4 ug/l	4	OA-1 (GC/MS)	KRM 04/30/05 0:05
tert-Amyl Methyl Ether (TAME)	<4 ug/l	4	OA-1 (GC/MS)	KRM 04/30/05 0:05
tert-Butyl Alcohol (TBA)	<100 ug/l	100	OA-1 (GC/MS)	KRM 04/30/05 0:05
Surrogate: 4-Bromofluorobenzene	91.0 %		79-118	KRM 04/30/05 0:05
TEH, as gasoline	<0.1 mg/l	0.1	Iowa OA-2	SMG 04/29/05 18:22
TEH, as #2 diesel fuel	<0.1 mg/l	0.1	Iowa OA-2	SMG 04/29/05 18:22
TEH, as waste oil	<0.1 mg/l	0.1	Iowa OA-2	SMG 04/29/05 18:22
Total Extractable Hydrocarbons	<0.1 mg/l	0.1	Iowa OA-2	SMG 04/29/05 18:22
Surrogate: Pentacosane	90.2 %		56-138	SMG 04/29/05 18:22
15D1183-05 GP-6 (4-6')			Matrix:Soil	Collected: 04/26/05 11:50
Methyl-t-butyl Ether (MTBE)	<0.052 mg/kg	0.052	OA-1 (GC/MS)	KRM 05/02/05 23:48
Benzene	<0.026 mg/kg	0.026	OA-1 (GC/MS)	KRM 05/02/05 23:48
Toluene	<0.026 mg/kg	0.026	OA-1 (GC/MS)	KRM 05/02/05 23:48
Ethylbenzene	<0.026 mg/kg	0.026	OA-1 (GC/MS)	KRM 05/02/05 23:48
Xylenes, total	<0.052 mg/kg	0.052	OA-1 (GC/MS)	KRM 05/02/05 23:48
Ethyl-tert-Butyl Ether (ETBE)	<0.052 mg/kg	0.052	OA-1 (GC/MS)	KRM 05/02/05 23:48
Di-iso-Propyl Ether (DIPE)	<0.052 mg/kg	0.052	OA-1 (GC/MS)	KRM 05/02/05 23:48
tert-Amyl Methyl Ether (TAME)	<0.052 mg/kg	0.052	OA-1 (GC/MS)	KRM 05/02/05 23:48
tert-Butyl Alcohol (TBA)	<1.29 mg/kg	1.29	OA-1 (GC/MS)	KRM 05/02/05 23:48

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.







EMR, Inc. - Minneapolis 5301 E River Rd., Suite 114 Fridley, MN 55421

Work Order: 15D1183

May 09, 2005

Page 3 of 3

Analyte	Result	MRL	Method	Analyst	Analyzed Qualifie
15D1183-05 GP-6 (4-6')			Matrix:Soil	(Collected: 04/26/05 11:50
Surrogate: 4-Bromofluorobenzene	108 %		64-143	KRM	05/02/05 23:48
TEH, as gasoline	<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 7:12
TEH, as #2 diesel fuel	<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 7:12
TEH, as waste oil	<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 7:12
Total Extractable Hydrocarbons	<5 mg/kg	5	Iowa OA-2	SMG	05/06/05 7:12
Surrogate: Pentacosane	86.7 %		60-140	SMG	05/06/05 7:12
15D1183-06 GP-6	•:	•	Matrix:Water		Collected: 04/26/05 12:00
Methyl-t-butyl Ether (MTBE)	<1 ug/l	1	OA-1 (GC/MS)	KRM	04/29/05 21:23
Benzene	<1 ug/l	1	OA-1 (GC/MS)	KRM	04/29/05 21:23
Toluene	<1 ug/l	1	OA-1 (GC/MS)	KRM	04/29/05 21:23
Ethylbenzene	<1 ug/l	1	OA-1 (GC/MS)	KRM	04/29/05 21:23
Xylenes, total	<2 ug/l	2	OA-1 (GC/MS)	KRM	04/29/05 21:23
Ethyl-tert-Butyl Ether (ETBE)	<2 ug/l	2	OA-1 (GC/MS)	KRM	04/29/05 21:23
Di-iso-Propyl Ether (DIPE)	<2 ug/l	2	OA-1 (GC/MS)	KRM	04/29/05 21:23
tert-Amyl Methyl Ether (TAME)	<2 ug/l	2	OA-1 (GC/MS)	KRM	04/29/05 21:23
tert-Butyl Alcohol (TBA)	<50 ug/l	50	OA-1 (GC/MS)	KRM	04/29/05 21:23
Surrogate: 4-Bromofluorobenzene	94.2 %		79-118	KRM	04/29/05 21:23
TEH, as gasoline	<0.1 mg/l	0.1	Iowa OA-2	SMG	04/29/05 0:40
TEH, as #2 diesel fuel	<0.1 mg/l	0.1	Iowa OA-2	SMG	04/29/05 0:40
TEH, as waste oil	<0.1 mg/l	0.1	Iowa OA-2	SMG	04/29/05 0:40
Total Extractable Hydrocarbons	<0.1 mg/l	0.1	Iowa OA-2	SMG	04/29/05 0:40
Surrogate: Pentacosane	84.7 %		56-138	SMG	04/29/05 0:40

End of Report

Mathy Vanzee

Keystone Laboratories, Inc.

Kathy Van Zee Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

CHAIN OF CUSTODY RECORD

LABORATORIES, INC.

600 E. 17th St. S. Newton, IA 50208

Phone: 641-792-8451 Fax: 641-792-7989

3012 Ansborough Ave. Waterloo, IA 50701

> Phone: 319-235-4440 Fax: 319-235-2480

www.keystonelabs.com

□ 1304 Adams

Kansas City, KS 66103 Phone: 913-321-7856

Fax: 913-321-7937

PAGE	of	\angle
		_

PRINT OR TYPE INFORMATION SAMPLER: David (Za SITE NAME: Kroxville ADDRESS: CITY/ST/ZIP: Kroxville PHONE: 743.277.5		REPORT TO: NAME: Lavid Radabaugh COMPANY NAME: EMK, Inc. ADDRESS: 5361 East River Rd. CITY/ST/ZIP: Fridley, MN 55421 PHONE: 163.422 2844 763.277.5200 FAX: 763.277.5201							_	BILL TO: NAME: Pavid Radabash COMPANY NAME: EMR. Inc. ADDRESS: SWI East Rive Rd. CITY/ST/ZIP: Karatte, t Tridley, MN 55421 PHONE: 763. 277. 5200 Keystone Quote No.: (If Applicable)				ey, MN 55421		
CLIENT SAMPLE NUMBER	DATE	ТІМЕ	SAMPL	E LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	OA-1 GCMS		ALYSES	REQU	IRED		LABORATORY SAMPLE TEMP UPON RECEIP		
GP-4-(10-12')	4/26/05	928	10	12'	2	Sui/		X	X							0/
G8-4	4/26/05	946			4	4.0		X	X							02
GP-5 (10'-12') GP-5 GP-6 - (4'-6')		1035	10-1	2'	2	Soil		X	X							03
GP-5		1050			4	11.0		X	X							04
GP-6- (4'-6')		1136	4'-6	,	2	انو		\times	X							05
GP-6		1200			4	4.0		X	X							106
MS		948	-	<u>_</u>	1	1+20			ΧÌ							
MSD		948			11	H20			X							
						112										
					1				\neg	_						
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	•	Time	Tiecelvi	eu by. (Signature)		Tim				Turn-Aroi				Rush	Contact Lab Pri	or to Submission
Gellnquished by: (Signature)		Date 472/0/0 Time 14/5	5 9	ed for Lab by: (Signation Lab by: Report		Tim	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	15		Remarks:			•			FORM: CCR 7-97

Drum Disposal Documents



Onyx Environmental Services, L.L.C.

W124 N9 851 Boundary Road Menomor ee Falls, W1 53051 Telephon:: (800) 255-5092 Fax: (262 | 255-7990

Hazardous Waste Management, Inc. P.O. Box 159 - Waukee, IA 50263

515-986-4800 - Office 515-240-1778 - Cell

LILM HITTER	
Approval Code	

FMA. (202 / 233-7990		\$15-E-10 1770			
T1. GENERATOR NAF	ME: BNSF	<u>۔</u> ر	Generator USEPA ID:	MND000826	,248
2. Genera or Address:	80-444 Ave A	JE	Billing Address:	Hazardous Waste Manag	
	Minneaulis MW	55421		P.O. Box 159 - Wankee,	IA 50263
3. Techni al Contect Pl			Billing Contact Phone:	515-986-4800	
4. Technical Contest Fa			Billing Contact Fax:	515-986-49 9 9	
Contes: Name:	Kenny Dav		Contact Name:	Gary Chase	
Technology Requested:	24444	TSDF Requested		☐ Check here if this is a re	-certification
PROPERTIES AND	ADIA (19-A) A HELLIO DA		Se Table Section Secti		-
			TIMTE		
S. A. I'M Can trement	ing Waste:	NOTE OF THE	No W Y ocation Na	me:	
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6. Woods Name:	hazardous waste (40 CFR Par	# 261\2 Ven □	No &		· · · · · ·
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	ontain debris (List size and t				Offic Rossid)
	EPA listed and characteristic			110	
				Codes	
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Trayan al Sidie (C)	to <u>10</u> or Not Applicable C		Nacasiba.	C. Color: BIA	12 W/0-76
PA II i i I III ac III ac III ac	: <73°F © 73-99°F © 10	40 1200E T 140 14	MOSE [7] ~2000€ [7] M	C. COIGI/G//	
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	ition: List ALL constituents (inclu		s and unic's) present in any c Constituents		
Constituents	Range 50-100	Units	Constituents	Range	Units
way es	30-100	- C/D			
Marie Oil			<u> </u>		
WARRET IS FO			**************************************	VFT	
TOTAL	N MUST EQUAL OR EXC	EPD 100%			
19 mxxxx BYR's if sees	Concentration PAM PCB's	remiteded by An CER :	61 D Purophoric D	Explosive C Redioective	a CT
Water Reactive D S	hock Sensitive O Oxidizer	Carcinogen D Infec	tions D. Other:	Emplosive to Technology	· •
13. If Ben rate. Concentra	tion FAL Is the waste subje	ct to the Benzenc Was	te Operations NESHAP? Y	es D No & Unknown D	
14. Is the vaste subject to	RCRA subpart CC control? Ye	s D No W Volatile	Organic Concentration, if	known Francy	
15. If waste is subject to the	re land ban and meets the treatm	nent struckuds, check h			
16. Is the vestestream bei	ng imported into the USA? Yes	□ No(3)			
17. Is the vestestream sub	ject to the Marine Pollutant Reg	ulztions? Yes O No.	ag	•	
	ject to Hazardous Organics NES	SHAP notification requ	irements? Yes L. No Q		
Shiippirig inform	ATION		7 77	= - 441	_
19. Pock ging: Bulk Se	olid O Type/Size:	Bulk Liquid Ly Ty	pe/Size 55941 Daum (her:
	y: Units Per: Month C	J Quarter LI Year	n Outs Luxue) and Cate	er:	
21. Shipping Nome: _				<u> </u>	
22. Hicza relicus Claso:	AWAM ::	_ PG:[All	/k	
SAMIPLING INFORM					
23. A. Sample Source (drum, lagcon, pond, tank, vat	i, etc.):			
Date Sampled: _	Sampler's National Supervising Sampling:	lame/Company:			
23. B. Gancrator's Age	nt Supervising Sampling:	~~~			

Gener ator's cer		_			
I hereby certify that all info	emenion submitted in this and all a	attached documents cont	ain true and accurate descript	tions of this waste. Any sample	e submitted is
	40 CFR 261-Appendix 1 or by us as been disclosed. I cuthorize Ony?				
	y a broker, the undersigned signs as				
from integration provided by	තිය දෙනාකාර යන් පුන්න්තනේ පාර්ගාග	ntian as k has Catannius	d to be reconcilly measurery.		
(har M.	1 / - ·	11/11	1 , 0 , 4 -	1 1 . 11 1	_
	VIN	John Gieben	hain, Mojell lec	h # 1/18/2003 Date	· · · · ·
Signature A	Agent for BASE	Printed (or typed) N	ame and Title	Odte /	

If the waste is approved, Onyx Environmental Services has the appropriate permits and will accept the waste pursuant to our agreement.



ENVIRONMENTAL SERVICES

TEGENERATOR US EPAID NO SPECIAL WASTE MUNICIPIED DESCRIPTION MANIFEST TICKET Generator's Name, and Walling Address BNSF 80 44TH AVENDE NORTHEAST MINNEAPOLIS: 14W SS421 A: Manifest Document Number Y 0058492 S.W. of Intersection B. State Generator's ID N. 10th St. & W. Rock Island ST, Knowville, I 50138 Generator's Phone 789 Transporter 1 Company Name: 10 All US EPA ID Number C State Trans ID ONYX ENVIRONMENTAL EVCS LLC N J D 0 8 6 6 3 1 3 6 D. Transporter's Phone Fransporter 2:Company Name: E. State Trans. ID F. Transporter's Phone OR STENNED VIEW THE SEAVERS US EPA ID Number G. State Facility's ID W124 NS451 BOUNDARY RD Ha Facility's Phone MENOMONEE FALLS IN 53061 W 1 D 0 5 3 9 8 7 255 6857 11: US DOT Description (Including Proper Shipping Name Hexard Class, and ID Number) 13. Total 14 Unit LICILIAND WATER MIXTURE NONE WONE N O N E Additional Descriptors of Materials Listed Above SEE ON FUNTER 15. Special Handling Instructions and Additional Information: Special Handling Instructions and Additional Information

Third party customer transported by WI Tch Srvs

EMERGENCY NUMBERS NEOTRAC 1-800-535-5063, WORK ORDER NUMBER 0531858000 Generator has signed manifest prior to pick up as noted by different dates. GENERATOR'S CERTIFICATION: Phereby declare that the contents of the consignment are fusly and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to explosible international and national government requisitions. Printed/Typed Name As agent for Printed/Typed Name :/ Discrepancy Indication Space . Facility Owner or Operator: Certification of receipt of materials covered by this manifest except sonoted in Item 19. Printed/Typed Nam 034805 SIGNATURE AND INFORMATION MUST BE LEGIBLE ON ALL COPIES TSDF COPY

Boring Logs



VISUAL CLASSIFICATION OF SOILS

EMR Project Name:

BNSF - Dwight Glover - Knoxville

EMR Project Number:

6981.001

Drilling Information Drilling Contractor:

Drilling Method:

EMR, Inc. Geoprobe

Drillers Name:

Borehole Diameter:

Sampler Type:

Geoprobe

Event Information

Logged by: Boring Depth: DKR 12'

GW Encountered

Static GW Level:

Location:

~10'

Note:

Boring #: MW #:

Surface Elevation:

GP-4

Start time/date:

9:10am/4-26-05

End time/date:

9:30am/4-26-05

								_	
Depth (ft)	Sample Interval	Sample Recovery	Evacuation Rate	Groundwater	PID/FID Readings	Blow Count (per/ft)	Graphic Log	USCS Classification	Soil Classification/ Description
_ 0 _	0-1	1'						OL	Black Organic
_ 2 _	1-4	3'			1			CL	Silty Clay, 10YR 4/4, med. Density, Fe staining
_ 4 _	4-6	2'			2			CL	Same, higher Fe staining content
6 _	6-8	2'			2			СН	Silty Clay, 10YR 5/1, high plasticity,soft, trace sand content (6.5-7.0 Fe Stainining <70)
8	8-10	2'			2.2			СН	Same, 10YR 4/2, becoming stiff, moist
10	10-12	2'			2.8			СН	Same, very stiff, moist to wet



VISUAL CLASSIFICATION OF SOILS

EMR Project Name:

Note:

~11'

BNSF - Dwight Glover - Knoxville

EMR Project Number:

6981.001

Drilling Information

Drilling Contractor: Drilling Method:

EMR, Inc. Geoprobe

Drillers Name:

2"

Borehole Diameter: Sampler Type:

Geoprobe

Event Information

DKR Logged by:

Boring Depth: GW Encountered 12'

Location:

Static GW Level:

Boring #:

MW #:

Surface Elevation:

GP-5

Start time/date:

10:05am/4-26-05

End time/date:

10:40am/4-26-05

	Location								End time/date: 10:40am/4-26-05
Depth (ft)	Sample Interval	Sample Recovery	Evacuation Rate	Groundwater	PID/FID Readings	Blow Count (per/ft)	Graphic Log	USCS Classification	Soil Classification/ Description
0 _	0-2	2'						OL	Black Organic Top Soil
2 _	2-4	2'			2.6			СН	Silty Clay, Black, high plasticity, soft, organics and small gravels
4 _	4-6	2'			2.8		! 	СН	Same, 10YR 2/1, Stiff, Fe staining
6 _	6-8	2'			2.6			СН	Same, becoming moist
- 8 <u>-</u>	8-10	2'			2.6			СН	Same
10_	10-12	2'		\triangleright	2.2			СН	Same, wet



VISUAL CLASSIFICATION OF SOILS

EMR Project Name:

BNSF - Dwight Glover - Knoxville

EMR Project Number:

6981.001

Note:

Drilling Information

Drilling Contractor: Drilling Method:

EMR, Inc. Geoprobe

Drillers Name:

Borehole Diameter: Sampler Type:

Geoprobe

Event Information

Logged by: Boring Depth: DKR

16'

GW Encountered Static GW Level:

Location:

~14'

Boring #: MW #:

GP-6

Surface Elevation:

Start time/date:

11:20am/4-26-05

End time/date:

11:50am/4-26-05

Depth (ft)	Sample Interval	Sample Recovery	Evacuation Rate	Groundwater	PID/FID Readings	Blow Count (per/ft)	Graphic Log	USCS Classification	Soil Classification/ Description
0 _	0-1	1'			1.4			OL	Black Organic
_ 2 _	1-4	3'			3.8			CL	Silty Clay, 10YR 4/4, med. Density, Fe staining
4 -	4-6	2'			4.4			CL	Same, higher Fe staining content
_ 6 _ _ 7 _	6-8	2'			2.0			СН	Silty Clay, 10YR 5/1, high plasticity,soft, trace sand content (6.5-7.0 Fe Stainining <70)
8 -	8-10	2'			3.2			СН	Same, 10YR 4/2, becoming stiff, moist
10	10-12	2'		∇	3.6	:		СН	Same, very stiff, moist to wet

Borin	Boring Number: GP-6							BNSF-I	Owight Glover Knoxville Project #: 6981.001
Depth (ft)	Sample Interval	Sample Recovery	Evacuation Rate	Ground water	PID/FID Readings	GC Reading	Graphic Log	USCS Classificatio	Soil Classification/ Description
12	12-14	2'			2.8				Firm, Gley 1 4/N fat clay with few 10YR 4/4 mottles. Moist to wet.
14	14-16	2'	·	I	3.4			СН	Soft, Gley 1 4/N fat clay, moist to wet.
16 17									End Boring at 16'
18									
20									
24									
25									
27									

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A CONTRACTOR OF STREET