UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

Site: Linwood Mining
ID # IAD980852297
Break: 1.3
Other: EPA
8-3-89

DATE: 8/3/89

MEMORANDUM

SUBJECT: Data Transmittal for Activity #: DC943,
Site Description: Unthun Trucking

FROM: Andrea Jirka
Chief, Laboratory Branch, ENSV

TO: Mike Sanderson
Chief, Superfund Branch, WSTM

ATTN: P. Culver

Attached is the data transmittal for the above referenced site. These data have met all quality assurance requirements unless indicated otherwise in the data package. This should be considered a X Partial or ___ Complete data transmittal (completes transmittal of _____). If you have any questions or comments, please contact Dee Simmons at 236-3881.

Attachments

cc: Data Files
Ann Melia, E&E/FIT

RECEIVED
AUG 07 1989
PREP SECTION

30815341
Superfund

DATA REPORTING / QUALIFICATION CODES

U - The material was analyzed for, but was not detected. The associated numerical value is the sample detection limit.

J - The associated numerical value is an estimated quantity (explanation attached).

I - The data are invalid (compound may or may not be present). Resampling and/or reanalysis is necessary for verification.

N - Sample not analyzed.

CODES FOR FLASH POINT DATA

L - The sample did not ignite or "flash". This is the highest temperature at which the sample was tested. It is possible that the material may be ignitable at higher temperatures.

K - The sample did ignite or "flash" at the lowest temperature tested. This is usually the ambient temperature at the time of the test. It is possible that the material may be ignitable at even lower temperatures.

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING
Location: BUFFALO IA
Site Number:
Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1020 Leader: WES MCCALL

Sample Number: DC94300 1
SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: 1

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Background on Moore Creek

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1035 Leader: WES MCCALL

Sample Number: DC943002F SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Field Blank

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1110 Leader: WES MCCALL

Sample Number: DC943003 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: 300' Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Umthun well
pH = 7.63
Temp. = 25°C
Cond. = 500 µmhos

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1135 Leader: WES MCCALL

Sample Number: DC943004 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Moore Creek adjacent to Umthun trucking.

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1400 Leader: WES MCCALL

Sample Number: DC943065 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: 325' Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Scott Co. Landfill Well
pH = 7.67
Cond. = 500 umhos
Temp. = 13°C

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1415 Leader: WES MCCALL

Sample Number: DC943006 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Donaldson Creek (between Landfill & Quarry).

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1500 Leader: WES MCCALL

Sample Number: DC943007 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Background on Donaldson Creek

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1700 Leader: WES MCCALL

Sample Number: DC943008 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER) OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METALS~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: 300' Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description:
Willard Wing
Box 702
Buffalo, IA 52728

Willard Wing Well

pH = 7.4
cond = 675
Temp = 14°C

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 24 Time: 0930 Leader: WES MCCALL

Sample Number: DC943009 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~ LP
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: 300' Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description:
Tom Egolf (Well)
11045 115th Ave
Davenport, IA 52804

pH = 7.71
Cond = 650 mmhos
Temp = 17°C

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 24 Time: 1020 Leader: WES MCCALL

Sample Number: DC9430010 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER) OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~ LB
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description:
Randy Diffmer (Well)
RR2 Box 20
Davenport, IA 52804
(319) 323-4640

pH = 7.7
cond = 1300 umhos
Temp = 15°C

(smells like sulfur, complaints of line settlement)

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 09:25 Leader: WES MCCALL

Sample Number: DC943011 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER:_____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: surface Pan #:_____ Aliquots:_____

Samplers: Wes McCall
Bobbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Linwood Quarry: Confluence of Donaldson Creek with Mississippi River.

Conductivity = 700 µ mohs
Temp = 17 °C
pH = 6.5

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 10:43 Leader: WES MCCALL

Sample Number: DC94301 2 — SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Well head at Lime plant at Linwood Quarry
16°C
conductivity 500 umohs
pH = 6.7

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 10:58 Leader: WES MCCALL

Sample Number: DC943013 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Well North side of Highway 22.
Linwood Quarry
Temp = 16°C
Conductivity - 900 umhos
pH = 7.3

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 11:25 Leader: WES MCCALL

Sample Number: DC9430 14 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
[redacted]		[redacted]	[redacted]
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Well sample at Linwood Quarry office

Temp = 17
Cond. = 800 u mhos
pH = 7.1

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 05 Day: 23 Time: 13:45 Leader: WES MCCALL

Sample Number: DC943015 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Don McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Drainage water under portion of Mine Vent area, Linwood Quarry

Cond = 600 µmhos
Temp = 19°C ?
pH = 6.65

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1410 Leader: WES MCCALL

Sample Number: DC943016 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Discharge Pond, Linwood Quarry
Cond = 1000 umhos
Temp = 22°C
pH = 9.8

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 15:00 Leader: WES MCCALL

Sample Number: DC943017 ~~DK~~ SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Above ground pumped discharge from Linwood Quarry

Conductivity = 640 umhos
Temp = 12.5°C
pH = ~~5.4~~ 6.76

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 15:05 Leader: WES MCCALL

Sample Number: DC943017 Dup SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Above ground pumped discharge from Linwood Quarry
Conductivity = 640 µmohs
Temp = 12.5°C
pH = 6.74

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Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1649 Leader: WES MCCALL

Sample Number: DC943018 — SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, (WATER), OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: _____ Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Moses Residence
Conductivity = 640 umhos
Temp = 14.5° C
pH = 6.74

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ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 09:05 Leader: WES MCCALL

Sample Number: DC943019 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
CUBITAINER		HNO3/4 C	TOTAL METALS
~~CUBITAINER~~		~~HNO3/4 C~~	~~DISSOLVED METAL~~
1 GAL.AMBER		4 C	SULFATE
1 GAL.AMBER		4 C	CHLORIDE

Depth: 405' Pan #: _____ Aliquots: _____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: City of Buffalo ; Well #2

Temp = 14.5°C
pH = ~~900 umhos~~ 6.20
Conductivity = 900 umhos

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0915 Leader: WES MCCALL

Sample Number: DC9430031 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: Ash

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: Aliquots: 5

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Pile #1 50' from vent to the South

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0930 Leader: WES MCCALL

Sample Number: DC9430032 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: Ash

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: Aliquots: 5

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Pile #2 150' from vent

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0940 Leader: WES MCCALL

Sample Number: DC9430033 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, (OTHER: Ash)

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: _____ Aliquots: 5

Samplers: R. Parsons
G. Hays

COMMENTS OF FIELD PERSONNEL

Site Description: Pile #3 50' SE of ~~[illegible]~~ Pile #2 (LH)

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Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0950 Leader: WES MCCALL

Sample Number: DC9430034 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: Ash

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: Aliquots: 5

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Pile #4 200' SE of vent

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING
Location: BUFFALO IA
Site Number:
Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0950 Leader: WES MCCALL

Sample Number: DC9430034D SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: Ash

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: Aliquots: 5

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Pile #4 200' SE of vent.
Duplicate

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 0955 Leader: WES MCCALL

Sample Number: DC9430035 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER:_____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6' Pan #:_____ Aliquots: 5

Samplers: R. Parsons
G. Hays

COMMENTS OF FIELD PERSONNEL

Site Description: Background NW of veat.

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FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING
Location: BUFFALO IA
Site Number:
Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1020 Leader: WES MCCALL

Sample Number: DC943003 5
SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, (SEDIMENT), WATER, OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-2" Pan #: _____ Aliquots: 4

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Background on Moore Creek

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1110 Leader: WES MCCALL

Sample Number: DC9430037 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-6" Pan #: _____ Aliquots: 4

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Umthun Well 50' North

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FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1135 Leader: WES MCCALL

Sample Number: DC9430038 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, (SEDIMENT), WATER, OTHER:_____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-2" Pan #:_____ Aliquots:_____

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Moore Creek behind Umthun Trucking

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 14:15 Leader: WES MCCALL

Sample Number: DC9430039 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: _____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-2" Pan #: _____ Aliquots: 4

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Donaldson Creek (between Landfill & Quarry).

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FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 08:50 Leader: WES MCCALL

Sample Number: DC943~~0~~F040 im SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER: fly-ash lime dust

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-3" Pan #: _____ Aliquots: 5

Samplers: Debbie Palmer
Wes McCall

COMMENTS OF FIELD PERSONNEL

Site Description: Linwood Quarry, Ash particulates from south blower at Kilns.

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 09:00 Leader: WES MCCALL

Sample Number: DC9430 ~~42~~ 44 — SMO #:

Sample ~~Media~~ (circle one):
SOIL, ~~DUST~~, RINSATE, SEDIMENT, WATER, OTHER: fly ash line dust

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-3" Pan #: _____ Aliquots: 5

Samplers: Debbie Palmer
Wes McCall

COMMENTS OF FIELD PERSONNEL

Site Description: Course ash and particulates from over flow at "cooling rollers" Linwood Quarry

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FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 09:30 Leader: WES MCCALL

Sample Number: DC9430 ~~F3~~042 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, (SEDIMENT), WATER, OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-3" Pan #: _____ Aliquots: 5

Samplers: Debbie Palmer
Wes McCall

COMMENTS OF FIELD PERSONNEL

Site Description: Linwood Quarry: Confluence of Donaldson Creek with Mississippi River.

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING — Site Number:
Location: BUFFALO IA — Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 1500 Leader: WES MCCALL

Sample Number: DC9430 0~~[illegible]~~43 my — SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, (SEDIMENT), WATER, OTHER: _____

Sample Split (circle one): YES (NO)

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth: 0-2" Pan #: _____ Aliquots: 4

Samplers: G. Hays
R. Parsons

COMMENTS OF FIELD PERSONNEL

Site Description: Background on Donaldson Creek

IBM-PC

FIELD SHEET
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 66115

Site Name: UMTHUN TRUCKING Site Number:
Location: BUFFALO IA Site Code:

Collected: YR: 89 MO: 5 Day: 23 Time: 17:05 Leader: WES MCCALL

Sample Number: DC9430044 SMO #:

Sample Media (circle one):
SOIL, DUST, RINSATE, SEDIMENT, WATER, OTHER:_____

Sample Split (circle one): YES NO

Sample Container	Tag Color	Preservative	Analysis Requested
8 OZ.JAR			TOTAL METALS
8 OZ.JAR			EP TOX
8 OZ.JAR			SULFIDE

Depth:_____ Pan #:_____ Aliquots:_____

Samplers: Wes McCall
Debbie Palmer

COMMENTS OF FIELD PERSONNEL

Site Description: Moses Residence
Donald W. Moses
12245 100th Ave
Davenport, IA 52804

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ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: WATER
METHOD: 9001W71
REVIEWER: P.COX
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 07/20/89

SAMPLES	DC943001	DC943002F	DC943003	DC943004
ALUMINUM	200 U	72 J	200 U	200 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	10 U	10 U	10 U
BARIUM	33 J	200 U	89 J	50 J
BERYLLIUM	5.0 U	5.0 U	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U	5.0 U
CALCIUM	170000	5000 U	77000	170000
CHROMIUM	12	10 U	28	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	25 U	13 J	25 U
IRON	410 U	100	160 U	170 U
LEAD	5.0 U	0.40 J	5.0 U	5.0 U
MAGNESIUM	45000	5000 U	31000	46000
MANGANESE	210	15 U	4.0 J	52
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	40 U	40 U	8.0 J	40 U
POTASSIUM	5500	5000 U	1700 J	7500
SELENIUM	5.0 U	5.0 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	16000	5000 U	14000	15000
THALLIUM	10 U	10 U	10 U	10 U
VANADIUM	50 U	50 U	50 U	50 U
ZINC	25 U	18 J	160	25 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: WATER
METHOD: 9001W71
REVIEWER: D.COX
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 07/20/89

SAMPLES	DC943005	DC943006	DC943007	DC943008
ALUMINUM	200 U	200 U	200 U	200 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	10 U	10 U	10 U
BARIUM	110 J	74 J	63 J	98 J
BERYLLIUM	5.0 U	5.0 U	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U	5.0 U
CALCIUM	88000	150000	130000	77000
CHROMIUM	10 U	9.0 J	10 U	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	25 U	25 U	25 U
IRON	1800	520	340 U	1900
LEAD	6.1 U	5.0 U	5.0 U	5.0 U
MAGNESIUM	34000	47000	42000	33000
MANGANESE	10 J	210	250	26
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	40 U	11 J	40 U	40 U
POTASSIUM	1600 J	4000 J	3300 J	7300
SELENIUM	5.0 U	5.0 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	19000	24000	28000	48000
THALLIUM	10 U	10 U	10 U	10 U
VANADIUM	50 U	50 U	50 U	50 U
ZINC	800	35 U	33 U	800
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: WATER
METHOD: 9001W71
REVIEWER: P.COX
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 07/20/89

SAMPLES	DC943009	DC943010	DC943011	DC943012
ALUMINUM	200 U	200 U	310 U	200 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	10 U	10 U	10 U
BARIUM	100 J	62 J	54 J	61 J
BERYLLIUM	5.0 U	5.0 U	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U	5.0 U
CALCIUM	90000	150000	110000	74000
CHROMIUM	10 U	9.0 J	28	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	20 J	25 U	25 U
IRON	190 U	100 U	500 U	120 U
LEAD	5.0 U	5.3 U	5.0 U	5.0 U
MAGNESIUM	33000	56000	19000	29000
MANGANESE	12 J	49	71	11 J
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	40 U	22 J	40 U	40 U
POTASSIUM	1800 J	3200 J	11000	3000 J
SELENIUM	5.0 U	5.0 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	16000	76000	35000	35000
THALLIUM	10 U	10 U	10 U	10 U
VANADIUM	50 U	50 U	50 U	50 U
ZINC	510	1600	20 U	50 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: WATER
METHOD: 9001W71
REVIEWER: P.COX
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 07/20/89

SAMPLES	DC943013	DC943014	DC943015	DC943016
ALUMINUM	200 U	200 U	200 U	490 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	10 U	10 U	10 U
BARIUM	24 J	43 J	40 J	34 J
BERYLLIUM	5.0 U	2.0 J	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U	5.0 U
CALCIUM	53000	110000	91000	240000
CHROMIUM	10 U	10 U	10 U	16
COBALT	50 U	11 J	50 U	50 U
COPPER	18 J	12 J	25 U	10 J
IRON	100 U	24000	140 U	610
LEAD	5.0 U	8.6	5.0 U	5.1 U
MAGNESIUM	19000	29000	36000	3100 J
MANGANESE	52	150	5.0 J	43
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	40 U	71	19 J	14 J
POTASSIUM	5000 J	1700 J	7900	17000
SELENIUM	25 U	5.0 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	180000	81000	12000	51000
THALLIUM	10 U	10 U	10 U	10 U
VANADIUM	50 U	50 U	50 U	50 U
ZINC	540	1100	27 U	20 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: WATER
METHOD: 9001W71
REVIEWER: D. COX
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 07/20/89

SAMPLES	DC943017	DC943017D	DC943018	DC943019
ALUMINUM	200 U	200 U	200 U	200 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	10 U	10 U	10 U
BARIUM	79 J	81 J	48 J	120 J
BERYLLIUM	5.0 U	5.0 U	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U	5.0 U
CALCIUM	80000	78000	160000	85000
CHROMIUM	10 U	16	10 U	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	25 U	11 J	25 U
IRON	130 U	190 U	1000	1900
LEAD	5.0 U	5.0 U	5.0 U	5.0 U
MAGNESIUM	35000	35000	40000	33000
MANGANESE	5.0 J	5.0 J	28	21
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	9.0 J	16 J	13 J	40 U
POTASSIUM	2900 J	2400 J	1900 J	1600 J
SELENIUM	5.0 U	5.0 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	18000	17000	20000	12000
THALLIUM	10 U	10 U	10 U	10 U
VANADIUM	50 U	50 U	50 U	50 U
ZINC	20 U	28 U	20 U	1500
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: SEDIMENT
METHOD: 9001W71
REVIEWER: P. COX
DATA FILE : P56

UNITS: MG/KG
CASE: 12127
DATE: 07/21/89

SAMPLES	DC943031	DC943032	DC943033	DC943034
ALUMINUM	7300	6600	6600	6500
ANTIMONY	18 U	16 U	16 U	16 U
ARSENIC	5.9 J	5.0 J	4.9 J	5.0 J
BARIUM	53 J	49 J	36 J	52 J
BERYLLIUM	1.8	1.9	2.2	2.1
CADMIUM	0.60 J	0.53 J	0.81 J	1.3 U
CALCIUM	310000 J	320000 J	250000 J	300000 J
CHROMIUM	15	12	12	11
COBALT	6.6 J	4.5 J	4.0 J	3.9 J
COPPER	38 J	4.8 J	2.2 J	3.4 J
IRON	13000	15000	14000	13000
LEAD	12	10	7.4	6.1
MAGNESIUM	2400	2400	1000 J	1300 J
MANGANESE	520 J	590 J	450 J	500 J
MERCURY	0.15 U	0.13 U	0.13 U	0.13 U
NICKEL	13	15	13	14
POTASSIUM	1500 U	1800 U	2200 U	1500 U
SELENIUM	0.69 J	0.75 J	0.65 J	0.62 J
SILVER	6.0	5.1	4.3	5.2
SODIUM	1500 U	1300 U	1300 U	1300 U
THALLIUM	0.30 J	0.37 J	0.24 J	0.23 J
VANADIUM	23 U	22 U	24 U	24 U
ZINC	96	56 U	110	75 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: SEDIMENT
METHOD: 9001W71
REVIEWER: D.COX
DATA FILE : P56

UNITS: MG/KG
CASE: 12127
DATE: 07/21/89

SAMPLES	DC943034D	DC943035	DC943036	DC943037
ALUMINUM	7700	16000	4000	10000
ANTIMONY	18 J	35 J	35 J	13 J
ARSENIC	5.4 J	9.6 J	4.1 J	5.0 J
BARIUM	57	140	160	110
BERYLLIUM	2.4	1.9	2.9	1.4
CADMIUM	0.48 J	1.2 U	0.87 J	0.45 J
CALCIUM	340000 J	5300 J	5600 J	38000 J
CHROMIUM	12	21	8.7	16
COBALT	4.3 J	11 J	28	6.8 J
COPPER	5.3 J	6.0 U	7.3 U	5.7 U
IRON	15000	23000	37000	15000
LEAD	6.3	18	6.5	14
MAGNESIUM	1400	2800	950 J	2500
MANGANESE	540 J	610 J	2200 J	790 J
MERCURY	0.12 U	0.12 U	0.14 U	0.11 U
NICKEL	14	22	64	16
POTASSIUM	1700 U	2100 U	1500 U	1900 U
SELENIUM	0.60 J	0.41 J	0.23 J	0.41 J
SILVER	5.3	2.4 U	2.9 U	2.3 U
SODIUM	1200 U	1200 U	1500 U	1100 U
THALLIUM	0.19 J	0.19 J	2.9 U	0.18 J
VANADIUM	28 U	39 U	21 U	28 U
ZINC	180	110	160	76 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: SEDIMENT
METHOD: 9001W71
REVIEWER: D.COX
DATA FILE : P56

UNITS: MG/KG
CASE: 12127
DATE: 07/21/89

SAMPLES	DC943038	DC943039	DC943040	DC943041
ALUMINUM	12000	8500	4300	3400
ANTIMONY	23 J	25 J	12 U	14 J
ARSENIC	6.1 J	5.9 J	3.6 J	3.2 J
BARIUM	100	86	67	68
BERYLLIUM	1.1 J	1.6	0.82 J	0.80 J
CADMIUM	1.1 J	0.53 J	1.0 U	1.0 U
CALCIUM	200000 J	22000 J	310000 J	390000 J
CHROMIUM	18	16	6.8	6.8
COBALT	8.5 J	7.7 J	10 U	1.8 J
COPPER	9.2 U	6.6 U	14 J	14 J
IRON	12000	17000	7900	6900
LEAD	79	9.5	13	8.1
MAGNESIUM	7800	7000	19000	9800
MANGANESE	2000 J	730 J	430 J	420 J
MERCURY	0.18 U	0.13 U	0.10 U	0.10 U
NICKEL	22	19	77	66
POTASSIUM	4400 U	1300 U	1300 U	1000 U
SELENIUM	1.8 U	0.40 J	1.0 U	0.38 J
SILVER	5.5	2.6 U	2.9	4.0
SODIUM	280 J	1300 U	1000 U	1000 U
THALLIUM	2.1 J	2.6 U	0.18 J	2.0 U
VANADIUM	32 U	25 U	210	190
ZINC	120	69 U	43 U	68 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____ ANALYST/ENTRY: PLC
REVIEW LEVEL: 2

MATRIX: SEDIMENT
METHOD: 9001W71
REVIEWER: D.COX
DATA FILE : P56

UNITS: MG/KG
CASE: 12127
DATE: 07/21/89

SAMPLES	DC943042	DC943043	DC943044
ALUMINUM	6700	4700	10000
ANTIMONY	18 U	16 U	15 J
ARSENIC	4.3 J	3.7 J	5.3 J
BARIUM	79	75	270
BERYLLIUM	1.2 J	1.1 J	1.4
CADMIUM	1.5 U	1.4 U	0.48 J
CALCIUM	160000 J	8000 J	3400 J
CHROMIUM	11	7.9	15
COBALT	3.2 J	6.0 J	11 J
COPPER	7.3 U	6.8 U	6.0 U
IRON	11000	12000	14000
LEAD	9.4	9.4	24
MAGNESIUM	6500	1500	1800
MANGANESE	420 J	420 J	2100 J
MERCURY	0.15 U	0.14 U	0.12 U
NICKEL	13	12	23
POTASSIUM	1500 U	1400 U	2300 U
SELENIUM	0.44 J	0.38 J	0.41 J
SILVER	2.9 U	2.7 U	2.4 U
SODIUM	1500 U	1400 U	1200 U
THALLIUM	2.9 U	2.7 U	0.22 J
VANADIUM	21 U	16 U	27 U
ZINC	63 U	130	110
CYANIDE	N	N	N

ecology and environment, inc.
CLOVERLEAF BUILDING 3, 6405 METCALF, OVERLAND PARK, KANSAS 66202, TEL. 913/432-9961
International Specialists in the Environment

MEMORANDUM

TO: Debra Morey, Chemist, CLQA/LABO

FROM: Peggy Cox, TAT PC
THRU: Joseph Chandler, TATL JCC

DATE: July 20, 1989

SUBJECT: Review of data for UMTHUM TRUCKING
TDD# T07-8904-013
PAN# T07-Z054-QSH

These data were reviewed according to the "Laboratory Data Validation Functional Guidelines for Evaluation of Inorganic Analyses," July 1, 1988 revision.

The following comments and attached data sheets are a result of Ecology & Environment Inc.'s review of the above mentioned data from the contract laboratory.

CASE NO.: 12127
CONTRACT NO.: 68-W8-0060
SITE: UMTHUM TRUCKING
REVIEWER: P. COX

LABORATORY: NANCO
METHOD NO.: 9001W71
EPA ACTIVITY: DC943
MATRIX: WATER

SMO SAMPLE NOS.		EPA SAMPLE NOS.	
MGF169	MGE207	DC943001	DC943011
MGF170	MGE208	DC943002F	DC943012
MGF171	MGE209	DC943003	DC943013
MGF172	MGE210	DC943004	DC943014
MGE201	MGE211	DC943005	DC943015
MGE202	MGE212	DC943006	DC943016
MGE203	MGE213	DC943007	DC943017
MGE204	MGE214	DC943008	DC943017D
MGE205	MGE215	DC943009	DC943018
MGE206	MGE216	DC943010	DC943019

recycled paper

GENERAL

Case 12127 contained 20 water samples analyzed for total metals at the low level concentration. Arsenic (As), lead (Pb), selenium (Se), and thallium (Tl) were analyzed by graphite furnace atomic absorption (GFAA) spectroscopy and mercury (Hg) by cold vapor (CV). Data review was performed at level 2.

HOLDING TIMES and PRESERVATION

Technical holding times and required preservation were met on all samples, with the exception of mercury (Hg) preparation/analysis holding times which were exceeded by 6 days. All data was qualified by the holding time/preservation rules.

INITIAL and CONTINUING CALIBRATION

Initial and continuing calibrations were within quality control limit requirements on all parameters.

BLANKS

Arsenic (As), vanadium (V), and zinc (Zn) were reported in the continuing calibration blanks and aluminum (Al) and lead (Pb) in the preparation blank. Field blank DC943002F (MGF170) was analyzed with aluminum (Al), iron (Fe), lead (Pb), and zinc (Zn) reported. Associated analyte data was qualified by the blank rules.

ICP INTERFERENCE CHECK

All analytes contained in the ICP interference check sample were within quality control limit requirements except antimony (Sb) and potasium (K) which were detected but not an elements in the EPA ICS solution. Antimony was reported at levels less than the instrument detection limit (IDL) and potassium at levels greater than the instrument detection limit (IDL). All data was qualified for potassium (K) by the ICP interference check.

LABORATORY CONTROL SAMPLE

All laboratory control samples analyzed met quality control limit requirements.

DUPLICATES

All analytes were within quality control limit requirements.

SPIKES

All analytes were within limit requirements for percent recovery except antimony (Sb), selenium (Se), and thallium (Tl). All data was qualified by the spike recovery rules.

GRAPHITE FURNACE ATOMIC ABSORPTION (GFAA)

All parameters requiring GFAA analysis met contractual requirments. Various samples for arsenic (As), selenium (Se), and thallium (Tl) were qualified due to post digestion spike recoveries being outside quality control limits.

ICP SERIAL DILUTION

Aluminum (Al), iron (Fe), potassium (K), and zinc (Zn) were exceptions to the ICP rule for percent difference since the original sample concentration was less than 50 times the instument detection limit (IDL). No data was qualified by the ICP serial dilution rules.

PERFORMANCE EVALUTATION SAMPLE

No performance evaluation sample was submitted to the laboratory for analysis.

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International Specialists in the Environment

MEMORANDUM

TO: Debra Morey, Chemist, CLQA/LABO

FROM: Peggy Cox, TAT PC
THRU: Joseph Chandler, TATL JCC

DATE: July 21, 1989

SUBJECT: Review of data for UMTHUM TRUCKING
TDD# T07-8904-013
PAN# T07-Z054-QSH

These data were reviewed according to the "Laboratory Data Validation Functional Guidelines for Evaluation of Inorganic Analyses," July 1, 1988 revision.

The following comments and attached data sheets are a result of Ecology & Environment Inc.'s review of the above mentioned data from the contract laboratory.

CASE NO.: 12127
CONTRACT NO.: 68-W8-0060
SITE: UMTHUM TRUCKING
REVIEWER: P. COX

LABORATORY: NANCO
METHOD NO.: 9001W71
EPA ACTIVITY: DC943
MATRIX: WATER/ASH/SOIL

SMO SAMPLE NOS.		EPA SAMPLE NOS.	
MGE217	MGE225	DC943900P	DC943037
MGE218	MGE226	DC943031	DC943038
MGE219	MGE227	DC943032	DC943039
MGE220	MGE228	DC943033	DC943040
MGE221	MGE229	DC943034	DC943041
MGE222	MGE230	DC943034D	DC943042
MGE223	MGE231	DC943035	DC943043
MGE224	MGE232	DC943036	DC943044

recycled paper

GENERAL

Case 12127 contained 16 water/ash/soil samples analyzed for total metals at the low level concentration. Arsenic (As), lead (Pb), selenium (Se), and thallium (Tl) were analyzed by graphite furnace atomic absorption (GFAA) spectroscopy and mercury (Hg) by cold vapor (CV). Data review was performed at level 2.

HOLDING TIMES and PRESERVATION

No technical holding times or required preservation are specified for soil samples.

INITIAL and CONTINUING CALIBRATION

Initial and continuing calibrations were within quality control limit requirements on all parameters.

BLANKS

Arsenic (As) was reported in the water matrix initial calibration blank and aluminum (Al), iron (Fe), potassium (K), vanadium (V), and zinc (Zn) in the continuing calibration blanks. Chromium (Cr) was reported in the water matrix preparation blank. Associated analyte data was qualified by the blank rules.

ICP INTERFERENCE CHECK

All analytes contained in the ICP interference check sample were within quality control limit requirements except antimony (Sb) and potasium (K) which were detected but not an elements in the EPA ICS solution. Antimony was reported at levels greater than the instrument detection limit (IDL) and potassium at levels less than the instrument detection limit (IDL). All data was qualified for antimony (Sb) by the ICP interference check.

LABORATORY CONTROL SAMPLE

All laboratory control samples analyzed met quality control limit requirements.

DUPLICATES

All analytes were within quality control limit requirements except calcium in the soil matrix sample. All soil matrix samples were qualified by the duplicate rules.

SPIKES

All analytes were within limit requirements for percent recovery except antimony (Sb), arsenic (As), copper (Cu), manganese (Mn), selenium (Se), and thallium (Tl) in the soil matrix sample and lead (Pb) and silver (Ag) in the water matrix sample. Associated sample data was qualified by the spike recovery rules.

GRAPHITE FURNACE ATOMIC ABSORPTION (GFAA)

All parameters requiring GFAA analysis met contractual requirments. Various samples for selenium (Se) and thallium (Tl) were qualified due to post digestion spike recoveries being outside quality control limits.

ICP SERIAL DILUTION

Barium (Ba), beryllium (Be), calcium (Ca), magnesium (Mg), and vanadium (V) in the soil matrix sample and cadmium (Cd) and nickel (Ni) in the water matrix sample were exceptions to the ICP rule for percent difference since the original sample concentration was less than 50 times the instument detection limit (IDL). No data was qualified by the ICP serial dilution rules.

PERFORMANCE EVALUTATION SAMPLE

Performance evaluation sample DC943900P (MGE217) was analyzed with all analytes present in the audit being identified. Calcium (Ca) and sodium (Na) were also reported. No data was qualified by the performance evaluation sample.

ROUTING AND TRANSMITTAL SLIP

Date 8/18

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. P. Culver, SPFD-WSTM		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

DATA TRANSMITTAL

MODIFIED DATA

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

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