DEC 12 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Charles W. Burke
Linwood Mining and Materials Corp.
401 East Front St.
Davenport, Iowa 52804

Dear Mr. Burke:

Enclosed is a copy of the Data Reporting/ Qualification Codes sheet, field sheets, and the analytical results for the soil and water samples taken from your property at the time of the inspection of the Umthun Trucking site. The samples were collected during May 1989 by Ecology and Environment, a contractor for the U.S. Environmental Protection Agency (EPA).

Well Water Samples

Samples were taken from three wells on your property:

Sample No. 012	Wellhead at lime plant
Sample No. 013	Bathhouse well, North of Highway 22
Sample No. 014	Linwood Quarry office

Iron was detected in the sample taken from your office water supply at a level above its Secondary Drinking Water Maximum Contaminant Levels of 300 micrograms per liter (ug/l). Manganese was detected at a level exceeding its Secondary Standard of 50 ug/l in both samples 013 and 014. Secondary Drinking Water Standards have been established based on aesthetic considerations, such as taste, odor, and discoloration of plumbing fixtures.

Sodium was detected in all three samples at levels up to 180,000 ug/l. This far exceeds the recommended maximum level of 20,000 ug/l for consumers on a sodium restricted diet. Anyone on such a diet should consult a physician regarding further use of this water.

If you would like additional information, or help in answering questions regarding consumption of this water, I suggest that you contact:

Mr. Dennis Alt
Bureau of Surface and Ground Water Protection
Iowa Department of Natural Resources
Henry A. Wallace Building
900 East Grand
Des Moines, Iowa 50319
Phone: (515) 281-8998

WSTM:SPFD:PREP:CULVER:final:bh:11/29/89:Disk #3:umthlinw.dat

PREP	ATSDR	PREP	DRNK	SPFD
CULVER	HARPER	FUERST	for LANGEMEIER	MORBY
Culver 11/30/89	Barber 11-21-89	Fuerst 12-1-89	KAF 12/1/89	KAF for RLM 12-8-89

30815333

Linwood Mining
IAD980852297
Break 103
Other
12-12-89

Surface and Mine Water Samples

As with the well water samples, the secondary standards were exceeded in several of the samples for iron, manganese, and sulfate. In addition, the health-based criteria for sodium was exceeded in several samples.

Soil, Ash, and Sediment Samples

Although various contaminants were detected in these samples, it does not appear that the levels are significant.

This information is forwarded to you in accordance with the provisions of Section 3007(a) of the Resource Conservation and Recovery Act of 1976 (RCRA) as amended, and Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended. If you have any questions regarding these analytical data, please contact Pete Culver of my staff at (913) 236-2856.

Sincerely yours,

Robert L. Morby
Chief, Superfund Branch
Waste Management Division

Enclosure

cc: Pete Hamlin, IDNR (with enclosure)
Darrell McAllister, IDNR (with enclosure)

bcc: Ralph Langemeier, WATR (w/enclosure)
Craig Smith, IOWA/RCRA (w/enclosure)

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 — Site Number:
Location: BUFFALO IA — Site Code:

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

Sample Number: DC943001 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
Location: BUFFALO IA
Site Number:
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: 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: 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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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: 09:25 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 u mhos
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: DC943012 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 umshos
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
[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 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: DC94301 4 — 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
~~[illegible]~~		~~[illegible]~~	~~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 sample at Linwood Quarry office

Temp = 17
Condi = 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 METALS~~
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: Drainage water under portion of Mine Vent area, Linwood Quarry

Cond = 600 umhos
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 ~~DA~~ 910 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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FIELD SHEET
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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: DC943003 1 — 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: DC943003 3 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
Location: BUFFALO IA

Site Number:
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

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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: 0950 Leader: WES MCCALL

Sample Number: DC9430034D SMO #:

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

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

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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: 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 6
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

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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: DC9430638 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

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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: 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
Location: BUFFALO IA
Site Number:
Site Code:

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

Sample Number: DC943~~0~~F040 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.

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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: 09:00 Leader: WES MCCALL

Sample Number: DC9430 ~~#2044~~ 1121 — 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: Course ash and particulates from overflow 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 ~~3~~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.

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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: 1500 Leader: WES MCCALL

Sample Number: DC9430 0~~44~~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

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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: _____
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 08/25/89

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

MODIFIED DATA

ANALYSIS TYPE: METALS, TOTAL

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: _____
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 08/25/89

SAMPLES	DC943006	DC943007
ALUMINUM	200 U	200 U
ANTIMONY	60 U	60 U
ARSENIC	10 U	10 U
BARIUM	74 J	63 J
BERYLLIUM	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U
CALCIUM	150000	130000
CHROMIUM	9.0 J	10 U
COBALT	50 U	50 U
COPPER	25 U	25 U
IRON	520	340 U
LEAD	5.0 U	5.0 U
MAGNESIUM	47000	42000
MANGANESE	210	250
MERCURY	0.20 U	0.20 U
NICKEL	11 J	40 U
POTASSIUM	4000 J	3300 J
SELENIUM	5.0 U	5.0 U
SILVER	10 U	10 U
SODIUM	24000	28000
THALLIUM	10 U	10 U
VANADIUM	50 U	50 U
ZINC	35 U	33 U
CYANIDE	N	N

MODIFIED DATA

ANALYSIS TYPE: METALS, TOTAL

TITLE: UMTHUM TRUCKING
LAB: NANCO
SAMPLE PREP: _____
REVIEW LEVEL: 2

ANALYST/ENTRY: PLC

MATRIX: WATER
METHOD: 9001W71
REVIEWER: _____
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 08/25/89

SAMPLES	DC943011	DC943012
ALUMINUM	310 U	200 U
ANTIMONY	60 U	60 U
ARSENIC	10 U	10 U
BARIUM	54 J	61 J
BERYLLIUM	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U
CALCIUM	110000	74000
CHROMIUM	28 J	10 U
COBALT	50 U	50 U
COPPER	25 U	25 U
IRON	500 U	120 U
LEAD	5.0 U	5.0 U
MAGNESIUM	19000	29000
MANGANESE	71	11 J
MERCURY	0.20 U	0.20 U
NICKEL	40 U	40 U
POTASSIUM	11000	3000 J
SELENIUM	5.0 U	5.0 U
SILVER	10 U	10 U
SODIUM	35000	35000
THALLIUM	10 U	10 U
VANADIUM	50 U	50 U
ZINC	20 U	50 U
CYANIDE	N	N

MODIFIED DATA

ANALYSIS TYPE: METALS, TOTAL

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: _____
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 08/25/89

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 J
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

MODIFIED DATA

ANALYSIS TYPE: METALS, TOTAL

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: _____
DATA FILE : P55

UNITS: UG/L
CASE: 12127
DATE: 08/25/89

SAMPLES	DC943017	DC943017D
ALUMINUM	200 U	200 U
ANTIMONY	60 U	60 U
ARSENIC	10 U	10 U
BARIUM	79 J	81 J
BERYLLIUM	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U
CALCIUM	80000	78000
CHROMIUM	10 U	16 J
COBALT	50 U	50 U
COPPER	25 U	25 U
IRON	130 U	190 U
LEAD	5.0 U	5.0 U
MAGNESIUM	35000	35000
MANGANESE	5.0 J	5.0 J
MERCURY	0.20 U	0.20 U
NICKEL	9.0 J	16 J
POTASSIUM	2900 J	2400 J
SELENIUM	5.0 U	5.0 U
SILVER	10 U	10 U
SODIUM	18000	17000
THALLIUM	10 U	10 U
VANADIUM	50 U	50 U
ZINC	20 U	28 U
CYANIDE	N	N

MODIFIED DATA

ANALYSIS TYPE: SULFATE BY ANION SCAN

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

MATRIX: WATER
METHOD: 3001WOO
REVIEWER: D.COX
DATA FILE : P83

UNITS: MG/L
CASE: 4740G
DATE: 08/03/89

SAMPLE NO.	RESULT	
DC943001	394	
DC943002F	0.10	U
DC943004	334	
DC943006	258	
DC943007	155	
DC943011	258	
DC943012	50.0	
DC943013	181	
DC943014	135	
DC943015	142	
DC943016	374	
DC943017	69.0	
DC943017D	68.0	

ANALYSIS TYPE: CHLORIDE BY ANION SCAN

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

MATRIX: WATER
METHOD: 3001W00
REVIEWER: _____
DATA FILE : P82

UNITS: MG/L
CASE: 4740G
DATE: 08/03/89

SAMPLE NO.	RESULT	
DC943001	33.0	
DC943002F	0.10	U
DC943004	40.0	
DC943006	64.8	
DC943007	66.2	
DC943011	55.6	
DC943012	14.0	
DC943013	84.0	
DC943014	61.6	
DC943015	24.4	
DC943016	112	
DC943017	7.00	
DC943017D	7.20	

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: 08/25/89

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	320000	250000	300000
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

MODIFIED DATA

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: 08/25/89

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

MODIFIED DATA

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: 08/25/89

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	22000	310000	390000
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	4.5 J	0.40 J	1.4 J	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

MODIFIED DATA

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: 08/25/89

SAMPLES	DC943042	DC943043
ALUMINUM	6700	4700
ANTIMONY	18 U	16 U
ARSENIC	4.3 J	3.7 J
BARIUM	79	75
BERYLLIUM	1.2 J	1.1 J
CADMIUM	1.5 U	1.4 U
CALCIUM	160000	8000
CHROMIUM	11	7.9
COBALT	3.2 J	6.0 J
COPPER	7.3 U	6.8 U
IRON	11000	12000
LEAD	9.4	9.4
MAGNESIUM	6500	1500
MANGANESE	420 J	420 J
MERCURY	0.15 U	0.14 U
NICKEL	13	12
POTASSIUM	1500 U	1400 U
SELENIUM	0.44 J	0.38 J
SILVER	2.9 U	2.7 U
SODIUM	1500 U	1400 U
THALLIUM	2.9 U	2.7 U
VANADIUM	21 U	16 U
ZINC	63 U	130
CYANIDE	N	N

MODIFIED DATA

ANALYSIS TYPE: EP TOXICITY METALS

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: D.Cox
DATA FILE : P07

UNITS: UG/L
CASE: 4740G
DATE: 08/15/89

SAMPLES	DC943031	DC943032	DC943033	DC943034
ALUMINUM	210	200 U	200 U	200 U
ANTIMONY	60 U	60 U	60 U	60 U
ARSENIC	10 U	3.0 J	2.5 J	10 U
BARIUM	130 J	130 J	43 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	1700000	2100 J	2000000	2000000
CHROMIUM	10 U	10 U	10 U	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	25 U	25 U	25 U
IRON	11 J	100 U	27 J	100 U
LEAD	5.0 U	5.0 U	5.0 U	5.0 U
MAGNESIUM	4600 J	15000	7500	7300
MANGANESE	15 U	1200	940	1500
MERCURY	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	40 U	40 U	40 U	40 U
POTASSIUM	4600 J	25000	36000	23000
SELENIUM	50 U	50 U	50 U	50 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	900 J	2600 J	3300 J	2600 J
THALLIUM	10 U	1.6 J	1.1 J	0.90 J
VANADIUM	8.0 J	8.9 J	10 J	12 J
ZINC	20 U	20 U	8.8 J	6.3 J
CYANIDE	N	N	N	N

ANALYSIS TYPE: EP TOXICITY METALS

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: P.COX
DATA FILE : P07

UNITS: UG/L
CASE: 4740G
DATE: 08/15/89

SAMPLES	DC943034D	DC943035	DC943036
ALUMINUM	200 U	200 U	200 U
ANTIMONY	60 U	60 U	60 U
ARSENIC	4.4 J	10 U	10 U
BARIUM	160 J	240	440
BERYLLIUM	5.0 U	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U	5.0 U
CALCIUM	2000000	53000	150000
CHROMIUM	10 U	10 U	10 U
COBALT	50 U	50 U	50 U
COPPER	25 U	25 U	25 U
IRON	100 U	18 J	120
LEAD	5.0 U	5.0 U	5.0 U
MAGNESIUM	7100	4300 J	9000
MANGANESE	1500	130	8000
MERCURY	0.20 U	0.20 U	0.20 U
NICKEL	40 U	40 U	40 U
POTASSIUM	23000	10000	5000 U
SELENIUM	50 U	5.0 U	5.0 U
SILVER	10 U	10 U	10 U
SODIUM	2600 J	320 J	580 J
THALLIUM	0.90 J	10 U	1.0 J
VANADIUM	12 J	50 U	50 U
ZINC	6.6 J	20 U	23
CYANIDE	N	N	N

ANALYSIS TYPE: EP TOXICITY METALS

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: D COX
DATA FILE : P07

UNITS: UG/L
CASE: 4740G
DATE: 08/15/89

SAMPLES	DC943038	DC943039	DC943040	DC943041
ALUMINUM	88 J	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	260	550	220	670
BERYLLIUM	5.0 U	0.90 J	5.0 U	5.0 U
CADMIUM	5.0 U	3.4 J	5.0 U	5.0 U
CALCIUM	2000000	480000	2900000	2700000
CHROMIUM	10 U	10 U	10 U	10 U
COBALT	50 U	50 U	50 U	50 U
COPPER	25 U	25 U	25 U	25 U
IRON	14 J	29 J	100 U	100 U
LEAD	5.0 U	5.0 U	50 U	50 U
MAGNESIUM	53000	120000	140 J	5000 U
MANGANESE	13000	5900	2.4 J	15 U
MERCURY	0.20 U	0.20 U	0.20 U	0.40
NICKEL	51	44	40 U	40 U
POTASSIUM	33000	5000 U	8700	3300 J
SELENIUM	50 U	5.0 U	50 U	50 U
SILVER	10 U	10 U	10 U	10 U
SODIUM	2800 J	690 J	1700 J	790 J
THALLIUM	3.9 J	1.0 J	1.4 J	10 U
VANADIUM	16 J	50 U	14 J	4.4 J
ZINC	20 U	7.4 J	20 U	20 U
CYANIDE	N	N	N	N

ANALYSIS TYPE: EP TOXICITY METALS

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

MATRIX: WATER
METHOD: 9001W71
REVIEWER: D.COX
DATA FILE : P07

UNITS: UG/L
CASE: 4740G
DATE: 08/15/89

SAMPLES	DC943042	DC943043
ALUMINUM	200 U	200 U
ANTIMONY	60 U	27 J
ARSENIC	2.3 J	2.8 J
BARIUM	810	760
BERYLLIUM	5.0 U	5.0 U
CADMIUM	5.0 U	5.0 U
CALCIUM	1800000	210000
CHROMIUM	10 U	10 U
COBALT	29 J	62
COPPER	25 U	25 U
IRON	37 J	420
LEAD	5.0 U	5.0 U
MAGNESIUM	18000	23000
MANGANESE	6600	13000
MERCURY	0.20 U	0.20 U
NICKEL	54	47
POTASSIUM	5000 U	5000 U
SELENIUM	50 U	5.0 U
SILVER	10 U	10 U
SODIUM	1200 J	1200 J
THALLIUM	10 U	10 U
VANADIUM	50 U	50 U
ZINC	43	48
CYANIDE	N	N

ANALYSIS TYPE: SULFIDE

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

MATRIX: SEDIMENT
METHOD: 3761W01
REVIEWER: R.COX
DATA FILE : P84

UNITS: MG/KG
CASE: 4740G
DATE: 08/04/89

SAMPLE NO.	RESULT
DC943031	53.0
DC943032	21.2
DC943033	10.6
DC943034	10.6
DC943034D	21.2
DC943035	10.6
DC943036	10.6
[illegible]	[illegible]
DC943038	21.2
DC943039	21.2
DC943040	21.2
DC943041	10.6
DC943042	10.6
DC943043	21.2

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☒ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:

Mr. Charles W. Burke
Linwood Mining & Materials Corp.
401 East Front St.
Davenport, Iowa 52804

4. Article Number
P 716 386 090

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee
X M. Stimson 401 E Front St

6. Signature — Agent
X M. Stimson

7. Date of Delivery
12-14-89

8. Addressee's Address *(ONLY if requested and fee paid)*
Same as #3 above

S Form 3811, Mar. 1987 ★ U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

U.S.MAIL

PENALTY FOR PRIVATE USE, $300

RETURN TO

Print Sender's name, address, and ZIP Code in the space below.

Environmental Protection Agency
WSTM/SPFD/TRST
726 Minnesota Avenue
Kansas City, Kansas 66101

PCulver

P 716 386 090

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Mr. Charles W. Burke	
Street and No. Linwood Mining & Materials Co 401 East Front St.	
P.O., State and ZIP Code Davenport, Iowa 52804	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	

'm 3800, June 1985

STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make inquiry.

☆ U.S.G.P.O. 1987-176-131