EPA Region 5 Records Ctr.
247102

0000020

MEMORANDUM

TO: Mike Urban
EPA/ERT

FROM: Anthony Lombardo
Carol Sim
ERT/TAT

THRU: W. Scott Butterfield
ERT/TATL

[illegible] Results of U.S. Scrap Air Analysis by GC MS

[illegible] November 6, 1985

[illegible] 12-[illegible]10-08
PCS 5008
TAT-12-F-00142

Attached are the preliminary results for target compounds for the U.S. Scrap air analysis. Samples were received on October 12, 1985, analysis took place on October 15, 25, and 26.

Target compounds were quantified using the area response of the single ions and daily standard. An internal standard of para-bromofluorobenzene was added to each standard and sample. Attached is a table of the concentrations and single ions of the daily standard. The linear method detection limit (MDL) for all target compounds is 2.5 parts per billion (ppb).

The instrument shutdown during the analysis of samples USS 1011-A and USS 1011-B. The data was recovered by restarting the analysis. This [illegible] the effect of shifting to lower scan numbers for the compounds and the possible loss of early eluting compounds.

A data sheet giving the analysis results is attached for each sample. A final report including non-target compound results, procedures, and [illegible] results is forthcoming.

COMPOUND	[illegible]	[illegible] CONCENTRATION PPM
Vinyl Chloride	[illegible]	
1,1-Dichloroethene	[illegible]	
1,2-Dichloroethane	[illegible]	
Benzene	[illegible]	
Trichloroethene	[illegible]	
Toluene	[illegible]	[illegible]
1,1,2-Trichloroethane	[illegible]	[illegible]
Tetrachloroethene	[illegible]	[illegible]
Ethyl Benzene	[illegible]	[illegible]
O-Xylene	[illegible]	[illegible]
Carbon Tet	[illegible]	10.0

Analysis [illegible]

Sample [illegible]

FRN 20000

Date Analyzed October [illegible] 3[illegible]

COMPOUND	SINGLE ION	SCAN NUMBER	RT TIME	CONCENTRATION PPB
Vinyl Chloride	62			ND
1,1-Dichloroethene	[illegible]		-	ND
1,2-Dichloroethane	62	-	-	ND
Benzene	78	127	2.8	BMDL
Trichloroethene	130	-	-	ND
Toluene	91	252	4.7	BMDL
1,1,2-Trichloroethane	83	-	-	ND
Tetrachloroethene	166	-	-	ND
Ethyl Benzene	91	-	-	BMDL
Xylenes*	91	-	-	BMDL
Carbon Tet	117	-	-	ND

[illegible] : Not Applicable.
[illegible] : Not Detected.
[illegible] : Below Method Detection Limit.
[illegible] : Total xylenes as o-xylene.

Analysis U.S. Scrap

Sample USS 1011-A-Recovery of Shutdown

FRN 20021

Date Analysed October 25, 1985

COMPOUND	SINGLE ION	SCAN NUMBER	RUN TIME	CONCENTRATION PPB)
Vinyl Chloride	62	-	-	ND**
1,1-Dichloroethene	61	-	-	ND
1,2-Dichloroethane	62	-	-	ND
Benzene	78	35	1.2	BMDL
Trichloroethene	130	-	-	ND
Toluene	91	205	3.82	4.8
1,1,2-Trichloroethane	83	-	-	ND
Tetrachloroethene	166	270	-	BMDL
Ethylbenzene	91	351	6.0	5.6
[illegible]	91	365	6.27	3.6
[illegible]	117	-	-	ND

Analysis : U.S. Scrap

Sample : USS 1011-C + 100 ml I.S.

FRN : 20028

Date Analyzed : October 26, 1985

COMPOUND	SINGLE ION	SCAN NUMBER	RUN TIME	CONCENTRATION (PPB)
Vinyl Chloride	62	-	-	ND
1,1-Dichloroethene	61	-	-	ND
1,2-Dichloroethane	62	-	-	ND
Benzene	78	16	3.3	BMDL
Trichloroethene	130	-	-	ND
Toluene	91	285	5.2	BMDL
1,1,2-Trichloroethane	83	-	-	ND
Tetrachloroethene	166	338	6.0	BMDL
Ethyl Benzene	91	404	7.0	2.0
Xylenes	91	413,450	7.1,7.5	3.9
[illegible]	117	-	-	ND

[illegible]:

[illegible]

[illegible] Detection Limit.

[illegible] as o-xylene.

Analysis U.S. Scrap

Sample USS 1011-B

FRN 20029

Date Analyzed : October 26, 1985

COMPOUND	SINGLE ION	SCAN NUMBER	RUN TIME	CONCENTRATION (PPB)
Vinyl Chloride	62	-	-	ND
1,1-Dichloroethene	61	-	-	ND
1,2-Dichloroethane	62	-	-	ND
Benzene	78	165	3.3	BMDL
Trichloroethene	130	206	3.9	BMDL
Toluene	91	285	5.0	3.7
1,1,2-Trichloroethane	83,97	-	-	ND
Tetrachloroethene	166	341	6.0	BMDL
[illegible]	91	405	6.9	2.6
[illegible]	91	435,450	7.0,7.5	5.2
[illegible]	117	-	-	ND

[illegible] Limit.
[illegible] Xylene.

Analysis : U.S. Scrap

Sample : USS 1011-E Recovery From Shutdown

FRN : 20032

Date Analyzed : October 26, 1985

COMPOUND	SINGLE ION	SCAN NUMBER	RUN TIME	CONCENTRATION (PPB)
Vinyl Chloride	62	-	-	ND**
1,1-Dichloroethene	61	-	-	ND
1,2-Dichloroethane	62	-	-	ND
Benzene	78	-	-	BMDL
Trichloroethene	130	-	-	ND
Toluene	91	138	2.7	6.4
1,1,2-Trichloroethane	83	-	-	ND
Tetrachloroethene	166	209	3.8	BMDL
Ethyl Benzene	91	292	5.0	6.5
[illegible]	91	308,343	5.2,5.7	11.7
[illegible]	117	-	-	ND

[illegible] limit.

[illegible] xylene.

[illegible] during instrument shutdown.

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ NO	PROJECT NAME
15-8510-8	U. S. SCRAP

SAMPLERS (Signature): [illegible]

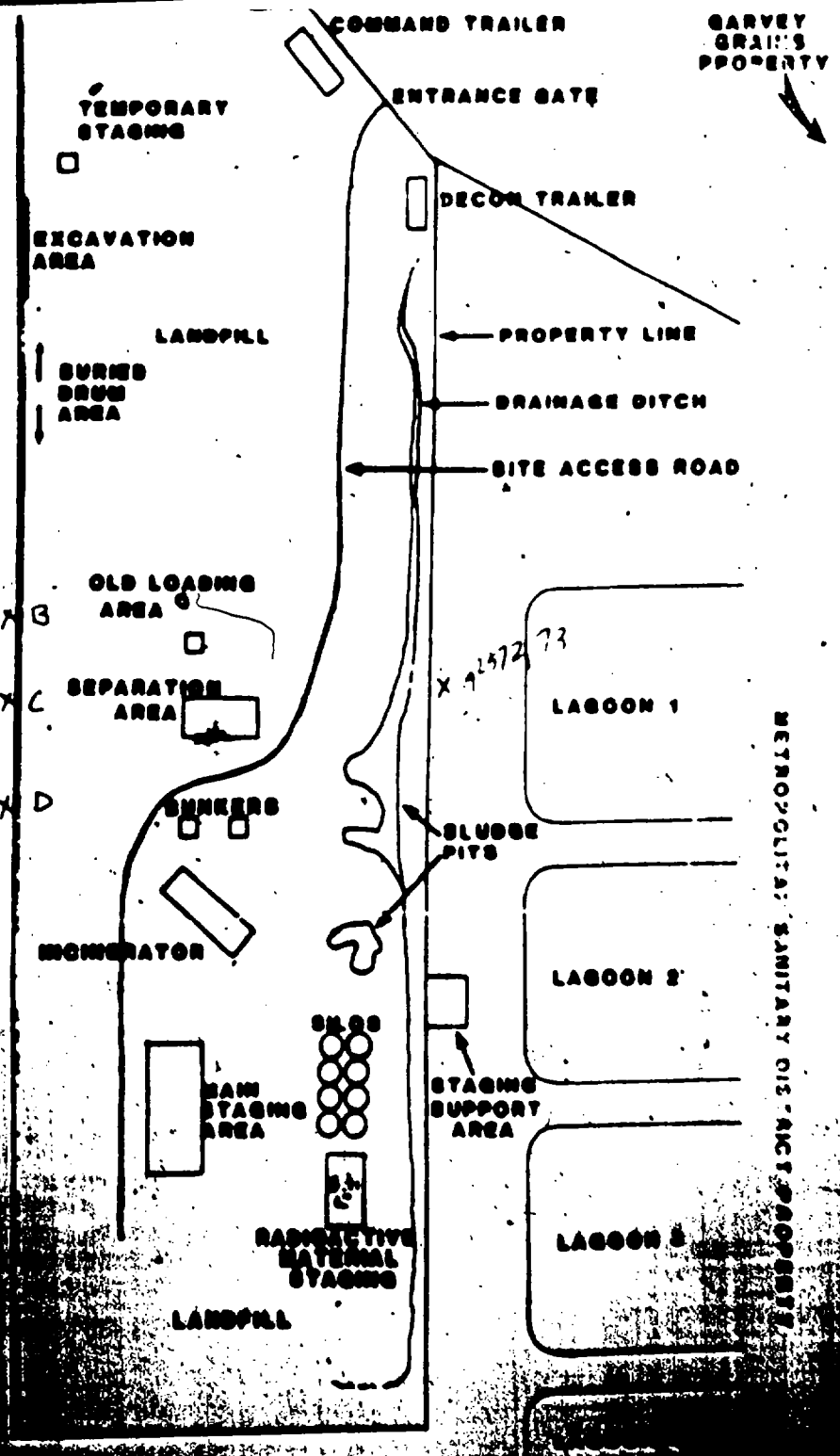
STA NO	DATE	TIME	COMP	GRAB	STATION LOCATION	NO OF CONTAINERS	GAS SAMPLING BAG						AIR TAG #	REMARKS
[illegible]-A	[illegible]	DAY		X	BACKROUND	1	1						5-2372	
[illegible]-B				X	BACKROUND	1	1						5-2373	
[illegible]-A				X	DOWNWIND	1	1						5-2374	
[illegible]-B				X	DOWNWIND	1	1						5-2375	
[illegible]-C				X	DOWNWIND	1	1						5-2376	
[illegible]-C				X	DOWNWIND	1	1						5-2377	
[illegible]-D				X	DOWNWIND	1	1						5-2378	
[illegible]-D				X	DOWNWIND	1	1						5-2379	
[illegible]				X	BLANK	1	1						5-2381	

Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	[illegible]
[illegible]				
Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	[illegible]
[illegible]				
Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	[illegible]

[illegible] Yellow [illegible] Laboratory File

10/11/85

RH = 72%
TEMP = 54°F
WIND - NE
@ 0-10 MPH



McKinley/[illegible]

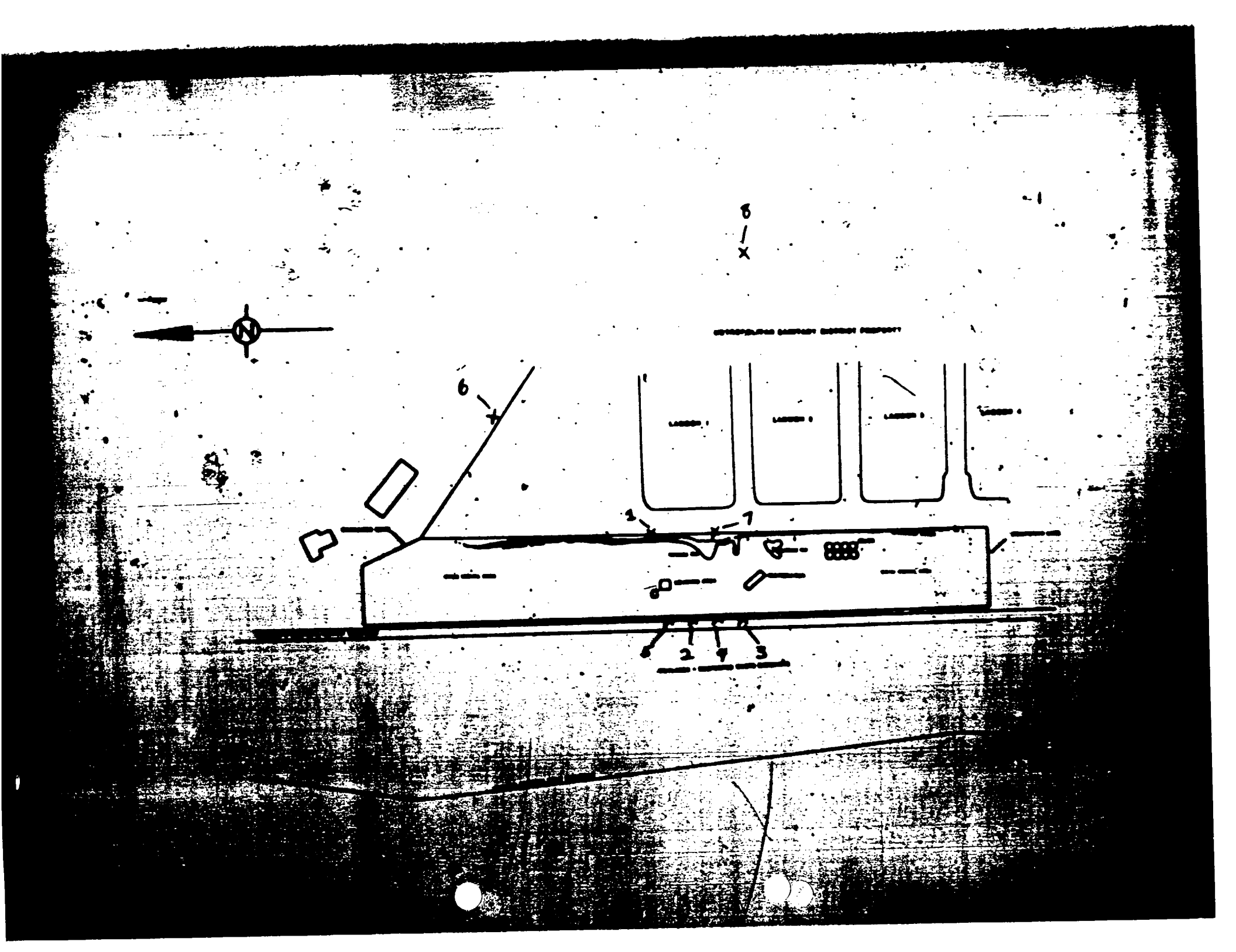
SAMPLING

AIR SAMPLING WORKSHEET

DATE 10-11-85

SAMPLE #	STATION #	TIME START	STOP	TOTAL	FLOW RATE	VOLUME	MEDIA	REMARKS
[illegible]-1	1	12:15		200 min	158.[illegible] ml/min	31.6 Lit.	[illegible]	
[illegible]-2A	2	11:10		240 min	191.4 ml/min	45.9 Lit.		Dup.
[illegible]-2B	2	11:10		240 min	188.5 ml/min	45.3 Lit.		Dup.
[illegible]-3	3	11:09		240 min	159.5 ml/min	37.1 Lit.		
[illegible]-4	4	11:12		240 min	177.3 ml/min	42.5 Lit.		
[illegible]-5	5	11:05		240 min	176.9 ml/min	42.2 Lit.		
[illegible]-6	6	11:05		240 min	178.4 ml/min	42.1 Lit.		
[illegible]-7	7	12:15		200 min	169.6 ml/min	33.9 Lit.		
[illegible]-8	8	11:20		240 min	160. ml/min	38.4 Lit.		
							[illegible]	
							[illegible]	

TEMPERATURE 55-59°F WIND NE to E 0-10 mph PRESSURE 30.22 HUMIDITY [illegible]


N
6
8
1
7
2
4
3

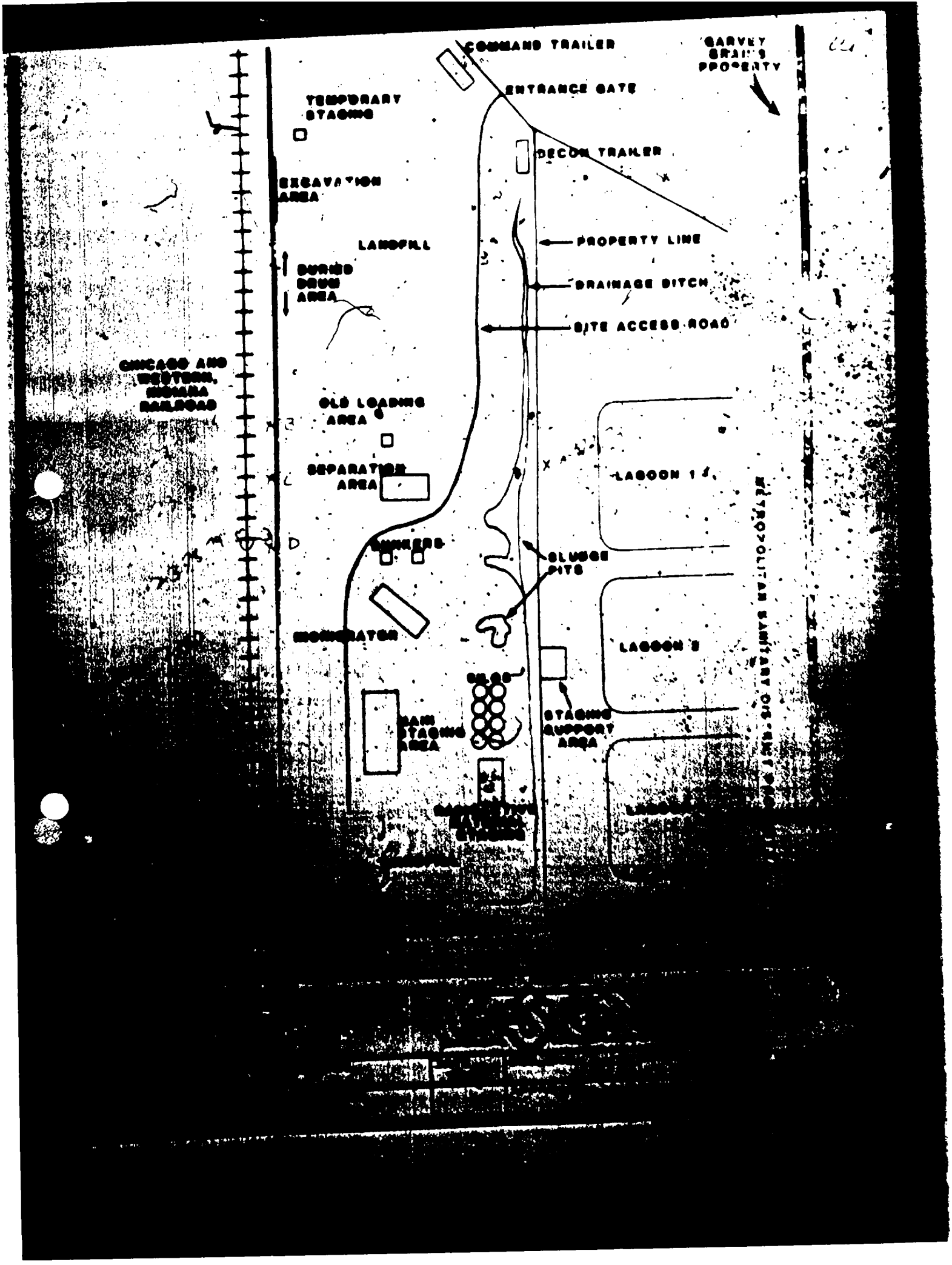
ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
[illegible]	U.S. Sp[illegible]

SAMPLERS: Bob [illegible]

STA. NO.	DATE	TIME			STATION LOCATION	NO. OF CONTAINERS		REMARKS
[illegible]	[illegible]	[illegible]			1	1	1	158.? 36.? S-2381
[illegible]					2	1	1	191.9 44.9 S-2382 ([illegible]
[illegible]					2	1	1	188.9 45.3 S-2383 ([illegible]
[illegible]					3	1	1	154.5 37.1 S-2384
[illegible]					4	1	1	177.8 42.5 S-2385
[illegible]					5	1	1	175.9 42.2 S-2386
[illegible]						1	1	175.4 42.1 S-2387
[illegible]					7			159.6 38.9 S-23[illegible]
[illegible]							1	160.? 38.? S-23[illegible]
[illegible]								S-23[illegible]
[illegible]								S-23[illegible]
[illegible]								


COMMAND TRAILER
GARVEY GRAIN'S PROPERTY
ENTRANCE GATE
TEMPORARY STAGING
DECON TRAILER
EXCAVATION AREA
LANDFILL
PROPERTY LINE
BURIED DRUM AREA
DRAINAGE DITCH
SITE ACCESS ROAD
CHICAGO AND WESTERN INDIANA RAILROAD
OLD LOADING AREA
SEPARATOR AREA
LAGOON 1
BUNKERS
SLUDGE PITS
INCINERATOR
LAGOON 2
BULGE
MAIN STAGING AREA
STAGING SUPPORT AREA

Briand

Please note that the "Blank" #1011-E was a sample of compressed "breathing" air in a sample bag

Any Questions Call 340-6689

Mike