APPENDIX B

DATE STARTED: 5-12-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-12-86		BORING NO. SB 1	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 49501

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

~~DES~~ ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	POWER GROUND HOG DRILL
SIZE:	—	2" OD	—	—	2 3/8	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: INSIDE TANK FARM → GRAVEL, LEVEL, TIGHT AREA

GROUNDWATER AT 17 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	157	0-1.5	0 1 1 1	≈.25	GRAVEL	
	SS	158	1.5-3	3 4	4'	SILT + SAND little clay tr S/C gravel	FILL
5	SS	159	3-4.5			Rd/Brn CLAY some silt tr S/gravel	TILL
	SS	160	7.5-9	9 14 22		Rd/Brn CLAY some silt little sand tr S/gravel	
10							
	SS	161	12-13.5	23 50 150	13	Highly FRACTURED/WEATHERED GRY SHALE	SHALE
15							
	SS	162	16.5-17	140/6"	17 ▼	SAME	
						WATER @ 17	
						EOB @ 17	

TYPE C BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13 L.F. SOIL | 4 L.F. ROCK | 6 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 5-13-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-13-86		BORING NO. SB-3	

CLIENT: NUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 49501

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

EDES ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	HW	CARBON STEEL	—	—	HSA	—	—	POWER GROUND HOG DRILL
SIZE:	6"	2" OD	—	—	2 3/4	—	—	
HAMMER WT/ FALL	140/30	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: GRAVEL, LEVEL, TANK FARM DRY

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	163	0-1.5	1 1 1 2	1	GRAVEL	GRAVEL
	SS	164	1.5-3	3 4 3 4		RD/BRN/GRY CLAY little silt and f/sand to f/gravel	TILL
5	SS	165	3-4.5	7		SAME TILL	
	SS	166	7.5-9	8 14 20		SAME TILL	
10							
	SS	167	12-13.5	14 30 80	13		
15						FRACTURED/WEATHERED GRY SHALE	SHALE
	SS	168	16.5-17	220/.5		SAME	
	SS	169	19-19.5	300/.5		SAME	
20						EOB @ 19.5	

TYPE C BORING HW CASING 0 TO 3 FT THEN — CASING — TO — FT.

QUANTITIES: 13 L.F. SOIL | 6.5 L.F. ROCK | 17 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 5·14·86	**eder associates** BORING REPORT	1 SHEET OF 1
DATE FINISHED: 5·14·86		BORING NO. SB4.

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 995-01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

EDS ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	HW	CARBON STEEL	—	—	HSA	—	—	POWER GROUND HOG DRILL
SIZE:	6"	2" OD	—	—	2 3/4	—	—	
HAMMER WT/ FALL	140/30"	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: TANK FARM, LEVEL, ~~WET~~ SURFACE PONDING

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME		STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	175	0-1.5	1	2			
				3	3	2	GRAVEL	GRAVEL (standing water)
	SS	176	1.5-3	3	5		GRY CLAY little silt and sand	Decomposed TILL
				4	6			
5	SS	177	3-4.5	9			Rd/YW CLAY little silt, sand and gravel	
	SS	178	7.5-9		10		Rd/BRN CLAY little silt and sand tr f/gravel	TILL
				14	21			
10								
	SS	179	12-13.5	20	48			
				173		13		
15							FRACTURED/WEATHERED GRY SHALE	SHALE
							EOB @ 13.5	

TYPE A	BORING HW	CASING 0	TO 2	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	.5 L.F. ROCK	15 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 5-14-86	**eder associates** BORING REPORT	1 SHEET OF 1
DATE FINISHED: 5-14-86		BORING NO. SB 6

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

~~SITE~~ ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	HW	CARBON STEEL	—	—	HSA	—	—	POWER HAND GROUND HOG DRILL
SIZE:	6"	2" OD	—	—	2 3/4	—	—	
HAMMER WT/ FALL	140/30	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: SW end of TANK FARM, GRAVEL, LEVEL, WET, SURFACE PONDING

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME		STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	170	0-1.5	2	3	.5	GRAVEL	
				4	4		Rd/BRN SAND + SILT some clay	FILL
	SS	171	1.5-3	6	9			
				8	5		BLK SAND + SILT tr f/gravel cinders, fill mat.	
5	SS	172	3-4.5	4				
						7		
					10		Rd/BRN CLAY little silt and f/gravel TILL	TILL
	SS	173	7.5-9	14	40			
10								
	SS	174	12-13	40	175	12.5		
							FRACTURED/WEATHERED SHALE	SHALE
15							EOB @ 12.5.	

TYPE C	BORING HW	CASING 0	TO .5	FT THEN —	CASING —	TO — FT.
QUANTITIES:	12.5 L.F. SOIL	0 L.F. ROCK	15 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 5-15-86	eder associates BORING REPORT	1 SHEET OF 1
DATE FINISHED: 5-15-86		BORING NO. SB 7

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

~~SOILS~~ ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	HW	CARBON STEEL	—	—	HSA	—	—	POWER HAND AUGER GROUP HOG DRILL
SIZE:	6"	2" OD	—	—	2 3/4	—	—	
HAMMER WT/ FALL	PUSHED	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	180	0-1.5	2 2 3 3	1.5	GRAVEL	GRAVEL
	SS	181	1.5-3	5 8 3 5		GRY/BLK CLAY little silt tr SAND	TILL
5	SS	182	3-4.5	8		Rd/BRN CLAY little silt tr S/gravel	
	SS	183	7.5-9	9 15 25		Rd/BRN CLAY little silt tr SAND + S/gravel	
10							
	SS	184	12-13.5	36 127 115	12	FRACTURED/WEATHERED SHALE	SHALE
15						EOB @ 13.5	

TYPE C	BORING HW	CASING 0	TO 1.5	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	12 L.F. SOIL	1.5 L.F. ROCK	5 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 5-7-86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-7-86		BORING NO. SB 8	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

~~AES~~ ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE: HW	HW	CARBON STEEL	—	—	HSA	—	—	CME 55 MOBILE DRILL
SIZE:	6"	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	140/30	140/30		BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME		STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	121	0 – 1.5	1	1	1.5	GRAVEL	GRAVEL
				1	2			
	SS	122	1.5 – 3	3	3	3.5	BRN SAND + SILT tr f/gravel	FILL perched H_2O in FILL
				4	5			
5	SS	123	3 – 4.5	4			Rd/BRN CLAY little silt + sand tr f/gravel	TILL
	SS	124	7.5 – 9		14		SAME	HOLE FILL w/H_2O from surface
				20	29			
10								
	SS	125	12 – 13.5	44	64			
				140				
						13	FRACTURED/WEATHERED SHALE	SHALE
15								
	SS	126	16.5 – 17	300/.5			SAME (consolidated)	
20								
	SS	127	20 – 20.5	200/.5			SAME	
							EOB @ 20.5	
25								

TYPE	A	BORING	HW	CASING	0	TO	1.5	FT THEN	—	CASING	— TO — FT.
QUANTITIES:	13	L.F. SOIL	7.5	L.F. ROCK	7	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE	

DATE STARTED: 5-2-86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-2-86		BORING NO. SB 9	

CLIENT: NUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 49501

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

~~SOILS~~ ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: LEVEL DRY GRASS

GROUNDWATER AT 20 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	75	0-1.5	4 5 7 7	1.5	BRN SILT + SAND some f/gravel, fill material	GRAVEL
	SS	76	1.5-3	9 11 6 7		BRN/YW CLAY little silt tr. sand + gravel	
5	SS	77	3-4.5	12		BRN CLAY some silt tr f/sand + gravel, fill material	FILL
	SS	78	7.5-9	1 14 33	8.5	BRN/RD CLAY little silt tr. sand + gravel	TILL
10							
	SS	79	12-13.5	37 65 130	13	FRACTURED/WEATHERED GRY SHALE	SHALE
15							
	SS	80	16.5-17	80/.5	20	SAME	
20			20-20.5	80/.5		EOB @ 20.5	

TYPE A — BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13 L.F. SOIL — 7.5 L.F. ROCK — 6 SS SAMPLES — — US TUBES — — L.F. OW PIPE

DATE STARTED: 5·10·86	**eder associates BORING REPORT**	1 SHEET OF 1	
DATE FINISHED: 5·10·86		BORING NO. SB 10	

CLIENT: HOKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

~~BORING~~ ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: DRY, LEVEL

GROUNDWATER AT 24.5 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME		STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	81	0–1.5	4	3		Kempack Rd/BRN oxidized	Kempack FILL
				2	3			
	SS	82	1.5–3	4	4	3	GRN/GRY Kempack	
				4	8		BRN/GRY SAND + SILT fill mat. cinders	FILL
5	SS	83	3–4.5	7	3			
				3	4			
	SS	84	4.5–6	2	2		SAME	
	SS	85	6–7.5	3	1		BRN CLAY + SAND some FILL MAT. CINDERS etc. WOOD	
	SS	86	7.5–9	1	1			
10				1	2			
	SS	87	9–10.5	3	5		SAME	
	SS	88	10.5–12	6	9			
15	SS	89	15–16	25	70		SAME	
						16		
							Fractured/weathered GRY SHALE	SHALE
20	SS	90	19–20	33	80		SAME	
	SS	91	23–24	64	130	24.5 ▼		
25							EOB @ 24.5	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	16 L.F. SOIL	8.5 L.F. ROCK	11 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 5·5·86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5·5·86		BORING NO. SB 11	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

EB ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140 / 30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: GRAVEL ROAD BERM, LEVEL DRY

GROUNDWATER AT 20.5 FT. AFTER EOB HRS. 13 FT. AFTER 2 HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	92	0–1.5	14 16 11 4		GRAVEL + SILT WET	FILL
	SS	93	1.5–3	5 7 3 4		BLK GRAVEL little sand little silt + clay	
5	SS	94	3–4.5	5 Sa 35% Si 35% Cl 35%		SAME	
					7		
	SS	95	7.5–9	7		BRN/YLW CLAY + SILT little sand tr. f/gravel	TILL
10				12 16			
	SS	96	12–13.5	24 65	13		
15				110		FRACTURED/WEATHERED GRY SHALE	SHALE
	SS	97	16.5–17	85/.5		SAME	
20	SS	98	20–20.5	135/.5	20.5 ▼	SAME	
						EOB @ 20.5	

TYPE A	BORING —	CASING —	TO/ — FT THEN —	CASING —	TO — FT.
QUANTITIES:	13 L.F. SOIL	7.5 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE

DATE STARTED: 5-5-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-5-86		BORING NO. SB 12	

CLIENT: HOKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

~~SOILS~~ ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: GRAVEL, LEVEL, DRY

GROUNDWATER AT 20 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	99	0-1.5	5 7 / 5 4		GRAVEL + SILT WET	FILL
	SS	100	1.5-3	6 9 / 5 9	4'	BRN/YW CLAY + SILT some SAND	
5	SS	101	3-4.5	11 Sa 25% Si 35% Cl 40%		BRN/YW/GRY Mottled clay + SILT tr gravel.	TILL
	SS	102	7.5-9	Sa 20% 6 Si 45% Cl 35% / 11 20		GRY CLAY little silt + SAND tr. gravel	
10							
	SS	103	12-13.5	48 82 / 160	13	FRACTURED/WEATHERED GRY SHALE	SHALE
15							
	SS	104	16.5-17	180/.5		SAME	
20	SS	105	20-20.5	160/.5		SAME	
	SS	106	23.5-24	125/.5	24 ▼	SAME	
25							

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	13 L.F. SOIL	11 L.F. ROCK	8 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 4/29/86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4/29/86		BORING NO. SB-13A	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION			
PROJECT NO. (S): 495-1			
ING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ENGINEER: NICK ANDRIANAS		INSPECTOR: NICK BECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/FALL	—	140/2"	—	BIT.				

SURFACE ELEVATION: NORTH COORDINATE: EAST COORDINATE:

SURFACE CONDITIONS: LEVEL-DRY-GRASS

GROUNDWATER AT 10.5 FT. AFTER 25 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM-TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ELEV.	DESCRIPTION AND REMARKS (Trace = 0-10% Little = 10-20% Some = 20-35% And = 35-50%)	Monitor Well Construction
0		SS29	0-1.5	2 3 5 6		Topsoil 3" BRN/Rd SILT + CLAY little SAND + GRAVEL	FILL
		SS30	1.5-3	7 9 3 5			
5		SS31	3-4.5	9		SAME (TILL)	TILL
		SS32	7.5-9	12 10 17		Rd/BRN CLAY little SILT little f/GRAVEL + SAND	
10							
		SS33	12-13.5	14 35 60	13	Fractured GRY SHALE weathered	SHALE
15							
		SS34	16.5-17	70/.5		SAME	
20		SS35	20-20.5	70/.5		SAME	
		SS36	23.5-24.5	60 150		WT @ 23' GRY fractured SHALE	
25						EOB @ 24.5'	

TYPE	A	BORING	—	CASING	—	TO	—	FT THEN	—	CASING — TO — FT.
QUANTITIES:	24.5	L.F. SOIL	0	L.F. ROCK	8	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE

DATE STARTED: 4-24-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4-24-86		BORING NO. SB 14A	

CLIENT: NUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 49501

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER		CORE BARREL	AUGER	OBS. WELL (OW)		DRILLING RIG AND METHOD
		SPLIT SPOON (SS)	UNDISTURBED (US)			PIPE	CAP	
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6	—	—	
HAMMER WT/ FALL	—	140 / 30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: DRY, LEVEL, GRASS

GROUNDWATER AT 19.5 FT. AFTER EOB HRS. 10 FT. AFTER 18 HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%	Monitor Well Construction
0	SS	37	0-1.5	2 4 6 5		Rd/BRN/BLK SILTY SAND + clay	FILL
	SS	38	1.5-3	7 10 5 8	3	SAME	
5	SS	39	3-4.5	11		Rd/BRN CLAY little silt + sand tr. gravel	TILL
	SS	40	7.5-9	9 12 20		SAME	
10							
	SS	41	12-13	45 100	12	FRACTURED/WEATHERED GRY SHALE	SHALE
15	SS	42	16-16.5	100/.5		SAME	
					19.5 ▼		
20	SS	43	19.5-20	70/.5		SAME EOB @ 20	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	12 L.F. SOIL	7.5 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 9/29/86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 9/29/86		BORING NO. SB 15	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION BEDFORD OHIO			
PROJECT NO. (S): 995-1			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ENGINEER: NICK ANDRIANAS		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	Steel	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140/30"	—	BIT.				

SURFACE ELEVATION: NORTH COORDINATE: EAST COORDINATE:

SURFACE CONDITIONS: LEVEL DRY GRASS

GROUNDWATER AT 22.5 FT. AFTER 2 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		SS16	0-1.5	2 3 6 7		Topsoil 4" BRN f/SANDY SILT little clay tr organics	FILL
		SS17	1.5-3	8 11 6 9			
5		SS18	3-4.5	12		SAME	
		SS19	7.5-9	7 7 8		BRN SILT + CLAY tr f/c sand	TILL
10							
		SS20	12-12.5	67/.5		Highly weathered GRY SHALE (dry)	
15		SS21	15.5-16.5	110/.5		SAME	
20		SS22	19-19.5	180/.5		wet seam 20'	← WATER SEEP 20'-21'
		SS23	22.5-23	230/.5		SAME slightly weathered more fractured.	
25		SS24	26-26.5	200/.5		SAME (dry)	
30		SS25	29.5-30	200/.4		SAME (dry)	
		SS26	33-33.3	200/.3		SAME (dry)	
35		SS27	36-36.2	200/.2		SAME (dry)	
40		SS28	39.5-39.7	200/.2		EOB @ 40'	

TYPE	A	BORING	—	CASING	—	TO	—	FT THEN	—	CASING	—	TO — FT.
QUANTITIES:	40	L.F. SOIL	0	L.F. ROCK	13	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE		

DATE STARTED: 4/25/86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4/25/86		BORING NO. SBW 16	

CLIENT: HUKILL CHEM CORP.

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION ; BEDFORD, OHIO

PROJECT NO. (S): 495-1

BORING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	steel	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30"	—	BIT.		—		

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, DRY, GRASS

GROUNDWATER AT DRY FT. AFTER 24 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		SS44	0-1.5	2 4 7 6		3" Topsoil SAND & SILT little clay, brick show	FILL
		SS45	1.5-3	9 14 6 4		Blk SAND, little silt cinder show	
5		SS46	3-4.5	7 Sa25% Si35% Cl40%		BRN/YW SILT some clay tr. f/sand + gravel	TILL
		SS47	7.5-9	12 20 24 Sa5% Si45% Cl50%		SAME (TILL)	
10							
		SS48	12-13	37 65		Highly weathered GRY SHALE	
15		SS49	16-16.5	170/.5		SAME (highly fractured)	
20		SS50	19-19.5	270/.5		SAME (moist seam 6")	← WET SEEP
			20.5-21	260/.5		WET SEAM	
	AUGER						
25						DRY SHALE slightly fractured	
						EOB @ 25'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	25 L.F. SOIL	0 L.F. ROCK	17 SS SAMPLES	0 US TUBES	L.F. OW PIPE 0	

DATE STARTED: 5·6·86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5·6·86		BORING NO. SB 17	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 49501

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

~~PROJ~~ ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: GRAVEL, slight grade towards east, DRY

GROUNDWATER AT 17 FT. AFTER 1½ HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	107	0-1.5	4 Sa 20% 4 Si 45% 3 3	Cl 35%	BRN SAND some silt little clay	FILL
	SS	108	1.5-3	4 Sa 40% 7 Si 35% 5 8	Cl 3' 35%	Rd/BRN CLAY little silt tr f/gravel	TILL
5	SS	109	3-4.5	11 Sa 30% Si 35%	Cl 35%	SAME	
	SS	110	7.5-9	5 Sa 15% 9 Si 40% 15 24	Cl 45%	SAME	
10							
	SS	111	12-13.5	18 Sa 15% 30 Si 35% 50	13 Cl 50%	FRACTURED/WEATHERED GRY SHALE	SHALE
15							
	SS	112	16.5-17	140/.5		SAME	
20					20 ▼		
	SS	113	20-21	70 300		WET SEAM	
25			25-25.5	140/.5		DRY FRACTURED GRY SHALE WEAK & FISSILE	
						EOB @ 25	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	13 L.F. SOIL	12 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 5-6-86	**eder associates** BORING REPORT	/ SHEET OF /	
DATE FINISHED: 5-6-86		BORING NO. SR 18	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: SITE INVESTIGATION FOR POTENTIAL CONTAMINATION

PROJECT NO. (S): 995 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGEDINE

PROJECT ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6	—	—	Mobile Drill
HAMMER WT/ FALL	—	140 / 30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, DRY GRAVEL NEXT TO LAKE Pustay

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	114	0-1.5	9 13 6 4		GRAVEL GRY SAND + GRAVEL little silt + clay	FILL
	SS	115	1.5-3	4 4 3 5	4	Rd/BRN CLAY little silt tr s/gravel	TILL
5	SS	116	3-4.5	9			
	SS	117	7.5-9	18 30 40	8	FRACTURED/WEATHERED GRY SHALE	SHALE
10							
	SS	118	12-13.5	42 85 230		SAME	
15							
	SS	119	16.5-17	240/.5		SAME (moistore)	
20	SS	120	20-20.5	180/.5	20 ▼	WET SEAM	
	A U G E R 28'					DRY GRY FRACTURED SHALE	
25							
30						EOB @ 28	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO — FT.
QUANTITIES:	8 L.F. SOIL	20 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE	

DATE STARTED: 10-1-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 10-1-86		BORING NO. SB 19	
CLIENT: Hukill Chemical Corp.			
PROJECT NAME AND LOCATION: Subsurface Investigation Phase II, Bedford OHIO			
PROJECT NO. (S): 49501			
RIG CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: John Dingledine	
...LS ENGINEER:		INSPECTOR: Nick Recchia	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	Standard	—	—	—	—	—	CME 55
SIZE:	—	2" OD	—	—	—	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA	NORTH COORDINATE: NA	EAST COORDINATE: NA

SURFACE CONDITIONS: Chempack fill material, extremely muddy + wet

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		KP3	0-1.5	pressed to 6'	1'	Rd/or CHEMPACK MATERIAL	FILL to EOB
			1.5-3			WHT/GRY CLAY to 1.5'	
5			3-4.5		4.5'	BLK SAND + GRAVEL some clay	
			4.5-6			BLK FOUNDRY SAND @ 6'	
						EOB @ 6'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	6 L.F. SOIL	— L.F. ROCK	1 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 10-1-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 10-1-86		BORING NO. SB 20	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: John Dingledine	
WELLS ENGINEER:		INSPECTOR: Nick Recchia	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	—	—	—	CME 55
SIZE:	—	2" OD	—	—	—	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: Chempack fill very muddy

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		KP4	0-1.5	pressed		Rd/OR CHEMPACK MATERIAL	
						mottled w/WHT CLAY	FILL TO EOB
		KP5	1.5-3			WHT/GRY CHEMPACK	
5			3-4.5			SAME	
			4.5-6				
			6-7.5			SAME	
			7.5-9		9'		
10						BRN CLAY FILL	
		KP6	10.5-12				
						EOB @ 12'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	12 L.F. SOIL	— L.F. ROCK	3 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

eder associates
BORING REPORT

DATE STARTED: 10-1-86	SHEET 1 OF 1
DATE FINISHED: 10-1-86	BORING NO. SB-21
CLIENT: HOKILL CHEMICAL CORP	
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO	
PROJECT NO. (S): 49501	
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL	BORING FOREMAN: JOHN Dingledine
DRILLING ENGINEER:	INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	—	—	—	CME 55
SIZE:	—	2" OD	—	—	—	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: CHEMPACK FILL AREA VERY MUDDY

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0			0-1.5	pressed to 13'		Rd/OR CHEMPACK MATERIAL	Chempack to 15'
		KP7	1.5-3				CLAY to EOB
5			3-4.5			SAME @ 4.5' occ. gravel	
			4.5-6				
		KP8	6-7.5			7.5' GRY/Rd mottled color	
			7.5-9				
10							
			9-10.5				
		KP9	10.5-12			GREEN CHEMPACK @ 12'	
			12-13.5				
15			13.5-15	soft	15'		
						GRY/BRN CLAY FILL NO CHEMPACK	
		KP10	17-18.5			GRY/BRN CLAY FILL	
20						EOB @ 18.5'	

TYPE	—	BORING	—	CASING	—	TO	—	FT THEN	—	CASING	— TO — FT.
QUANTITIES:	18.5 L.F. SOIL		— L.F. ROCK		4 SS SAMPLES		— US TUBES		— L.F. OW PIPE		

DATE STARTED: 10-1-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 10-1-86		BORING NO. SB 25	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: Subsurface Investigation phase II Bedford OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN Dinsteline	
DRILLS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	—	—	—	CME 55
SIZE:	—	2" OD	—	—	—	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA	NORTH COORDINATE: —	EAST COORDINATE: —

SURFACE CONDITIONS: CHEMPACK FILL AREA, MUDDY, RAIN

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–38% And = 39–90%)	Monitor Well Construction
0			0-1.5			BRN/GRY SILT some clay	FILL to 6.5'
			1.5-3			1.5' BLK FOUNDRY SAND	TILL @ 6.5'
5			3-4.5				
		KP1	4.5-6		6.5'	4.5-6 BLK FOUNDRY SAND	
			6-6.5			RD/BRN TILL	
						EOB @ 6.5'	

TYPE	—	BORING	—	CASING	—	TO	—	FT THEN	—	CASING	— TO — FT.
QUANTITIES:	6.5	L.F. SOIL	—	L.F. ROCK	1	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE	

DATE STARTED: 10-1-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 10-1-86		BORING NO. SB-26	
CLIENT: TUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: Subsurface Investigation phase II Bedford, OHIO			
PROJECT NO. (S): 99501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
DRILLS ENGINEER:		INSPECTOR: DICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	standard	—	—	—	—	—	CME 55
SIZE:	—	2" OD	—	—	—	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: CHEMPACK FILL, MUDDY

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0			0-1.5			LGT BRN CLAY (chempack?) tr. gravel	CLAY FILL to 4'
		KP2	1.5-3		4'	WHT/GRY CLAY FILL (chempack)	FOUNDRY FILL to EOB
5			3-4.5			BLK SAND tr gravel foundry sand + slag	
						EOB @ 6'	

TYPE — BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 6' L.F. SOIL — L.F. ROCK / SS SAMPLES — US TUBES — L.F. OW PIPE

DATE STARTED: 9-25-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-25-86		BORING NO. SB 28	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO			
PROJECT NO. (S): 49501			
RING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Dr.
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NORTH COORDINATE: EAST COORDINATE:

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	25	SS105	.5-2	3		Rd/BRN/BLK ASH, BRICK SAND, GLASS, FOUNDRY SLAG + SAND	
				7 11			
	3.5	SS106	2-3.5	3 4			
				2		Rd SAND FILL some gravel brick powder	
5							
							FILL to 15.5
	1.5	SS107	8-9.5	4 2		SAME	
10				1			SHALE to EOB
	2	SS108	12.5-14	3		SAME ASH + cindres	
				4 6			
15					15.5		
	4	SS109	17-18.5	14 19		Rd/BRN HIGHLY WEATHERED SHALE	
				30			
20							
	-6	SS110	23.5-24.3	60		GRY weathered shale	
				100/.3			
25						EOB @ 24.3'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.			
QUANTITIES:	15.5 L.F. SOIL	8.8 L.F. ROCK	16 SS SAMPLES	— US TUBES	— L.F. OW PIPE					

DATE STARTED: 9-24-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-24-86		BORING NO. SB-29	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
RING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
OILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS:

GROUNDWATER AT 11 FT. AFTER 1/6 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	25	SS83	.5-2	3		BLK/BRN SAND, ASH, BRICK GLASS + GRAVEL FOUNDRY SLAG	FILL to 4.5
				2 48			
	55	SS84	2-3.5	31 7			
				9 7	4.5		
5	2	SS85	3.5-5	6 8		BRN CLAY TILL	TILL to 9.5
							Shale to EOB
	8.5	SS86	8-9.5	11 14	9.5	RD/GRY Highly weathered shale	
10				21			
					12.5 ▽		wet seam @ 23.5' water level to 12.5' after 10 MIN
15	4.4	SS87	14.5-16	25			
				75 106		SAME	
20							
	15	SS88	21.5-22.5	67		SAME	
				161			
	—	SS89	22.5-23.5	87/.5		GRY SHALE WET SEAM	
25						EOB @ 23.5	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.		
QUANTITIES:	9.5 L.F. SOIL	14 L.F. ROCK	17 SS SAMPLES	— US TUBES	— L.F. OW PIPE				

DATE STARTED: 9-26-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-26-86		BORING NO. SB 30	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION BEDFORD OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
SOILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	1.5	SS111A	.5-2	2 4 4		BLK/BRN SAND, ASH, BRICK foundry slag + gravel	FILL to 21.5'
	18	111B	2-3.5	4 4 5 4			
5	4.8	111C	3.5-5	3 2			TILL to 26'
	340	111D	8-9.5	1 25 12		SAME mostly slag material	SHALE to EOB
10							
	12	111E	12.5-14	1 3		SAME	
15							
	2	111F	17-18.5	6 10 5		SAME	
20							
	2.2	111G	21.5-23	5 6 10	21.5	BRN/GRY SILTY CLAY TILL	
25							
					26		
		111H	28-28.5	150/.5		GRY WEATHERED SHALE	
30						EOB @ 28.5	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	26 L.F. SOIL	2.5 L.F. ROCK	18 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-26-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-26-86		BORING NO. SB 31	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION			
PROJECT NO. (S): 49501			
ING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
.LS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER		CORE BARREL	AUGER	OBS. WELL (OW)		DRILLING RIG AND METHOD
		SPLIT SPOON (SS)	UNDISTURBED (US)			PIPE	CAP	
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	4" ID	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: NW FILL AREA

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME		STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%	Monitor Well Construction
0	2	SS113A	.5-2		4		BRN SAND, WOOD + foundry slag/sand	
				4	3			
	10	113B	2-3.5	3	4			FILL to 27'
				5	8			
5	20	113C	3.5-5	14	29		SAME	Shale to EOB
	4	113D	8-9.5	4	2		BRN SAND + Foundry slag + gravel	
10				1				
					1			
	12	113E	12.5-14.5	1	1		SAME	
15				1				
	2	113F	17.5-19		2		GRY/Rd SAND well sorted	
20				1	2			
	600	113G	22.5-23.5		2			
				6			BLK FOUNDRY SAND some slag	
25								
						27'		
	100	113H	26.5-28		2		GRY weathered shale	
				16	100			
30								
							EOB @ 28'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.				
QUANTITIES:	27 L.F. SOIL	1 L.F. ROCK	18 SS SAMPLES	— US TUBES	— L.F. OW PIPE						

DATE STARTED: 9-25-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-25-86		BORING NO. SB 32	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
LAB ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: NW FILL AREA

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	0	SS90	.5-2	4 5 4		BLK SAND, BRICK, GLASS Foundry slag	
	0	SS91	2-3.5	7 3 2 2			FILL to 25.5
5	1	SS92	3.5-5	2 2		Foundry sand/slag	
10	0	SS93	8-9.5	3 2 1		SAME	Shale to EOB
15	0	SS94	12.5-14	1 2 1		SAME	
20	1	SS95	17-18.5	3 1 1		SAME	
25	-		23.5-25	1 13 13		WET SEEP @ 23.5	
30	4	SS96	25.5-26		25.5	Rubble @ 25' GRY weathered shale	
	—	SS97	30.5-31.8	100/.3		GRY shale weathered EOB @ 31'	

TYPE	A	BORING	—	CASING	—	TO	—	FT THEN	—	CASING — TO — FT.
QUANTITIES:	25.5 L.F. SOIL	5.5 L.F. ROCK	19 SS SAMPLES	— US TUBES	— L.F. OW PIPE					

DATE STARTED: 9-25-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-25-86		BORING NO. SB 33	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
ING CONTRACTOR: TRIGGS GEOTECH		BORING FOREMAN: JOHN DINGLEDINE	
.S ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NORTH COORDINATE: EAST COORDINATE:

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	0	SS98	.5-2	7		BRN SAND some SLAG	
				3 3		bricks, gravel + glass	
	4	SS99	2-3.5	3 3			Fill to 16.5
				4 4			
5	1	SS100	3.5-5	3 4		SAME @ 5'	
							TILL to 22
							Shale to EOB
	0	SS101	8-9.5	3 3		SAME	
10				3			
	1	SS102	12.5-14	3		SAME tr. glass	
				3 1			
15							
					16.5		
	0	SS103	17-18.5	6 9		BRN CLAY TILL	
				14			
20							
					22		
	0	SS104	23.5-24	60/.5		GRY/BRN weathered shale	
25						EOB @ 24'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.		
QUANTITIES:	22 L.F. SOIL	2 L.F. ROCK	17 SS SAMPLES	— US TUBES	— L.F. OW PIPE				

DATE STARTED: 9-26-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-26-86		BORING NO. SB 43	

CLIENT: HUKILL CHEMICAL CORP

PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO

PROJECT NO. (S): 49501

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	4" ID	—	—	
HAMMER WT/ FALL	—	140/30	—	SIT.		—		

SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS: NW FILL AREA

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	2	SS14A	.5-2	1		BRN/BLK SAND, SLAG FOUNDRY SAND, GLASS BRICK	FILL TO 4.5
				0 4			
	1.5	114B	2-3.5	6 6			
				7 7			
5	8.5	114C	3.5-5	10 13	4.5	BRN/GRY CLAY TILL	TILL TO EOB
	1	114D	8-9.5	11 18		BRN/GRY CLAY TILL	
10				25			
						EOB @ 10'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	10 L.F. SOIL	0 L.F. ROCK	4 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-17-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-17-86		BORING NO. SB 34	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II			
PROJECT NO. (S): 99501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
DRILLS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS: Building boring concrete floor

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	200	SS15	.5-2	4	.5	CONCRETE .5'	TILL to EOB
				4 5		BRN/GRY CLAY TILL	
	150	SS16	2-3.5	6 9			
				11 6		SAME @ 6'	
5	100	SS17	3.5-5	9 12			
						EOB @ 6'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.

QUANTITIES:	6 L.F. SOIL	— L.F. ROCK	13 SS SAMPLES	— US TUBES	— L.F. OW PIPE

DATE STARTED: 9-17-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-17-86		BORING NO. SB 35	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
RING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
OILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: BUILDING BORING CONCRETE FLOOR

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	1000+	SS1	.7-2	1 1 2	.7	CONCRETE	CONCRETE to .7'
	1000+	SS2	2-3.5	3 5 7 3		GRY/BRN SILTY CLAY (TILL)	TILL to 13'
5	—	SS3	3.5-5	7 5		SAME @ 5'	SHALE 13' to EOE
10	—	SS4	8-9.5	6 11 15		GRY/BRN CLAY SOME shale frgs. (TILL) "indurated"	
15	—	SS5	12.5-13.5	85 29	13	GRY weathered shale	
	100	SS6	17.5-18	170/.5		SAME	
20	30	SS7	19.5-20	175/.5		SAME WET SEAM @ 20'	
	35	SS8	22.5-23	210/.5		GRY weathered fissile shale (dry)	
						EOB @ 23'	

TYPE	A	BORING	—	CASING	—	TO	—	FT THEN	—	CASING	—	TO — FT.
QUANTITIES:	13	L.F. SOIL	10	L.F. ROCK	18	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE		

DATE STARTED: 9-18-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-18-86		BORING NO. SB 36	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN:	
SOILS ENGINEER:		INSPECTOR:	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	Standard	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS: Building boring, concrete floor

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		SS28	.5-2	3	.5	CONCRETE .5'	FILL to EOB
				6 8	2 ▽	BRN SAND TR ASH	
		SS29	2-3.5	6 10		perched water @ 2'	
				15		pipe obstruction @ 3.9'	
5						EOB @ 3.9'	

TYPE — BORING — CASING — TO — FT THEN — CASING TO — FT.

QUANTITIES: 3.9 L.F. SOIL | — L.F. ROCK | 12 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 9-18-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-18-86		BORING NO. SB-36A	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II			
PROJECT NO. (S): 49501			
ING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	standard	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

SURFACE ELEVATION: NA	NORTH COORDINATE: —	EAST COORDINATE: —	
SURFACE CONDITIONS: Building borings concrete floor.			
GROUNDWATER AT FT. AFTER HRS.	FT. AFTER HRS.		

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		SS25	.5-2	3	.5	CONCRETE .5'	FILL to EOB
				4 5	2'	BRN SAND	
		SS26	2-3.5	4 11			
				13 7		hit pipe @ 3.5'	
5		SS27	3.5-5	4 6			
						EOB @ 3.5'	
						Abandon hole @ 3.5'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.				
QUANTITIES:	3.5 L.F. SOIL	— L.F. ROCK	13 SS SAMPLES	— US TUBES	— L.F. OW PIPE						

DATE STARTED: 9-18-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-18-86		BORING NO. SB 37	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
DRILLS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	Skid Rig
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA	NORTH COORDINATE: —	EAST COORDINATE: —
SURFACE CONDITIONS: Building borings, concrete		
GROUNDWATER AT FT. AFTER HRS.	FT. AFTER HRS.	

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	2	SS18	.5-2	5	.5	CONCRETE .5'	FILL to 3.5'
				8 8			TILL to 13'
	380	SS19	2-3.5	8 13	3.5	BRN SAND, GRAVEL brick show FILL	SHALE to EOB
				10 14			
5	9.5	SS20	3.5-4.5	17		3.5' perched water	
	4	SS21	7-9.5	4 8		BRN SILT little clay little gravel TILL tr. organics	
10				18			
	3.5	SS22	12.5-13.5	53 155	13	GRY weathered shale	
15						EOB @ 13.5'	

TYPE 4	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.				
QUANTITIES:	13.5 L.F. SOIL	0 L.F. ROCK	15 SS SAMPLES	— US TUBES	— L.F. OW PIPE						

DATE STARTED: 9-17-86	**eder associates** BORING REPORT		SHEET 1 OF 1
DATE FINISHED: 9-17-86			BORING NO. SB 38
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II			
PROJECT NO. (S): 49501			
RING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
JILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS: BUILDING BORING

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	500	SS9	.5–2	2 4 7	.5	CONCRETE .5'	FILL to 3'
	1000+	SS10	2–3.5	5 7 13	3 ▽	BLK SAND + GRAVEL "SATURATED"	TILL to 13'
5	1000+	SS11	3.5–5			BRN CLAY w/ ORGANIC MATTER	Shale to EOB
10	900	SS12	8–9.5	16 15 11		SAME	
	12	SS13	12.5–13.5	42 80	13	weathered gry Shale (DRY)	
15							
	20	SS14	16.5–17	227/.5		DRY Shale	
20						EOB @ 17'	

TYPE 4	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.				
QUANTITIES:	13	L.F. SOIL	4	L.F. ROCK	16	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE	

DATE STARTED: 9-30-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-30-86		BORING NO. SB 39	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
GEOLOGIST OR ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA	NORTH COORDINATE: —	EAST COORDINATE: —
SURFACE CONDITIONS: DRY LEVEL neutralization pit		
GROUNDWATER AT FT. AFTER HRS.	FT. AFTER HRS.	

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		NPS4	0-1.5			BRN/BLK FILL CLAY, ASH WOOD, LIME GRAVEL	FILL to 4'
			1.5-3	31 18 37	4'	SAME @ 3'	TILL (Altered) to EO
5			3-4.5			BRN/GRY CLAY TILL	
		NPS5	4.5-6				
		NPS6	8-9.5			SAME @ 9.5	
10			9.5-11	9 15 22		chemically Altered till	
						EOB @ 11'	

TYPE	—	BORING	—	CASING	—	TO	—	FT THEN	—	CASING — TO — FT.
QUANTITIES:	11	L.F. SOIL	—	L.F. ROCK	3	SS SAMPLES	—	US TUBES	—	L.F. OW PIPE

DATE STARTED: 9-30-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-30-86		BORING NO. SB 40	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
GEOLOGIST ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: dry level neutralization pit

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		NPS1	0-1.5			WHT LIME .5'	FILL to 6'
						BRN CLAY, WOOD, LIME AND ASH	
			1.5-3				TILL to EOB
5		NPS2	3-4.5	5	6'	SAND, ASH, LIME GRAVEL @ 4'	
			4.5-6	8 10		BRN/GRY CLAY TILL	
10		NPS3	9.5-11	9			
				18 40		BRN/GRY CLAY TILL "chemically altered" tr. white material	
						EOB @ 11'	

TYPE —	BORING —	CASING —	TO — FT THEN —	CASING —	TO — FT.
QUANTITIES:	11 L.F. SOIL	— L.F. ROCK	3 SS SAMPLES	— US TUBES	— L.F. DW PIPE

DATE STARTED: 9-30-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-30-86		BORING NO. 58 41	
CLIENT: HOKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
LS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" OD	—	—	Mobile Drill
HAMMER WT/FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: Neutralization pit borings

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		WPS7	0-1.5			BRN/BLK FILL CLAY, ASH WOOD, lime gravel	FILL to 6'
			1.5-3			Rd/BRN SAND FILL white gravel	TILL to EOB
5		WPS8	4.5-6		6'		
			6-7.5			Chemically Altered TILL	
		WPS9	7.5-9			BRN CLAY TILL @ 10'	
10			9-10.5			EOB @ 10.5'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	10.5 L.F. SOIL	— L.F. ROCK	3 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-30-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-30-86		BORING NO. SB 42	
CLIENT: HUKILL CHEMICAL CORP			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
RING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
LS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA	NORTH COORDINATE: —	EAST COORDINATE: —
SURFACE CONDITIONS: NEUTRALIZATION pit		
GROUNDWATER AT FT. AFTER HRS.	FT. AFTER HRS.	

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0		WPS10	0–1.5			BRN/BLK FILL CLAY ASH, GRAVEL white crystals	FILL TO EOB
			1.5–3				
5			3–4.5				
		UPS11	4.5–6			@ 4.5' CLAY, GRAVEL + LIMESTONE	
			6–7.5				
			7.5–9				
10		NPS12	9–10.5			@ 10' CLAY, GRAVEL AND RD/LIMESTONE	
						EOB @ 10.5'	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	10.5 L.F. SOIL	— L.F. ROCK	13 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-23-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-23-86		BORING NO. SB 47	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION Phase II Bedford OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
LS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" OD	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: LEVEL

GROUNDWATER AT — FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	1.5	SS48	0-1.5	2 4 5 4		BRN SAND little gravel ash, brick show	
	75	SS49	1.5-3	4 4 1 1		SAME @ 3'	FILL to 7'
5	340	SS50	3-4.5	2 4 4 3		BLK/GRY CLAY little ash	
	150	SS51	4.5-6		7		
10	20	SS52	9-10.5	7 14 26		GRY/BRN CLAY TILL	TILL to 13'
15	15	SS53	13.5-14.5	35 80	13	GRY weathered shale	Shale to EOB
20		SS54	17.5-18.5	160/.5		EOB @ 18'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.		
QUANTITIES:	13 L.F. SOIL	5 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE				

DATE STARTED: 9-23-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-23-86		BORING NO. SB 48	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS ASSOCIATES		BORING FOREMAN: JOHN DINGLEDINE	
SOILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" OD	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: LEVEL

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	2	SS55	.5-2	3 4 4	2'	BRN CLAY some sand, ash gravel	Fill to 2'
	5.5	SS56	2-3.5	4 4 4 4		Rd/Brn CLAY TILL	Till to 9'
5	15	SS57	3.5-5	4 9		SAME sand/silt seams	
	13	SS58	8-9.5	13 22 25	9'		
10						GRY oxidized highly weathered shale fissile	Shale to EOB
	3	SS59	12.5-13.5	21 70		GRY shale wet seam @ 13'	
15	8	SS60	16.5-16.8	100/.3		GRY shale @ 16.8' DRY	
						EOB @ 16.8'	

TYPE A	BORING —	CASING —	TO — FT THEN —	CASING —	TO — FT.
QUANTITIES:	9 L.F. SOIL	7.8 L.F. ROCK	16 SS SAMPLES	— US TUBES	— L.F. OW PIPE

DATE STARTED: 9-23-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-23-86		BORING NO. SB49	
CLIENT: HOOKER CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO			
PROJECT NO. (S): 49501			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
DRILL ENGINEER:		INSPECTOR: DICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4 1/2	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: LEVEL

GROUNDWATER AT 7 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	2.6	SS61	.5-2	2		BLK/BRN SAND little ash gravel	Fill to 5'
				5 4			
	150	SS62	2-3.5	3 3			
				4 1		BRN CLAY little sand, ash	
5	200	SS63	3.5-5	1 4	5		TILL to 13'
						BRN/GRY CLAY TILL	SHALE to EOB
	20	SS64	8-9.5	8 9			
10				15		SAME @ 9.0	
	8	SS65	12.5-13.5	40	13		
				90		GRY weathered Shale	
15							
	3.5	SS66	16.5-16.8	100/.3		WET SEAM @ 16.5'	
						EOB @ 16.8	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	3.8 L.F. ROCK	16 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-19-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-19-86		BORING NO. WELL F	
CLIENT: JUKILL CHEMICAL CORP		HOLE DRY — NO WELL INSTALLED	
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 45
SIZE:	—	2" OD	—	—	4" ID	—	—	SKID RIG
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	7.6	SS28	.5-2	4		BRN SAND, CLAY + ASH tr gravel	
				7 4			
	300+	SS29	2-3.5	4 12		GRY/BLK SAND some silt tr ASH	FILL to 10.5'
				18 4			
5	1000+	SS30	3.5-5	2 3			TILL to 13'
	300+	SS31	8-9.5	3 5		BRN/GRY Mottled SILT and CLAY tr gravel	Shale to EOB
10				9			
						TILL @ 10.5'	
	300	SS32	12.5-14	20	13		
				32 60		Highly weathered BRN/GRY SHALE	
15							
	64	SS33	17-17.4	100/.4		SAME	
20							
	30	SS34	20.4-20.9	100/.4		SAME	
	30	SS35	24-24.4	100/.4		SAME	
25							
		SS36	27.5-27.8	100/.3		SAME	
30							
		SS37	30.5-30.7	100/.2		SAME	
	A						
	U						
	G						
35	E						
	R						
						EOB @ 35.5	
						DRY	

TYPE —	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.

QUANTITIES:	13 L.F. SOIL	22.5 L.F. ROCK	10 SS SAMPLES	— US TUBES	— L.F. OW PIPE

eder associates
BORING REPORT

DATE STARTED: 9-23-86	SHEET 1 OF 1
DATE FINISHED: 9-23-86	BORING NO. SB 50

CLIENT: HUKILL CHEMICAL CORP.
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO
PROJECT NO. (S): 49501
CONTRACTOR: TRIGGS GEOTECHNICAL
BORING FOREMAN: JOHN DINGLEDINE
DRILLS ENGINEER:
INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	4" ID	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —
SURFACE CONDITIONS: API TANK BASIN
GROUNDWATER AT 20 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	2	SS75	0-2	2 3 4 5	2	BRN SAND some clay tr. organic mat.	FILL to 2'
	3	SS76	2-3.5	9 12 6 6		Rd/BRN CLAY TILL	
5	3.5	SS77	3.5-5	8 12		SAME @ 5'	TILL to 13
							Shale to EOB
	2.5	SS78	8-9.5	16 25 40		GRY CLAY TILL tr. shale fragments	
10							
	2	SS79	12.5-13.5	100 27	13	GRY CLAY TILL (top)	
15						GRY WEATHERED SHALE (Bot)	
	6.5	SS80	16.5-17	100/.4		GRY weathered shale	
20					20 ▽		
	6	SS81	20-20.5	120/.5		WET SEAM @ 20'	
	.50	SS82	23.5-24	140/.5		GRY shale (WET)	
25						EOB @ 24'	

TYPE 4	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	11 L.F. ROCK	5 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 9-23-86	**eder associates BORING REPORT**	SHEET 1 OF 1	
DATE FINISHED: 9-23-86		BORING NO. SB 51	
CLIENT: HUKILL CHEMICAL CORP.			
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 495 01			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
SOILS ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	Standard	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	4" ID	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT. —				

SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: API TANK BASIN

GROUNDWATER AT 27 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	350	SS67	.5-2	2 2 3		Rd/Brn SAND + GRAVEL tr. Asphalt	FILL to 8'
	780	SS68	2-3.5	3 2 2 2			
5	1000	SS69	3.5-5	1 2		SAME @ 5'	
					8		TILL to 13'
	400	SS70	8-9.5	3 4 5		Brn/Gry CLAY TILL	
10							SHALE to EOB
	250	SS71	12-13.5	22 40 55	13	Gry weathered shale	
15							
	15	SS72	16.5-17	100/.5		SAME	
20							
	12	SS73	20-20.4	100/.4		SAME	
	15	SS74	23.5-24	100/.4		SAME (dry)	
25							
		A U G E R				WET SEEP @ 27'	
30						EOB @ 30'	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	17 L.F. ROCK	8 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 5-7-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-7-86		BORING NO. SBC 1	

CLIENT: NUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION BEDFORD OHIO

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER		CORE BARREL	AUGER	OBS. WELL (OW)		DRILLING RIG AND METHOD
		SPLIT SPOON (SS)	UNDISTURBED (US)			PIPE	CAP	
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140 / 30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, CONCRETE PAD, ADJACENT TO FILLING STATIONS

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	128	.5-2	3 5 6	.5	CEMENT .5' Rd/BRN SAND+SILT little S/gravel tr. fill mat.	FILL
	SS	129	2-3.5			SAME	
5	SS	130	5-6.5	3 2 4			
	SS	131	8-9.5	0 1 0		SAME	
10							
	SS	132	13-14.5	36 260 90	13.5	FRACTURED/WEATHERED GRY SHALE EOB @ 13.5'	SHALE
15							

TYPE A BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13.0 L.F. SOIL | .5 L.F. ROCK | 5 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 5·7·86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5·7·86		BORING NO. SBC 2	
CLIENT: HUKILL CHEMICAL CORPORATION			
PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION			
PROJECT NO. (S): 495 01			
DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ENGINEER: NICK ANDRIANAS		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: NORTH COORDINATE: EAST COORDINATE:

SURFACE CONDITIONS: CEMENT PAD, LEVEL, DRY

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	133	.5-2	3 5 6	-.5	CONCRETE	FILL
5	SS	134	5-6.5	3 4 4		Rd/GRY SAND + SILT tr. clay tr. fill mat.	
10	SS	135	8-9.5	8 14 22		SAME	
15	SS	136	13.5-14.5	55 250	13	Fractured/weathered GRY SHALE EOB @ 14.5	SHALE

TYPE A BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13 L.F. SOIL 1.5 L.F. ROCK 4 SS SAMPLES — US TUBES — L.F. OW PIPE

DATE STARTED: 5-8-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-8-86		BORING NO. SBC 3	

CLIENT: HOKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTAIL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA			CME 55
SIZE:	—	2" OD	—	—				Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, CONCRETE PAD, DRY

GROUNDWATER AT 23 FT. AFTER EOB HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	137	.5-2	4 3 2	.5	CONCRETE BRN SAND + SILT little fill mat.	FILL
5	SS	138	5-6.5	3 2 2		SAME	
	SS	139	8-9.5	2 2 2		GRY/BLK SAND + f/GRAVEL some silt → cinders	
10					13 ▼		Perched water @ 13'
	SS	140	13-14.5	1 0 28	13.5		
15						Fractured/weathered GRY SHALE	SHALE
	SS	141	18-18.5	225/.5		DRY SHALE	
20							
	SS	142	21.5-22	350/.5		SAME	
25					26 ▼		
	SS	143	27-27.5	330/.5		Fractured GRY SHALE EOB @ 27.5	

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13.5 L.F. SOIL	14 L.F. ROCK	7 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED: 5-8-86	eder associates BORING REPORT	/ SHEET OF /
DATE FINISHED: 5-8-86		BORING NO. SBC 4

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 495 01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 Mobile Drill
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140 / 30	—	BIT. —				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, DRY, CONCRETE PAD

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	144	.5 - 2	6 5 5	.5	CONCRETE	
						Rd/BRN SAND + SILT little fill mat.	FILL
5	SS	145	5 - 6.5	1 1 0		SAME	
	SS	146	8 - 9.5	6 18 11	8.5	GRY/GRN SILT + CLAY little S/SAND + R shale frags. TILL	TILL
10					13'		
	SS	147	13 - 14	35 100		Fractured/weathered GRY SHALE	SHALE
15							

TYPE	BORING	CASING	TO	FT THEN	CASING	TO	FT.
QUANTITIES:	L.F. SOIL	L.F. ROCK	SS SAMPLES	US TUBES	L.F. OW PIPE		

DATE STARTED: 5-8-85	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-8-85		BORING NO. SBC 5	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 495 01

CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	—	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, CONCRETE PAD, DRY

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	148	.5-2	5 7 6	.5	CONCRETE Rd/BRN SAND + SILT little Sill mat.	FILL
5	SS	149	5-6.5	7 11 15	5.5	GRY/Rd/GRN SILT + SAND tr. gravel	TILL
10	SS	150	8-9.5	8 18 32		SAME	
15	SS	151	13-14	48 160	13.5	Fractured/weathered GRY SHALE EOB @ 14'	SHALE

TYPE A — BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13.5 L.F. SOIL | .5 L.F. ROCK | 4 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 5-8-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 5-8-86		BORING NO. SBC 6	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 49501

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL — BORING FOREMAN: JOHN DINGLEDINE

GEOLOGIST ENGINEER: NICK ANDRIANAS — INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	—	—	CME 55 MOBILE DRILL
SIZE:	—	2" OD	—	—	6"	—	—	
HAMMER WT/ FALL	—	140/30	—	BIT.				

SURFACE ELEVATION: — NORTH COORDINATE: — EAST COORDINATE:

SURFACE CONDITIONS: LEVEL CONCRETE PAD, DRY

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	SS	152	.5-2	2 3 4	.5	Rd/BRN/GRY SILT, SAND and CLAY tr fill mat.	FILL
5	SS	153	5-6.5	5 9 13	6	Rd/BRN SILT some CLAY tr f/gravel + SAND TILL	TILL
10	SS	154	8-9.5	12 22 30		SAME	
					12 ▼	Perched water	
					13		
15	SS	155	13-14	60 110		Fractured/weathered GRY SHALE (DRY) EOB @ 14'	SHALE

TYPE A BORING — CASING — TO — FT THEN — CASING — TO — FT.

QUANTITIES: 13 L.F. SOIL | 1 L.F. ROCK | 4 SS SAMPLES | — US TUBES | — L.F. OW PIPE

DATE STARTED: 4-28-86	eder associates BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4-28-86		BORING NO. WELL A	
CLIENT: HUKILL CHEMICAL CORPORATION			
PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION, BEDFORD OHIO			
PROJECT NO. (S): 495 01			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
ENGINEER: NICK ANDRIANAS		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	carbon steel	—	—	HSA	STAINLESS	LOCKING	CME 55
SIZE:	—	2" OD	—	—	6"	2" OD	4"	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

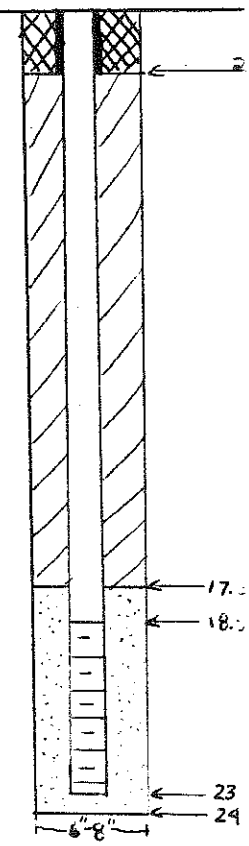
SURFACE ELEVATION: 979.59 | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: LEVEL, DRY, CLEAR

GROUNDWATER AT 19.5 FT. AFTER EOB HRS. 12 FT. AFTER 24 HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0		SS51	0 – 1.5	3 5 7 4	FILL	BRN SILT + CLAY little f/sand, tr f/gravel
		SS52	1.5 – 3	6 7 4 7	4'	GRY/BLK SILT + f/SAND some clay little f/gravel
5			3 – 4.5	11		NO RECOVERY 3–4.5
		SS53	7.5 – 9	11 12 16		RD/BRN CLAY some silt tr f/sand + f/gravel (TILL)
10						
		SS54	12 – 13.5	14 34 83	13'	
15						Fractured/weathered GRY SHALE (fissile)
		SS55	16.5 – 17	120/.5		SAME
20		SS56	20 – 20.5	85/.5	19.5 ▼	SAME (WET)
25	AUGER				25.5'	EOB

Monitor Well Construction



CONCRETE TO 2.0'
BENTONITE TO 17.5'
fine clean SAND to 24.5

TYPE A	BORING 4"	CASING 0	TO 2	FT THEN —	CASING —	TO —	FT.		
QUANTITIES:	25.5 L.F. SOIL	— L.F. ROCK	16 SS SAMPLES	— US TUBES	23.5 L.F. OW PIPE				

DATE STARTED: 4·29·86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4·29·86		BORING NO. WELL B	

CLIENT: NUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION BEDFORD, OHIO

PROJECT NO. (S): 495 01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

SOILS ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	carbon steel	—	—	HSA	stainless	LOCKING	CME 55
SIZE:	—	2" OD	—	—	6"	2"	4"	Mobile Drill
HAMMER WT/ FALL	—	140 / 30"	—	BIT.				

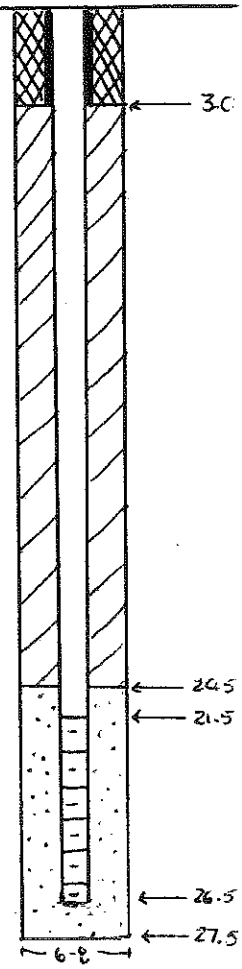
SURFACE ELEVATION: 979.05 | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: Level, dry, gravel

GROUNDWATER AT 22.5 FT. AFTER EOB HRS. 15.1 FT. AFTER 2.5 HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0		SS57	0-1.5	5 5 9 11		Rd/Brn SILT little clay tr common fill mat.
		SS58	1.5-3	10 13 5 6		Rd/Brn MOTTLED SILT little clay little f/gravel + sand
5		SS59	3-4.5	9		SAME
		SS60	7.5-9	5 4 4		Blk f/SAND some silt common fill mat. glass frags. FILL
10						
		SS61	12-13.5	4 15 27	12.5'	SAME w/ rubber stripping
						Rd/Brn/Gry CLAY little silt tr f/gravel TILL
15						
		SS62	16.5-17.5	24 64	17'	Gry WEATHERED/FRACTURED SHALE (fissile)
20						
		SS63	20.5-21	70/.5'	22.5 ▼	Gry FRACTURED SHALE (fissile) oxidation Rd/Brn btwn seams.
25		SS64	24-24.5	74/.5'		SAME (WET)
	A U G E R				28'	EOB
30						DRY SHALE @ 28'

Monitor Well Construction



CONCRETE TO 3.0'
BENTONITE TO 20.5'
CLEAN FINE SAND TO 27.5'

TYPE A	BORING 4"	CASING 0	TO 3	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	17 L.F. SOIL	11 L.F. ROCK	18 SS SAMPLES	— US TUBES	26.5 L.F. OW PIPE		

DATE STARTED: 4·30·86	**eder associates** BORING REPORT	1 SHEET OF 1	
DATE FINISHED: 4·30·86		BORING NO. WELL C	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION BEDFORD OHIO

PROJECT NO. (S): 495 01

DRILLING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

GEOTECH ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	CARBON STEEL	—	—	HSA	STAINLESS	LOCKING	CME 55
SIZE:	—	2" OD	—	—	6"	2" OD	4"	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.				

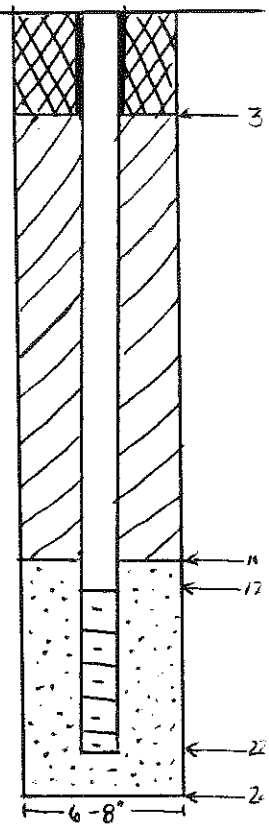
SURFACE ELEVATION: 979.4 | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: GRAVEL, WET, ADJACENT TO BERM

GROUNDWATER AT 12.5 FT. AFTER EOB HRS. 15.1 FT. AFTER 24 HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0		SS65	0-1.5	7 8 6		GRY/BRN GRAVEL some cobbles little sand, silt + clay. FILL
		SS66	3-4.5	5 11		
5		SS67	4.5-6	9 9	5'	GRY/BRN CLAY some fill mat.
				13 17		GRY/BRN CLAY some silt little sand TILL
		SS68	7.5-9	7		SAME
10				11 20		
		SS69	12-13.5	13 26 80	13'	
15						GRY WEATHERED/FRACTURED SHALE (fissile)
		SS70	16.5-17.5	40 180		SAME
					18.5	
20		SS71	20.5-21	95/.5		GRY FRACTURED SHALE oxidation in seams
	A U G E R TO 24'				24'	EOB
25						

Monitor Well Construction



CONCRETE TO 3'
BENTONITE TO 16.5'
SAND TO 24'

TYPE A	BORING 4"	CASING 0	TO 3	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	11 L.F. ROCK	17 SS SAMPLES	— US TUBES	22.5 L.F. OW PIPE		

eder associates
BORING REPORT

DATE STARTED: 10-1-86
DATE FINISHED: 10-1-86
SHEET 1 OF 1
BORING NO. WELL E

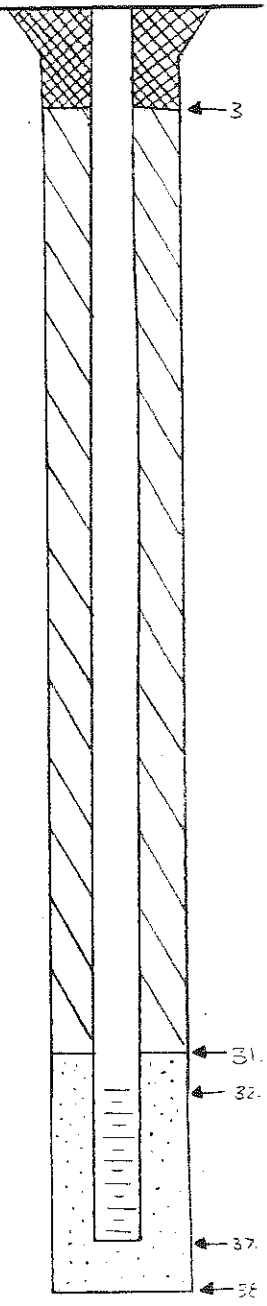
CLIENT: HUKILL CHEMICAL CORP
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II BEDFORD OHIO
PROJECT NO. (S):
BORING CONTRACTOR:
BORING FOREMAN:
S ENGINEER:
INSPECTOR:

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	—	—	—	HSA	304	LOCK CAP	CME 55
SIZE:	—	—	—		4" ID	2"	4"×5"	Mobile Dr.
HAMMER WT/ FALL	—	—	—	BIT.		—		

SURFACE ELEVATION: NA
NORTH COORDINATE: —
EAST COORDINATE: —
SURFACE CONDITIONS: NW FILL AREA
GROUNDWATER AT 24.9 FT. AFTER 48 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM — TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0				AUGER		Fill material SAND, SLAG, BRICK GLASS.
5						
10						
15					13'	Highly weathered gry Shale
20						
25					25 ▽	
30						
35						water flow into augers @ 32.5'
						EOB @ 38.5

Monitor Well Construction



TYPE	BORING	CASING	TO	FT THEN	CASING	TO	FT.

QUANTITIES:	L.F. SOIL	L.F. ROCK	SS SAMPLES	US TUBES	L.F. OW PIPE

DATE STARTED: 9-22-86	**eder associates** BORING REPORT	SHEET 1 OF 1	
DATE FINISHED: 9-22-86		BORING NO. SB46	
CLIENT: HUKILL CHEMICAL CORP.		installed WELL F here	
PROJECT NAME AND LOCATION: SUBSURFACE INVESTIGATION PHASE II Bedford OHIO			
PROJECT NO. (S): 49501			
BORING CONTRACTOR: TRIGGS GEOTECHNICAL		BORING FOREMAN: JOHN DINGLEDINE	
DRILL ENGINEER:		INSPECTOR: NICK RECCHIA	

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	304	LOCK CAP	CME 45 SKID RIG
SIZE:	—	2" OD	—	—	4" ID	2"	4"x5'	
HAMMER WT/ FALL	—	140/30	—	BIT. —				

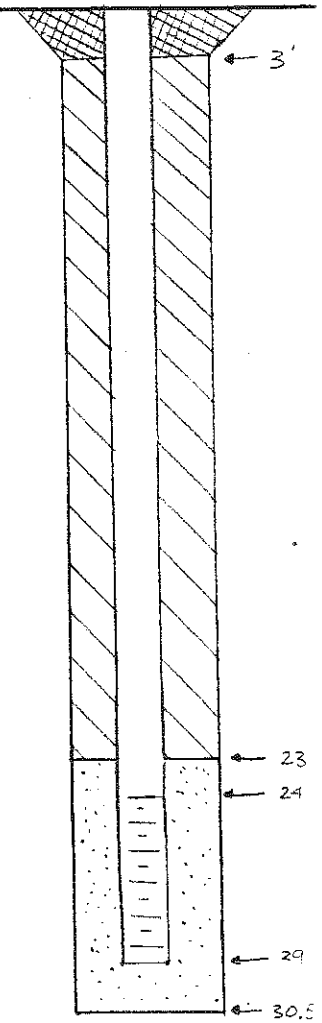
SURFACE ELEVATION: NA NORTH COORDINATE: — EAST COORDINATE: —

SURFACE CONDITIONS: Level, curbside

GROUNDWATER AT 27 FT. AFTER 24 HRS. FT. AFTER HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM—TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0	6.5	SS38	0-1.5	1 2 3 2		BRN CLAY + SILT tr SAND
	150	SS39	1.5-3	3 2 3 1		BLK/BRN SAND little silty clay tr. ASH + gravel
5	65.0	SS40	3-4.5	3 1 2 1		SAME
	1000+	SS41	4.5-6			SAME; some clay
10	990	SS42	9-10.5	5 13 9	10	Rd/GRY CLAY TILL little silt
15	75	SS43	13.5-14.5	100 36	13	GRY weathered shale
	40	SS44	17.5-17.9	100/.4		SAME
20						
	35	SS45	21-21.4	100/.4		SAME
25	45	SS46	24.5-25	130/.5		WET SEEP @ 24.5'
					27 ▽	
30	250	SS47	28-28.5	150/.5		GRY shale dry
						EOB @ 30.5'

Monitor Well Construction



concrete to 3'
bentonite to 23'
SAND to 30.5'

TYPE A	BORING —	CASING —	TO —	FT THEN —	CASING —	TO —	FT.
QUANTITIES:	13 L.F. SOIL	17 L.F. ROCK	1/0 SS SAMPLES	— US TUBES	30.5 L.F. OW PIPE		

eder associates
BORING REPORT

DATE STARTED: 9-29-86	SHEET 1 OF 1
DATE FINISHED: 9-29-86	BORING NO. WELL G
CLIENT: HUKILL CHEMICAL CORP.	
PROJECT NAME AND LOCATION: Subsurface investigation phase II	
PROJECT NO. (S): 49501	
BORING CONTRACTOR: TRIGGS GEOTECHNICAL	BORING FOREMAN: JOHN DINGLEDINE
SOILS ENGINEER:	INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	—	STANDARD	—	—	HSA	304	LOCKCAP	CME 55
SIZE:	—	2" OD	—	—	4"OD	2"	4"x5'	Mobile Drill
HAMMER WT/ FALL	—	140/30	—	BIT.		—		

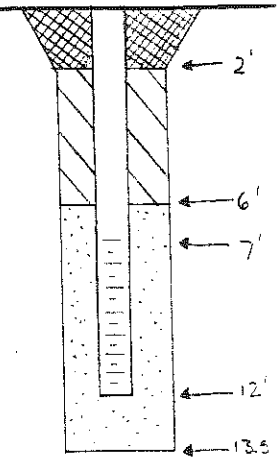
SURFACE ELEVATION: NA | NORTH COORDINATE: — | EAST COORDINATE: —

SURFACE CONDITIONS: embankment to creek edge

GROUNDWATER AT 7 FT. AFTER 1 HRS. 3.6 FT. AFTER 48 HRS.

DEPTH BELOW GND.	OVA READING	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)
0	8.5		.5 – 2	3		BRN/BLK CLAY tr ASH rebar + concrete disintergrated concrete
				7 15		
	40	SS121	2 – 3.5	10 8		
				7 4		
5	40		3.5 – 5	3 4		GRY/BLK CLAY tr SAND WOOD, ASH, CEMENT AND CLAY @ 6'
	150		5 – 6.5	1 2	7	
				3	▽	
				1		
10			9.5 – 11	1 2		WET SEEP @ 9.5'
				2 4		
	1000+		11 – 12.5	8 32		GRY/BLK CLAY little ORGANICS
	1000+		12.5 – 13.5	125	13	
15						GRY weathered shale (dry)
						EOB @ 13.5'

Monitor Well Construction



concrete to 2'
bentonite to 6'
sand to 13.5'

TYPE	BORING	CASING	TO	FT THEN	CASING	TO	FT.
4	—	—	—	—	—	—	—

QUANTITIES:										
13	L.F. SOIL	.5	L.F. ROCK	1 1	SS SAMPLES	—	US TUBES	13.5	L.F. OW PIPE

DATE STARTED: 5-9-86	**eder associates** BORING REPORT	1 SHEET OF 2	
DATE FINISHED: 5-9-86		BORING NO. DEEP WELL PROBE	

CLIENT: HUKILL CHEMICAL CORPORATION

PROJECT NAME AND LOCATION: POTENTIAL CONTAMINATION INVESTIGATION

PROJECT NO. (S): 495 01

BORING CONTRACTOR: TRIGGS GEOTECHNICAL | BORING FOREMAN: JOHN DINGLEDINE

~~AES~~ ENGINEER: NICK ANDRIANAS | INSPECTOR: NICK RECCHIA

EQUIPMENT:	CASING	SOIL SAMPLER: SPLIT SPOON (SS)	SOIL SAMPLER: UNDISTURBED (US)	CORE BARREL	AUGER	OBS. WELL (OW): PIPE	OBS. WELL (OW): CAP	DRILLING RIG AND METHOD
TYPE:	HW	CARBON STEEL	—	—	HSA	—	—	CME 55
SIZE:	4"	2" OD	—	—	6"	—	—	Mobile Drill
HAMMER WT/ FALL	140/30	140/30	—	BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

SURFACE CONDITIONS: WET 5'S of EAST SIDE BERM → TANK FARM (WELL C VICINITY)

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE B NO.	DEPTH FROM – TO	BLOWS/6" OR CURE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS (Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%)	Monitor Well Construction
0	AUGER					FILL	
5					5		
	TO 34'					TILL	
10							
	BEDROCK				13	Fractured/weathered SHALE	
15							
20							
25							
30						roller bit becomes difficult	
35						bottom of casing	← 39
40	OPEN SS	156	40-40.2	300/.2		well consolidated GRY SHALE (DRY)	

TYPE	BORING	CASING	TO	FT THEN	CASING	TO	FT.
QUANTITIES:	13 L.F. SOIL	21 L.F. ROCK	1 SS SAMPLES	— US TUBES	— L.F. OW PIPE		

DATE STARTED:	**eder associates** BORING REPORT	2 SHEET OF 2
DATE FINISHED:		BORING NO. DEEP WELL PROBE.

CLIENT:

PROJECT NAME AND LOCATION

PROJECT NO. (S):

BORING CONTRACTOR: | BORING FOREMAN:

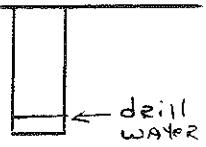
SOILS ENGINEER: | INSPECTOR:

EQUIPMENT:	CASING	SOIL SAMPLER		CORE BARREL	AUGER	OBS. WELL (OW)		DRILLING RIG AND METHOD
		SPLIT SPOON (SS)	UNDISTURBED (US)			PIPE	CAP	
TYPE:								
SIZE:								
HAMMER WT/ FALL				BIT.				

SURFACE ELEVATION: | NORTH COORDINATE: | EAST COORDINATE:

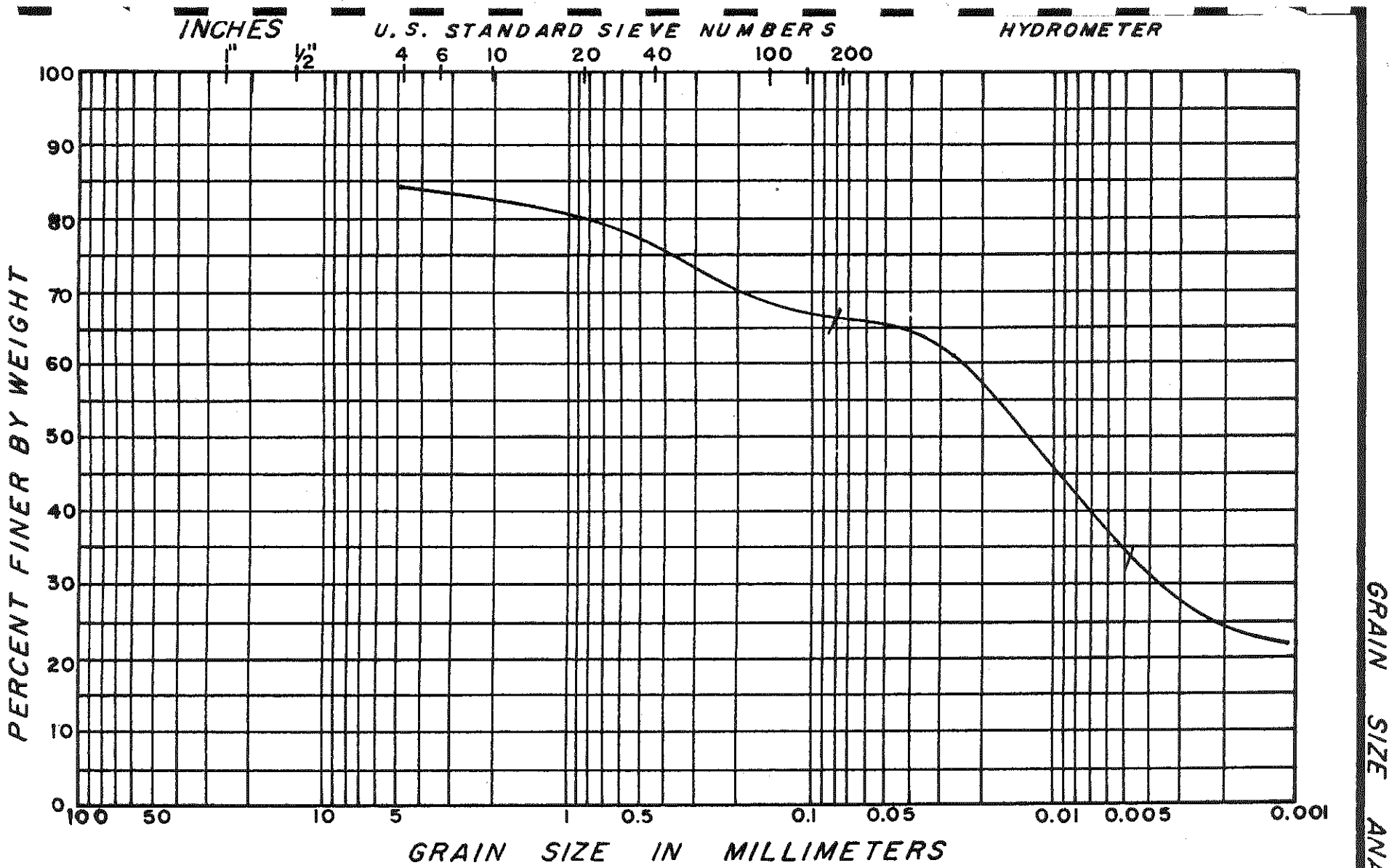
SURFACE CONDITIONS:

GROUNDWATER AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GND.	CASING BLOWS PER FT.	TYPE & NO.	DEPTH FROM – TO	BLOWS/6" OR CORE TIME	STRATA DEPTH/ ELEV.	DESCRIPTION AND REMARKS Trace = 0–10% Little = 10–20% Some = 20–35% And = 35–50%	Monitor Well Construction
40						CASING push down to 34'	
						OPEN HOLE 34-44' DRILL WATER BAILED TO 43.5'	
45							

TYPE BORING CASING TO FT THEN CASING TO FT.

QUANTITIES:	L.F. SOIL	L.F. ROCK	SS SAMPLES	US TUBES	L.F. OW PIPE



GRAIN SIZE ANALYSIS

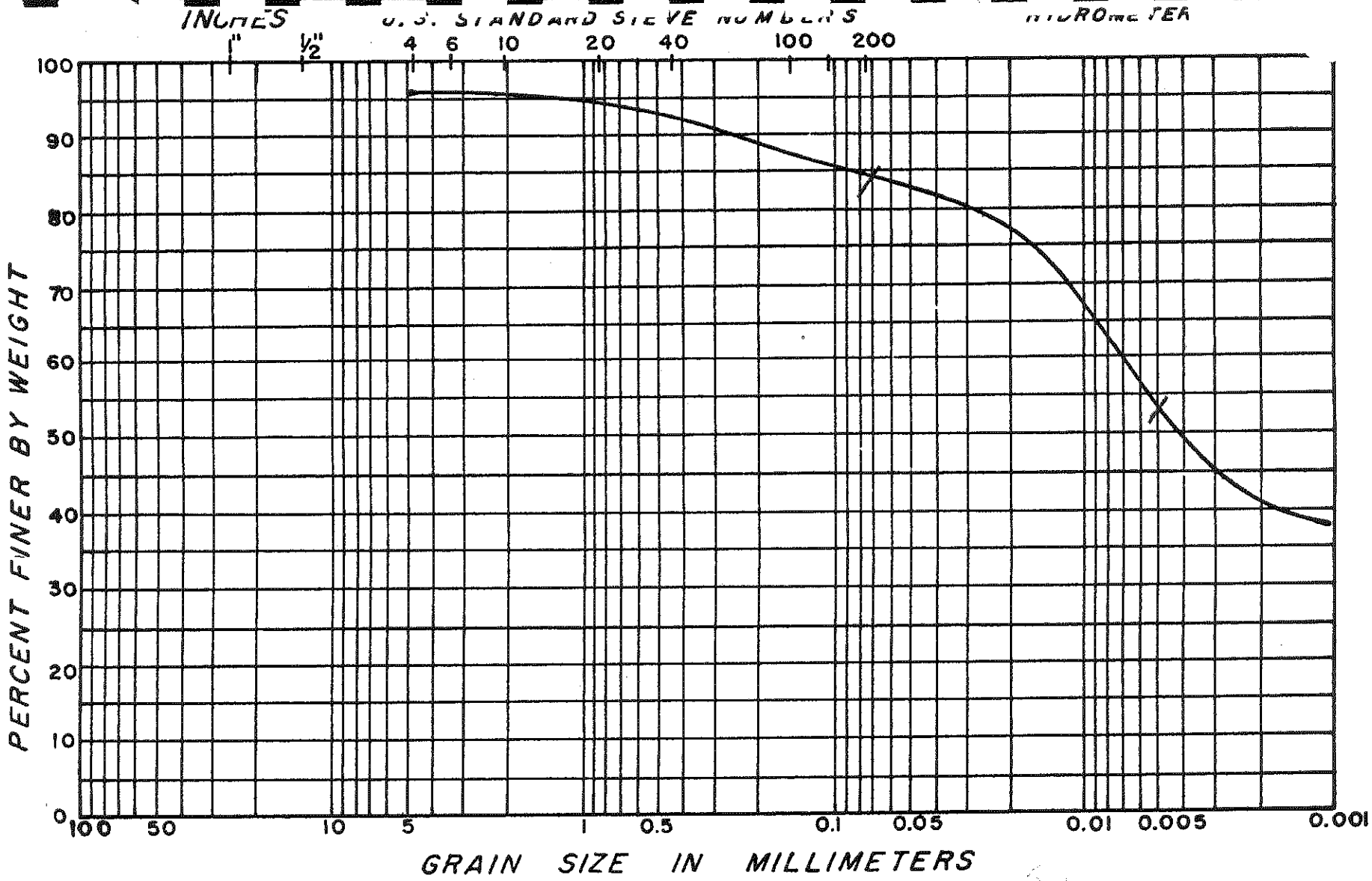
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO BORING NO. SB11 SAMPLE NO. SS94 3.0-4.5'

TRIGGS & ASSOCIATES, INC.

35% SAND 30% SILT 35% CLAY



GRAIN SIZE ANALYSIS

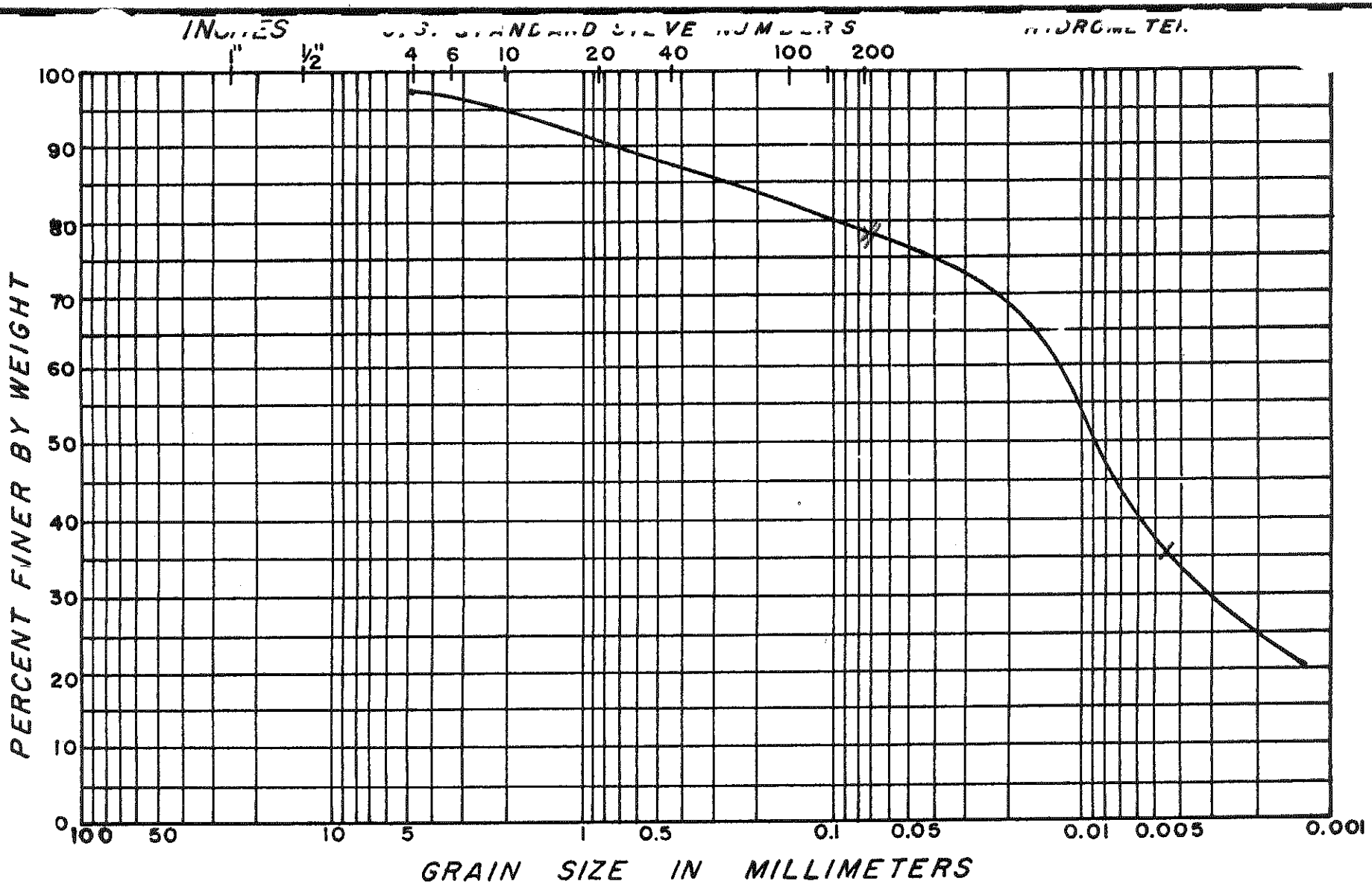
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL — PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO — BORING NO. SB12 — SAMPLE NO. SS100 1.5-3.0'

TRIGGS & ASSOCIATES, INC.

15% SAND 30% SILT 55% CLAY



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

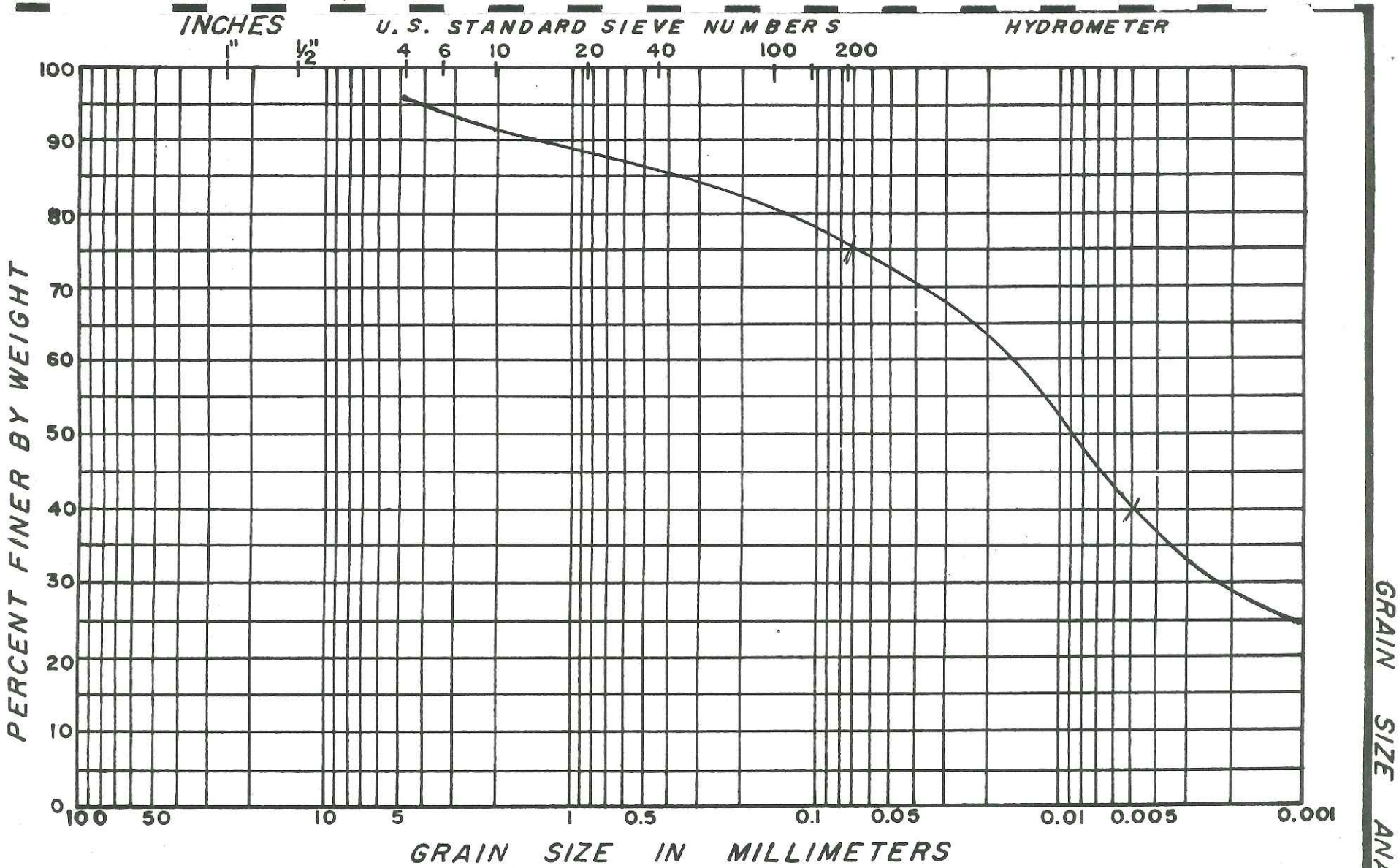
OWNER HUKILL CHEMICAL — PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO — BORING NO. SB12 — SAMPLE NO. SS102 7.5-9.0'

GRAIN SIZE ANALYSIS

TRIGGS & ASSOCIATES, INC.

20% SAND 45% SILT 35% CLAY



GRAIN SIZE ANALYSIS

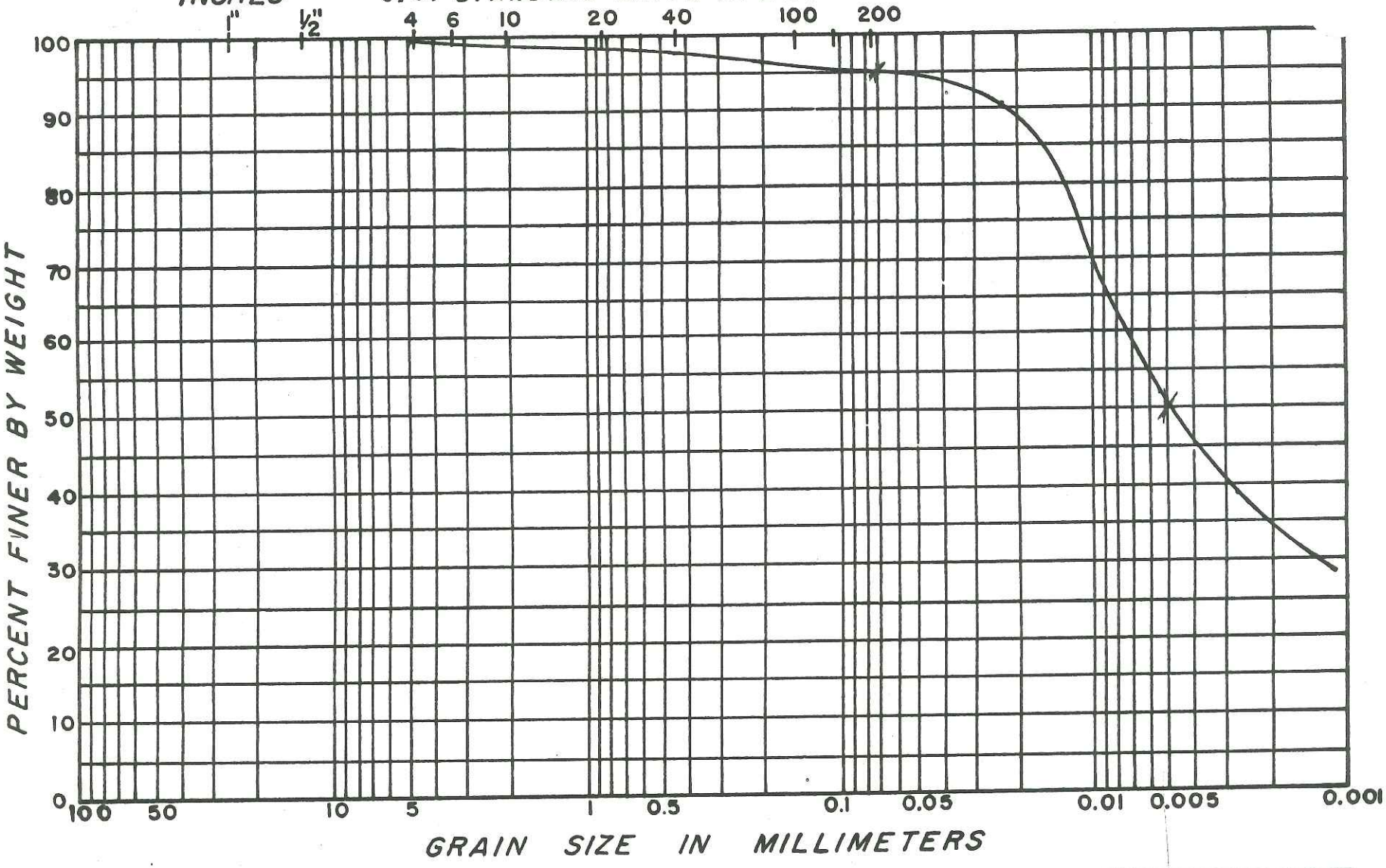
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO BORING NO. SB12 SAMPLE NO. 3.0-4.5' SS101

TRIGGS & ASSOCIATES, INC.

25% SAND 35% SILT 40% CLAY Fill/Till



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

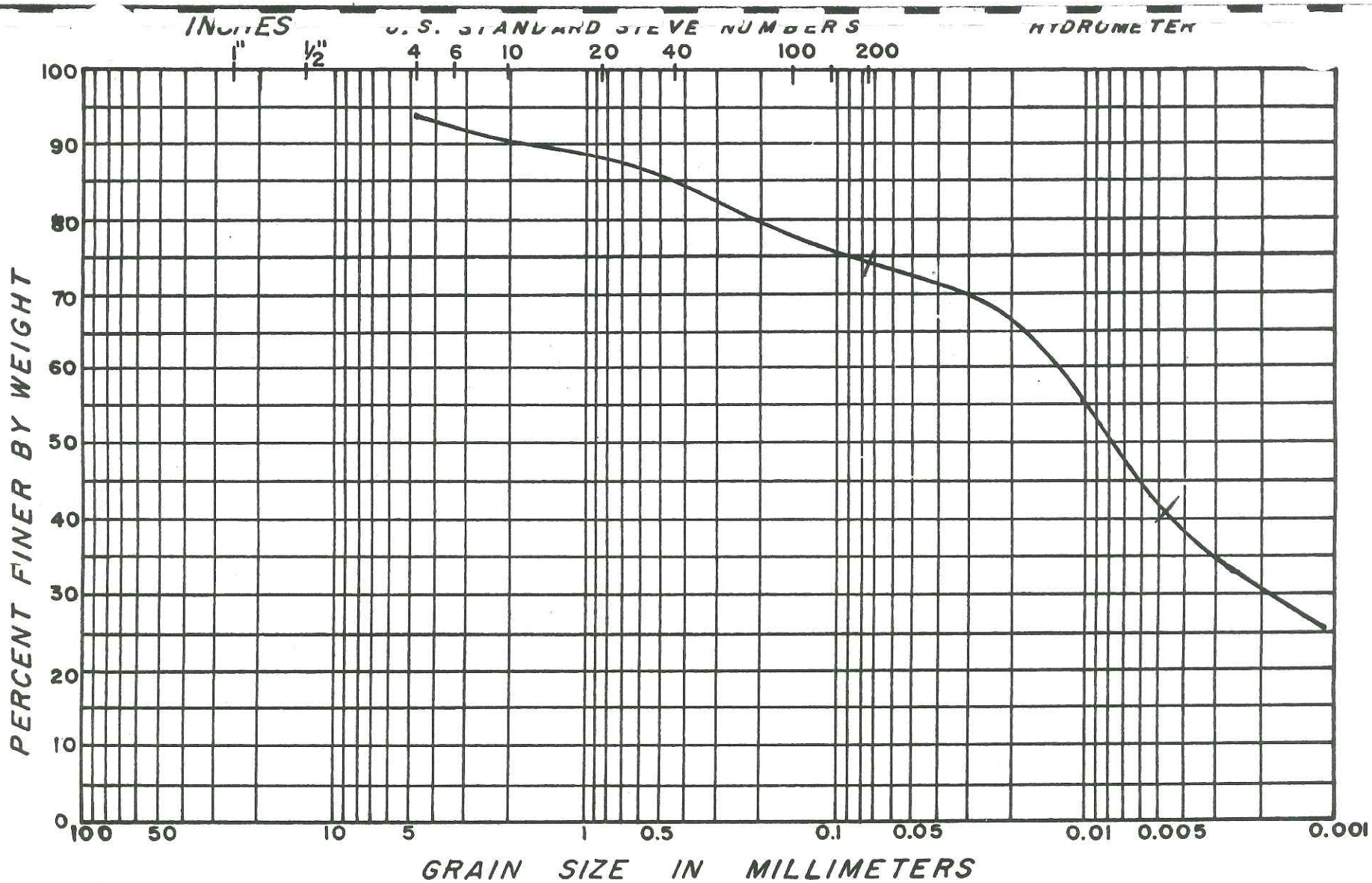
OWNER HUKILL CHEMICAL — PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO — BORING NO. SBW 16 — SAMPLE NO. GSH 7.5-9.0' 5542

GRAIN SIZE ANALYSIS

TRIGGS & ASSOCIATES, INC.

5% SAND
45% SILT 50% CLAY Till



GRAIN SIZE ANALYSIS

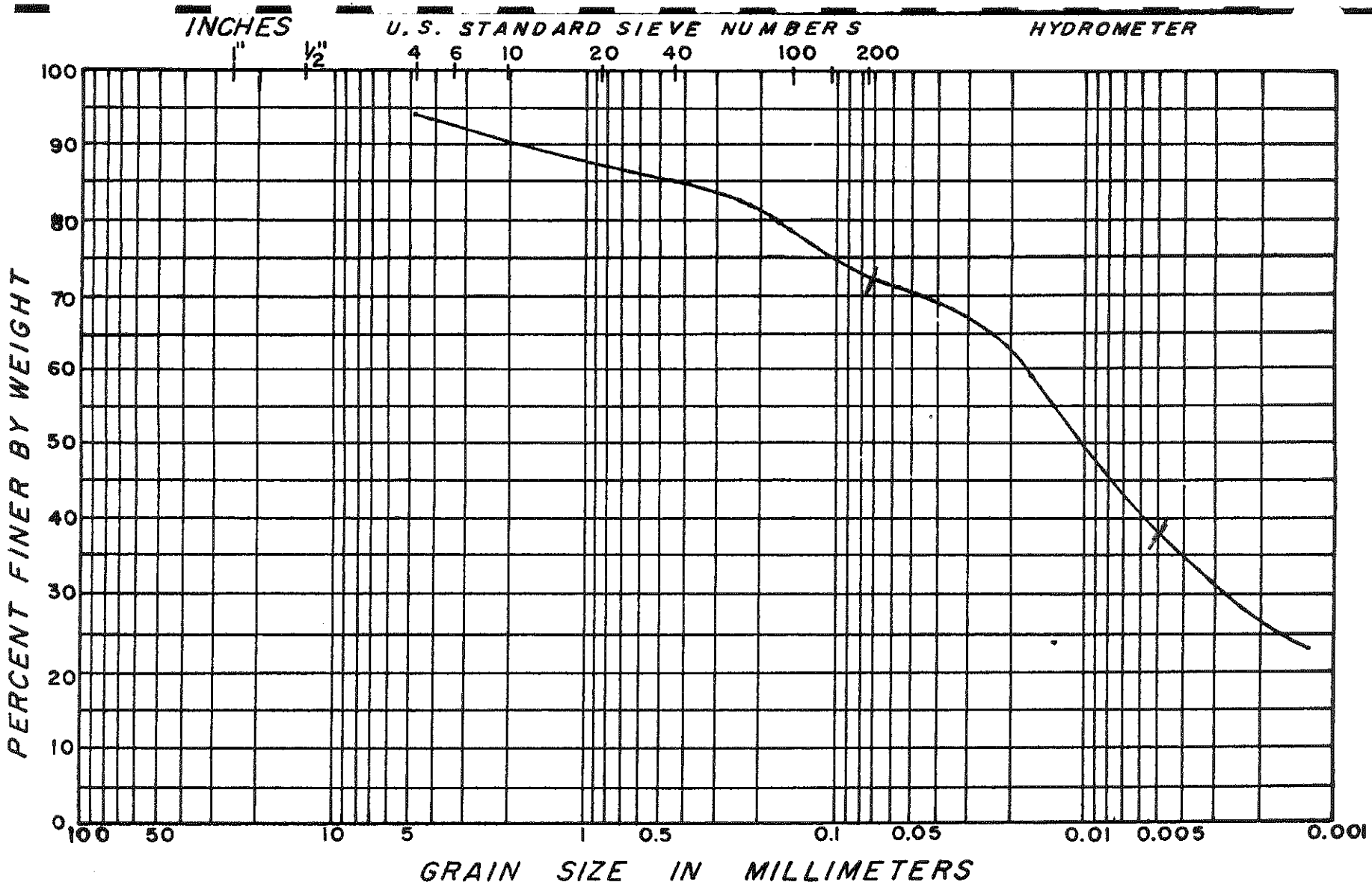
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO BORING NO. SBW16 SAMPLE NO. GSH 3.0-4.5' 5546

TRIGGS & ASSOCIATES, INC.

25% SAND 35% SILT 40% CLAY Fill



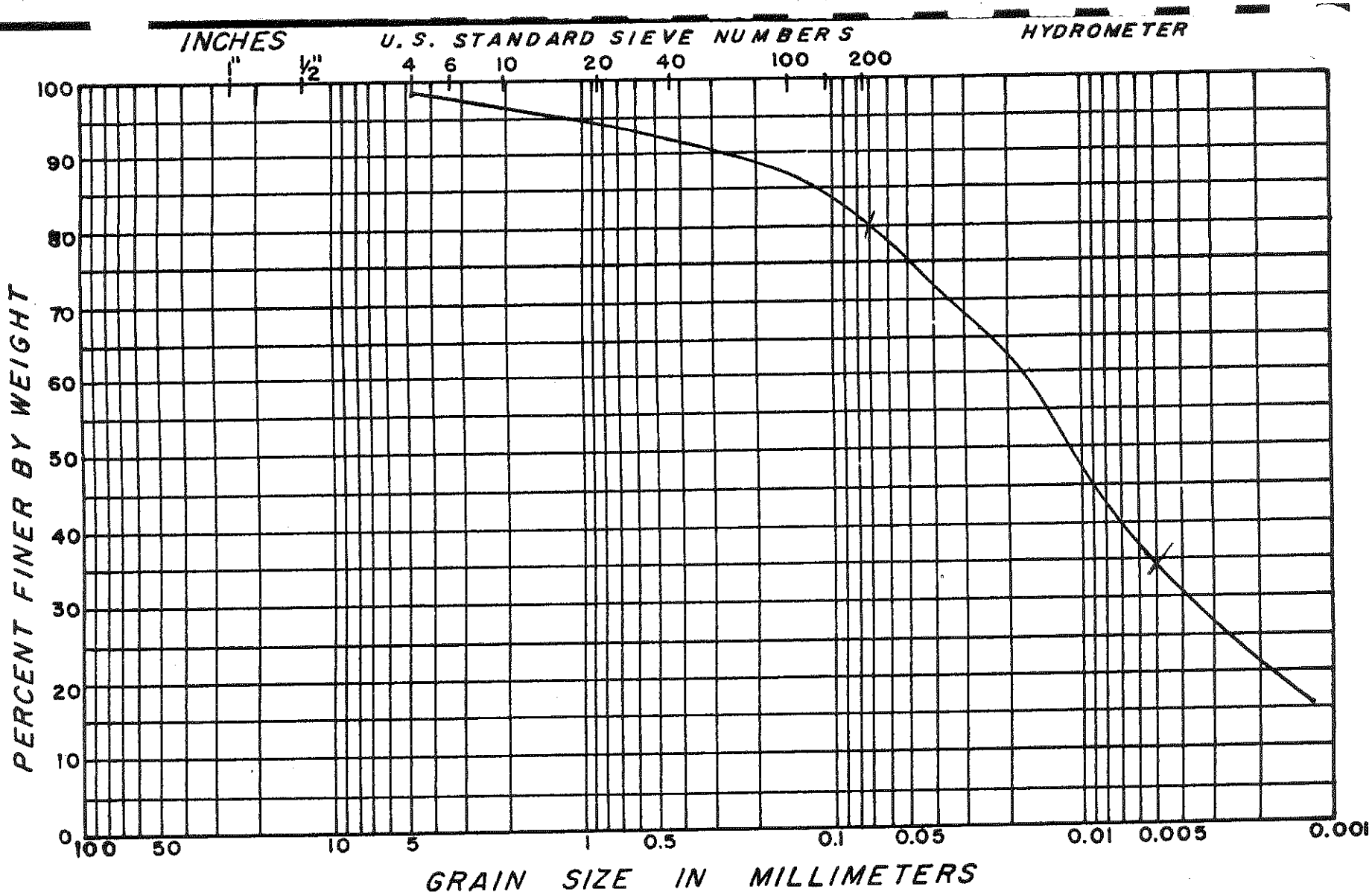
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER	HUCKILL CHEMICAL	PROJECT	HUCKILL CHEMICAL
LOCATION	BEDFORD, OHIO	BORING NO. SB-17	SAMPLE NO. SS 109; 3.0 - 4.5'

GRAIN SIZE ANALYSIS

TRIGGS & ASSOCIATES, INC.

30% SAND 35% SILT 35% CLAY



GRAIN SIZE ANALYSIS

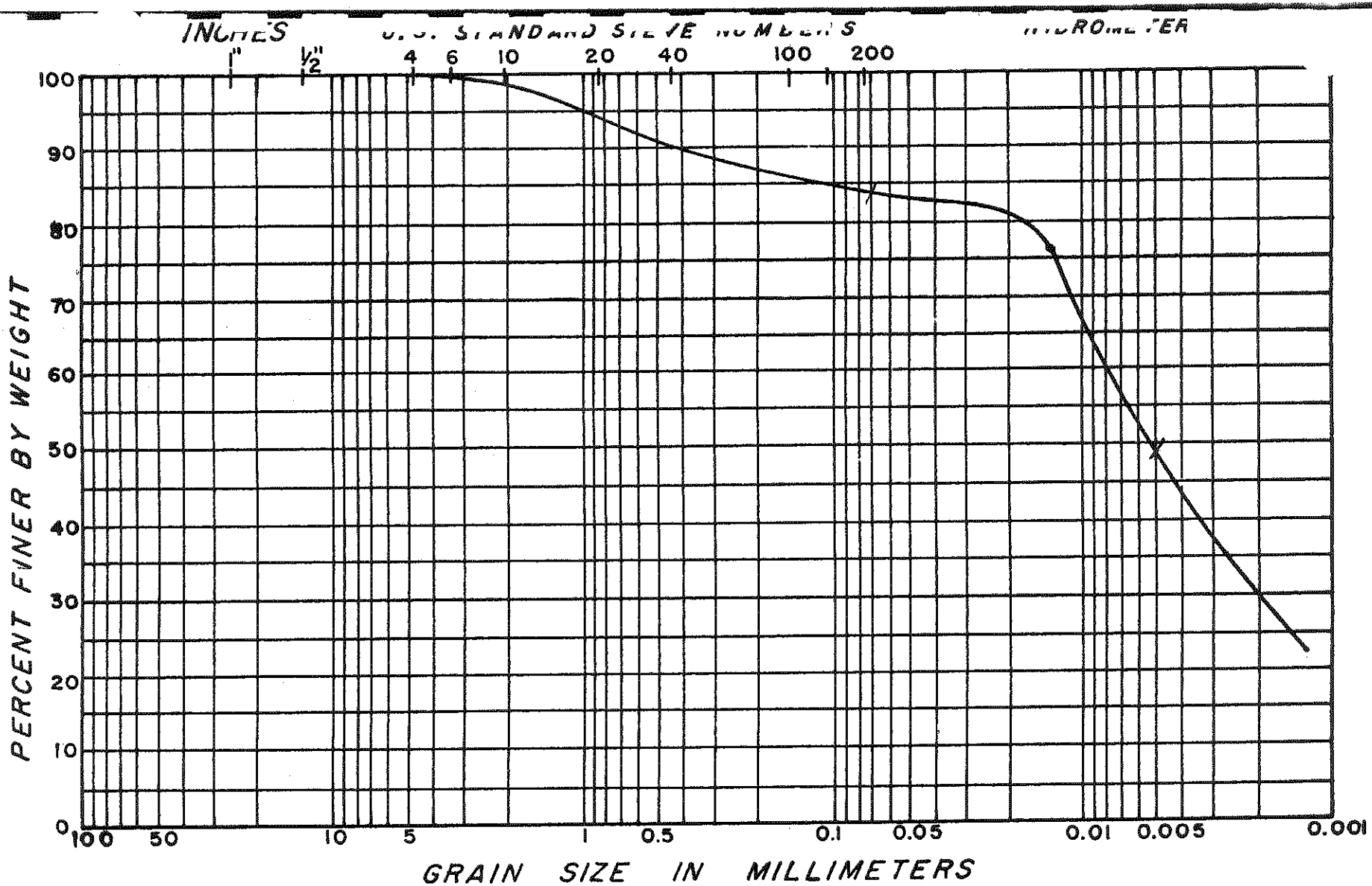
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO BORING NO. SB-17 SAMPLE NO. SS107 0-1.5'

TRIGGS & ASSOCIATES, INC.

20% SAND 45% SILT 35% CLAY



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

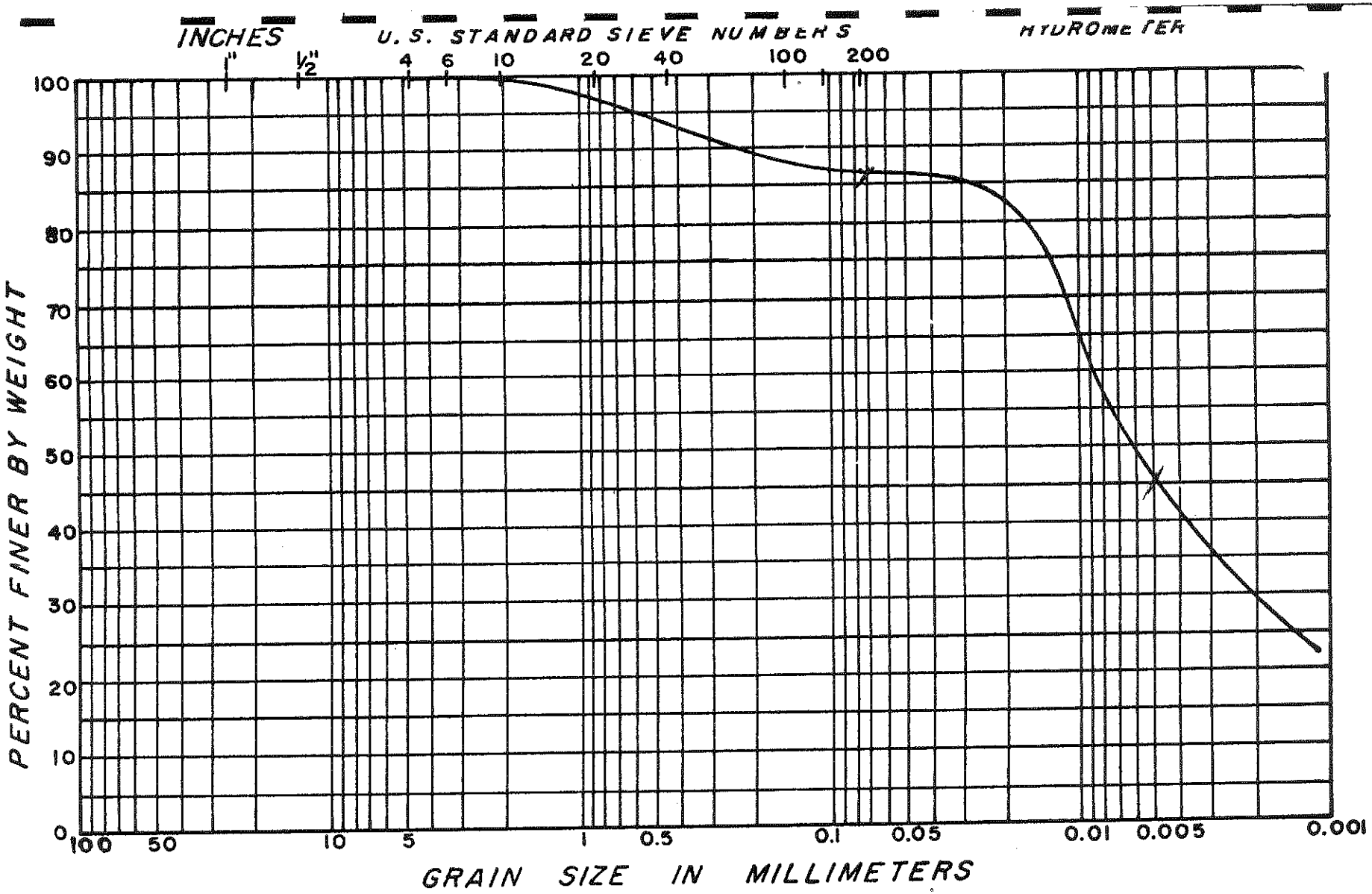
OWNER HUKILL CHEMICAL — PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO — BORING NO. SB-17 — SAMPLE NO. SS111 12.0-13.5'

GRAIN SIZE ANALYSIS

TRIGGS & ASSOCIATES, INC.

15% SAND 35% SILT 50% CLAY



GRAIN SIZE ANALYSIS

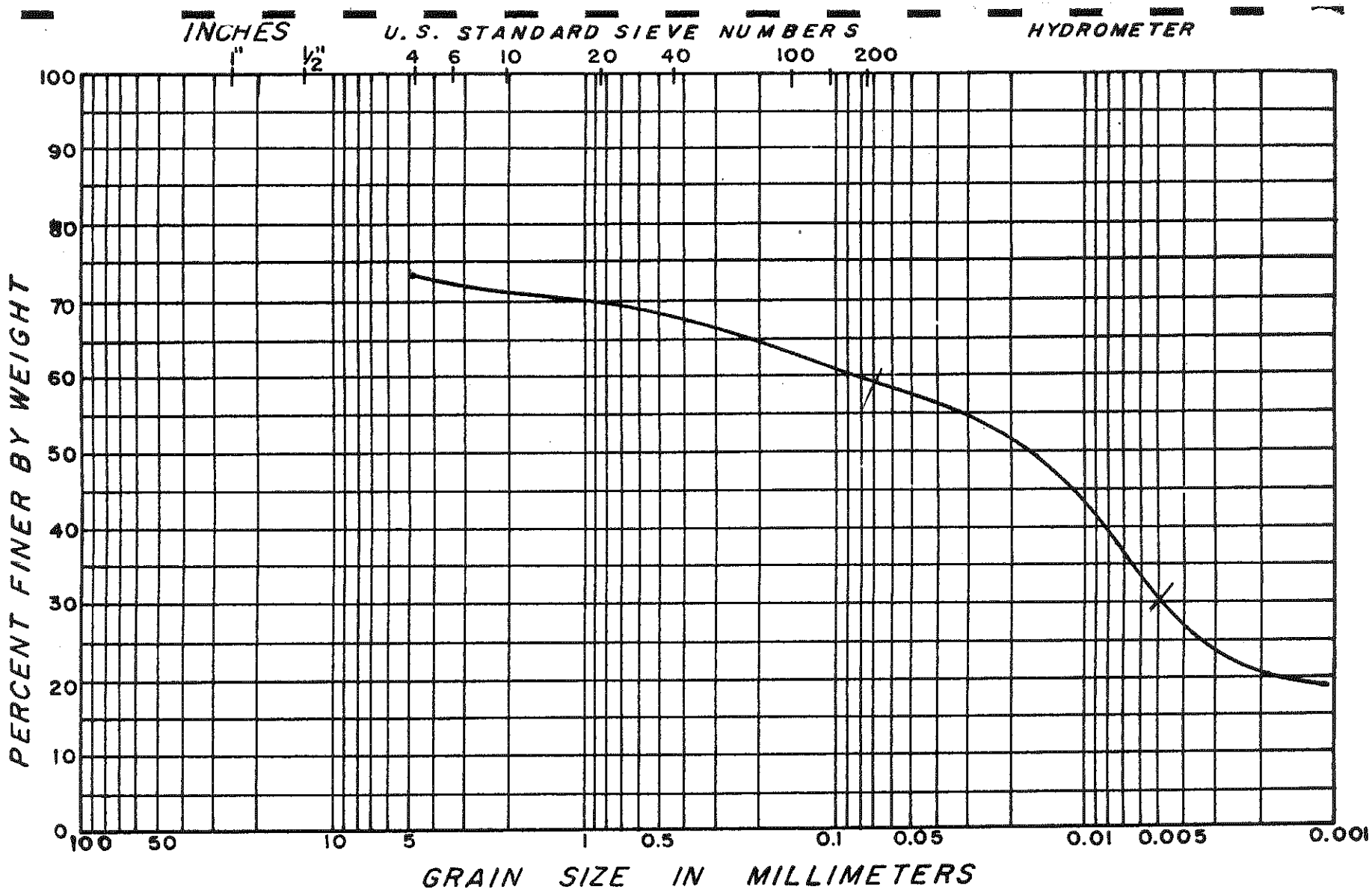
GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO BORING NO. SB17 SAMPLE NO. SS110 7.5-9.0'

TRIGGS & ASSOCIATES, INC.

15% SAND 40% SILT 45% CLAY



GRAIN SIZE ANALYSIS

GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

OWNER HUKILL CHEMICAL — PROJECT HUKILL CHEMICAL

LOCATION BEDFORD, OHIO — BORING NO. SB17 — SAMPLE NO SS108 1.5-3.0'

TRIGGS & ASSOCIATES, INC.

40% SAND 30% SILT 30% CLAY

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
AMPLE MANAGEMENT OFFICE
.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
WELLBSSM59

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0895

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	14 F	15.	MERCURY	.12 U
4.	BARIUM	[70] P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	2.9 U P	18.	SELENIUM	2.9 U R P
7.	CALCIUM		19.	SILVER	5.8 U P
8.	CHROMIUM	19 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	50 * F	24.	ZINC	

CYANIDE

PERCENT SOLIDS (%) 86

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MUS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi a mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
AMPLE MANAGEMENT OFFICE
.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO. WELLBSSM59DUP

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0896

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	14 F	15.	MERCURY	.12 U
4.	BARIUM	[82] P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5.9 P	18.	SELENIUM	2.9 U R F
7.	CALCIUM		19.	SILVER	5.9 U P
8.	CHROMIUM	29 U R R	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	51 * F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	85

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MUST BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

OMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
WELLBSSM59BLK

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0897

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER X SOIL X SLUDGE OTHER

B.T.F. 86/06/06

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	5 U F	15.	MERCURY	.1 U
4.	BARIUM	30 U P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	2.5 U P	18.	SELENIUM	2.5 U R F
7.	CALCIUM		19.	SILVER	5 U P
8.	CHROMIUM	5 U R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	2.5 U * F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	100

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MUS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS: This is a field blank. It was digested as if it were a solid

LAB MANAGER Kathy A. Mitchell

Sample Number

SS-66

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16050298
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 05/07/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 05/16/86
Date Analyzed: 05/16/86
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: 14
Percent Moisture (Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	1200 u
74-83-9	Bromomethane	1200 u
75-01-4	Vinyl Chloride	1200 u
75-00-3	Chloroethane	1200 u
75-09-2	Methylene Chloride	4600 B
67-64-1	Acetone	7400 B
75-15-0	Carbon Disulfide	600 u
75-35-4	1,1-Dichloroethene	600 u
75-34-3	1,1-Dichloroethane	600 u
156-60-5	Trans-1,2-Dichloroethene	600 u
67-66-3	Chloroform	600 u
107-06-2	1,2-Dichloroethane	600 u
78-93-3	2-Butanone	3200 B
71-55-6	1,1,1-Trichloroethane	600 u
56-23-5	Carbon Tetrachloride	600 u
108-05-4	Vinyl Acetate	1200 u
75-27-4	Bromodichloromethane	600 u

Data reporting qualifiers are explained on Page 2.
****

Laboratory Name: NUS CORPORATION Sample Number
Case No: EDER ASSOCIATES SS-66

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

CAS Number		ug/kg
		**********
78-87-5	1,2-Dichloropropane	600 u
10061-02-6	Trans-1,3-Dichloropropene	600 u
79-01-6	Trichloroethene	600 u
124-48-1	Dibromochloromethane	600 u
79-00-5	1,1,2-Trichloroethane	600 u
71-43-2	Benzene	600 u
10061-01-5	cis-1,3-Dichloropropene	600 u
110-75-8	2-Chloroethylvinylether	1200 u
75-25-2	Bromoform	600 u
108-10-1	4-Methyl-2-Pentanone	1200 u
591-78-6	2-Hexanone	1200 u
127-18-4	Tetrachlorethene	600 u
79-34-5	1,1,2,2-Tetrachloroethane	600 u
108-88-3	Toluene	1400 B
108-90-7	Chlorobenzene	600 u
100-41-4	Ethylbenzene	1300
100-42-5	Styrene	600 u
	Total Xylenes	6300

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

- Spiked compound.

NR - No value required.

Laboratory Name: NUS CORPORATION Sample Number
Case No: EDER ASSOCIATES SS-66

Organics Analysis Data Sheet
(Page 6)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg	
**********	**********	****	****	******	
526-73-8	BENZENE, 1,2,3-TRIMETHYL-	VOA	437	4000	J
611-14-3	BENZENE, 1-ETHYL-2-METHYL-	VOA	485	3000	J

Sample Number

SS-70

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16050299
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 05/07/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 05/16/86
Date Analyzed: 05/16/86
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: 7
Percent Moisture (Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	1100 u
74-83-9	Bromomethane	1100 u
75-01-4	Vinyl Chloride	1100 u
75-00-3	Chloroethane	1100 u
75-09-2	Methylene Chloride	21000 B
67-64-1	Acetone	4100 B
75-15-0	Carbon Disulfide	550 u
75-35-4	1,1-Dichloroethene	550 u
75-34-3	1,1-Dichloroethane	300 J
156-60-5	Trans-1,2-Dichloroethene	550 u
67-66-3	Chloroform	550 u
107-06-2	1,2-Dichloroethane	550 u
78-93-3	2-Butanone	5200 B
71-55-6	1,1,1-Trichloroethane	550 u
56-23-5	Carbon Tetrachloride	550 u
108-05-4	Vinyl Acetate	1100 u
75-27-4	Bromodichloromethane	550 u

Data reporting qualifiers are explained on Page 2.
****

Laboratory Name: NUS CORPORATION Sample Number
Case No: EDER ASSOCIATES SS-70

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

CAS Number		ug/kg
78-87-5	1,2-Dichloropropane	550 u
10061-02-6	Trans-1,3-Dichloropropene	550 u
79-01-6	Trichloroethene	550 u
124-48-1	Dibromochloromethane	550 u
79-00-5	1,1,2-Trichloroethane	550 u
71-43-2	Benzene	550 u
10061-01-5	cis-1,3-Dichloropropene	550 u
110-75-8	2-Chloroethylvinylether	1100 u
75-25-2	Bromoform	550 u
108-10-1	4-Methyl-2-Pentanone	1100 u
591-78-6	2-Hexanone	1100 u
127-18-4	Tetrachlorethene	550 u
79-34-5	1,1,2,2-Tetrachloroethane	550 u
108-88-3	Toluene	4500 B
108-90-7	Chlorobenzene	550 u
100-41-4	Ethylbenzene	440 J
100-42-5	Styrene	550 u
	Total Xylenes	2000

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

- Spiked compound.

NR - No value required.

Sample Number

SS-70 DUP

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16050297
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 05/07/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 05/16/86
Date Analyzed: 05/16/86
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: 4
Percent Moisture (Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	1000 u
74-83-9	Bromomethane	1000 u
75-01-4	Vinyl Chloride	1000 u
75-00-3	Chloroethane	1000 u
75-09-2	Methylene Chloride	16000 B
67-64-1	Acetone	2800 B
75-15-0	Carbon Disulfide	500 u
75-35-4	1,1-Dichloroethene	500 u
75-34-3	1,1-Dichloroethane	300 J
156-60-5	Trans-1,2-Dichloroethene	500 u
67-66-3	Chloroform	500 u
107-06-2	1,2-Dichloroethane	500 u
78-93-3	2-Butanone	3200 B
71-55-6	1,1,1-Trichloroethane	500 u
56-23-5	Carbon Tetrachloride	500 u
108-05-4	Vinyl Acetate	1000 u
75-27-4	Bromodichloromethane	500 u

Data reporting qualifiers are explained on Page 2.
****

Laboratory Name: NUS CORPORATION Sample Number
Case No: EDER ASSOCIATES SS-70 DUP

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

CAS Number		ug/kg
		**********
78-87-5	1,2-Dichloropropane	500 u
10061-02-6	Trans-1,3-Dichloropropene	500 u
79-01-6	Trichloroethene	500 u
124-48-1	Dibromochloromethane	500 u
79-00-5	1,1,2-Trichloroethane	500 u
71-43-2	Benzene	500 u
10061-01-5	cis-1,3-Dichloropropene	500 u
110-75-8	2-Chloroethylvinylether	1000 u
75-25-2	Bromoform	500 u
108-10-1	4-Methyl-2-Pentanone	1000 u
591-78-6	2-Hexanone	1000 u
127-18-4	Tetrachlorethene	320 J
79-34-5	1,1,2,2-Tetrachloroethane	500 u
108-88-3	Toluene	10000 B
108-90-7	Chlorobenzene	500 u
100-41-4	Ethylbenzene	720
100-42-5	Styrene	500 u
	Total Xylenes	3300

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

- Spiked compound.

NR - No value required.

Sample Number

SS-70 BLANK

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16050292
Sample Matrix: Soil
Data Release Authorized By:
****

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 05/07/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 05/16/86
Date Analyzed: 05/16/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Decanted): NR

CAS Number		ug/kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	15 B
67-64-1	Acetone	2 J B
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	1,1-Dichloroethane	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u
67-66-3	Chloroform	1 J
107-06-2	1,2-Dichloroethane	5 u
78-93-3	2-Butanone	3 J B
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

Data reporting qualifiers are explained on Page 2.
****

Laboratory Name: NUS CORPORATION Sample Number
Case No: EDER ASSOCIATES SS-70 BLANK

Organics Analysis Data Sheet
(Page 2)

Volatile Compounds (continued)

CAS Number		ug/kg
		**********
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10 u
591-78-6	2-Hexanone	10 u
127-18-4	Tetrachlorethene	5 u
79-34-5	1,1,2,2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value - If the result is a value greater than or equal to the detection limit, report the value

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the indicated detection limit but greater than zero (e.g. 10J).

C - This flag applies to pesticide parameters where the identification has been comfirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

- Spiked compound.

NR - No value required.

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SSM167SB3

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1017

CASE NO. HUKILL
QC REPORT NO. HUKIL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	19 F	15.	MERCURY	.11 U
4.	BARIUM	34 U P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	2.8 U P	18.	SELENIUM	2.8 U
7.	CALCIUM		19.	SILVER	5.6 U
8.	CHROMIUM	28 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	23 F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	88

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SSM173SB6

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1018

CASE NO. HUKILL
QC REPORT NO. HUKI

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	15 F	15.	MERCURY	.11 U
4.	BARIUM	[45] P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	2.8 U P	18.	SELENIUM	2.8 U
7.	CALCIUM		19.	SILVER	5.6 U
8.	CHROMIUM	5.6 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	10 F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	88

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COMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SSM92SB11

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
CASE NO. HUKILL
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1016
QC REPORT NO. HUKI

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	13 F	15.	MERCURY	.11 U
4.	BARIUM	202 P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	4.8 P	18.	SELENIUM	2.7 U
7.	CALCIUM		19.	SILVER	5.3 U
8.	CHROMIUM	5.3 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	5.3 F	24.	ZINC	
CYANIDE			PERCENT SOLIDS (%)		93

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SSM167SB3TOX

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1017

CASE NO. HUKILL
QC REPORT NO. HUKI

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X E.P.

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	10 U F	15.	MERCURY	~~5~~ 10 U
4.	BARIUM	60 U P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U
7.	CALCIUM		19.	SILVER	10 U
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi a Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO. SSM173SB6TOX

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1018

CASE NO. HUKILL
QC REPORT NO. HUKIL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X E.P.t

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	10 U F	15.	MERCURY	~~5~~ 10 U
4.	BARIUM	550 P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U
7.	CALCIUM		19.	SILVER	10 U
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathy A Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SSM92SB11TOX

DATE 86/09/08

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8609-1016

CASE NO. HUKILL
QC REPORT NO. HUKI

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X E.P.

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	10 U F	15.	MERCURY	~~5~~ 10 U
4.	BARIUM	1200 P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U
7.	CALCIUM		19.	SILVER	10 U
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	
CYANIDE			PERCENT SOLIDS (%)		

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathy A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-3

DATE 86/10/27

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0023

CASE NO. HUK-I
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	453 R
3.	ARSENIC	7.9 U * F	15.	MERCURY	.16 U R
4.	BARIUM	[79] * P	16.	NICKEL	84
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	6.3 P	18.	SELENIUM	3.9 U
7.	CALCIUM		19.	SILVER	7.9 U
8.	CHROMIUM	70 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	152 R P	22.	TIN	
11.	IRON	61100 P	23.	VANADIUM	
12.	LEAD	72 F	24.	ZINC	289 R *
	CYANIDE			PERCENT SOLIDS (%)	63

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS M BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi a. mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-10

DATE 86/10/27

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0024

CASE NO. HUK-I
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	533 R
3.	ARSENIC	6.2 * F	15.	MERCURY	.13 U R
4.	BARIUM	[87] * P	16.	NICKEL	28
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	3.1 U P	18.	SELENIUM	3.1 U
7.	CALCIUM	18400 P	19.	SILVER	6.2 U
8.	CHROMIUM	18 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	35 R P	22.	TIN	
11.	IRON	27200 P	23.	VANADIUM	
12.	LEAD	22 S F	24.	ZINC	103 R *
	CYANIDE			PERCENT SOLIDS (%)	80

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS M BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
AMPLE MANAGEMENT OFFICE
.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SB10SSM81

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0919

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	12 U F	15.	MERCURY	.24 U
4.	BARIUM	[119] F	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	12 P	18.	SELENIUM	6 U R F
7.	CALCIUM		19.	SILVER	12 U P
8.	CHROMIUM	255 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	110 * F	24.	ZINC	

CYANIDE

PERCENT SOLIDS (%) 42

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MU BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathy A. Mitchell

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U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SB10SSM82

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0920

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	6 U F	15.	MERCURY	.12 U
4.	BARIUM	[54] P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	6.5 P	18.	SELENIUM	3 U R F
7.	CALCIUM		19.	SILVER	6 U P
8.	CHROMIUM	27 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	~~[0]~~ 48.9 S * F	24.	ZINC	
	CYANIDE			PERCENT SOLIDS (%)	84

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MUS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A Mitchell

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'.S. EPA CONTRACT LABORATORY PROGRAM
AMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SB10SSM84

DATE 86/05/28

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8605-0922

CASE NO. HUKILL
QC REPORT NO. HUKILL

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	
3.	ARSENIC	19 F	15.	MERCURY	.16 U
4.	BARIUM	[121] P	16.	NICKEL	
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	6.5 P	18.	SELENIUM	4 U R F
7.	CALCIUM		19.	SILVER	8.1 U P
8.	CHROMIUM	40 U R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER		22.	TIN	
11.	IRON		23.	VANADIUM	
12.	LEAD	73 * F	24.	ZINC	

CYANIDE

PERCENT SOLIDS (%) 62

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS MU BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

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LAB MANAGER Kathi A. Mitchell

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U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-1

DATE 86/10/27

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0021

CASE NO. HUK-I
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	440 R
3.	ARSENIC	6.4 U * 1	15.	MERCURY	.13 U R
4.	BARIUM	[51] * P	16.	NICKEL	20 U
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	3.9 P	18.	SELENIUM	3.2 U
7.	CALCIUM	14700 P	19.	SILVER	6.4 U
8.	CHROMIUM	11 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	11 U R P	22.	TIN	
11.	IRON	38100 P	23.	VANADIUM	
12.	LEAD	23 S F	24.	ZINC	41 R *
	CYANIDE			PERCENT SOLIDS (%)	77

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS M BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-2

DATE 86/10/27

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0022

CASE NO. HUK-I
QC REPORT NO. HUK-

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	552 R
3.	ARSENIC	8.1 * F	15.	MERCURY	.16 U R
4.	BARIUM	[73] * P	16.	NICKEL	25 U
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	4.1 U P	18.	SELENIUM	4.1 U
7.	CALCIUM		19.	SILVER	8.1 U
8.	CHROMIUM	207 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	51 R P	22.	TIN	
11.	IRON	26300 P	23.	VANADIUM	
12.	LEAD	Kam 11/10/87 ~~29~~ ~~*~~ 69 F	24.	ZINC	144 R *
	CYANIDE			PERCENT SOLIDS (%)	61

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

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U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-3

DATE 86/10/22

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0023

CASE NO. HUK-III
QC REPORT NO. HUK-II

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X E.P.to

(UG/L) OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	1590
3.	ARSENIC	10 U F	15.	MERCURY	.2 U
4.	BARIUM	270 P	16.	NICKEL	202
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U F
7.	CALCIUM		19.	SILVER	
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	66 P	22.	TIN	
11.	IRON	80 U P	23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	108
CYANIDE			PERCENT SOLIDS (%)		

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS M BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi a. mitchell

WILSON LABORATORIES

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.
ATTN:
7013 KRICK ROAD
BEDFORD, OH 44146

DATE RPTD: 10/27/86
DATE RCVD: 10/04/86
PURCHASE AUTH:
FILE NO.: 86-9681
ORDER NO.: 4638

LAB NUMBER: 86110023
SAMPLE DESCRIPTION: KP-3 SOIL

DATE SAMPLED: 10/02/86
TIME SAMPLED: 1305

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
FLUORIDE, EP TOXICITY	0.8	MG/L	614-31
SULFATE, EP TOXICITY	1330.	MG/L	635-192
CHLORIDE, EP TOXICITY	56.	MG/L	639-224
NITRATE, EP TOXICITY	4.7	MG/L	632-197
PHOSPHORUS, EP TOXICITY	ND(0.2)	MG/L	636-182

—CONCLUSION—LAB NUMBER: 86110023 KP-3 SOIL

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES PUBLISHED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984 OR IN EPA PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

WILSON LABORATORIES

Lynn R Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-10

DATE 86/10/22

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0024

CASE NO. HUK-III
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X EP. to

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	10600
3.	ARSENIC	10 U F	15.	MERCURY	.2 U
4.	BARIUM	540 P	16.	NICKEL	42
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5U F
7.	CALCIUM		19.	SILVER	
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	36 P	22.	TIN	
11.	IRON	1950 P	23.	VANADIUM	
12.	LEAD	14 F	24.	ZINC	126
CYANIDE			PERCENT SOLIDS (%)		

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathy A. Mitchell

WILSON LABORATORIES

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.
ATTN:
7013 KRICK ROAD
BEDFORD, OH 44146

DATE RPTD: 10/27/86
DATE RCVD: 10/04/86
PURCHASE AUTH:
FILE NO.: 86-9681
ORDER NO.: 4638

LAB NUMBER: 86110024
SAMPLE DESCRIPTION: KP-10 SOIL

DATE SAMPLED: 10/01/86
TIME SAMPLED: 1700

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
FLUORIDE, EP TOXICITY	0.3	MG/L	614-31
SULFATE, EP TOXICITY	18.	MG/L	635-191
CHLORIDE, EP TOXICITY	47.	MG/L	639-224
NITRATE, EP TOXICITY	ND(0.1)	MG/L	632-197
PHOSPHORUS, EP TOXICITY	ND(0.2)	MG/L	636-182

—CONCLUSION—LAB NUMBER: 86110024 KP-10 SOIL

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES PUBLISHED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984 OR IN EPA PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

WILSON LABORATORIES

Lynn R Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-1

DATE 86/10/22

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0021

CASE NO. HUK-III
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X EP.

(UG/L) OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	3950
3.	ARSENIC	10 U F	15.	MERCURY	.2 U
4.	BARIUM	210 P	16.	NICKEL	47
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U
7.	CALCIUM		19.	SILVER	
8.	CHROMIUM	10 U P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	[18] P	22.	TIN	
11.	IRON	7200 P	23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	81
CYANIDE			PERCENT SOLIDS (%)		

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

W I L S O N L A B O R A T O R I E S

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.
ATTN:
7013 KRICK ROAD
BEDFORD, OH 44146

DATE RPTD: 10/27/86
DATE RCVD: 10/04/86
PURCHASE AUTH:
FILE NO.: 86-9681
ORDER NO.: 4638

LAB NUMBER: 86110021
SAMPLE DESCRIPTION: KP-1 SOIL

DATE SAMPLED: 10/01/86
TIME SAMPLED: 1315

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
FLUORIDE, EP TOXICITY	0.2	MG/L	614-31
SULFATE, EP TOXICITY	57.	MG/L	635-191
CHLORIDE, EP TOXICITY	2.	MG/L	639-224
NITRATE, EP TOXICITY	ND(0.1)	MG/L	632-197
PHOSPHORUS, EP TOXICITY	ND(0.2)	MG/L	636-182

—CONCLUSION—LAB NUMBER: 86110021 KP-1 SOIL

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES PUBLISHED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984 OR IN EPA PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

WILSON LABORATORIES

Lynn R. Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST

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U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
KP-2

DATE 86/10/22

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8611-0022

CASE NO. HUK-III
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL SLUDGE OTHER X E.P.T

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	898
3.	ARSENIC	10 U F	15.	MERCURY	.2 U
4.	BARIUM	250 P	16.	NICKEL	31 U
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	5 U P	18.	SELENIUM	5 U
7.	CALCIUM		19.	SILVER	
8.	CHROMIUM	3860 P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	60 P	22.	TIN	
11.	IRON	170 P	23.	VANADIUM	
12.	LEAD	5 U F	24.	ZINC	75
CYANIDE			PERCENT SOLIDS (%)		

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

W I L S O N L A B O R A T O R I E S

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.
ATTN:
7013 KRICK ROAD
BEDFORD, OH 44146

DATE RPTD: 10/27/86
DATE RCVD: 10/04/86
PURCHASE AUTH:
FILE NO.: 86-9681
ORDER NO.: 4638

LAB NUMBER: 86110022
SAMPLE DESCRIPTION: KP-2 SOIL

DATE SAMPLED: 10/01/86
TIME SAMPLED: 1327

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
FLUORIDE, EP TOXICITY	0.5	MG/L	614-31
SULFATE, EP TOXICITY	900.	MG/L	635-192
CHLORIDE, EP TOXICITY	14.	MG/L	639-224
NITRATE, EP TOXICITY	7.	MG/L	632-197
PHOSPHORUS, EP TOXICITY	ND(0.2)	MG/L	636-182

—CONCLUSION—LAB NUMBER: 86110022 KP-2 SOIL

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES PUBLISHED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984 OR IN EPA PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

WILSON LABORATORIES

Lynn R. Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST

Sample Number

SS-120

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091569
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analyzed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 9
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	10 B	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	8 J,B	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	11 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	11 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	11 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	11 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	3 J,B
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	5 U	100-42-5	Styrene	5 U
				Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V ug If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ug/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required

NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275

412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091569
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-120 COMPOSITE 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 370	ug/kg
0B52	Acenaphthylene	< 370	ug/kg
0B53	Anthracene	< 370	ug/kg
0B55	Benzo(a)Anthracene	< 370	ug/kg
0B56	Benzo(a)Pyrene	< 370	ug/kg
0B57	3,4-Benzofluoranthene	< 370	ug/kg
0B58	Benzo(ghi)Perylene	< 370	ug/kg
0B59	Benzo(k)Fluoranthene	< 370	ug/kg
0B68	Chrysene	< 370	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 370	ug/kg
0B81	Fluoranthene	< 370	ug/kg
0B82	Fluorene	< 370	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 370	ug/kg
0B89	Naphthalene	< 370	ug/kg
0B94	Phenanthrene	< 370	ug/kg
0B95	Pyrene	< 370	ug/kg
0D42	2-Methylnaphthalene	< 370	ug/kg
0E22	LLS - Extraction		
0F19	MSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

Sample Number

SS-120 DUP

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091570
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analyzed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 10
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	9 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	7 J,B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	11 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	3 J,B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

alue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ug/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205
412-788-1080

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091570
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-120 COMPOSITE-DUPLICATE 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 400	ug/kg
0B52	Acenaphthylene	< 400	ug/kg
0B53	Anthracene	< 400	ug/kg
0B55	Benzo(a)Anthracene	< 400	ug/kg
0B56	Benzo(a)Pyrene	< 400	ug/kg
0B57	3,4-Benzofluoranthene	< 400	ug/kg
0B58	Benzo(ghi)Perylene	< 400	ug/kg
0B59	Benzo(k)Fluoranthene	< 400	ug/kg
0B68	Chrysene	< 400	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 400	ug/kg
0B81	Fluoranthene	< 400	ug/kg
0B82	Fluorene	< 400	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 400	ug/kg
0B89	Naphthalene	< 400	ug/kg
0B94	Phenanthrene	< 400	ug/kg
0B95	Pyrene	< 400	ug/kg
0D42	2-Methylnaphthalene	< 400	ug/kg
0E22	LLS - Extraction		
0F19	HSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

CC: INVOICE

Sample Number

55-120 BLANK

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16891571
Sample Matrix: Water
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analyzed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	10 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	10 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	10 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	31 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	6 J,B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	10 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	10 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	10 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	10 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	1 J,B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	10 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ug/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required

Laboratory Name: ROS CORPORATION

Case No: EDER ASSOCIATES

Sample Number

SS-120 BLANK

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1 .	1066-40-6	SILANOL, TRIMETHYL-	VOA	386	3 J,B
2 .					
3 .					
4 .					
5 .					
6 .					
7 .					
8 .					
9 .					
10 .					
11 .					
12 .					
13 .					
14 .					
15 .					
16 .					
17 .					
18 .					
19 .					
20 .					
21 .					
22 .					
23 .					
24 .					
25 .					
26 .					
27 .					
28 .					
29 .					
30 .					

NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275

412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. MICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091571
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-120 BLANK(WATER) 09/24

TEST	DETERMINATION	RESULTS	UNITS
0118	POLYNUCLEAR AROMATICS		
0B01	Acenaphthene	< 20	ug/l
0B02	Acenaphthylene	< 20	ug/l
0B03	Anthracene	< 20	ug/l
0B05	Benzo(a)Anthracene	< 20	ug/l
0B06	Benzo(a)Pyrene	< 20	ug/l
0B07	3,4-Benzofluoranthene	< 20	ug/l
0B08	Benzo(ghi)Perylene	< 20	ug/l
0B09	Benzo(k)Fluoranthene	< 20	ug/l
0B18	Chrysene	< 20	ug/l
0B19	Dibenzo(a,h)Anthracene	< 20	ug/l
0B31	Fluoranthene	< 20	ug/l
0B32	Fluorene	< 20	ug/l
0B37	Indeno(1,2,3 cd)Pyrene	< 20	ug/l
0B39	Naphthalene	< 20	ug/l
0B44	Phenanthrene	< 20	ug/l
0B45	Pyrene	< 20	ug/l
0D12	2-Methylnaphthalene	< 20	ug/l
0E25	Base Neutral Extraction-Water		
0F02	HSL - Volatile Organic Acids		

COMMENTS:

Reviewed and Approved by: JMC

Sample Number

SS-119

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091347
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analysed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 9
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	7 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	10 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	11 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	2 J,B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

'a/-) If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required

NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275
412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091567
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-119 COMPOSITE 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 370	ug/kg
0B52	Acenaphthylene	< 370	ug/kg
0B53	Anthracene	< 370	ug/kg
0B55	Benzo(a)Anthracene	< 370	ug/kg
0B56	Benzo(a)Pyrene	< 370	ug/kg
0B57	3,4-Benzofluoranthene	< 370	ug/kg
0B58	Benzo(ghi)Perylene	< 370	ug/kg
0B59	Benzo(k)Fluoranthene	< 370	ug/kg
0B68	Chrysene	< 370	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 370	ug/kg
0B81	Fluoranthene	< 370	ug/kg
0B82	Fluorene	< 370	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 370	ug/kg
0B89	Naphthalene	< 370	ug/kg
0B94	Phenanthrene	< 370	ug/kg
0B95	Pyrene	< 370	ug/kg
0D42	2-Methylnaphthalene	< 370	ug/kg
0E22	LLS - Extraction		
0F19	HSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

C INVOICE

Sample Number

SS-04

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091565
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/12/86
Date Analysed: 10/12/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 12
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	5 u	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	13 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	11 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	5 B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Iue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in tl blank as well as a sample. It indicates possible/ probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptio attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: EDER ASSOCIATES

Sample Number
SS-84

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1 .	1066-40-6	SILANOL, TRIMETHYL-	VOA	278	10 J,B
2 .		UNKNOWN	VOA	583	10 J
3 .					
4 .					
5 .					
6 .					
7 .					
8 .					
9 .					
10 .					
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NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275
412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091565
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-B4 SB-29 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 370	ug/kg
0B52	Acenaphthylene	< 370	ug/kg
0B53	Anthracene	< 370	ug/kg
0B55	Benzo(a)Anthracene	< 370	ug/kg
0B56	Benzo(a)Pyrene	< 370	ug/kg
0B57	3,4-Benzofluoranthene	< 370	ug/kg
0B58	Benzo(ghi)Perylene	< 370	ug/kg
0B59	Benzo(k)Fluoranthene	< 370	ug/kg
0B68	Chrysene	< 370	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 370	ug/kg
0B81	Fluoranthene	< 370	ug/kg
0B82	Fluorene	< 370	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 370	ug/kg
0B89	Naphthalene	< 370	ug/kg
0B94	Phenanthrene	< 370	ug/kg
0B95	Pyrene	< 370	ug/kg
0D42	2-Methylnaphthalene	< 370	ug/kg
0E22	LLS - Extraction		
0F19	HSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

CC INVOICE

Sample Number

SS-04 RA

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16891565RA
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/12/86
Date Analysed: 10/12/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 12
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	5 U	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	11 B	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	11 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	11 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	11 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	5 J	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	3 J
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	5 U	100-42-5	Styrene	5 U
				Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

V ue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ug/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in t blank as well as a sample. It indicates possible probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used they must be fully described and such descriptio attached to the data summary report.

S Spiked Compound

NR No value required.

Laboratory Name: NUS CORPORATION
Case No: EDER ASSOCIATES

Sample Number
SS-84 RA

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1 .	1066-40-6	SILANOL, TRIMETHYL-	VOA	279	10 J,B
2 .		UNKNOWN	VOA	503	8 J
3 .					
4 .					
5 .					
6 .					
7 .					
8 .					
9 .					
10 .					
11 .					
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Sample Number

SS-05

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091378
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/06/86
Date Analyzed: 10/06/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 18
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	12 u	78-87-5	1,2-Dichloropropane	6 u
74-83-9	Bromomethane	12 u	10061-02-6	Trans-1,3-Dichloropropene	6 u
75-01-4	Vinyl Chloride	12 u	79-01-6	Trichloroethene	6 u
75-00-3	Chloroethane	12 u	124-48-1	Dibromochloromethane	6 u
75-09-2	Methylene Chloride	10 B	79-00-5	1,1,2-Trichloroethane	6 u
67-64-1	Acetone	34 B	71-43-2	Benzene	6 u
75-15-0	Carbon Disulfide	6 u	10061-01-5	cis-1,3-Dichloropropene	6 u
75-35-4	1,1-Dichloroethene	6 u	110-75-8	2-Chloroethylvinylether	12 u
75-34-3	1,1-Dichloroethane	6 u	75-25-2	Bromoform	6 u
156-60-5	Trans-1,2-Dichloroethene	6 u	108-10-1	4-Methyl-2-Pentanone	12 u
67-66-3	Chloroform	6 u	591-78-6	2-Hexanone	12 u
107-06-2	1,2-Dichloroethane	6 u	127-18-4	Tetrachloroethene	6 u
78-93-3	2-Butanone	12 u	79-34-5	1,1,2,2-Tetrachloroethane	6 u
71-55-6	1,1,1-Trichloroethane	6 u	108-88-3	Toluene	21 B
56-23-5	Carbon Tetrachloride	6 u	108-90-7	Chlorobenzene	6 u
108-05-4	Vinyl Acetate	12 u	100-41-4	Ethylbenzene	6 u
75-27-4	Bromodichloromethane	6 u	100-42-5	Styrene	6 u
				Total Xylenes	6 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

alue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

Sample Number

SS-113

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091568
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDEN ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/12/86
Date Analysed: 10/12/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 12
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	5 u	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	76 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	7 J	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	1 J,B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

1 lue — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)>10ug/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in t blank as well as a sample. It indicates possible probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used they must be fully described and such descriptio attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: EDER ASSOCIATES

Sample Number
SS-112

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1 .	1066-40-6	SILANOL, TRIMETHYL-	VOA	279	18 J,B
2 .		UNKNOWN	VOA	583	6 J
3 .					
4 .					
5 .					
6 .					
7 .					
8 .					
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NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275

412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091568
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-112 SB-30 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 3800	ug/kg
0B52	Acenaphthylene	< 3800	ug/kg
0B53	Anthracene	< 3800	ug/kg
0B55	Benzo(a)Anthracene	< 3800	ug/kg
0B56	Benzo(a)Pyrene	< 3800	ug/kg
0B57	3,4-Benzofluoranthene	< 3800	ug/kg
0B58	Benzo(ghi)Perylene	< 3800	ug/kg
0B59	Benzo(k)Fluoranthene	< 3800	ug/kg
0B68	Chrysene	< 3800	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 3800	ug/kg
0B81	Fluoranthene	< 3800	ug/kg
0B82	Fluorene	< 3800	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 3800	ug/kg
0B89	Naphthalene	< 3800	ug/kg
0B94	Phenanthrene	< 3800	ug/kg
0B95	Pyrene	< 3800	ug/kg
0D42	2-Methylnaphthalene	< 3800	ug/kg
0E22	LLS - Extraction		
0F19	MSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

CC: INVOICE

Sample Number

SS-113

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16891566
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analyzed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 13
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	8 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	24 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	11 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	2 J,B
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

alue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analysed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides>=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

FORM I

NUS CORPORATION

Laboratory Services Division
5350 Campbells Run Road
Pittsburgh, PA 15205

REMIT TO:
Park West Two
Cliff Mine Road
Pittsburgh, PA 15275

412-788-1080

LAB ANALYSIS REPORT

CLIENT NAME: EDER ASSOCIATES
ADDRESS: PO BOX-H,85 FOREST AVE
LOCUST VALLEY, NY 11560
ATTENTION: MR. NICK ANDRIANAS

REPORT DATE: 11/04/86

NUS CLIENT NO: 893902
NUS SAMPLE NO: 16091566
VENDOR NO: 05626100
WORK ORDER NO: 55830
DATE RECEIVED: 09/27/86

SAMPLE IDENTIFICATION: SS-113 SB-31 09/24

TEST	DETERMINATION	RESULTS	UNITS
0122	POLYNUCLEAR AROMATICS-SOLID		
0B51	Acenaphthene	< 340	ug/kg
0B52	Acenaphthylene	< 340	ug/kg
0B53	Anthracene	< 340	ug/kg
0B55	Benzo(a)Anthracene	< 340	ug/kg
0B56	Benzo(a)Pyrene	< 340	ug/kg
0B57	3,4-Benzofluoranthene	< 340	ug/kg
0B58	Benzo(ghi)Perylene	< 340	ug/kg
0B59	Benzo(k)Fluoranthene	< 340	ug/kg
0B68	Chrysene	< 340	ug/kg
0B69	Dibenzo(a,h)Anthracene	< 340	ug/kg
0B81	Fluoranthene	< 340	ug/kg
0B82	Fluorene	< 340	ug/kg
0B87	Indeno(1,2,3cd) Pyrene	< 340	ug/kg
0B89	Naphthalene	< 340	ug/kg
0B94	Phenanthrene	< 340	ug/kg
0B95	Pyrene	< 340	ug/kg
0D42	2-Methylnaphthalene	< 340	ug/kg
0E22	LLS - Extraction		
0F19	HSL-Volatile Organic Acid-Soil		

COMMENTS:

Reviewed and Approved by: JMC

CC INVOICE

Sample Number

SS-113 RA

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16091546RA
Sample Matrix: Soil
Data Release Authorized By:

Case No: EDER ASSOCIATES
QC Report No:
Contract No:
Date Sample Received: 09/27/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 10/05/86
Date Analyzed: 10/05/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 13
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	9 B	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	27 B	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	11 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	11 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	11 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	11 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	2 J,B
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	5 U	100-42-5	Styrene	5 U
				Total Xylenes	5 U

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

alue If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data ticated the presence of a compound that meets the identification teria but the result is less than the specified detection limit but greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)>10ug/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

S Spiked Compound

NR No value required.

FORM I

U.S. EPA CONTRACT LABORATORY PROGRAM
SAMPLE MANAGEMENT OFFICE
P.O. BOX 818 - ALEXANDRIA, VA 22313
703/557-2490 FTS:8-557-2490

EPA SAMPLE NO.
SS-120COMP

DATE 86/10/27

INORGANIC ANALYSIS DATA SHEET

LAB NAME WILSON LABORATORIES
SOW NO. 784
LAB SAMPLE ID. NO. 8610-1238

CASE NO. HUK-I
QC REPORT NO. HUK-I

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW X MEDIUM
MATRIX: WATER SOIL X SLUDGE OTHER

UG/L OR MG/KG DRY WEIGHT (CIRCLE ONE)

1.	ALUMINUM		13.	MAGNESIUM	
2.	ANTIMONY		14.	MANGANESE	501 R
3.	ARSENIC	21 * F	15.	MERCURY	.11 U R
4.	BARIUM	172 * P	16.	NICKEL	[22]
5.	BERYLLIUM		17.	POTASSIUM	
6.	CADMIUM	3.9 P	18.	SELENIUM	2.8 U
7.	CALCIUM		19.	SILVER	5.6 U
8.	CHROMIUM	26 R P	20.	SODIUM	
9.	COBALT		21.	THALLIUM	
10.	COPPER	78 R P	22.	TIN	
11.	IRON	61200 P	23.	VANADIUM	
12.	LEAD	273 P	24.	ZINC	1230 R *
CYANIDE			PERCENT SOLIDS (%)		89

FOOTNOTES: FOR REPORTING RESULTS TO EPA, STANDARD RESULT QUALIFIERS ARE USED AS DEFINED ON COVER PAGE. ADDITIONAL FLAGS OR FOOTNOTES EXPLAINING RESULTS ARE ENCOURAGED. DEFINITION OF SUCH FLAGS M BE EXPLICIT AND CONTAINED ON COVER PAGE, HOWEVER.

COMMENTS:

LAB MANAGER Kathi A. Mitchell

WILSON LABORATORIES

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.
ATTN:
7013 KRICK ROAD
BEDFORD, OH 44146

DATE RPTD: 12/10/86
DATE RCVD: 10/01/86
PURCHASE AUTH:
FILE NO.: 86-9681
ORDER NO.: 4617

LAB NUMBER: 86101238
SAMPLE DESCRIPTION: SS-120 COMPOSITE

DATE SAMPLED: 09/26/86
TIME SAMPLED: 1435

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
SOLIDS, TOTAL	DONE	.	665-54
ARSENIC, EP TOXICITY	DONE	.	HUKILL
BARIUM, EP TOXICITY	DONE	.	HUKILL
CADMIUM, EP TOXICITY	DONE	.	HUKILL
CHROMIUM, EP TOXICITY	DONE	.	HUKILL
COPPER, EP TOXICITY	DONE	.	HUKILL
IRON, EP TOXICITY	DONE	.	HUKILL
LEAD, EP TOXICITY	DONE	.	HUKILL
MANGANESE, EP TOXICITY	DONE	.	HUKILL
MERCURY, EP TOXICITY	DONE	.	HUKILL
NICKEL, EP TOXICITY	DONE	.	HUKILL
SELENIUM, EP TOXICITY	DONE	.	HUKILL
SILVER, EP TOXICITY	DONE	.	HUKILL
ZINC, EP TOXICITY	DONE	.	HUKILL
ARSENIC, TOTAL	DONE	.	
BARIUM, TOTAL	DONE	.	
CADMIUM, TOTAL	DONE	.	
CHROMIUM, TOTAL	DONE	.	
COPPER, TOTAL	DONE	.	
IRON, TOTAL	DONE	.	
LEAD, TOTAL	DONE	.	
MANGANESE, TOTAL	DONE	.	
MERCURY, TOTAL	DONE	.	
NICKEL, TOTAL	DONE	.	
SELENIUM, TOTAL	DONE	.	
SILVER, TOTAL	DONE	.	
ZINC, TOTAL	DONE	.	
FLUORIDE, EP TOXICITY	1.0	MG/L	614-31
SULFATE, EP TOXICITY	38.	MG/L	635-191
CHLORIDE, EP TOXICITY	2.	MG/L	639-224
NITRATE, EP TOXICITY	ND(0.1)	MG/L	632-197
PHOSPHORUS, EP TOXICITY	ND(0.2)	MG/L	636-182

—CONCLUSION—LAB NUMBER: 86101238 SS-120 COMPOSITE

LABORATORY REPORT

CLIENT: HUKILL CHEMICAL CORP.

FILE NO.: 86-9681
ORDER NO.: 4617

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES PUBLISHED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984 OR IN EPA PUBLICATION, SW 846, 2ND EDITION, JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

WILSON LABORATORIES

Lynn R Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST