TORRINGTON
Part of worldwide Ingersoll-Rand

Corporate Offices
The Torrington Company
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Torrington, CT 06790
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January 19, 1987

Mr. Reggie Baker
Chief Site Management Section
Office of Environmental Response
Indiana Department of Environmental Management
5500 West Bradbury Avenue
Indianapolis, IN 46241

Dear Mr. Baker:

Enclosed in the final summary report of the clean-up work which the Torrington Company has taken at its South Bend site. Thank you for your assistance on this project

Very truly yours,
THE TORRINGTON COMPANY

Robert M. Lewis

Robert M. Lewis
Senior Environmental Engineer

RML:aaj

Enclosure

TORRINGTON COMPANY HEAVY BEARINGS FACILITY
SOUTH BEND, INDIANA

December 22, 1986

INTRODUCTION

In December 1935, The Torrington Company purchased the Bantam Ball Bearing Company at 3702 West Sample Street in South Bend which manufactured ball, thrust, radial, tapered and cylindrical roller bearings. The location retained the Bantam Ball Bearing Corporation name until 1943 when it became The Torrington Company, Bantam Bearings Division. At some later date it became The Torrington Company, Heavy Bearings Division.

The physical facility grew in size as various additions were constructed following the 1935 purchase. By 1967, the plant had reached its present-day size of 350,806 square feet, which includes the main building (West Building), the foundry and an outbuilding known as Shed C. Throughout the history of the facility, it was operated as a bearing manufacturing plant. In 1984, The Torrington Company decided to close the South Bend facility because of declining Heavy Bearings business and available manufacturing space in two other more modern Torrington Company facilities.

When the plant site was offered for sale, The Torrington Company decided to determine if any environmental concerns existed at the site.

A preliminary exploratory round of sampling and analysis was done in order to identify any potential areas of contamination. Groundwater monitoring wells were installed, water samples were taken from these wells and from ponds located at the property. Torrington also instituted a thorough soil sampling program in those areas shown on the attached site plan.

Based upon the test results, the plant site was found to be generally free of potential environmental problems. However, a second phase of sampling and analysis was done. In this phase, attention was focused upon areas which had shown any indication of contamination in the initial sampling work (see attached sampling plan). A more comprehensive analysis was performed upon this set of samples in order to verify the previous sampling results.

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INTRODUCTION (Continued)

Once the samples were taken and analyzed, Torrington determined that three areas at the plant should be addressed: the storm drainage ponds, the underground storage tanks and an area of contaminated soil. Following is a description of each of those areas and the work which has been done.

STORM DRAINAGE PONDS

There were five ponds located at the property as shown in the attached site plan. These ponds were utilized in handling storm water run off, particularly from roof drains in the building. These ponds had no discharge outlet. Samples of water and sediments taken from the ponds did not show any significant contamination, which was not surprising since no treatment or disposal of wastes had taken place in the ponds.

The Torrington Company decided to fill in as many ponds as possible prior to the sale of the plant. In 1985 discussions with Mr. Robert Carter, then the person in charge of the Indiana State Board of Health's Groundwater Section, Mr. Carter had recommended that the ponds be filled in to avoid any future use by subsequent owners which could create an environmental problem. As confirmed during a 5/20/86 meeting with Mr. Reggie Baker, Chief of Site Management Section, Office of Environmental Response, because there was no evidence of contamination in the ponds, Torrington would have Ponds #2, #3, #4, and #5 filled in. Pond #1 would be left in place to handle water from the roof drains.

Torrington followed through according to plan, filling in ponds #2, #3, #4 and #5. Only pond #1 remains and it appears to be very healthy with a large fish population.

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UNDERGROUND STORAGE TANKS

There were five "underground" storage tanks located at the South Bend property. Of the five, only two were actually located underground; the other three were located above ground level, but were covered with a mound of earth. The two underground tanks were located to the east of the main building under a layer of concrete. One was an 8,000 gallon tank which formerly contained Stoddard solvent (Varsol); the other was an 8,000 gallon tank which formerly contained cutting oil. Both tanks were emptied when the plant was closed down. The three tanks in the earthen mound included a 12,000 gallon tank used for cutting oil and two 20,000 gallon fuel oil tanks. These tanks were also emptied when the plant was shut down.

The Torrington Company has a company-wide policy that all underground storage tanks be removed and placed above ground in protected enclosures. In the case of the South Bend plant, the tanks were removed from the ground and disposed.

There had been no record or indication of any problems or leakage from the tanks. Nevertheless, when the tanks were withdrawn from the ground, precautions were taken to make sure any contamination was detected. As the tanks were pulled out, a visual inspection was made of the tanks and the soil surrounding the tanks. In addition, soil samples were taken to determine if there had been any spillage or leakage, either long term or occurring during the tank removal.

When excavated, the two Stoddard solvent tanks appeared to be in good condition and showed no sign of leakage. The area from which these tanks were removed contained sand fill which showed no signs of contamination. Laboratory analysis of soil samples confirmed this. The area was filled in with clean soil, and concrete was replaced on the surface.

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UNDERGROUND STORAGE TANKS (Continued)

When the other three tanks were removed from the earthen mound, there was some oil contamination. The tanks all appeared to be in good condition with no leaks or corrosion, but one end of the cutting oil tank was coated with oil. The soil surrounding that end of the tank also contained some oil. The area of contaminated soil was removed and samples of the remaining soil were taken for analysis. The lab analysis indicated that there was still some oil in the soil, so more excavation was done. Subsequent sampling and analysis confirmed that the remaining soil was clean.

SOILS

Soil samples and samples taken from the monitoring wells indicated a localized area of low level contamination near the southwest corner of the building. The contamination was detected primarily at the sample point identified as S-3 and found to a much lesser extent at sample point W-4 (see site plan).

Based upon this analytical information, Torrington decided to remove some amount of soils. In order to determine the amount of soil which would be removed, further soil sampling was done in the area surrounding sample point S-3. Based upon the analysis of these samples, it appeared that approximately 300-400 cubic yards of soil would be excavated. In order to ensure that suffucient soil was removed during the excavation operation, Torrington hired a geologist to take on-site readings with an organic "sniffer" to help Torrington determine how much soil it wanted to remove.

Once the excavation project was underway, it became evident that the extent of contamination was greater than originally anticipated. The cause of the contamination was also uncovered. The pipelines leading from the fuel oil and cutting oil storage tanks to the building were corroded in certain places. There were also visible holes in a few spots. This discovery allowed Torrington for the first time to define the cause of the contamination and to define precisely the impacted area.

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SOILS (Continued)

After the discovery of the leaking pipes had been made, the entire pipeline was dug up and all of the oil-contaminated soil was removed down to the level of the water table. This involved breaking up a concrete driveway and loading area and excavating approximately 1,700 cubic yards of soil. Clean fill was trucked in to replace the excavated material and a new driveway area was laid down.

As the contaminated soil was dug out, it was piled up on a layer of plastic and then covered with sheets of plastic in order to prevent any washing out of contaminants by rainwater. The soil was stored in this fashion pending the approval of the disposal permit by the Solid Waste Management Branch. Once the approval had been received, the soil was trucked to the Prairie View Landfill in Wyatt, Indiana.

Canonie Engineers

Boring Log Legend

SAMPLE

No: (Number) Soil samples are numbered consecutively from the ground surface. Core samples are numbered consecutively from the first core run.

Type: SS= Split-Spoon (2" O.D.) ST= Shelby Tube A= Auger Cuttings
PT= Piston Tube CR= Core Run

Interval: The depth of sampling interval in feet below ground surface.

BLOW COUNT

The number of blows required to drive a 2-inch O.D. split-spoon sampler with a 140 pound hammer falling 30-inches. When appropriate, the sampler is driven 18 inches and blow counts are reported for each 6-inch interval. The sum of blow counts for the last two 6-inch intervals is designated as the standard penetration resistance (N) expressed as blows per foot.

RECOVERY IN INCHES

The length of sample recovered by the sampling device.

U.S.C.S SOIL TYPE

The Unified Soil Classification System symbol for recovered soil samples determined by visual examination or laboratory tests. Refer to ASTM D2487-69 for a detailed description of procedure and symbols. Underlined symbols denote classifications based on laboratory tests (ie: ML), all others are based on visual classification only.

PERCENT MOISTURE

Natural moisture content of sample expressed as percent of dry weight.

qu, TSF

Unconfined compressive strength in tons per square foot obtained by Hand Penetrometer. Laboratory compression test values are indicated by underlining.

CONTACT DEPTH

The contact depth between soil layers is interpreted from significant changes in recovered samples and observations during drilling. Actual changes between soil layers often occur gradationally and the contact depths shown on the boring logs should be considered as approximate.

SOIL DESCRIPTION AND REMARKS

Soil descriptions include consistency or density, color, predominant soil types, and modifying constituents.

COHESIVE SOILS			GRANULAR SOILS	
Consistency	qu (TSF)	Blows/Ft.	Density	Blows Per Foot
Very Soft	less than 0.25	0-1	Very Loose	4 or less
Soft	0.25 to 0.50	2-4	Loose	5 to 10
Medium Stiff	0.50 to 1.00	5-8	Medium Dense	11 to 30
Stiff	1.00 to 2.00	9-15	Dense	31 to 50
Very Stiff	2.00 to 4.00	15-30	Very Dense	over 50
Hard	more than 4.00	Over 30		

PARTICLE SIZE DESCRIPTION

Boulder=	Larger than 12 inches.
Cobble=	3 to 12 inches.
Gravel=	0.187 to 3 inches.
Sand=	0.074 mm to 4.76 mm.
Silt and Clay=	Smaller than 0.074 mm

DEFINITION OF TERMS

Trace=	5 to 12 percent by weight.
Some=	12 to 30 percent by weight.
And=	Approximately equal fractions.
( )=	Drillers observation.

PIEZO.

(Piezometer) Screened interval of the piezometer installation is denoted by cross-hatching.

GENERAL NOTE

The boring logs and related information depict subsurface conditions only at the specific locations and dates indicated. Soil conditions and water levels at other locations may differ from conditions occurring at these boring locations. Also the passage of time may result in a change in the conditions at these boring locations.

SOIL TEST BORING REFUSAL

Defined as any material causing a blow count greater than 100 blows/6 inches. Such material may include bedrock, "floating" rock slabs, boulders, dense gravel seams, or cemented soils. Refusal is usually indicated in fractional notation showing number of blows as the numerator and inches of penetration as the denominator.

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Boring Log

PROJECT No. CE 83-182
BORING No. S-3
PAGE 1 OF 1

PROJECT NAME TORRINGTON BANTAM BEARING DIVISION
BORING LOCATION N 4307.30, E 5552.18 • SURFACE ELEV. 710.38
DRILLER J. BLATZ, PEERLESS-MIDWEST DATE: START 8/13/84 FINISH 8/13/84

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0 6 6 12	BLOW COUNT 6 12 12 18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
	1	HS	.2	1.2			12				.2	BLACK SANDY GRAVEL, FILL (OIL STAINED).	
	2	HS	1.4	2.4			12						
	3	HS	1.5	1.5			3	SP				BROWN MEDIUM SAND, SOME GRAVEL. SEWAGE ODOR.	
	4	HS	3.0	4.0			12					BLACK MEDIUM SAND, SOME GRAVEL. OVA = 200 PPM.	
5	5	HS	4.0	5.0			12					OVA = 500 PPM.	
	6	HS	5.0	6.0			12					OVA = 700 PPM.	
	1	SS	7.0	8.5			14					DARK BROWN MEDIUM SAND. STRONG ODOR. OVA > 1,000 PPM.	
10													
												GRAY MEDIUM TO COARSE SAND, SOME GRAVEL. OVA = 200 PPM.	
15													
												BROWN MEDIUM TO COARSE SAND, SOME GRAVEL. OVA = 100 PPM.	
20													
											24.0		
25												BORING TERMINATED AT 24.0 FT. WATER ENCOUNTERED AT APPROXIMATELY 6.5 FT.	
												NOTE: OVA VALUE IS ORGANIC VAPOR LEVEL FROM BOREHOLE MONITORED WITH A CENTURY FLAME IONIZING OVA METER.	

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Boring Log

PROJECT No. CE 83-182
BORING No. W-7
PAGE 1 OF 1

PROJECT NAME TORRINGTON BANTAM BEARING DIVISION
BORING LOCATION N 4550.88, E 5855.74 SURFACE ELEV. 713.30
DRILLER NORM EGER DATE: START 10/18/84 FINISH 10/18/84

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0 TO 6	BLOW COUNT 6 TO 12	BLOW COUNT 12 TO 18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
									GP			.2	GRAVEL FILL.	
									SP				BROWN MEDIUM TO COARSE SAND. TRACE OF GRAVEL. OVA = 0 PPM.	
	1	SS	3.5	5.0	1	1	2	9						
5													TRACE OF CLAY.	
	2	SS	8.0	9.5	7	9	11	12						
10														
15													GRAY MEDIUM TO COARSE SAND. OVA = 0 PPM.	
20														
25												25.0		
									GP			26.0	LAYER OF FINE GRAVEL.	
									SP				GRAY MEDIUM TO COARSE SAND, SOME GRAVEL.	
30												31.8		
													BORING TERMINATED AT 31.8 FEET.	
													NOTE: OVA VALUE IS ORGANIC VAPOR LEVEL FROM BOREHOLE MONITORED WITH A CENTURY FLAME IONIZING OVA METER.	

* ESTIMATED

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Boring Log

PROJECT No. CE 83-182
BORING No. W-5
PAGE 1 OF 1

PROJECT NAME TORRINGTON BANTAM BEARING DIVISION
BORING LOCATION N 3994.81, E 5613.03 • SURFACE ELEV. 712.33
DRILLER J. BLATZ, PEERLESS-MIDWEST DATE: START 7/30/84 FINISH 7/31/84

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0 6 / 6 12 / 12 18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
	2	HS	.5	.5		3	SP				BLACK MEDIUM TO COARSE SAND. TRACE OF CLAY AND SOME GRAVEL. OVA = 0.0 PPM.	
	1	HS	2.0	3.0		12						
5	3	HS	5.0	6.0		12					BROWN MEDIUM TO COARSE SAND. SOME GRAVEL.	
	1	SS	8.5	10.0		9					ENCOUNTERED WATER AT 8.5 FT. CASING WENT DOWN 1 FT. WHILE BAILING 3 IN.	
10												
15												
20												
25												
30										29.0		
							GP				BROWN SANDY GRAVEL.	
35										35.0		
											TERMINATED BORING AT 35.0 FT.	

NOTE: OVA VALUE IS ORGANIC VAPOR LEVEL FROM BOREHOLE MONITORED WITH A CENTURY FLAME IONIZING OVA METER.

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Boring Log

PROJECT No. CE 83-182
BORING No. W-4
PAGE 1 OF 1

PROJECT NAME TORRINGTON BANTAM BEARING DIVISION
BORING LOCATION N 4112.18, E 5579.40 • SURFACE ELEV. 710.31
DRILLER J. BLATZ, PEERLESS-MIDWEST DATE: START 7/27/84 FINISH 7/30/84

DEPTH	SAMPLE No.	SAMPLE TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0 6 / 6 12	BLOW COUNT 6 12 / 12 18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
	3	HS	0	.25			3	SP				OILY BLACK SAND WITH GRAVEL. OVA = 80 PPM.	
	4	HS	.5	1.5			12					BROWN MEDIUM TO COARSE SAND. TRACE OF GRAVEL.	
	1	HS	3.5	4.5			12					GRAY MEDIUM TO COARSE SAND. TRACE OF GRAVEL. OVA = 0.0 PPM.	
5	2	HS	4.5	5.5			12						
10	1	SS	10.0	11.5			9						
	2	SS	11.5	13.0	4	4 / 5	9						
15													
20													
											24.0		
25								GP				BROWNISH-GRAY GRAVEL AND MEDIUM TO COARSE SAND.	
30													
											34.0		
35												BORING TERMINATED AT 34.0 FT.	

NOTE: OVA VALUE IS ORGANIC VAPOR LEVEL FROM BOREHOLE MONITORED WITH A CENTURY FLAME IONIZING OVA METER.

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Boring Log

PROJECT No. CF 83-182
BORING No. W-2
PAGE 1 OF 1

PROJECT NAME TORRINGTON BANTAM BEARING DIVISION
BORING LOCATION N 3998.41, E 5867.16 • SURFACE ELEV. 712.42
DRILLER J. BLATZ, PEERLESS-MIDWEST DATE: START 8/1/84 FINISH 8/2/84

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0 TO 6	BLOW COUNT 6 TO 12	BLOW COUNT 12 TO 18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
									SP			1.0	BROWN MEDIUM SAND, SOME GRAVEL.	
												1.2	BLACKTOP PAVEMENT.	
	1	HS	3.0	4.0				12	SP				BROWN MEDIUM SAND, TRACE OF GRAVEL AND CLAY. OVA = 0 PPM.	
	2	HS	4.0	5.0				12					GRAY MEDIUM SAND, TRACE OF GRAVEL. OVA = 0 PPM.	
5	3	HS	5.0	6.0				12						
	1	SS	8.5	10.0	16	20	20	16					WATER ENCOUNTERED AT APPROXIMATELY 8.5 FT.	
10														
15														
20														
25														
30												31.0	GRAY MEDIUM TO COARSE SAND, SOME GRAVEL. OVA = 0.0 PPM.	
									GP				BROWN SANDY GRAVEL, DENSE FORMATION AT 31.0 FT. LARGER PIECES APPEAR TO BE BROKEN COBBLES.	
35												37.0		
													BORING TERMINATED AT 37.0 FT. NOTE: OVA VALUE IS ORGANIC VAPOR LEVEL FROM BOREHOLE MONITORED WITH A CENTURY FLAME IONIZING OVA METER.	
40														

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151.1
Report Date: 05-09-86

Client I.D.: TRAVEL BLANK
ERG Sample No.: 04/150736
Matrix: WATER

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	ND (5)	ug/L
Carbon Tetrachloride	ND (5)	ug/L
Chlorobenzene	ND (5)	ug/L
1,2-Dichloroethane	ND (5)	ug/L
1,1,1-Trichloroethane	ND (5)	ug/L
1,1-Dichloroethane	ND (5)	ug/L
1,1,2-Trichloroethane	ND (5)	ug/L
1,1,2,2-Tetrachloroethene	ND (10)	ug/L
Chloroethane	ND (10)	ug/L
2-Chloroethylvinylether	ND (5)	ug/L
Chloroform	ND (5)	ug/L
1,1-Dichloroethene	ND (5)	ug/L
Trans-1,2-dichloroethene	ND (5)	ug/L
1,2-Dichloroethene	ND (5)	ug/L
Trans-1,3-dichlorpropene	ND (5)	ug/L
Cis-1,3-dichlorpropene	ND (5)	ug/L
Ethylbenzene	ND (5)	ug/L
Methylene Chloride	ND (10)	ug/L
Chloromethane	ND (10)	ug/L
Bromomethane	ND (5)	ug/L
Bromoform	ND (5)	ug/L
Bromodichloromethane	ND (5)	ug/L
Chlorodibromomethane	ND (5)	ug/L
Tetrachloroethene	ND (5)	ug/L
Toluene	ND (5)	ug/L
Trichloroethene	ND (5)	ug/L
Vinyl Chloride	ND (10)	ug/L
Acetone	ND (10)	ug/L
2-Butanone	ND (10)	ug/L
Carbon Disulfide	ND (5)	ug/L
2-Hexanone	ND (10)	ug/L
4-Methyl-2-pentanone	ND (10)	ug/L
Styrene	ND (5)	ug/L
Vinyl Acetate	ND (10)	ug/L
Total Xylenes	ND (5)	ug/L

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151.1
Report Date: 05-05-86

Client I.D.: SOLVENT TANK
ERG Sample No.: 04/150735
Matrix: WATER
Date Sampled: 04-18-86
Time Sampled: 3:15PM

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	ND (5000)	ug/L
Carbon Tetrachloride	ND (5000)	ug/L
Chlorobenzene	ND (5000)	ug/L
1,2-Dichloroethane	ND (5000)	ug/L
1,1,1-Trichloroethane	ND (5000)	ug/L
1,1-Dichloroethane	ND (5000)	ug/L
1,1,2-Trichloroethane	ND (5000)	ug/L
1,1,2,2-Tetrachloroethene	ND (10000)	ug/L
Chloroethane	ND (10000)	ug/L
2-Chloroethylvinylether	ND (5000)	ug/L
Chloroform	ND (5000)	ug/L
1,1-Dichloroethene	ND (5000)	ug/L
Trans-1,2-dichloroethene	ND (5000)	ug/L
1,2-Dichloroethene	ND (5000)	ug/L
Trans-1,3-dichlorpropene	ND (5000)	ug/L
Cis-1,3-dichlorpropene	ND (5000)	ug/L
Ethylbenzene	ND (5000)	ug/L
Methylene Chloride	ND (10000)	ug/L
Chloromethane	ND (10000)	ug/L
Bromomethane	ND (5000)	ug/L
Bromoform	ND (5000)	ug/L
Bromodichloromethane	ND (5000)	ug/L
Chlorodibromomethane	ND (5000)	ug/L
Tetrachloroethene	ND (5000)	ug/L
Toluene	ND (5000)	ug/L
Trichloroethene	ND (5000)	ug/L
Vinyl Chloride	ND (10000)	ug/L
Acetone	ND (10000)	ug/L
2-Butanone	ND (10000)	ug/L
Carbon Disulfide	ND (5000)	ug/L
2-Hexanone	ND (10000)	ug/L
4-Methyl-2-pentanone	ND (10000)	ug/L
Styrene	ND (5000)	ug/L
Vinyl Acetate	ND (10000)	ug/L
Total Xylenes	<5000	ug/L

Client I.D.: TRAVEL BLANK
ERG Sample No.: 04/150736
Matrix: WATER

Parameter	Result	Units

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151.1
Report Date: 05-05-86

Client I.D.: WELL W-7
ERO Sample No.: 04/150734
Matrix: WATER
Date Sampled: 04-18-86
Time Sampled: 2:25PM

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	ND (5)	ug/L
Carbon Tetrachloride	ND (5)	ug/L
Chlorobenzene	ND (5)	ug/L
1,2-Dichloroethane		
1,1,1-Trichloroethane		
1,1-Dichloroethane	ND (5)	ug/L
1,1,2-Trichloroethane	ND (5)	ug/L
1,1,2,2-Tetrachloroethene	ND (10)	ug/L
Chloroethane	ND (10)	ug/L
2-Chloroethylvinylether		
Chloroform	ND (5)	ug/L
1,1-Dichloroethene	ND (5)	ug/L
	ND (5)	ug/L
Trans-1,2-dichloroethene		
1,2-Dichloroethene	ND (5)	ug/L
Trans-1,3-dichlorpropene	ND (5)	ug/L
	ND (5)	ug/L
Cis-1,3-dichlorpropene		
Ethylbenzene	ND (5)	ug/L
Methylene Chloride	ND (5)	ug/L
	ND (10)	ug/L
Chloromethane	ND (10)	ug/L
Bromomethane	ND (5)	ug/L
Bromoform	ND (5)	ug/L
Bromodichloromethane		
Chlorodibromomethane	ND (5)	ug/L
Tetrachloroethene	ND (5)	ug/L
	ND (5)	ug/L
Toluene		
Trichloroethene		
Vinyl Chloride	ND (5)	ug/L
	ND (10)	ug/L
Acetone		
2-Butanone		
Carbon Disulfide	ND (10)	ug/L
	ND (5)	ug/L
2-Hexanone	ND (10)	ug/L
4-Methyl-2-pentanone	ND (10)	ug/L
Styrene	ND (5)	ug/L
Vinyl Acetate	ND (10)	ug/L
Total Xylenes	ND (5)	ug/L

Client I.D.: SOLVENT TANK
ERO Sample No.: 04/150735
Matrix: WATER
Date Sampled: 04-18-86
Time Sampled: 3:15PM

Parameter	Result	Units

See last page for explanation of symbols

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151
Report Date: 05-05-86

Client I.D.: 15
ERG Sample No.: 03/149071
Matrix: WATER

Parameter	Result	Units
Fluoranthene	ND (1300000)	ug/L
4-Chlorophenyl Phenyl Ether	ND (1300000)	ug/L
4-Bromophenyl Phenyl Ether	ND (1300000)	ug/L
Bis(2-chloroisopropyl) Ether	ND (1300000)	ug/L
Bis(2-chloroethoxy)methane	ND (1300000)	ug/L
Hexachlorobutadiene	ND (1300000)	ug/L
Hexachlorocyclopentadiene	ND (1300000)	ug/L
Isophorone	ND (1300000)	ug/L
Naphthalene	ND (1300000)	ug/L
Nitrobenzene	ND (1300000)	ug/L
N-Nitrosodiphenylamine	ND (1300000)	ug/L
N-Nitrosodipropylamine	ND (1300000)	ug/L
Bis(2-ethylhexyl)phthalate	ND (1300000)	ug/L
Butylbenzylphthalate	ND (1300000)	ug/L
Di-n-butylphthalate	ND (1300000)	ug/L
Di-n-octylphthalate	ND (1300000)	ug/L
Diethylphthalate	ND (1300000)	ug/L
Dimethylphthalate	ND (1300000)	ug/L
Benzo(a)anthracene	ND (1300000)	ug/L
Benzo(a)pyrene	ND (1300000)	ug/L
Benzo(b)fluoranthene	ND (1300000)	ug/L
Benzo(k)fluoranthene	ND (1300000)	ug/L
Chrysene	ND (1300000)	ug/L
Acenaphthylene	ND (1300000)	ug/L
Anthracene	ND (1300000)	ug/L
Benzo(ghi)perylene	ND (1300000)	ug/L
Fluorene	ND (1300000)	ug/L
Phenanthrene	ND (1300000)	ug/L
Dibenzo(a,h)anthracene	ND (1300000)	ug/L
Indeno(1,2,3-cd)pyrene	ND (1300000)	ug/L
Pyrene	ND (1300000)	ug/L
Benzyl Alcohol	ND (1300000)	ug/L
4-Chloroaniline	ND (1300000)	ug/L
Dibenzofuran	ND (1300000)	ug/L
2-Methylnaphthalene	ND (1300000)	ug/L
2-Nitroaniline	ND (6100000)	ug/L
3-Nitroaniline	ND (6100000)	ug/L
4-Nitroaniline	ND (6100000)	ug/L

SD-Sample damaged
FR-See field report for result
SR-See attached report
NA-Result not applicable to test

ND-Nondetected, Detection limit in ()
<-Positive result at an unquantifiable concentration below indicated level

Thank you for your business.

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151
Report Date: 05-05-86

Client I.D.: 4
ERG Sample No.: 03/149060
Matrix: SOLID

Parameter	Result	Units
Toluene	ND (5)	ug/Kg
Trichloroethene	ND (5)	ug/Kg
Vinyl Chloride	ND (10)	ug/Kg
Acetone	ND (10)	ug/Kg
2-Butanone	ND (10)	ug/Kg
Carbon Disulfide	ND (5)	ug/Kg
2-Hexanone	ND (10)	ug/Kg
4-Methyl-2-pentanone	ND (10)	ug/Kg
Styrene	ND (5)	ug/Kg
VInyl Acetate	ND (10)	ug/Kg
Total Xylenes	ND (5)	ug/Kg

Client I.D.: 15
ERG Sample No.: 03/149071
Matrix: WATER BLANK

Parameter	Result	Units
ACID FRACTION (RAS PROTOCAL)		
2,4,6-Trichlorophenol	ND (1300000)	ug/L
p-Chloro-m-cresol	ND (1300000)	ug/L
2,Chlorophenol	ND (1300000)	ug/L
2,4-Dichlorophenol	ND (1300000)	ug/L
2,4-Dimethylphenol	ND (1300000)	ug/L
2-Nitrophenol	ND (1300000)	ug/L
4-nitrophenol	ND (6100000)	ug/L
4,6-Dinitro-2-methylphenol	ND (6100000)	ug/L
Pentachlorophenol	ND (6100000)	ug/L
Phenol	ND (1300000)	ug/L
Benzoic Acid	ND (6100000)	ug/L
2-Methylphenol	ND (1300000)	ug/L
4-Methylphenol	ND (1300000)	ug/L
2,4,5-Trichlorophenol	ND (6100000)	ug/L
ABE-NEUTRAL FRACTION (RAS PROTOCAL)		
Acenaphthene	ND (1300000)	ug/L
1,2,4-Trichlorobenzene	ND (1300000)	ug/L
Hexachlorobenzene	ND (1300000)	ug/L
Hexachloroethane	ND (1300000)	ug/L
Bis(2-chloroethyl)ether	ND (1300000)	ug/L
2-Chloronaphthalene	ND (1300000)	ug/L
1,2-Dichlorobenzene	ND (1300000)	ug/L
1,3-Dichlorobenzene	ND (1300000)	ug/L
1,4-Dichlorobenzene	ND (1300000)	ug/L
3,3'-Dichlorobenzene	ND (2500000)	ug/L
2,4-Dinitrotoluene	ND (1300000)	ug/L
2,6-Dibitrotoluene	ND (1300000)	ug/L
1,2-Diphenylhydrazine	ND (1300000)	ug/L

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151
Report Date: 05-05-86

Client I.D.: 3
ERG Sample No.: 03/149059
Matrix: SOLID

Parameter	Result	Units
Bromoform	ND (5)	ug/Kg
Bromodichloromethane	ND (5)	ug/Kg
Chlorodibromomethane	ND (5)	ug/Kg
Tetrachloroethane	ND (5)	ug/Kg
Toluene	ND (5)	ug/Kg
Trichloroethene	ND (5)	ug/Kg
Vinyl Chloride	ND (10)	ug/Kg
Acetone	27	ug/Kg
2-Butanone	39	ug/Kg
Carbon Disulfide	ND (5)	ug/Kg
2-Hexanone	ND (10)	ug/Kg
4-Methyl-2-pentanone	ND (10)	ug/Kg
Styrene	ND (5)	ug/Kg
VInyl Acetate	ND (10)	ug/Kg
Total Xylenes	ND (5)	ug/Kg

Client I.D.: 4
ERG Sample No.: 03/149060
Matrix: SOLID

POND 5 SEDIMENT

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	16	ug/Kg
Carbon Tetrachloride	ND (5)	ug/Kg
Chlorobenzene	ND (5)	ug/Kg
1,2-Dichloroethane	ND (5)	ug/Kg
1,1,1-Trichloroethane	ND (5)	ug/Kg
1,1-Dichloroethane	ND (5)	ug/Kg
1,1,2-Trichloroethane	ND (5)	ug/Kg
1,1,2,2-Tetrachloroethene	ND (10)	ug/Kg
Chloroethane	ND (10)	ug/Kg
2-Chloroethylvinylether	ND (5)	ug/Kg
Chloroform	26	ug/Kg
1,1-Dichloroethene	ND (5)	ug/Kg
Trans-1,2-dichloroethene	ND (5)	ug/Kg
1,2-Dichloroethene	ND (5)	ug/Kg
Trans-1,3-dichloropropene	ND (5)	ug/Kg
Cis-1,3-dichloropropene	ND (5)	ug/Kg
Ethylbenzene	ND (5)	ug/Kg
Methylene Chloride	27	ug/Kg
Chloromethane	ND (10)	ug/Kg
Bromomethane	ND (5)	ug/Kg
Bromoform	ND (5)	ug/Kg
Bromodichloromethane	ND (5)	ug/Kg
Chlorodibromomethane	ND (5)	ug/Kg
Tetrachloroethane	ND (5)	ug/Kg

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4151
Report Date: 05-05-86

Client I.D.: 2
ERG Sample No.: 03/149058
Matrix: SOLID

Parameter	Result	Units
Ethylbenzene	ND (10)	ug/Kg
Methylene Chloride	(68)	ug/Kg
Chloromethane	ND (20)	ug/Kg
Bromomethane	ND (10)	ug/Kg
Bromoform	ND (10)	ug/Kg
Bromodichloromethane	ND (10)	ug/Kg
Chlorodibromomethane	ND (10)	ug/Kg
Tetrachloroethane	(17)	ug/Kg
Toluene	(33)	ug/Kg
Trichloroethene	<10	ug/Kg
Vinyl Chloride	ND (20)	ug/Kg
Acetone	(20)	ug/Kg
2-Butanone	ND (20)	ug/Kg
Carbon Disulfide	ND (10)	ug/Kg
2-Hexanone	ND (20)	ug/Kg
4-Methyl-2-pentanone	ND (20)	ug/Kg
Styrene	ND (10)	ug/Kg
Vinyl Acetate	ND (20)	ug/Kg
Total Xylenes	ND (10)	ug/Kg

Client I.D.: 3
ERG Sample No.: 03/149059
Matrix: SOLID

POND 4 SEDIMENT

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	(47)	ug/Kg
Carbon Tetrachloride	ND (5)	ug/Kg
Chlorobenzene	ND (5)	ug/Kg
1,2-Dichloroethane	ND (5)	ug/Kg
1,1,1-Trichloroethane	(880)	ug/Kg
1,1-Dichloroethane	(100)	ug/Kg
1,1,2-Trichloroethane	ND (5)	ug/Kg
1,1,2,2-Tetrachloroethene	ND (10)	ug/Kg
Chloroethane	ND (10)	ug/Kg
2-Chloroethylvinylether	ND (5)	ug/Kg
Chloroform	ND (5)	ug/Kg
1,1-Dichloroethene	(34)	ug/Kg
Trans-1,2-dichloroethene	ND (5)	ug/Kg
1,2-Dichloroethene	ND (5)	ug/Kg
Trans-1,3-dichloropropene	ND (5)	ug/Kg
Cis-1,3-dichloropropene	ND (5)	ug/Kg
Ethylbenzene	ND (5)	ug/Kg
Methylene Chloride	(28)	ug/Kg
Chloromethane	ND (10)	ug/Kg
Bromomethane	ND (5)	ug/Kg

ANALYTICAL REPORT
ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4131
Report Date: 05-05-86

SOIL SAMPLE NEAR S-3

Client I.D.: 2
ERG Sample No.: 03/149058
Matrix: SOLID

Parameter	Result	Units
Nitrobenzene	ND (7600)	ug/Kg
N-Nitrosodiphenylamine	ND (7600)	ug/Kg
N-Nitrosodisopropylamine	ND (7600)	ug/Kg
Bis(2-ethylhexyl)phthalate	<7600	ug/Kg
Butylbenzylphthalate	ND (7600)	ug/Kg
Di-n-butylphthalate	ND (7600)	ug/Kg
Di-n-octylphthalate	ND (7600)	ug/Kg
Diethylphthalate	ND (7600)	ug/Kg
Dimethylphthalate	ND (7600)	ug/Kg
Benzo(a)anthracene	ND (7600)	ug/Kg
Benzo(a)pyrene	ND (7600)	ug/Kg
Benzo(b)fluoranthene	ND (7600)	ug/Kg
Benzo(k)fluoranthene	ND (7600)	ug/Kg
Chrysene	ND (7600)	ug/Kg
Acenaphthylene	ND (7600)	ug/Kg
Anthracene	ND (7600)	ug/Kg
Benzo(ghi)perylene	ND (7600)	ug/Kg
Fluorene	ND (7600)	ug/Kg
Phenanthrene	<7600	ug/Kg
Dibenzo(a,h)anthracene	ND (7600)	ug/Kg
Indeno(1,2,3-cd)pyrene	ND (7600)	ug/Kg
Pyrene	ND (7600)	ug/Kg
Benzyl Alcohol	ND (7600)	ug/Kg
4-Chloroaniline	ND (7600)	ug/Kg
Dibenzofuran	ND (7600)	ug/Kg
2-Methylnaphthalene	<7600	ug/Kg
2-Nitroaniline	ND (37000)	ug/Kg
3-Nitroaniline	ND (37000)	ug/Kg
4-Nitroaniline	ND (37000)	ug/Kg
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	(22)	
Carbon Tetrachloride	ND (10)	ug/Kg
Chlorobenzene	ND (10)	ug/Kg
1,2-Dichloroethane	ND (10)	ug/Kg
1,1,1-Trichloroethane	(7600)	ug/Kg
1,1-Dichloroethane	(65)	ug/Kg
1,1,2-Trichloroethane	ND (10)	ug/Kg
1,1,2,2-Tetrachloroethene	ND (20)	ug/Kg
Chloroethane	ND (20)	ug/Kg
2-Chloroethylvinylether	ND (10)	ug/Kg
Chloroform	ND (10)	ug/Kg
1,1-Dichloroethene	(60)	ug/Kg
trans-1,2-dichloroethene	ND (10)	ug/Kg
1,2-Dichloroethene	ND (10)	ug/Kg
trans-1,3-dichloropropene	ND (10)	ug/Kg
cis-1,3-dichloropropene	ND (10)	ug/Kg

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.

Project: A4131
Report Date: 05-05-86

Client I.D.: 1
ERG Sample No.: 03/149057
Matrix: SOLID

Parameter	Result	Units
Vinyl Acetate	ND (10)	ug/Kg
Total Xylenes	ND (5)	ug/Kg

Client I.D.: 2
ERG Sample No.: 03/149058
Matrix: SOLID

Parameter	Result	Units
ACID FRACTION (RAS PROTOCAL)		
2,4,6-Trichlorophenol	ND (7600)	ug/Kg
p-Chloro-m-cresol	ND (7600)	ug/Kg
2-Chlorophenol	ND (7600)	ug/Kg
2,4-Dichlorophenol	ND (7600)	ug/Kg
2,4-Dimethylphenol	ND (7600)	ug/Kg
2-Nitrophenol	ND (7600)	ug/Kg
4-Nitrophenol	ND (37000)	ug/Kg
4,6-Dinitro-2-methylphenol	ND (37000)	ug/Kg
Pentachlorophenol	ND (37000)	ug/Kg
Phenol	ND (7600)	ug/Kg
Benzoic Acid	ND (37000)	ug/Kg
2-Methylphenol	ND (7600)	ug/Kg
4-Methylphenol	ND (7600)	ug/Kg
2,4,5-Trichlorophenol	ND (37000)	ug/Kg
BASE-NEUTRAL FRACTION (RAS PROTOCAL)		
Acenaphthene	ND (7600)	ug/Kg
1,2,4-Trichlorobenzene	ND (7600)	ug/Kg
Hexachlorobenzene	ND (7600)	ug/Kg
Hexachloroethane	ND (7600)	ug/Kg
Bis(2-chloroethyl)ether	ND (7600)	ug/Kg
2-Chloronaphthalene	ND (7600)	ug/Kg
1,2-Dichlorobenzene	ND (7600)	ug/Kg
1,3-Dichlorobenzene	ND (7600)	ug/Kg
1,4-Dichlorobenzene	ND (7600)	ug/Kg
3,3'-Dichlorobenzene	ND (15000)	ug/Kg
2,4-Dinitrotoluene	ND (7600)	ug/Kg
2,6-Dinitrotoluene	ND (7600)	ug/Kg
1,2-Diphenylhydrazine	ND (7600)	ug/Kg
Fluoranthene	ND (7600)	ug/Kg
4-Chlorophenyl Phenyl Ether	ND (7600)	ug/Kg
4-Bromophenyl Phenyl Ether	ND (7600)	ug/Kg
Bis(2-chloroisopropyl) Ether	ND (7600)	ug/Kg
Bis(2-chloroethoxy)methane	ND (7600)	ug/Kg
Hexachlorobutadiene	ND (7600)	ug/Kg
Hexachlorocyclopentadiene	ND (7600)	ug/Kg
Isophorone	ND (7600)	ug/Kg
Naphthalene	ND (7600)	ug/Kg

erg

ANALYTICAL REPORT

ENVIRONMENTAL RESEARCH GROUP, INC.
117 N. FIRST
ANN ARBOR, MICHIGAN 48104 (313) 662-3104

Project: 44151
Report Date: 05-05-86

Client P.O.
Report: 18418

Samples Recvd: 03-26-86
Refer Questions To:
ROBYN WOOLEY

Client:
HARZA ENGINEERING
150 S. WACKER
ROOM 1140
CHICAGO, IL 60606
Attention: DAVID POTT

Approved: Joseph A Hnatow

Residual Samples Will Be Held
TWO WEEKS

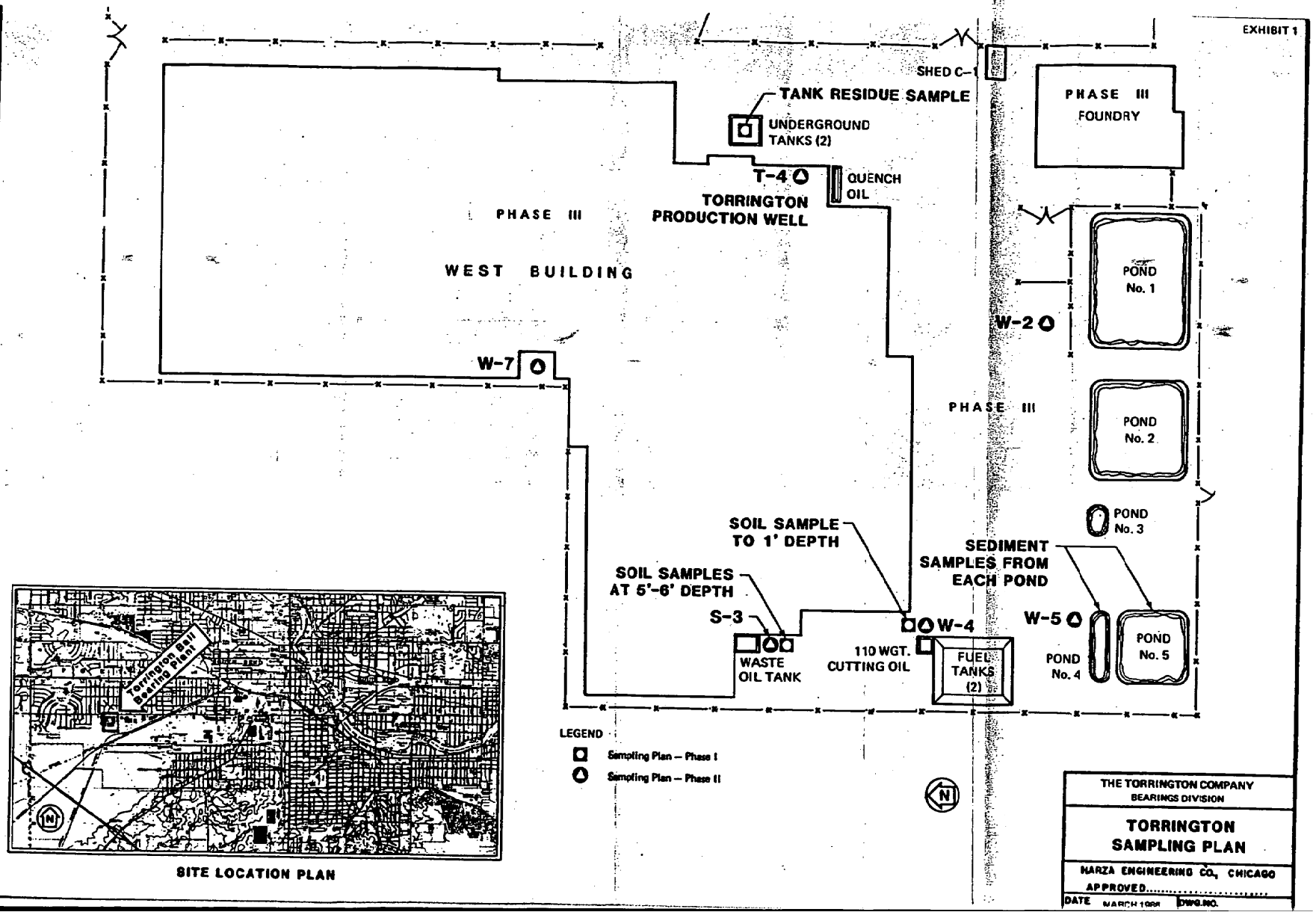
SOIL SAMPLE NEAR W-4

Client I.D.: 1
ERO Sample No.: 03/149057
Matrix: SOLID

Parameter	Result	Units
VOLITILE FRACTION (RAS PROTOCAL)		
Benzene	(12)	ug/Kg
Carbon Tetrachloride	ND (5)	ug/Kg
Chlorobenzene	ND (5)	ug/Kg
1,2-Dichloroethane	ND (5)	ug/Kg
1,1,1-Trichloroethane	ND (5)	ug/Kg
1,1-Dichloroethane	ND (5)	ug/Kg
1,1,2-Trichloroethane	ND (5)	ug/Kg
1,1,2,2-Tetrachloroethene	ND (10)	ug/Kg
Chloroethane	ND (10)	ug/Kg
2-Chloroethylvinylether	ND (5)	ug/Kg
Chloroform	ND (5)	ug/Kg
1,1-Dichloroethene	ND (5)	ug/Kg
Trans-1,2-dichloroethene	ND (5)	ug/Kg
1,2-Dichloroethene	ND (5)	ug/Kg
Trans-1,3-dichloropropene	ND (5)	ug/Kg
Cis-1,3-dichloropropene	ND (5)	ug/Kg
Ethylbenzene	ND (5)	ug/Kg
Methylene Chloride	(31)	ug/Kg
Chloromethane	ND (10)	ug/Kg
Bromomethane	ND (5)	ug/Kg
Bromoform	ND (5)	ug/Kg
Bromodichloromethane	ND (5)	ug/Kg
Chlorodibromomethane	ND (5)	ug/Kg
Tetrachloroethane	(5)	ug/Kg
Toluene	ND (5)	ug/Kg
Trichloroethene	ND (5)	ug/Kg
Vinyl Chloride	ND (10)	ug/Kg
Acetone	ND (10)	ug/Kg
2-Butanone	ND (10)	ug/Kg
Carbon Disulfide	ND (5)	ug/Kg
2-Hexanone	ND (10)	ug/Kg
4-Methyl-2-pentanone	ND (10)	ug/Kg
Styrene	ND (5)	ug/Kg

See last page for explanation of symbols.

EXHIBIT 1



SITE LOCATION PLAN

THE TORRINGTON COMPANY
BEARINGS DIVISION

TORRINGTON SAMPLING PLAN

HARZA ENGINEERING CO., CHICAGO

APPROVED.....

DATE MARCH 1988 DWG.NO.

TORRINGTON
Part of worldwide Ingersoll-Rand

Corporate Offices

The Torrington Company
59 Field Street
Torrington, CT 06790
(203) 482-9511

July 30, 1986

Mr. Reggie Baker
Chief-Site Management
Office of Environmental Response
Indiana Department of Environmental Management
5500 West Bradbury Avenue
Indianapolis, IN 46241

Dear Mr. Baker:

This letter confirms our phone call of July 28, 1986 in which we discussed the steps which the Torrington Company has taken and its plans for completing the clean-up action at the South Bend site.

As explained, four of the five storm drainage ponds on the property have been filled and all five underground storage tanks have been removed according to the Preliminary Work Plan.

The area of contaminated soil was sampled by Harza Engineering as described in the Preliminary Work Plan. Based upon the results of the laboratory analysis, the earth in the affected area will be excavated to the depth of the water table in order to clean the contaminated area to background soil levels. This will entail the removal of 300-400 cubic yards of soil. The excavated soil will be transported to Fort Wayne and landfilled at the Chemical Waste Management hazardous waste site.

In order to ensure that sufficient soil is removed during the excavation, a geologist from ETS Environmental Engineers in South Bend will be on-site with an organic "sniffer". He will use this apparatus to confirm the proper removal of contaminated soils.

The soil removal work will proceed once approval is received from the hazardous waste landfill. It is projected that the environmental clean-up action will be completed by September 1, 1986. A fully detailed report of all the environmental clean-up work will be submitted to you.

Very truly yours,

THE TORRINGTON COMPANY

Robert M. Lewis

Robert M. Lewis
Senior Environmental Engineer

RML/aaj

TORRINGTON
Part of worldwide Ingersoll-Rand

Corporate Offices
The Torrington Company
59 Field Street
Torrington, CT 06790
(203) 482-9511

June 5, 1986

Mr. Reggie Baker
Chief - Site Management
Office of Environmental Response
Indiana Department of Environmental Management
5500 West Bradbury Avenue
Indianapolis, IN 46241

Dear Mr. Baker:

Thank you for giving Jack Williams and myself the opportunity to meet with you and messrs. Corpuz and Studebaker on May 20th regarding the Torrington Company South Bend plant site. As we discussed, there is a sale pending on the South Bend property and there is some clean-up action which Torrington would like to accomplish prior to the sales transaction. Pursuant to our discussions, enclosed is a preliminary work plan which describes the steps we would like to take in this matter. As agreed upon in the meeting, Torrington is proceeding to undertake the removal of the storage tanks and the filling of the ponds as described in the work plan. We would appreciate any guidance your office can provide to ensure that the work is done properly. Since we are anxious to move on this matter, your prompt attention would be of great assistance.

Very truly yours,

THE TORRINGTON COMPANY

Robert M. Lewis

Robert M. Lewis
Senior Environmental Engineer

RML/aaj

TORRINGTON
Part of worldwide Ingersoll-Rand

Preliminary Work Plan
Torrington Company Heavy Bearings Facility
South Bend, Indiana

June 5, 1986

Introduction

In December 1935, the Torrington Company purchased the Bantam Ball Bearing Company at 3702 West Sample Street in South Bend which manufactured ball, thrust, radial, tapered and cylindrical roller bearings. The location retained the Bantam Ball Bearings Corporation name until 1943 when it became the Torrington Company, Bantam Bearings Division. At some later date it became the Torrington Company, Heavy Bearings Division.

The physical facility grew in size as various additions were constructed following the 1935 purchase. By 1967, the plant had reached it present-day size of 350,806 square feet, which includes the main building (West Building), the foundry and an outbuilding know as Shed C. Throughout the history of the facility, it was operated as a bearing manufacturing plant. In 1984, the Torrington Company decided to close the South Bend facility because of declining heavy bearings business and available manufacturing space in two other more modern Torrington Company facilities.

When the plant site was offered for sale, Torrington Company decided to determine if any environmental concerns existed at the site. Groundwater monitoring wells were installed; water samples were taken from these wells and from ponds located at the property. Torrington also instituted a thorough soil sampling program in those areas shown on the attached site plan.

Once the samples were taken and analyzed, Torrington determined that three areas at the plant should be addressed; the storm drainage ponds, the underground storage tanks and an area of contaminated soil. Following is a description of each of those areas and the work Torrington proposes to be performed at each.

Storm Drainage Ponds

There are five ponds located at the property as shown in the attached site plan. These ponds were utilized in handling storm water run off, particularly from roof drains in the building. These ponds have no discharge outlet. Samples of water and sediments taken from the ponds have not shown any significant contamination. This is not surprising since no treatment or disposal of wastes has taken place in the ponds.

Storm Drainage Ponds (Continued)

The Torrington Company proposes to fill in as many ponds as possible prior to the sale of the plant. In past discussions with Mr. Robert Carter of the Indiana Department of Environmental Management, Mr. Carter has recommended that the ponds should be filled in to avoid any future use by subsequent owners which could create an environmental problem. As confirmed during our 5/20/86 meeting, because there is no evidence of contamination in the ponds, Torrington will have Ponds #2, #3, #4 and #5 filled in. Pond #1 will be left in place to handle water from the roof drains. It is the only pond which actually has water in it year-round.

Underground Storage Tanks

There are five "underground" storage tanks located at the South Bend property. Of the five, only two are actually located underground; the other three are located above ground level, but are covered with a mound of earth. The two underground tanks are located to the east of the main building under a layer of concrete. One is an 8,000 gallon tank which formerly contained Stoddard solvent (Varsol); the other is an 8,000 gallon tank which formerly contained cutting oil. Both tanks were emptied when the plant was closed down. The three tanks in the earthen mound include a 12,000 gallon tank used for cutting oil and two 20,000 gallon fuel oil tanks. These tanks were also emptied when the plant was shut down.

The Torrington Company has a company-wide policy that all underground storage tanks be removed and placed above ground in protected enclosures. In the case of the South Bend plant, the tanks will be removed from the ground and disposed.

There has been no record or indication of any problems or leakage from the tanks. Nevertheless, when the tanks are withdrawn from the ground, precautions will be taken to make sure any contamination will be detected. As the tanks are pulled out, a visual inspection will be made of the tanks and the soil surrounding the tanks. In addition, soil samples will be taken to determine if there had been any spillage or leakage, either long term or occurring during the tank removal. If there is no evidence of contamination as indicated by analysis of the samples, the holes will be filled in and concrete replaced as necessary. If contamination is detected, more sampling will be done to determine the extent of contamination and the appropriate remedial action implemented.

Soils

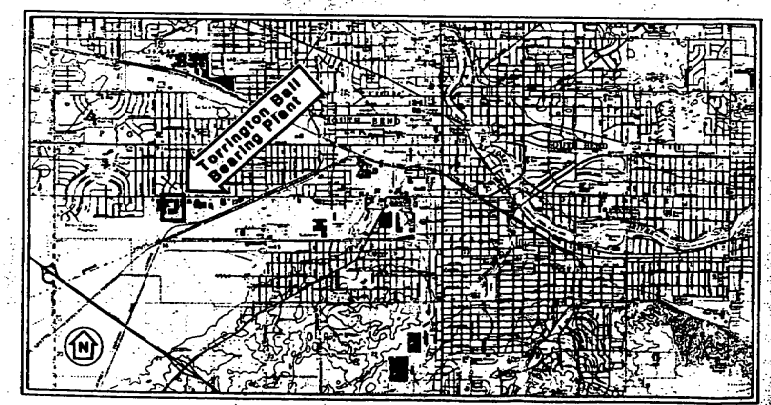
Soil samples and samples taken from monitoring walls indicate a localized area of soil which contains low levels of contaminants. This area is located near the southwest corner of the building around the sample point identified as S-3 (see attached site plan). The parameter of concern is 1,1,1 trichloroethane, which was analyzed as a concentration of 7.6 parts per million (ppm). Torrington proposes to excavate a certain amount of soil as discussed below.

In order to determine the volume of soil to be removed, further sampling will be done by Harza Engineering. Soil samples will be taken in a grid pattern and sent to ERG Laboratories in Ann Arbor Michigan for analysis. A background soil sample will also be taken and analyzed to show the natural characteristics of the soil in the neighborhood.

After analysis, the volume of soil to be removed will be calculated, using a safety factor. The actual removal of soil will be done by an outside contractor experienced with this type of work. The contaminated soil will be disposed in a chemically secure landfill such as Chemical Waste Management in Fort Wayne, Indiana. The soil will be manifested and handled as a RCRA hazardous waste. Once the contaminated soil has been removed, clean fill will be used to level out the area.

This soil removal program will eliminate the possibility of any adverse impact upon groundwater quality. In order to confirm this, the existing monitoring wells can be sampled periodically in the future.

EXHIBIT 1



SITE LOCATION PLAN

SHED C–1

TANK RESIDUE SAMPLE

UNDERGROUND TANKS (2)

T-4

TORRINGTON PRODUCTION WELL

QUENCH OIL

PHASE III FOUNDRY

PHASE III

WEST BUILDING

W-7

W-2

POND No. 1

PHASE III

POND No. 2

POND No. 3

SOIL SAMPLE TO 1' DEPTH

SEDIMENT SAMPLES FROM EACH POND

SOIL SAMPLES AT 5'-6' DEPTH

S-3

W-4

W-5

WASTE OIL TANK

110 WGT. CUTTING OIL

FUEL TANKS (2)

POND No. 4

POND No. 5

LEGEND

Sampling Plan – Phase I

Sampling Plan – Phase II

N

THE TORRINGTON COMPANY
BEARINGS DIVISION

TORRINGTON SAMPLING PLAN

HARZA ENGINEERING CO., CHICAGO

APPROVED.....

DATE MARCH 1986

DWG. NO.